# Cerebral organoids model human brain development ar

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| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 237. Transgenic Expression of Dp116 in Muscle Does Not Ameliorate Dystrophy in mdx Mice. Molecular Therapy, 2004, 9, S91. | 3.7 | 1 |
| 2 | Miniature human brains. Nature, 2013, 501, 319-320. | 13.7 | 9 |
| 3 | Precocious Acquisition of Neuroepithelial Character in the Eye Field Underlies the Onset of Eye Morphogenesis. Developmental Cell, 2013, 27, 293-305. | 3.1 | 86 |
| 4 | Build-a-Brain. Cell Stem Cell, 2013, 13, 377-378. | 5.2 | 20 |
| 5 | Artificial three-dimensional niches deconstruct pancreas developmentin vitro. Development (Cambridge), 2013, 140, 4452-4462. | 1.2 | 233 |
| 6 | Cortical Evolution: Judge the Brain by Its Cover. Neuron, 2013, 80, 633-647. | 3.8 | 444 |
| 7 | Neural Stem Cells: Generating and Regenerating the Brain. Neuron, 2013, 80, 588-601. | 3.8 | 479 |
| 8 | Evolving Concepts of Gliogenesis: A Look Way Back and Ahead to the Next 25 Years. Neuron, 2013, 80, 613-623. | 3.8 | 161 |
| 9 | Engineering Approaches to Illuminating Brain Structure and Dynamics. Neuron, 2013, 80, 568-577. | 3.8 | 116 |
| 10 | Self-organization of axial polarity, inside-out layer pattern, and species-specific progenitor dynamics in human ES cellâ€“derived neocortex. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20284-20289. | 3.3 | 778 |
| 11 | Small but beautiful. Nature Reviews Neuroscience, 2013, 14, 665-665. | 4.9 | 15 |
| 12 | The developing human brainâ€”modeled in a dish. Nature Methods, 2013, 10, 929-929. | 9.0 | 4 |
| 13 | Modeling human brain development with cerebral organoids. Stem Cell Research and Therapy, 2013, 4, 154. | 2.4 | 13 |
| 14 | What Are Mini-Brains?. Science, 2013, 342, 200-201. | 6.0 | 15 |
| 15 | Progress in the Genetics of Polygenic Brain Disorders: Significant New Challenges for Neurobiology. Neuron, 2013, 80, 578-587. | 3.8 | 74 |
| 16 | Biomedical briefing. Nature Medicine, 2013, 19, 1198-1199. | 15.2 | 0 |
| 17 | Adenovirus-Mediated Efficient Gene Transfer into Cultured Three-Dimensional Organoids. PLoS ONE, 2014, 9, e93608. | 1.1 | 63 |
| 18 | A method to investigate radial glia cell behavior using two-photon time-lapse microscopy in an ex vivo model of spinal cord development. Frontiers in Neuroanatomy, 2014, 8, 22. | 0.9 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Optimizing neuronal differentiation from induced pluripotent stem cells to model ASD. Frontiers in Cellular Neuroscience, 2014, 8, 109. | 1.8 | 62 |
| 20 | Fate of graft cells: what should be clarified for development of mesenchymal stem cell therapy for ischemic stroke?. Frontiers in Cellular Neuroscience, 2014, 8, 322. | 1.8 | 11 |
| 21 | Comparative genomics of brain size evolution. Frontiers in Human Neuroscience, 2014, 8, 345. | 1.0 | 14 |
| 22 | Modeling physiological and pathological human neurogenesis in the dish. Frontiers in Neuroscience, 2014, 8, 183. | 1.4 | 31 |
| 23 | Induced Pluripotent Stem Cells Derived from Alzheimerâ€™s Disease Patients: The Promise, the Hope and the Path Ahead. Journal of Clinical Medicine, 2014, 3, 1402-1436. | 1.0 | 17 |
| 24 | Human iPSC Models: A Platform for Investigating Neurodevelopmental Diseases. Journal of Molecular and Genetic Medicine: an International Journal of Biomedical Research, 2014, 08, . | 0.1 | 0 |
| 25 | ESNATS Conference â€" The use of Human Embryonic Stem Cells for Novel Toxicity Testing Approaches. ATLA Alternatives To Laboratory Animals, 2014, 42, 97-113. | 0.7 | 13 |
| 27 | Monitoring neurogenesis in the cerebral cortex: an update. Future Neurology, 2014, 9, 323-340. | 0.9 | 3 |
| 28 | Solving the puzzle of Parkinsonâ€™s disease using induced pluripotent stem cells. Experimental Biology and Medicine, 2014, 239, 1421-1432. | 1.1 | 16 |
| 29 | Characterization of Human Hippocampal Neural Stem/Progenitor Cells and Their Application to Physiologically Relevant Assays for Multiple Ionotropic Glutamate Receptors. Journal of Biomolecular Screening, 2014, 19, 1174-1184. | 2.6 | 7 |
| 30 | In vitro organogenesis from pluripotent stem cells. Organogenesis, 2014, 10, 159-163. | 0.4 | 29 |
| 31 | Concise Review: Drug Discovery in the Age of the Induced Pluripotent Stem Cell. Stem Cells Translational Medicine, 2014, 3, 500-509. | 1.6 | 65 |
| 32 | New Methods in Tissue Engineering: Improved Models for Viral Infection. Annual Review of Virology, 2014, 1, 475-499. | 3.0 | 23 |
| 33 | In vitro clinical trials: the future of cell-based profiling. Frontiers in Pharmacology, 2014, 5, 121. | 1.6 | 16 |
| 34 | State-of-the-art of 3D cultures (organs-on-a-chip) in safety testing and pathophysiology. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 441-477. | 0.9 | 166 |
| 35 | FRA2A Is a CGG Repeat Expansion Associated with Silencing of AFF3. PLoS Genetics, 2014, 10, e1004242. | 1.5 | 41 |
| 36 | The Billion Cell Construct: Will Three-Dimensional Printing Get Us There?. PLoS Biology, 2014, 12, e1001882. | 2.6 | 162 |
| 37 | Human iPSC-Derived Miniature Organs: A Tool for Drug Studies. Clinical Pharmacology and Therapeutics, 2014, 96, 310-313. | 2.3 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 38 | 3D tissue-engineered model of Ewing's sarcoma. Advanced Drug Delivery Reviews, 2014, 79-80, 155-171. | 6.6 | 39 |
| 39 | Human Stem Cells for Craniomaxillofacial Reconstruction. Stem Cells and Development, 2014, 23, 1437-1451. | 1.1 | 9 |
| 40 | Engineered Cell Manipulation for Biomedical Application. Nanomedicine and Nanotoxicology, 2014, , . | 0.1 | 3 |
| 41 | Nucleaseâ€mediated genome editing: At the frontâ€line of functional genomics technology. Development Growth and Differentiation, 2014, 56, 2-13. | 0.6 | 60 |
| 42 | Regulation of the neural stem cell compartment by extracellular matrix constituents. Progress in Brain Research, 2014, 214, 3-28. | 0.9 | 56 |
| 43 | The Future of Neuroepigenetics in the Human Brain. Progress in Molecular Biology and Translational Science, 2014, 128, 199-228. | 0.9 | 14 |
| 44 | New strategies in kidney regeneration and tissue engineering. Current Opinion in Nephrology and Hypertension, 2014, 23, 399-405. | 1.0 | 49 |
| 45 | In Vitro Toxicology Systems. Methods in Pharmacology and Toxicology, 2014, , . | 0.1 | 8 |
| 46 | Cytoskeletal Regulation by AUTS2 in Neuronal Migration and Neuritogenesis. Cell Reports, 2014, 9, 2166-2179. | 2.9 | 109 |
| 47 | Three-dimensional bioprinting: new horizon for cardiac surgery. European Journal of Cardio-thoracic Surgery, 2014, 46, 339-341. | 0.6 | 23 |
| 48 | A brief perspective on neural cell therapy. Molecular and Cellular Therapies, 2014, 2, 2. | 0.2 | 1 |
| 49 | In vitro neurogenesis: development and functional implications of iPSC technology. Cellular and Molecular Life Sciences, 2014, 71, 1623-1639. | 2.4 | 39 |
| 50 | Rethinking Differentiation: Stem Cells, Regeneration, and Plasticity. Cell, 2014, 157, 110-119. | 13.5 | 217 |
| 51 | The human side of microglia. Trends in Neurosciences, 2014, 37, 125-135. | 4.2 | 206 |
| 52 | Assembly of Functional Threeâ€Dimensional Neuronal Networks on a Microchip. Small, 2014, 10, 2530-2536. | 5.2 | 20 |
| 53 | The Human Conditionâ€”A Molecular Approach. Cell, 2014, 157, 216-226. | 13.5 | 175 |
| 54 | On the road to bioartificial organs. Pflugers Archiv European Journal of Physiology, 2014, 466, 1847-1857. | 1.3 | 20 |
| 55 | Selfâ€organization of neural tissue architectures from pluripotent stem cells. Journal of Comparative Neurology, 2014, 522, 2831-2844. | 0.9 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 56 | Human CLP1 Mutations Alter tRNA Biogenesis, Affecting Both Peripheral and Central Nervous System Function. Cell, 2014, 157, 636-650. | 13.5 | 189 |
| 57 | Differentiation, polarization, and migration of human induced pluripotent stem cell-derived neural progenitor cells co-cultured with a human glial cell line with radial glial-like characteristics. Biochemical and Biophysical Research Communications, 2014, 447, 683-688. | 1.0 | 18 |
| 58 | Modeling Neurodevelopmental Disorders Using Human Pluripotent Stem Cells. Stem Cell Reviews and Reports, 2014, 10, 494-511. | 5.6 | 36 |
| 59 | Bioengineering approaches to guide stem cell-based organogenesis. Development (Cambridge), 2014, 141, 1794-1804. | 1.2 | 116 |
| 60 | Cortical neurogenesis from pluripotent stem cells: complexity emerging from simplicity. Current Opinion in Neurobiology, 2014, 27, 151-157. | 2.0 | 35 |
| 61 | Boosting the Power of Schizophrenia Genetics by Leveraging New Statistical Tools. Schizophrenia Bulletin, 2014, 40, 13-17. | 2.3 | 84 |
| 62 | Lab generated retina: Realizing the dream. Visual Neuroscience, 2014, 31, 317-332. | 0.5 | 12 |
| 63 | Congenital microcephaly. American Journal of Medical Genetics, Part C: Seminars in Medical Genetics, 2014, 166, 124-139. | 0.7 | 105 |
| 64 | Drug discovery through stem cell-based organoid models. Advanced Drug Delivery Reviews, 2014, 69-70, 19-28. | 6.6 | 172 |
| 65 | Brains in metamorphosis: reprogramming cell identity within the central nervous system. Current Opinion in Neurobiology, 2014, 27, 208-214. | 2.0 | 28 |
| 66 | Using genetic findings in autism for the development of new pharmaceutical compounds. Psychopharmacology, 2014, 231, 1063-1078. | 1.5 | 27 |
| 67 | iPSC-derived neurons as a higher-throughput readout for autism: promises and pitfalls. Trends in Molecular Medicine, 2014, 20, 91-104. | 3.5 | 42 |
| 68 | Pluripotent stem cells in regenerative medicine: challenges and recent progress. Nature Reviews Genetics, 2014, 15, 82-92. | 7.7 | 403 |
| 69 | Development-Inspired Reprogramming of the Mammalian Central Nervous System. Science, 2014, 343, 1239882. | 6.0 | 87 |
| 70 | Engineering Three-Dimensional Stem Cell Morphogenesis for the Development of Tissue Models and Scalable Regenerative Therapeutics. Annals of Biomedical Engineering, 2014, 42, 352-367. | 1.3 | 71 |
| 71 | Self-organizing stem cells. Nature Methods, 2014, 11, 31-31. | 9.0 | 2 |
| 72 | 2013: Signaling Breakthroughs of the Year. Science Signaling, 2014, 7, eg1. | 1.6 | 2 |
| 73 | Human Pluripotent Stem Cell Culture: Considerations for Maintenance, Expansion, and Therapeutics. Cell Stem Cell, 2014, 14, 13-26. | 5.2 | 297 |

| # | Article | IF | Citations |
|---|---|---|---|
| 74 | Extracellular matrix: A dynamic microenvironment for stem cell niche. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 2506-2519. | 1.1 | 1,017 |
| 75 | In situ-forming injectable hydrogels for regenerative medicine. Progress in Polymer Science, 2014, 39, 1973-1986. | 11.8 | 435 |
| 76 | Modeling human carcinomas: Physiologically relevant 3D models to improve anti-cancer drug development. Advanced Drug Delivery Reviews, 2014, 79-80, 50-67. | 6.6 | 129 |
| 77 | Modeling human development in 3D culture. Current Opinion in Cell Biology, 2014, 31, 23-28. | 2.6 | 76 |
| 78 | Analytical tools and current challenges in the modern era of neuroepigenomics. Nature Neuroscience, 2014, 17, 1476-1490. | 7.1 | 100 |
| 79 | Toward in vitro models of brain structure and function. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13682-13683. | 3.3 | 26 |
| 80 | Integration of microstructured scaffolds, neurons, and multielectrode arrays. Progress in Brain Research, 2014, 214, 415-442. | 0.9 | 9 |
| 81 | Generation of cerebral organoids from human pluripotent stem cells. Nature Protocols, 2014, 9, 2329-2340. | 5.5 | 1,189 |
| 82 | The Cell Biology of Neurogenesis: Toward an Understanding of the Development and Evolution of the Neocortex. Annual Review of Cell and Developmental Biology, 2014, 30, 465-502. | 4.0 | 616 |
| 83 | Generation of Functional Neurons from Feeder-Free, Keratinocyte-Derived Equine Induced Pluripotent Stem Cells. Stem Cells and Development, 2014, 23, 1524-1534. | 1.1 | 44 |
| 84 | Pituitary cell differentiation from stem cells and other cells: toward restorative therapy for hypopituitarism?. Regenerative Medicine, 2014, 9, 513-534. | 0.8 | 16 |
| 85 | To Simulate or Not to Simulate: What Are the Questions?. Neuron, 2014, 84, 254-261. | 3.8 | 62 |
| 86 | Luminal signalling links cell communication to tissue architecture during organogenesis. Nature, 2014, 515, 120-124. | 13.7 | 129 |
| 87 | Symmetry breaking, germ layer specification and axial organisation in aggregates of mouse embryonic stem cells. Development (Cambridge), 2014, 141, 4231-4242. | 1.2 | 346 |
| 88 | Wnt/Î²-catenin and FGF signalling direct the specification and maintenance of a neuromesodermal axial progenitor in ensembles of mouse embryonic stem cells. Development (Cambridge), 2014, 141, 4243-4253. | 1.2 | 141 |
| 89 | The generation of kidney organoids by differentiation of human pluripotent cells to ureteric bud progenitorâ€“like cells. Nature Protocols, 2014, 9, 2693-2704. | 5.5 | 86 |
| 90 | Small organelle, big responsibility: the role of centrosomes in development and disease. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130468. | 1.8 | 128 |
| 91 | Microfabrication and microfluidics for muscle tissue models. Progress in Biophysics and Molecular Biology, 2014, 115, 279-293. | 1.4 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 92 | Gyrification from constrained cortical expansion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12667-12672. | 3.3 | 332 |
| 93 | Adult neurogenesis: bridging the gap between mice and humans. Trends in Cell Biology, 2014, 24, 558-563. | 3.6 | 117 |
| 94 | Tissue-culture light sheet fluorescence microscopy (TC-LSFM) allows long-term imaging of three-dimensional cell cultures under controlled conditions. Integrative Biology (United Kingdom), 2014, 6, 988-998. | 0.6 | 39 |
| 95 | Investigating human disease using stem cell models. Nature Reviews Genetics, 2014, 15, 625-639. | 7.7 | 225 |
| 97 | Bioengineered functional brain-like cortical tissue. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13811-13816. | 3.3 | 255 |
| 98 | Microfluidic organs-on-chips. Nature Biotechnology, 2014, 32, 760-772. | 9.4 | 2,468 |
| 99 | A three-dimensional human neural cell culture model of Alzheimerâ€™s disease. Nature, 2014, 515, 274-278. | 13.7 | 950 |
| 100 | Human stem cell models of dementia. Human Molecular Genetics, 2014, 23, R35-R39. | 1.4 | 23 |
| 101 | Biological and medical applications of a brain-on-a-chip. Experimental Biology and Medicine, 2014, 239, 1096-1107. | 1.1 | 103 |
| 102 | Three-dimensional organotypic culture: experimental models of mammalian biology and disease. Nature Reviews Molecular Cell Biology, 2014, 15, 647-664. | 16.1 | 626 |
| 103 | Mouse models of human evolution. Current Opinion in Genetics and Development, 2014, 29, 75-80. | 1.5 | 15 |
| 104 | Organogenesis in a dish: Modeling development and disease using organoid technologies. Science, 2014, 345, 1247125. | 6.0 | 1,937 |
| 105 | Neural stem cells: are they the hope of a better life for patients with fetal-onset hydrocephalus?. Fluids and Barriers of the CNS, 2014, 11, 7. | 2.4 | 18 |
| 106 | Central nervous system regeneration--where are we?. QJM - Monthly Journal of the Association of Physicians, 2014, 107, 335-339. | 0.2 | 19 |
| 107 | Epigenetic Regulation of Pluripotency and Differentiation. Circulation Research, 2014, 115, 311-324. | 2.0 | 205 |
| 108 | A Quantitative Framework to Evaluate Modeling of Cortical Development by Neural Stem Cells. Neuron, 2014, 83, 69-86. | 3.8 | 184 |
| 109 | Skin deep: from dermal fibroblasts to pancreatic beta cells. Immunologic Research, 2014, 59, 279-286. | 1.3 | 2 |
| 110 | Microcephaly genes evolved adaptively throughout the evolution of eutherian mammals. BMC Evolutionary Biology, 2014, 14, 120. | 3.2 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 111 | 3D mouse embryonic stem cell culture for generating inner ear organoids. Nature Protocols, 2014, 9, 1229-1244. | 5.5 | 124 |
| 112 | Generating Human Neurons In Vitro and Using Them to Understand Neuropsychiatric Disease. Annual Review of Neuroscience, 2014, 37, 479-501. | 5.0 | 58 |
| 113 | A method to recapitulate early embryonic spatial patterning in human embryonic stem cells. Nature Methods, 2014, 11, 847-854. | 9.0 | 680 |
| 114 | Bioelectrical Mechanisms for Programming Growth and Form: Taming Physiological Networks for Soft Body Robotics. Soft Robotics, 2014, 1, 169-191. | 4.6 | 44 |
| 115 | Acrylamide alters neurotransmitter induced calcium responses in murine ESC-derived and primary neurons. NeuroToxicology, 2014, 43, 117-126. | 1.4 | 34 |
| 116 | Thinking out of the dish: what to learn about cortical development using pluripotent stem cells. Trends in Neurosciences, 2014, 37, 334-342. | 4.2 | 89 |
| 117 | Stem Cells on the Brain: Modeling Neurodevelopmental and Neurodegenerative Diseases Using Human Induced Pluripotent Stem Cells. Journal of Neurogenetics, 2014, 28, 5-29. | 0.6 | 52 |
| 118 | Generation, expansion and functional analysis of endothelial cells and pericytes derived from human pluripotent stem cells. Nature Protocols, 2014, 9, 1514-1531. | 5.5 | 281 |
| 119 | Role of mesenchymal stem cells in cell life and their signaling. World Journal of Stem Cells, 2014, 6, 24. | 1.3 | 19 |
| 120 | <em>In Vitro</em> Pancreas Organogenesis from Dispersed Mouse Embryonic Progenitors. Journal of Visualized Experiments, 2014, , . | 0.2 | 20 |
| 121 | The Power and the Promise of Cell Reprogramming: Personalized Autologous Body Organ and Cell Transplantation. Journal of Clinical Medicine, 2014, 3, 373-387. | 1.0 | 8 |
| 122 | Evolving Marine Biomimetics for Regenerative Dentistry. Marine Drugs, 2014, 12, 2877-2912. | 2.2 | 32 |
| 123 | A CGG-Repeat Expansion Mutation inZNF713Causes FRA7A: Association with Autistic Spectrum Disorder in two Families. Human Mutation, 2014, 35, n/a-n/a. | 1.1 | 28 |
| 124 | Mesenchymal Wnt/Î²-Catenin Signaling Controls Epithelial Stem Cell Homeostasis in Teeth by Inhibiting the Antiapoptotic Effect of Fgf10. Stem Cells, 2015, 33, 1670-1681. | 1.4 | 26 |
| 125 | Can a few nonâ€coding mutations make a human brain?. BioEssays, 2015, 37, 1054-1061. | 1.2 | 17 |
| 126 | Mutations in  <scp>CDK</scp> 5 <scp>RAP</scp> 2  cause Seckel syndrome. Molecular Genetics & Genomic Medicine, 2015, 3, 467-480. | 0.6 | 55 |
| 127 | Simultaneous MR imaging for tissue engineering in a rat model of stroke. Scientific Reports, 2015, 5, 14597. | 1.6 | 26 |
| 128 | The proteome of schizophrenia. NPJ Schizophrenia, 2015, 1, 14003. | 2.0 | 96 |

| # | Article | IF | Citations |
|---|---|---|---|
| 129 | Quantitative high-throughput gene expression profiling of human striatal development to screen stem cellâ€“derived medium spiny neurons. Molecular Therapy - Methods and Clinical Development, 2015, 2, 15030. | 1.8 | 18 |
| 130 | Generation of retinal ganglion cells with functional axons from human induced pluripotent stem cells. Scientific Reports, 2015, 5, 8344. | 1.6 | 105 |
| 131 | Advances in 3D neuronal cell culture. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, . | 0.6 | 18 |
| 132 | Stem Cells and Progenitor Cells for Tissue-Engineered Solutions to Congenital Heart Defects. Biomarker Insights, 2015, 10s1, BMI.S20058. | 1.0 | 7 |
| 133 | Generation of Aggregates of Mouse Embryonic Stem Cells that Show Symmetry Breaking, Polarization and Emergent Collective Behaviour <em>In Vitro</em>. Journal of Visualized Experiments, 2015, , . | 0.2 | 51 |
| 134 | In vitro-ex vivo model systems for nanosafety assessment. European Journal of Nanomedicine, 2015, 7, . | 0.6 | 22 |
| 135 | Understanding the molecular basis of autism in a dish using hiPSCs-derived neurons from ASD patients. Molecular Brain, 2015, 8, 57. | 1.3 | 14 |
| 136 | The GIPC1-Akt1 Pathway Is Required for the Specification of the Eye Field in Mouse Embryonic Stem Cells. Stem Cells, 2015, 33, 2674-2685. | 1.4 | 15 |
| 137 | Fabrication of three-dimensional hydrogel scaffolds for modeling shunt failure by tissue obstruction in hydrocephalus. Fluids and Barriers of the CNS, 2015, 12, 26. | 2.4 | 15 |
| 138 | A reproducible and versatile system for the dynamic expansion of human pluripotent stem cells in suspension. Biotechnology Journal, 2015, 10, 1589-1599. | 1.8 | 31 |
| 139 | Cryopreservation of embryonic stem cellâ€derived multicellular neural aggregates labeled with micronâ€sized particles of iron oxide for magnetic resonance imaging. Biotechnology Progress, 2015, 31, 510-521. | 1.3 | 15 |
| 140 | Building blocks of the cerebral cortex: from development to the dish. Wiley Interdisciplinary Reviews: Developmental Biology, 2015, 4, 529-544. | 5.9 | 4 |
| 141 | Alzheimer's in 3D culture: Challenges and perspectives. BioEssays, 2015, 37, 1139-1148. | 1.2 | 83 |
| 142 | Neural Cell Fate Determination. , 2015, , 283-296. | | 3 |
| 143 | Neurobiology collides with moral and criminal responsibility: the result is double vision. , 0, , 231-250. | | 0 |
| 144 | A new technique for modeling neuronal connectivity using human pluripotent stem cells. Restorative Neurology and Neuroscience, 2015, 33, 347-356. | 0.4 | 2 |
| 145 | Recent Patents and Advances in Regenerative Medicine and Stem Cell Therapies for Diabetes, Cardiovascular and Neurodegenerative Diseases. Recent Patents on Regenerative Medicine, 2015, 5, 36-54. | 0.4 | 0 |
| 146 | An Advocacy for the Use of 3D Stem Cell Culture Systems for the Development of Regenerative Medicine: An Emphasis on Photoreceptor Generation. Journal of Stem Cell Research & Therapy, 2015, 05, . | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 147 | Assembling Kidney Tissues from Cells: The Long Road from Organoids to Organs. Frontiers in Cell and Developmental Biology, 2015, 3, 70. | 1.8 | 13 |
| 148 | Induced Pluripotency and Gene Editing in Disease Modelling: Perspectives and Challenges. International Journal of Molecular Sciences, 2015, 16, 28614-28634. | 1.8 | 19 |
| 149 | Morphological and functional aspects of progenitors perturbed in cortical malformations. Frontiers in Cellular Neuroscience, 2015, 9, 30. | 1.8 | 42 |
| 150 | MCPH1: a window into brain development and evolution. Frontiers in Cellular Neuroscience, 2015, 9, 92. | 1.8 | 36 |
| 151 | Impact of prenatal environmental stress on cortical development. Frontiers in Cellular Neuroscience, 2015, 9, 207. | 1.8 | 28 |
| 152 | Lost highway(s): barriers to postnatal cortical neurogenesis and implications for brain repair. Frontiers in Cellular Neuroscience, 2015, 9, 216. | 1.8 | 7 |
| 153 | Recapitulating the Tumor Ecosystem Along the Metastatic Cascade Using 3D Culture Models. Frontiers in Oncology, 2015, 5, 170. | 1.3 | 27 |
| 154 | Sustained Pax6 Expression Generates Primate-like Basal Radial Glia in Developing Mouse Neocortex. PLoS Biology, 2015, 13, e1002217. | 2.6 | 93 |
| 155 | Transdifferentiation-Induced Neural Stem Cells Promote Recovery of Middle Cerebral Artery Stroke Rats. PLoS ONE, 2015, 10, e0137211. | 1.1 | 22 |
| 156 | In vitro generation of human pluripotent stem cell derived lung organoids. ELife, 2015, 4, . | 2.8 | 605 |
| 157 | Microendophenotypes of Psychiatric Disorders: Phenotypes of Psychiatric Disorders at the Level of Molecular Dynamics, Synapses, Neurons, and Neural Circuits. Current Molecular Medicine, 2015, 15, 111-118. | 0.6 | 14 |
| 158 | Polymeric Nanovehicle Regulated Spatiotemporal Real-Time Imaging of the Differentiation Dynamics of Transplanted Neural Stem Cells after Traumatic Brain Injury. ACS Nano, 2015, 9, 6683-6695. | 7.3 | 31 |
| 159 | Human Evolution: Enhancing the Brain. Current Biology, 2015, 25, R421-R423. | 1.8 | 3 |
| 160 | Probing disorders of the nervous system using reprogramming approaches. EMBO Journal, 2015, 34, 1456-1477. | 3.5 | 45 |
| 161 | Programming and Reprogramming Cellular Age in the Era of Induced Pluripotency. Cell Stem Cell, 2015, 16, 591-600. | 5.2 | 147 |
| 162 | How to make a midbrain dopaminergic neuron. Development (Cambridge), 2015, 142, 1918-1936. | 1.2 | 286 |
| 163 | Functional cortical neurons and astrocytes from human pluripotent stem cells in 3D culture. Nature Methods, 2015, 12, 671-678. | 9.0 | 1,220 |
| 164 | Addressing the Genetics of Human Mental Health Disorders in Model Organisms. Annual Review of Genomics and Human Genetics, 2015, 16, 173-197. | 2.5 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 165 | Epigenetic changes in the developing brain: Effects on behavior. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6789-6795. | 3.3 | 52 |
| 166 | Creating Patient-Specific Neural Cells for the InÂVitro Study of Brain Disorders. Stem Cell Reports, 2015, 5, 933-945. | 2.3 | 72 |
| 167 | Human cerebral organoids recapitulate gene expression programs of fetal neocortex development. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15672-15677. | 3.3 | 870 |
| 168 | Studying Lineage Decision-Making In Vitro: Emerging Concepts and Novel Tools. Annual Review of Cell and Developmental Biology, 2015, 31, 317-345. | 4.0 | 41 |
| 169 | Generation of Neural Progenitor Spheres from Human Pluripotent Stem Cells in a Suspension Bioreactor. Methods in Molecular Biology, 2015, 1502, 119-128. | 0.4 | 7 |
| 170 | A high-throughput platform for stem cell niche co-cultures and downstream gene expression analysis. Nature Cell Biology, 2015, 17, 340-349. | 4.6 | 133 |
| 171 | Stem Cell-Derived Systems in Toxicology Assessment. Stem Cells and Development, 2015, 24, 1284-1296. | 1.1 | 49 |
| 172 | Micropatterned, clickable culture substrates enable in situ spatiotemporal control of human PSC-derived neural tissue morphology. Chemical Communications, 2015, 51, 5238-5241. | 2.2 | 25 |
| 173 | Mathematical modelling of fluid transport and its regulation at multiple scales. BioSystems, 2015, 130, 1-10. | 0.9 | 6 |
| 174 | Engineering Living Functional Materials. ACS Synthetic Biology, 2015, 4, 8-11. | 1.9 | 119 |
| 175 | A practical guide to induced pluripotent stem cell research using patient samples. Laboratory Investigation, 2015, 95, 4-13. | 1.7 | 58 |
| 176 | Engineered In Vitro Disease Models. Annual Review of Pathology: Mechanisms of Disease, 2015, 10, 195-262. | 9.6 | 442 |
| 177 | Path from schizophrenia genomics to biology: gene regulation and perturbation in neurons derived from induced pluripotent stem cells and genome editing. Neuroscience Bulletin, 2015, 31, 113-127. | 1.5 | 12 |
| 178 | The Microenvironment of Embryoid Bodies Modulated the Commitment to Neural Lineage Postcryopreservation. Tissue Engineering - Part C: Methods, 2015, 21, 356-366. | 1.1 | 8 |
| 179 | Modeling human lung development and disease using pluripotent stem cells. Development (Cambridge), 2015, 142, 13-16. | 1.2 | 40 |
| 180 | Imaging oxygen in neural cell and tissue models by means of anionic cell-permeable phosphorescent nanoparticles. Cellular and Molecular Life Sciences, 2015, 72, 367-381. | 2.4 | 49 |
| 181 | Concise Review: Modeling Multiple Sclerosis With Stem Cell Biological Platforms: Toward Functional Validation of Cellular and Molecular Phenotypes in Inflammation-Induced Neurodegeneration. Stem Cells Translational Medicine, 2015, 4, 252-260. | 1.6 | 20 |
| 182 | Nanoengineered Surfaces for Focal Adhesion Guidance Trigger Mesenchymal Stem Cell Self-Organization and Tenogenesis. Nano Letters, 2015, 15, 1517-1525. | 4.5 | 54 |

| # | Article | IF | Citations |
|---|---|---|---|
| 183 | On human pluripotent stem cell control: The rise of 3D bioengineering and mechanobiology. Biomaterials, 2015, 52, 26-43. | 5.7 | 105 |
| 184 | Reprogramming patient-derived cells to study the epilepsies. Nature Neuroscience, 2015, 18, 360-366. | 7.1 | 46 |
| 185 | Genetic Changes Shaping the Human Brain. Developmental Cell, 2015, 32, 423-434. | 3.1 | 115 |
| 186 | LightÂsheet-based fluorescence microscopy (LSFM) for the quantitative imaging of cells and tissues. Cell and Tissue Research, 2015, 360, 129-141. | 1.5 | 66 |
| 188 | The nanoparticle biomolecule corona: lessons learned â€“ challenge accepted?. Chemical Society Reviews, 2015, 44, 6094-6121. | 18.7 | 539 |
| 189 | Cell reprogramming and neuronal differentiation applied to neurodegenerative diseases: Focus on Parkinson's disease. FEBS Letters, 2015, 589, 3396-3406. | 1.3 | 5 |
| 190 | The bio-corona and its impact on nanomaterial toxicity. European Journal of Nanomedicine, 2015, 7, . | 0.6 | 27 |
| 191 | Organoid Models and Applications in Biomedical Research. Nephron, 2015, 130, 191-199. | 0.9 | 2,247 |
| 192 | The Renaissance of Developmental Biology. PLoS Biology, 2015, 13, e1002149. | 2.6 | 26 |
| 193 | CEP63 deficiency promotes p53-dependent microcephaly and reveals a role for the centrosome in meiotic recombination. Nature Communications, 2015, 6, 7676. | 5.8 | 96 |
| 194 | From One-Cell to Tissue: Reprogramming, Cell Differentiation and Tissue Engineering. BioScience, 2015, 65, 468-475. | 2.2 | 10 |
| 195 | FOXG1-Dependent Dysregulation of GABA/Glutamate Neuron Differentiation in Autism Spectrum Disorders. Cell, 2015, 162, 375-390. | 13.5 | 894 |
| 196 | Organs from the lab. Nature, 2015, 522, 373-377. | 13.7 | 87 |
| 197 | Being human: The role of pluripotent stem cells in regenerative medicine and humanizing Alzheimer's disease models. Molecular Aspects of Medicine, 2015, 43-44, 54-65. | 2.7 | 24 |
| 198 | Spatial and temporal control of cell aggregation efficiently directs human pluripotent stem cells towards neural commitment. Biotechnology Journal, 2015, 10, 1612-1624. | 1.8 | 35 |
| 199 | Advances in Reprogramming-Based Study of Neurologic Disorders. Stem Cells and Development, 2015, 24, 1265-1283. | 1.1 | 20 |
| 200 | Current Methods and Challenges in the Comprehensive Characterization of Human Pluripotent Stem Cells. Stem Cell Reviews and Reports, 2015, 11, 357-372. | 5.6 | 10 |
| 201 | Beyond 3D culture models of cancer. Science Translational Medicine, 2015, 7, 283ps9. | 5.8 | 80 |

| # | Article | IF | Citations |
|---|---|---|---|
| 202 | An Ethics Toolbox for Neurotechnology. Neuron, 2015, 86, 34-37. | 3.8 | 48 |
| 203 | Neuronal medium that supports basic synaptic functions and activity of human neurons in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2725-34. | 3.3 | 317 |
| 204 | Induced Pluripotent Stem Cell Models to Enable In Vitro Models for Screening in the Central Nervous System. Stem Cells and Development, 2015, 24, 1852-1864. | 1.1 | 34 |
| 205 | Fundamentals of Neurogenesis and Neural Stem Cell Development. , 2015, , 1-13. | | 1 |
| 206 | Seeking the right context for evaluating nanomedicine: from tissue models in petri dishes to microfluidic organs-on-a-chip. Nanomedicine, 2015, 10, 685-688. | 1.7 | 65 |
| 207 | Consciousness: here, there and everywhere?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140167. | 1.8 | 394 |
| 208 | Switching roles: the functional plasticity of adult tissue stem cells. EMBO Journal, 2015, 34, 1164-1179. | 3.5 | 77 |
| 209 | The extracellular matrix compartment of neural stem and glial progenitor cells. Glia, 2015, 63, 1330-1349. | 2.5 | 102 |
| 210 | Rbm8aHaploinsufficiency Disrupts Embryonic Cortical Development Resulting in Microcephaly. Journal of Neuroscience, 2015, 35, 7003-7018. | 1.7 | 75 |
| 211 | Kidney regeneration using developing xenoembryo. Current Opinion in Organ Transplantation, 2015, 20, 160-164. | 0.8 | 5 |
| 212 | Shaping of biological tubes by mechanical interaction of cell and extracellular matrix. Current Opinion in Genetics and Development, 2015, 32, 129-134. | 1.5 | 30 |
| 213 | The route to spinal cord cell types: a tale of signals and switches. Trends in Genetics, 2015, 31, 282-289. | 2.9 | 104 |
| 214 | Organoid development in cancer genome discovery. Current Opinion in Genetics and Development, 2015, 30, 42-48. | 1.5 | 58 |
| 215 | Generating a self-organizing kidney from pluripotent cells. Current Opinion in Organ Transplantation, 2015, 20, 178-186. | 0.8 | 16 |
| 216 | Analysing human neural stem cell ontogeny by consecutive isolation of Notch active neural progenitors. Nature Communications, 2015, 6, 6500. | 5.8 | 73 |
| 217 | Direct somatic lineage conversion. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140368. | 1.8 | 26 |
| 218 | Three-Dimensional Neural Spheroid Culture: AnIn VitroModel for Cortical Studies. Tissue Engineering - Part C: Methods, 2015, 21, 1274-1283. | 1.1 | 111 |
| 219 | Genomic approaches to studying human-specific developmental traits. Development (Cambridge), 2015, 142, 3100-3112. | 1.2 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 220 | Proliferation control in neural stem and progenitor cells. Nature Reviews Neuroscience, 2015, 16, 647-659. | 4.9 | 318 |
| 221 | Monoamine neurotransmitter disordersâ€"clinical advances and future perspectives. Nature Reviews Neurology, 2015, 11, 567-584. | 4.9 | 221 |
| 222 | Modeling mouse and human development using organoid cultures. Development (Cambridge), 2015, 142, 3113-3125. | 1.2 | 386 |
| 223 | Is this a brain which I see before me? Modeling human neural development with pluripotent stem cells. Development (Cambridge), 2015, 142, 3138-3150. | 1.2 | 91 |
| 224 | Chromosomal Rearrangements as Barriers to Genetic Homogenization between Archaic and Modern Humans. Molecular Biology and Evolution, 2015, 32, msv204. | 3.5 | 24 |
| 225 | Functional genomics of human brain development and implications for autism spectrum disorders. Translational Psychiatry, 2015, 5, e665-e665. | 2.4 | 24 |
| 226 | Neural retina identity is specified by lens-derived BMP signals. Development (Cambridge), 2015, 142, 1850-1859. | 1.2 | 36 |
| 227 | Challenges in understanding psychiatric disorders and developing therapeutics: a role for zebrafish. DMM Disease Models and Mechanisms, 2015, 8, 647-656. | 1.2 | 38 |
| 228 | RASopathies: unraveling mechanisms with animal models. DMM Disease Models and Mechanisms, 2015, 8, 769-782. | 1.2 | 66 |
| 229 | Using human induced pluripotent stem cells to model cerebellar disease: Hope and hype. Journal of Neurogenetics, 2015, 29, 95-102. | 0.6 | 10 |
| 230 | Quantitative multivariate analysis of dynamic multicellular morphogenic trajectories. Integrative Biology (United Kingdom), 2015, 7, 825-833. | 0.6 | 15 |
| 231 | Human Neural Development and Human Embryonic Stem Cell Neural Differentiation. Translational Medicine Research, 2015, , 189-199. | 0.0 | 0 |
| 232 | Vascular diseases await translation of blood vessels engineered from stem cells. Science Translational Medicine, 2015, 7, 309rv6. | 5.8 | 24 |
| 233 | Nephron organoids derived from human pluripotent stem cells model kidney development and injury. Nature Biotechnology, 2015, 33, 1193-1200. | 9.4 | 694 |
| 234 | Utilizing induced pluripotent stem cells (iPSCs) to understand the actions of estrogens in human neurons. Hormones and Behavior, 2015, 74, 228-242. | 1.0 | 21 |
| 235 | In vitro bioengineered model of cortical brain tissue. Nature Protocols, 2015, 10, 1362-1373. | 5.5 | 87 |
| 236 | Challenges and opportunities toward enabling phenotypic screening of complex and 3D cell models. Future Medicinal Chemistry, 2015, 7, 513-525. | 1.1 | 18 |
| 237 | The stability of memories during brain remodeling: A perspective. Communicative and Integrative Biology, 2015, 8, e1073424. | 0.6 | 36 |

| # | Article | IF | Citations |
|---|---|---|---|
| 238 | Using Patient-Derived Induced Pluripotent Stem Cells to Model and Treat Epilepsies. Current Neurology and Neuroscience Reports, 2015, 15, 71. | 2.0 | 30 |
| 239 | Centrosome function and assembly in animal cells. Nature Reviews Molecular Cell Biology, 2015, 16, 611-624. | 16.1 | 445 |
| 240 | Modeling psychiatric disorders for developing effective treatments. Nature Medicine, 2015, 21, 979-988. | 15.2 | 127 |
| 241 | Pluripotent stem cell-based disease modeling: current hurdles and future promise. Current Opinion in Cell Biology, 2015, 37, 102-110. | 2.6 | 66 |
| 242 | Human stem cell-based disease modeling: prospects and challenges. Current Opinion in Cell Biology, 2015, 37, 84-90. | 2.6 | 31 |
| 243 | Organotypic brain slice cultures: A review. Neuroscience, 2015, 305, 86-98. | 1.1 | 324 |
| 244 | Generation of functional hippocampal neurons from self-organizing human embryonic stem cell-derived dorsomedial telencephalic tissue. Nature Communications, 2015, 6, 8896. | 5.8 | 404 |
| 245 | Toward biomanufacturing of pluripotent stem cell derived products: scale out and scale up. Pharmaceutical Bioprocessing, 2015, 3, 25-33. | 0.8 | 1 |
| 246 | Biological Networks Governing the Acquisition, Maintenance, and Dissolution of Pluripotency: Insights from Functional Genomics Approaches. Cold Spring Harbor Symposia on Quantitative Biology, 2015, 80, 189-198. | 2.0 | 2 |
| 248 | Natural photoreceptors and their application to synthetic biology. Trends in Biotechnology, 2015, 33, 80-91. | 4.9 | 44 |
| 249 | Human pluripotent stem cellâ€derived products: Advances towards robust, scalable and costâ€effective manufacturing strategies. Biotechnology Journal, 2015, 10, 83-95. | 1.8 | 82 |
| 250 | 3D culture of murine neural stem cells on decellularized mouse brain sections. Biomaterials, 2015, 41, 122-131. | 5.7 | 75 |
| 251 | Intracellular labeling of mouse embryonic stem cellâ€“derived neural progenitor aggregates with micron-sized particles of iron oxide. Cytotherapy, 2015, 17, 98-111. | 0.3 | 22 |
| 252 | Multi-parametric O2 Imaging in Three-Dimensional Neural Cell Models with the Phosphorescent Probes. Methods in Molecular Biology, 2015, 1254, 55-71. | 0.4 | 13 |
| 253 | Cell Polarity and Neurogenesis in Embryonic Stem Cell-Derived Neural Rosettes. Stem Cells and Development, 2015, 24, 1022-1033. | 1.1 | 27 |
| 254 | 3D in vitro modeling of the central nervous system. Progress in Neurobiology, 2015, 125, 1-25. | 2.8 | 196 |
| 255 | Application of human induced pluripotent stem cells for modeling and treating neurodegenerative diseases. New Biotechnology, 2015, 32, 212-228. | 2.4 | 34 |
| 256 | Convergence of Advances in Genomics, Team Science, and Repositories as Drivers of Progress in Psychiatric Genomics. Biological Psychiatry, 2015, 77, 6-14. | 0.7 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 257 | Concise Reviews: In Vitro-Produced Pancreas Organogenesis Models in Three Dimensions: Self-Organization From Few Stem Cells or Progenitors. Stem Cells, 2015, 33, 8-14. | 1.4 | 14 |
| 258 | Application and Assessment of Optical Clearing Methods for Imaging of Tissue-Engineered Neural Stem Cell Spheres. Tissue Engineering - Part C: Methods, 2015, 21, 292-302. | 1.1 | 44 |
| 259 | Derivation of Endodermal Progenitors From Pluripotent Stem Cells. Journal of Cellular Physiology, 2015, 230, 246-258. | 2.0 | 25 |
| 260 | Modelling Neurodegenerative Diseases Using Human Pluripotent Stem Cells. , 2016, , . | | 1 |
| 261 | Heterozygous STXBP1 Mutations Associated with Ohtahara Syndrome: Two Littles Make a Lot. Epilepsy Currents, 2016, 16, 330-332. | 0.4 | 0 |
| 262 | Human-Organoid Models: Accomplishments to Salvage Test-Animals. Journal of Biomedical Engineering and Medical Devices, 2016, 01, . | 0.1 | 2 |
| 263 | The cytoskeletal arrangements necessary to neurogenesis. Oncotarget, 2016, 7, 19414-19429. | 0.8 | 44 |
| 264 | From stem cells to comparative corticogenesis: a bridge too far?. Stem Cell Investigation, 2016, 3, 39-39. | 1.3 | 8 |
| 265 | iPSCs: A Minireview from Bench to Bed, including Organoids and the CRISPR System. Stem Cells International, 2016, 2016, 1-9. | 1.2 | 16 |
| 266 | Biology-inspired microphysiological system approaches to solve the prediction dilemma of substance testing. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 272-321. | 0.9 | 214 |
| 267 | Are stem cellâ€derived neural cells physiologically credible?. Journal of Physiology, 2016, 594, 6569-6572. | 1.3 | 6 |
| 268 | Mini-Brains Make Big Leaps for Studying Human Neural Development and Disease. Epilepsy Currents, 2016, 16, 402-404. | 0.4 | 1 |
| 269 | The Application of Human iPSCs in Neurological Diseases: From Bench to Bedside. Stem Cells International, 2016, 2016, 1-10. | 1.2 | 15 |
| 270 | Bioreactors. , 2016, , . | | 0 |
| 271 | Insights into the Biology and Therapeutic Applications of Neural Stem Cells. Stem Cells International, 2016, 2016, 1-18. | 1.2 | 21 |
| 272 | Advances in Stem Cell Research- A Ray of Hope in Better Diagnosis and Prognosis in Neurodegenerative Diseases. Frontiers in Molecular Biosciences, 2016, 3, 72. | 1.6 | 11 |
| 273 | Utility of Induced Pluripotent Stem Cells for the Study and Treatment of Genetic Diseases: Focus on Childhood Neurological Disorders. Frontiers in Molecular Neuroscience, 2016, 9, 78. | 1.4 | 29 |
| 274 | Neural Substrate Expansion for the Restoration of Brain Function. Frontiers in Systems Neuroscience, 2016, 10, 1. | 1.2 | 85 |

| # | Article | IF | Citations |
|---|---|---|---|
| 275 | iPS Cellsâ€"The Triumphs and Tribulations. Dentistry Journal, 2016, 4, 19. | 0.9 | 8 |
| 276 | Biocompatibility of Subcutaneously Implanted Plant-Derived Cellulose Biomaterials. PLoS ONE, 2016, 11, e0157894. | 1.1 | 164 |
| 277 | Self-Organizing 3D Human Neural Tissue Derived from Induced Pluripotent Stem Cells Recapitulate Alzheimerâ€™s Disease Phenotypes. PLoS ONE, 2016, 11, e0161969. | 1.1 | 405 |
| 278 | Functional Evaluations of Genes Disrupted in Patients with Touretteâ€™s Disorder. Frontiers in Psychiatry, 2016, 7, 11. | 1.3 | 14 |
| 279 | Expectations for the Methodology and Translation of Animal Research: A Survey of the General Public, Medical Students and Animal Researchers in North America. ATLA Alternatives To Laboratory Animals, 2016, 44, 361-381. | 0.7 | 6 |
| 280 | Targeting Nicotinamide Phosphoribosyltransferase as a Potential Therapeutic Strategy to Restore Adult Neurogenesis. CNS Neuroscience and Therapeutics, 2016, 22, 431-439. | 1.9 | 28 |
| 281 | Biology of lung cancer: genetic mutation, epithelial-mesenchymal transition, and cancer stem cells. General Thoracic and Cardiovascular Surgery, 2016, 64, 517-523. | 0.4 | 13 |
| 282 | De Novo Prediction of Stem Cell Identity using Single-Cell Transcriptome Data. Cell Stem Cell, 2016, 19, 266-277. | 5.2 | 484 |
| 283 | Differentiation Induction of Mouse Neural Stem Cells in Hydrogel Tubular Microenvironments with Controlled Tube Dimensions. Advanced Healthcare Materials, 2016, 5, 1104-1111. | 3.9 | 31 |
| 284 | 3D-Biodruck von Gewebe- und Organmodellen. Angewandte Chemie, 2016, 128, 4728-4743. | 1.6 | 2 |
| 285 | Functional Kidney Bioengineering with Pluripotent Stemâ€Cellâ€Derived Renal Progenitor Cells and Decellularized Kidney Scaffolds. Advanced Healthcare Materials, 2016, 5, 2080-2091. | 3.9 | 51 |
| 286 | Human Inducible Pluripotent Stem Cells and Autism Spectrum Disorder: Emerging Technologies. Autism Research, 2016, 9, 513-535. | 2.1 | 26 |
| 287 | Tissue culture on a chip: Developmental biology applications of selfâ€organized capillary networks in microfluidic devices. Development Growth and Differentiation, 2016, 58, 505-515. | 0.6 | 17 |
| 288 | Toward Organs on Demand: Breakthroughs and Challenges in Models of Organogenesis. Current Pathobiology Reports, 2016, 4, 77-85. | 1.6 | 21 |
| 289 | Pluripotent stem cell-derived kidney organoids: An in vivo-like in vitro technology. European Journal of Pharmacology, 2016, 790, 12-20. | 1.7 | 35 |
| 290 | A Method for Sectioning and Immunohistochemical Analysis of Stem Cellâ€"Derived 3â€D Organoids. Current Protocols in Stem Cell Biology, 2016, 37, 1C.19.1-1C.19.11. | 3.0 | 11 |
| 291 | A syndrome of microcephaly, short stature, polysyndactyly, and dental anomalies caused by a homozygous KATNB1 mutation. American Journal of Medical Genetics, Part A, 2016, 170, 728-733. | 0.7 | 13 |
| 292 | Advances in Zika Virus Research: Stem Cell Models, Challenges, and Opportunities. Cell Stem Cell, 2016, 19, 690-702. | 5.2 | 103 |

| # | Article | IF | Citations |
|---|---|---|---|
| 293 | 3D culture models of tissues under tension. Journal of Cell Science, 2017, 130, 63-70. | 1.2 | 40 |
| 294 | Tissue chips to aid drug development and modeling for rare diseases. Expert Opinion on Orphan Drugs, 2016, 4, 1113-1121. | 0.5 | 36 |
| 295 | Molecular mechanisms of asymmetric divisions in mammary stem cells. EMBO Reports, 2016, 17, 1700-1720. | 2.0 | 63 |
| 296 | Sonic hedgehog signaling: A conserved mechanism for the expansion of outer radial glia and intermediate progenitor cells and for the growth and folding of the neocortex. Neurogenesis (Austin, Tex ), 2016, 3, e1242957. | 1.5 | 3 |
| 297 | <scp>CPAP</scp> promotes timely cilium disassembly to maintain neural progenitor pool. EMBO Journal, 2016, 35, 803-819. | 3.5 | 208 |
| 299 | Zika virus infection induces mitosis abnormalities and apoptotic cell death of human neural progenitor cells. Scientific Reports, 2016, 6, 39775. | 1.6 | 181 |
| 300 | Cerebral Organoids Recapitulate Epigenomic Signatures of the Human Fetal Brain. Cell Reports, 2016, 17, 3369-3384. | 2.9 | 296 |
| 301 | 3D culture models of Alzheimerâ€™s disease: a road map to a â€œcure-in-a-dishâ€• Molecular Neurodegeneration, 2016, 11, 75. | 4.4 | 109 |
| 302 | Modeling Cancer with Pluripotent Stem Cells. Trends in Cancer, 2016, 2, 485-494. | 3.8 | 30 |
| 303 | High-throughput compound evaluation on 3D networks of neurons and glia in a microfluidic platform. Scientific Reports, 2016, 6, 38856. | 1.6 | 113 |
| 304 | Using Induced Pluripotent Stem Cells to Investigate Complex Genetic Psychiatric Disorders. Current Behavioral Neuroscience Reports, 2016, 3, 275-284. | 0.6 | 6 |
| 305 | A morphospace for synthetic organs and organoids: the possible and the actual. Integrative Biology (United Kingdom), 2016, 8, 485-503. | 0.6 | 48 |
| 306 | Human induced pluripotent stem cells: A disruptive innovation. Current Research in Translational Medicine, 2016, 64, 91-96. | 1.2 | 18 |
| 308 | High-throughput platforms for the screening of new therapeutic targets for neurodegenerative diseases. Drug Discovery Today, 2016, 21, 1355-1366. | 3.2 | 16 |
| 309 | Role of Sodium Channels in Epilepsy. Cold Spring Harbor Perspectives in Medicine, 2016, 6, a022814. | 2.9 | 78 |
| 310 | Evaluating cell reprogramming, differentiation and conversion technologies in neuroscience. Nature Reviews Neuroscience, 2016, 17, 424-437. | 4.9 | 239 |
| 311 | Better models for brain disease. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5461-5464. | 3.3 | 5 |
| 312 | Hedgehog signaling promotes basal progenitor expansion and the growth and folding of the neocortex. Nature Neuroscience, 2016, 19, 888-896. | 7.1 | 150 |

| # | Article | IF | Citations |
|---|---|---|---|
| 313 | Complex Tissue and Disease Modeling using hiPSCs. Cell Stem Cell, 2016, 18, 309-321. | 5.2 | 121 |
| 314 | Advancing the understanding of autism disease mechanisms through genetics. Nature Medicine, 2016, 22, 345-361. | 15.2 | 684 |
| 315 | Generating Mini-Organs in Culture. Current Pathobiology Reports, 2016, 4, 59-68. | 1.6 | 1 |
| 316 | Engineering human cells and tissues through pluripotent stem cells. Current Opinion in Biotechnology, 2016, 40, 133-138. | 3.3 | 12 |
| 317 | Microcephaly and Zika virus: a clinical and epidemiological analysis of the current outbreak in Brazil. Jornal De Pediatria, 2016, 92, 230-240. | 0.9 | 94 |
| 318 | The emerging role of in vitro electrophysiological methods in CNS safety pharmacology. Journal of Pharmacological and Toxicological Methods, 2016, 81, 47-59. | 0.3 | 43 |
| 319 | Zika virus impairs growth in human neurospheres and brain organoids. Science, 2016, 352, 816-818. | 6.0 | 1,016 |
| 320 | Engineering of Adult Neurogenesis and Gliogenesis. Cold Spring Harbor Perspectives in Biology, 2016, 8, a018861. | 2.3 | 13 |
| 321 | Brain-Region-Specific Organoids Using Mini-bioreactors for Modeling ZIKV Exposure. Cell, 2016, 165, 1238-1254. | 13.5 | 1,680 |
| 322 | Consequences of Numerical Centrosome Defects in Development and Disease. , 2016, , 117-149. | | 2 |
| 323 | Zika Virus Depletes Neural Progenitors in Human Cerebral Organoids through Activation of the Innate Immune Receptor TLR3. Cell Stem Cell, 2016, 19, 258-265. | 5.2 | 629 |
| 324 | Induced Pluripotent Stem Cells in Regenerative Medicine. , 2016, , 51-75. | | 2 |
| 326 | Loss of function of PCDH12 underlies recessive microcephaly mimicking intrauterine infection. Neurology, 2016, 86, 2016-2024. | 1.5 | 32 |
| 327 | Bioengineered cell culture systems of central nervous system injury and disease. Drug Discovery Today, 2016, 21, 1456-1463. | 3.2 | 5 |
| 328 | Self-organization of the human embryo in the absence of maternal tissues. Nature Cell Biology, 2016, 18, 700-708. | 4.6 | 516 |
| 329 | Three-dimensional models for studying development and disease: moving on from organisms to organs-on-a-chip and organoids. Integrative Biology (United Kingdom), 2016, 8, 672-683. | 0.6 | 94 |
| 330 | Induced Pluripotent Stem Cells Meet Genome Editing. Cell Stem Cell, 2016, 18, 573-586. | 5.2 | 398 |
| 331 | Utilization of stem cells to model Parkinson's disease â€“ current state and future challenges. Future Neurology, 2016, 11, 171-186. | 0.9 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 332 | The Brazilian Zika virus strain causes birth defects in experimental models. Nature, 2016, 534, 267-271. | 13.7 | 1,132 |
| 333 | Stage-specific roles of FGF2 signaling in human neural development. Stem Cell Research, 2016, 17, 330-341. | 0.3 | 22 |
| 334 | Stem Cell-Mediated Regeneration of the Adult Brain. Transfusion Medicine and Hemotherapy, 2016, 43, 321-327. | 0.7 | 15 |
| 335 | hPSC-derived lung and intestinal organoids as models of human fetal tissue. Developmental Biology, 2016, 420, 230-238. | 0.9 | 56 |
| 336 | Mutations in genes encoding condensin complex proteins cause microcephaly through decatenation failure at mitosis. Genes and Development, 2016, 30, 2158-2172. | 2.7 | 106 |
| 337 | Generation of improved human cerebral organoids from single copy DYRK1A knockout induced pluripotent stem cells in trisomy 21: hypothetical solutions for neurodevelopmental models and therapeutic alternatives in down syndrome. Cell Biology International, 2016, 40, 1256-1270. | 1.4 | 4 |
| 338 | Modeling neurodegenerative disorders in adult somatic cells: A critical review. Frontiers in Biology, 2016, 11, 232-245. | 0.7 | 5 |
| 339 | Organoids: Modeling Development and the Stem Cell Niche in a Dish. Developmental Cell, 2016, 38, 590-600. | 3.1 | 334 |
| 340 | The development of anatomy: from macroscopic body dissections to stem cellâ€“derived organoids. Histochemistry and Cell Biology, 2016, 146, 647-650. | 0.8 | 3 |
| 341 | Microcarrier-based platforms for in vitro expansion and differentiation of human pluripotent stem cells in bioreactor culture systems. Journal of Biotechnology, 2016, 234, 71-82. | 1.9 | 51 |
| 342 | A 3D Toolbox to Enhance Physiological Relevance of Human Tissue Models. Trends in Biotechnology, 2016, 34, 757-769. | 4.9 | 57 |
| 343 | In vitro models of medulloblastoma: Choosing the right tool for the job. Journal of Biotechnology, 2016, 236, 10-25. | 1.9 | 165 |
| 344 | Looking to the future following 10 years of induced pluripotent stem cell technologies. Nature Protocols, 2016, 11, 1579-1585. | 5.5 | 31 |
| 345 | Building brains in a dish: Prospects for growing cerebral organoids from stem cells. Neuroscience, 2016, 334, 105-118. | 1.1 | 49 |
| 346 | Modeling human disease using organotypic cultures. Current Opinion in Cell Biology, 2016, 43, 22-29. | 2.6 | 48 |
| 347 | Midbrain-like Organoids from Human Pluripotent Stem Cells Contain Functional Dopaminergic and Neuromelanin-Producing Neurons. Cell Stem Cell, 2016, 19, 248-257. | 5.2 | 628 |
| 348 | CRISPR/Cas9 genome editing in human pluripotent stem cells: Harnessing human genetics in a dish. Developmental Dynamics, 2016, 245, 788-806. | 0.8 | 20 |
| 349 | Concise Review: Progress and Challenges in Using Human Stem Cells for Biological and Therapeutics Discovery: Neuropsychiatric Disorders. Stem Cells, 2016, 34, 523-536. | 1.4 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 351 | hi<scp>PSC</scp>â€derived <scp>iMSC</scp>s: NextGen <scp>MSC</scp>s as an advanced therapeutically active cell resource for regenerative medicine. Journal of Cellular and Molecular Medicine, 2016, 20, 1571-1588. | 1.6 | 86 |
| 352 | Organoids and the genetically encoded selfâ€assembly of embryonic stem cells. BioEssays, 2016, 38, 181-191. | 1.2 | 99 |
| 353 | Concise Review: Exciting Cells: Modeling Genetic Epilepsies with Patient-Derived Induced Pluripotent Stem Cells. Stem Cells, 2016, 34, 27-33. | 1.4 | 38 |
| 354 | Encoding and decoding time in neural development. Development Growth and Differentiation, 2016, 58, 59-72. | 0.6 | 22 |
| 355 | Cerebral cortex expansion and folding: what have we learned?. EMBO Journal, 2016, 35, 1021-1044. | 3.5 | 262 |
| 356 | Culture and establishment of self-renewing human and mouse adult liver and pancreas 3D organoids and their genetic manipulation. Nature Protocols, 2016, 11, 1724-1743. | 5.5 | 527 |
| 357 | A strategy for generating kidney organoids: Recapitulating the development in human pluripotent stem cells. Developmental Biology, 2016, 420, 210-220. | 0.9 | 42 |
| 358 | Rapid Induction of Cerebral Organoids From Human Induced Pluripotent Stem Cells Using a Chemically Defined Hydrogel and Defined Cell Culture Medium. Stem Cells Translational Medicine, 2016, 5, 970-979. | 1.6 | 116 |
| 359 | Latest developments in the field of stem cell research and regenerative medicine compiled from publicly available information and press releases from nonacademic institutions 1 April 2016â€“ 31 May 2016. Regenerative Medicine, 2016, 11, 499-505. | 0.8 | 1 |
| 360 | Derivation of Intestinal Organoids from Human Induced Pluripotent Stem Cells for Use as an Infection System. Methods in Molecular Biology, 2016, 1576, 157-169. | 0.4 | 11 |
| 361 | A decade of progress in tissue engineering. Nature Protocols, 2016, 11, 1775-1781. | 5.5 | 570 |
| 362 | Generation of kidney organoids from human pluripotent stem cells. Nature Protocols, 2016, 11, 1681-1692. | 5.5 | 243 |
| 363 | A High Proliferation Rate is Critical for Reproducible and Standardized Embryoid Body Formation from Laminin-521-Based Human Pluripotent Stem Cell Cultures. Stem Cell Reviews and Reports, 2016, 12, 721-730. | 5.6 | 8 |
| 364 | Engineering in vitro complex pathophysiologies for drug discovery purposes. Drug Discovery Today, 2016, 21, 1341-1344. | 3.2 | 5 |
| 365 | TALEN-based generation of a cynomolgus monkey disease model for human microcephaly. Cell Research, 2016, 26, 1048-1061. | 5.7 | 36 |
| 366 | A CEP215â€“HSET complex links centrosomes with spindle poles and drives centrosome clustering in cancer. Nature Communications, 2016, 7, 11005. | 5.8 | 66 |
| 367 | 3D Biomimetic Cultures: The Next Platform for Cell Biology. Trends in Cell Biology, 2016, 26, 798-800. | 3.6 | 28 |
| 368 | Transcriptional Dynamics at Brain Enhancers: from Functional Specialization to Neurodegeneration. Current Neurology and Neuroscience Reports, 2016, 16, 94. | 2.0 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 369 | Mammalian cell cultures as models for Mycobacterium tuberculosis â€“human immunodeficiency virus (HIV) interaction studies: A review. Asian Pacific Journal of Tropical Medicine, 2016, 9, 832-838. | 0.4 | 5 |
| 370 | Intelligent Nanosystems for Energy, Information and Biological Technologies. , 2016, , . | | 2 |
| 371 | Transformation of the Radial Glia Scaffold Demarcates Two Stages of Human Cerebral Cortex Development. Neuron, 2016, 91, 1219-1227. | 3.8 | 264 |
| 372 | Reconstructed cell fateâ€“regulatory programs in stem cells reveal hierarchies and key factors of neurogenesis. Genome Research, 2016, 26, 1505-1519. | 2.4 | 25 |
| 373 | Chapter 11 Medicine and Biology: Technologies Operating at Extremely Low Temperatures. , 2016, , 349-394. | | 0 |
| 374 | Threeâ€dimensional pancreas organogenesis models. Diabetes, Obesity and Metabolism, 2016, 18, 33-40. | 2.2 | 33 |
| 375 | Dishing out mini-brains: Current progress and future prospects in brain organoid research. Developmental Biology, 2016, 420, 199-209. | 0.9 | 256 |
| 376 | Entangled active matter: From cells to ants. European Physical Journal: Special Topics, 2016, 225, 629-649. | 1.2 | 35 |
| 377 | Pluripotent stem cells as a model for embryonic patterning: From signaling dynamics to spatial organization in a dish. Developmental Dynamics, 2016, 245, 976-990. | 0.8 | 27 |
| 378 | Direct neuronal reprogramming: learning from and for development. Development (Cambridge), 2016, 143, 2494-2510. | 1.2 | 112 |
| 379 | Proteomics and molecular tools for unveiling missing links in the biochemical understanding of schizophrenia. Proteomics - Clinical Applications, 2016, 10, 1148-1158. | 0.8 | 14 |
| 380 | Brain in a Dish. , 2016, , 117-132. | | 2 |
| 381 | Steering Organoids Toward Discovery: Self-Driving Stem Cells Are Opening a World of Possibilities, Including Drug Testing and Tissue Sourcing. IEEE Pulse, 2016, 7, 18-23. | 0.1 | 1 |
| 382 | A small molecule-based strategy for endothelial differentiation and three-dimensional morphogenesis from human embryonic stem cells. Heliyon, 2016, 2, e00133. | 1.4 | 1 |
| 383 | Self-organization of human embryonic stem cells on micropatterns. Nature Protocols, 2016, 11, 2223-2232. | 5.5 | 119 |
| 384 | Neural tube morphogenesis in synthetic 3D microenvironments. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6831-E6839. | 3.3 | 186 |
| 385 | Rapamycin regulates autophagy and cell adhesion in induced pluripotent stem cells. Stem Cell Research and Therapy, 2016, 7, 166. | 2.4 | 74 |
| 386 | High-Throughput Toxicity and Phenotypic Screening of 3D Human Neural Progenitor Cell Cultures on a Microarray Chip Platform. Stem Cell Reports, 2016, 7, 970-982. | 2.3 | 55 |

| # | Article | IF | Citations |
|---|---|---|---|
| 387 | Challenges in long-term imaging and quantification of single-cell dynamics. Nature Biotechnology, 2016, 34, 1137-1144. | 9.4 | 178 |
| 388 | Schizophrenia patient-derived olfactory neurosphere-derived cells do not respond to extracellular reelin. NPJ Schizophrenia, 2016, 2, 16027. | 2.0 | 9 |
| 389 | Endothelin-1 supports clonal derivation and expansion of cardiovascular progenitors derived from human embryonic stem cells. Nature Communications, 2016, 7, 10774. | 5.8 | 21 |
| 390 | Efficient Generation of Corticofugal Projection Neurons from Human Embryonic Stem Cells. Scientific Reports, 2016, 6, 28572. | 1.6 | 17 |
| 391 | The promises and challenges of human brain organoids as models of neuropsychiatric disease. Nature Medicine, 2016, 22, 1220-1228. | 15.2 | 224 |
| 396 | CNS disease models with human pluripotent stem cells in the CRISPR age. Current Opinion in Cell Biology, 2016, 43, 96-103. | 2.6 | 19 |
| 397 | Intermittent high oxygen influences the formation of neural retinal tissue from human embryonic stem cells. Scientific Reports, 2016, 6, 29944. | 1.6 | 26 |
| 398 | Neural Subtype Specification from Human Pluripotent Stem Cells. Cell Stem Cell, 2016, 19, 573-586. | 5.2 | 225 |
| 399 | Functional properties of in vitro excitatory cortical neurons derived from human pluripotent stem cells. Journal of Physiology, 2016, 594, 6573-6582. | 1.3 | 23 |
| 400 | Multi-compartmental biomaterial scaffolds for patterning neural tissue organoids in models of neurodevelopment and tissue regeneration. Journal of Tissue Engineering, 2016, 7, 204173141667192. | 2.3 | 8 |
| 401 | The <em>Ex Vivo</em> Culture and Pattern Recognition Receptor Stimulation of Mouse Intestinal Organoids. Journal of Visualized Experiments, 2016, , . | 0.2 | 4 |
| 402 | Modeling Brain Development Using Human Cells for the Study and Treatment of Zika Virus Infections. Current Behavioral Neuroscience Reports, 2016, 3, 381-383. | 0.6 | 0 |
| 403 | Making new kidneys. Current Opinion in Organ Transplantation, 2016, 21, 574-580. | 0.8 | 7 |
| 404 | Genomic divergence and brain evolution: How regulatory DNA influences development of the cerebral cortex. BioEssays, 2016, 38, 162-171. | 1.2 | 37 |
| 405 | Synthetic Morphogenesis. Cold Spring Harbor Perspectives in Biology, 2016, 8, a023929. | 2.3 | 84 |
| 406 | Stem Cell Models of Human Brain Development. Cell Stem Cell, 2016, 18, 736-748. | 5.2 | 290 |
| 407 | Modeling Development and Disease with Organoids. Cell, 2016, 165, 1586-1597. | 13.5 | 2,022 |
| 408 | The positional identity of iPSC-derived neural progenitor cells along the anterior-posterior axis is controlled in a dosage-dependent manner by bFGF and EGF. Differentiation, 2016, 92, 183-194. | 1.0 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 409 | Modeling psychiatric disorders: from genomic findings to cellular phenotypes. Molecular Psychiatry, 2016, 21, 1167-1179. | 4.1 | 92 |
| 410 | Voltage-Gated Na<sup>+</sup>Channels: Not Just for Conduction. Cold Spring Harbor Perspectives in Biology, 2016, 8, a029264. | 2.3 | 43 |
| 411 | Biomaterial-engineering and neurobiological approaches for regenerating the injured cerebral cortex. Regenerative Therapy, 2016, 3, 63-67. | 1.4 | 3 |
| 412 | Translational Research in Life Sciences. , 2016, , 1-10. | | 0 |
| 413 | North Carolina Macular Dystrophy Is Caused by Dysregulation of the Retinal Transcription Factor PRDM13. Ophthalmology, 2016, 123, 9-18. | 2.5 | 105 |
| 414 | A Robust Single Primate Neuroepithelial Cell Clonal Expansion System for Neural Tube Development and Disease Studies. Stem Cell Reports, 2016, 6, 228-242. | 2.3 | 22 |
| 415 | Growth of human breast tissues from patient cells in 3D hydrogel scaffolds. Breast Cancer Research, 2016, 18, 19. | 2.2 | 99 |
| 416 | Stem Cells: A Renaissance in Human Biology Research. Cell, 2016, 165, 1572-1585. | 13.5 | 87 |
| 417 | Large-Scale Production of Mature Neurons from Human Pluripotent Stem Cells in a Three-Dimensional Suspension Culture System. Stem Cell Reports, 2016, 6, 993-1008. | 2.3 | 78 |
| 418 | Design Principles for Engineering of Tissues from Human Pluripotent Stem Cells. Current Stem Cell Reports, 2016, 2, 43-51. | 0.7 | 19 |
| 419 | Linking adult hippocampal neurogenesis with human physiology and disease. Developmental Dynamics, 2016, 245, 702-709. | 0.8 | 14 |
| 420 | Organâ€onâ€aâ€Chip Systems: Microengineering to Biomimic Living Systems. Small, 2016, 12, 2253-2282. | 5.2 | 245 |
| 421 | Stem cellâ€derived astrocytes: are they physiologically credible?. Journal of Physiology, 2016, 594, 6595-6606. | 1.3 | 17 |
| 422 | Neural patterning of human induced pluripotent stem cells in 3-D cultures for studying biomolecule-directed differential cellular responses. Acta Biomaterialia, 2016, 42, 114-126. | 4.1 | 43 |
| 423 | Physiologically relevant human tissue models for infectious diseases. Drug Discovery Today, 2016, 21, 1540-1552. | 3.2 | 42 |
| 424 | Mechanisms of Zika Virus Infection and Neuropathogenesis. DNA and Cell Biology, 2016, 35, 367-372. | 0.9 | 40 |
| 425 | 3D Bioprinting of Tissue/Organ Models. Angewandte Chemie - International Edition, 2016, 55, 4650-4665. | 7.2 | 215 |
| 426 | Design and demonstration of a pumpless 14 compartment microphysiological system. Biotechnology and Bioengineering, 2016, 113, 2213-2227. | 1.7 | 192 |

| # | Article | IF | Citations |
|---|---|---|---|
| 427 | Pluripotent stem cells in disease modelling and drug discovery. Nature Reviews Molecular Cell Biology, 2016, 17, 170-182. | 16.1 | 488 |
| 428 | Disease signatures for schizophrenia and bipolar disorder using patient-derived induced pluripotent stem cells. Molecular and Cellular Neurosciences, 2016, 73, 96-103. | 1.0 | 31 |
| 429 | The Cellular and Molecular Landscapes of the Developing Human Central Nervous System. Neuron, 2016, 89, 248-268. | 3.8 | 571 |
| 430 | Live imaging of microtubule dynamics in organotypic hippocampal slice cultures. Methods in Cell Biology, 2016, 131, 107-126. | 0.5 | 11 |
| 431 | In vivo modeling of neuronal function, axonal impairment and connectivity in neurodegenerative and neuropsychiatric disorders using induced pluripotent stem cells. Molecular and Cellular Neurosciences, 2016, 73, 3-12. | 1.0 | 19 |
| 432 | Crosslinking of extracellular matrix scaffolds derived from pluripotent stem cell aggregates modulates neural differentiation. Acta Biomaterialia, 2016, 30, 222-232. | 4.1 | 52 |
| 433 | Massively parallel cis-regulatory analysis in the mammalian central nervous system. Genome Research, 2016, 26, 238-255. | 2.4 | 106 |
| 434 | Fetal Brain Extracellular Matrix Boosts Neuronal Network Formation in 3D Bioengineered Model of Cortical Brain Tissue. ACS Biomaterials Science and Engineering, 2016, 2, 131-140. | 2.6 | 100 |
| 435 | A LUHMES 3D dopaminergic neuronal model for neurotoxicity testing allowing long-term exposure and cellular resilience analysis. Archives of Toxicology, 2016, 90, 2725-2743. | 1.9 | 90 |
| 436 | Analytic Models of Oxygen and Nutrient Diffusion, Metabolism Dynamics, and Architecture Optimization in Three-Dimensional Tissue Constructs with Applications and Insights in Cerebral Organoids. Tissue Engineering - Part C: Methods, 2016, 22, 221-249. | 1.1 | 151 |
| 437 | The Janus soul of centrosomes: a paradoxical role in disease?. Chromosome Research, 2016, 24, 127-144. | 1.0 | 8 |
| 438 | Neurodevelopmental origins of bipolar disorder: iPSC models. Molecular and Cellular Neurosciences, 2016, 73, 63-83. | 1.0 | 90 |
| 439 | Modeling Alzheimer's disease with human induced pluripotent stem (iPS) cells. Molecular and Cellular Neurosciences, 2016, 73, 13-31. | 1.0 | 100 |
| 440 | A 3D printed microfluidic device for production of functionalized hydrogel microcapsules for culture and differentiation of human Neuronal Stem Cells (hNSC). Lab on A Chip, 2016, 16, 1593-1604. | 3.1 | 121 |
| 441 | Regulation of neuronal migration, an emerging topic in autism spectrum disorders. Journal of Neurochemistry, 2016, 136, 440-456. | 2.1 | 89 |
| 442 | Using human pluripotent stem cells to study Friedreich ataxia cardiomyopathy. International Journal of Cardiology, 2016, 212, 37-43. | 0.8 | 5 |
| 443 | Recapitulating Cellâ€“Cell Interactions for Organoid Construction â€“ Are Biomaterials Dispensable?. Trends in Biotechnology, 2016, 34, 711-721. | 4.9 | 50 |
| 444 | The use of human neurons for novel drug discovery in dementia research. Expert Opinion on Drug Discovery, 2016, 11, 355-367. | 2.5 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 445 | Organoids as Model Systems for Gastrointestinal Diseases: Tissue Engineering Meets Genetic Engineering. Current Pathobiology Reports, 2016, 4, 1-9. | 1.6 | 25 |
| 446 | Utilizing stem cells for three-dimensional neural tissue engineering. Biomaterials Science, 2016, 4, 768-784. | 2.6 | 60 |
| 447 | Adhesion modification of neural stem cells induced by nanoscale ripple patterns. Nanotechnology, 2016, 27, 125301. | 1.3 | 13 |
| 448 | Advanced biomaterial strategies to transplant preformed micro-tissue engineered neural networks into the brain. Journal of Neural Engineering, 2016, 13, 016019. | 1.8 | 57 |
| 449 | A Three-Dimensional Organoid Culture System Derived from Human Glioblastomas Recapitulates the Hypoxic Gradients and Cancer Stem Cell Heterogeneity of Tumors Found In Vivo. Cancer Research, 2016, 76, 2465-2477. | 0.4 | 453 |
| 450 | Silk as a Biomaterial to Support Long-Term Three-Dimensional Tissue Cultures. ACS Applied Materials & Interfaces, 2016, 8, 21861-21868. | 4.0 | 90 |
| 451 | Advancing multiscale structural mapping of the brain through fluorescence imaging and analysis across length scales. Interface Focus, 2016, 6, 20150081. | 1.5 | 8 |
| 452 | Establishment of Functional Genomics Pipeline in Mouse Epiblast-Like Tissue by Combining Transcriptomic Analysis and Gene Knockdown/Knockin/Knockout, Using RNA Interference and CRISPR/Cas9. Human Gene Therapy, 2016, 27, 436-450. | 1.4 | 11 |
| 453 | Advancing drug discovery for neuropsychiatric disorders using patient-specific stem cell models. Molecular and Cellular Neurosciences, 2016, 73, 104-115. | 1.0 | 49 |
| 454 | Organoids as an in vitro model of human development and disease. Nature Cell Biology, 2016, 18, 246-254. | 4.6 | 1,090 |
| 455 | Wnt-YAP interactions in the neural fate of human pluripotent stem cells and the implications for neural organoid formation. Organogenesis, 2016, 12, 1-15. | 0.4 | 13 |
| 456 | Reprogramming psychiatry: stem cells and bipolar disorder. Lancet, The, 2016, 387, 823-825. | 6.3 | 11 |
| 457 | Organoids as Models for Neoplastic Transformation. Annual Review of Pathology: Mechanisms of Disease, 2016, 11, 199-220. | 9.6 | 64 |
| 458 | Missing link: Animal models to study whether Zika causes birth defects. Nature Medicine, 2016, 22, 225-227. | 15.2 | 17 |
| 459 | Reverse Engineering Human Pathophysiology with Organs-on-Chips. Cell, 2016, 164, 1105-1109. | 13.5 | 170 |
| 460 | Transcriptomics analysis of iPSC-derived neurons and modeling of neuropsychiatric disorders. Molecular and Cellular Neurosciences, 2016, 73, 32-42. | 1.0 | 33 |
| 461 | Organoids as a model system for studying human lung development and disease. Biochemical and Biophysical Research Communications, 2016, 473, 675-682. | 1.0 | 83 |
| 462 | Stem Cells in Neurotoxicology/Developmental Neurotoxicology: Current Scenario and Future Prospects. Molecular Neurobiology, 2016, 53, 6938-6949. | 1.9 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 463 | Prolonged Mitosis of Neural Progenitors Alters Cell Fate in the Developing Brain. Neuron, 2016, 89, 83-99. | 3.8 | 156 |
| 464 | Modeling psychiatric disorders with patient-derived iPSCs. Current Opinion in Neurobiology, 2016, 36, 118-127. | 2.0 | 72 |
| 465 | Genetically engineering self-organization of human pluripotent stem cells into a liver bud-like tissue using Gata6. Nature Communications, 2016, 7, 10243. | 5.8 | 128 |
| 466 | Engineering Stem Cell Organoids. Cell Stem Cell, 2016, 18, 25-38. | 5.2 | 654 |
| 467 | 3D high throughput screening and profiling of embryoid bodies in thermoformed microwell plates. Lab on A Chip, 2016, 16, 734-742. | 3.1 | 63 |
| 468 | A novel homozygous splicing mutation of CASC5 causes primary microcephaly in a large Pakistani family. Human Genetics, 2016, 135, 157-170. | 1.8 | 31 |
| 469 | Building a Terminal. Neuroscientist, 2016, 22, 372-391. | 2.6 | 29 |
| 470 | Reverse engineering human neurodegenerative disease using pluripotent stem cell technology. Brain Research, 2016, 1638, 30-41. | 1.1 | 20 |
| 471 | Modeling developmental neuropsychiatric disorders with iPSC technology: challenges and opportunities. Current Opinion in Neurobiology, 2016, 36, 66-73. | 2.0 | 29 |
| 472 | Clinical Trials in a Dish: The Potential of Pluripotent Stem Cells to Develop Therapies for Neurodegenerative Diseases. Annual Review of Pharmacology and Toxicology, 2016, 56, 489-510. | 4.2 | 72 |
| 473 | Bioengineering Hematopoietic Stem Cell Niche toward Regenerative Medicine. Advanced Drug Delivery Reviews, 2016, 99, 212-220. | 6.6 | 19 |
| 474 | Neuronal migration disorders: Focus on the cytoskeleton and epilepsy. Neurobiology of Disease, 2016, 92, 18-45. | 2.1 | 82 |
| 475 | iPSC-based drug screening for Huntington×³s disease. Brain Research, 2016, 1638, 42-56. | 1.1 | 26 |
| 476 | Patient-Specific Induced Pluripotent Stem Cells for Disease Modeling and Phenotypic Drug Discovery. Journal of Medicinal Chemistry, 2016, 59, 2-15. | 2.9 | 31 |
| 477 | Evaluation of steroidomics by liquid chromatography hyphenated to mass spectrometry as a powerful analytical strategy for measuring human steroid perturbations. Journal of Chromatography A, 2016, 1430, 97-112. | 1.8 | 80 |
| 478 | Human neural stem cell-derived cultures in three-dimensional substrates form spontaneously functional neuronal networks. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1022-1033. | 1.3 | 20 |
| 479 | Modeling autism spectrum disorders with human neurons. Brain Research, 2017, 1656, 49-54. | 1.1 | 17 |
| 480 | Back and forth in time: Directing age in iPSC-derived lineages. Brain Research, 2017, 1656, 14-26. | 1.1 | 38 |

| # | Article | IF | Citations |
|---|---|---|---|
| 481 | Induced pluripotent stem cells as a discovery tool for Alzheimer×³s disease. Brain Research, 2017, 1656, 98-106. | 1.1 | 35 |
| 482 | New approaches for direct conversion of patient fibroblasts into neural cells. Brain Research, 2017, 1656, 2-13. | 1.1 | 23 |
| 483 | Modeling Huntington×³s disease with patient-derived neurons. Brain Research, 2017, 1656, 76-87. | 1.1 | 31 |
| 484 | Characterization of 3D pluripotent stem cell aggregates and the impact of their properties on bioprocessing. Process Biochemistry, 2017, 59, 276-288. | 1.8 | 13 |
| 485 | Concise Review: Induced Pluripotent Stem Cell Research in the Era of Precision Medicine. Stem Cells, 2017, 35, 545-550. | 1.4 | 67 |
| 486 | Human iPSC-Derived Cerebral Organoids Model Cellular Features of Lissencephaly and Reveal Prolonged Mitosis of Outer Radial Glia. Cell Stem Cell, 2017, 20, 435-449.e4. | 5.2 | 463 |
| 487 | Genome engineering of stem cell organoids for disease modeling. Protein and Cell, 2017, 8, 315-327. | 4.8 | 30 |
| 488 | Optical Barcoding for Single-Clone Tracking to Study Tumor Heterogeneity. Molecular Therapy, 2017, 25, 621-633. | 3.7 | 32 |
| 489 | Zika virus disrupts molecular fingerprinting of human neurospheres. Scientific Reports, 2017, 7, 40780. | 1.6 | 120 |
| 490 | Division modes and physical asymmetry in cerebral cortex progenitors. Current Opinion in Neurobiology, 2017, 42, 75-83. | 2.0 | 44 |
| 491 | A Rapid Pipeline to Model Rare Neurodevelopmental Disorders with Simultaneous CRISPR/Cas9 Gene Editing. Stem Cells Translational Medicine, 2017, 6, 886-896. | 1.6 | 19 |
| 492 | Systematic time-dependent visualization and quantitation of the neurogenic rate in brain organoids. Biochemical and Biophysical Research Communications, 2017, 483, 94-100. | 1.0 | 3 |
| 493 | Probing human brain evolution and development in organoids. Current Opinion in Cell Biology, 2017, 44, 36-43. | 2.6 | 90 |
| 494 | Anisotropically organized three-dimensional culture platform for reconstruction of a hippocampal neural network. Nature Communications, 2017, 8, 14346. | 5.8 | 90 |
| 495 | Cellular self-assembly and biomaterials-based organoid models of development and diseases. Acta Biomaterialia, 2017, 53, 29-45. | 4.1 | 45 |
| 496 | Understanding Parkinsonâ€™s Disease through the Use of Cell Reprogramming. Stem Cell Reviews and Reports, 2017, 13, 151-169. | 5.6 | 26 |
| 497 | Neurons derived from different brain regions are inherently different in vitro: a novel multiregional brain-on-a-chip. Journal of Neurophysiology, 2017, 117, 1320-1341. | 0.9 | 95 |
| 498 | RB controls growth, survival, and neuronal migration in human cerebral organoids. Development (Cambridge), 2017, 144, 1025-1034. | 1.2 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 499 | Recent Zika Virus Isolates Induce Premature Differentiation of Neural Progenitors in Human Brain Organoids. Cell Stem Cell, 2017, 20, 397-406.e5. | 5.2 | 267 |
| 500 | Interspecies organogenesis generates autologous functional islets. Nature, 2017, 542, 191-196. | 13.7 | 238 |
| 501 | Integrin suppresses neurogenesis and regulates brain tissue assembly in planarian regeneration. Development (Cambridge), 2017, 144, 784-794. | 1.2 | 24 |
| 502 | Dawn of the organoid era. BioEssays, 2017, 39, 1600244. | 1.2 | 50 |
| 503 | Bioengineered 3D Glial Cell Culture Systems and Applications for Neurodegeneration and Neuroinflammation. SLAS Discovery, 2017, 22, 583-601. | 1.4 | 55 |
| 504 | Organoid technologies meet genome engineering. EMBO Reports, 2017, 18, 367-376. | 2.0 | 52 |
| 505 | Genetics of Migraine: Insights into the Molecular Basis of Migraine Disorders. Headache, 2017, 57, 537-569. | 1.8 | 88 |
| 506 | Cell migration in schizophrenia: Patient-derived cells do not regulate motility in response to extracellular matrix. Molecular and Cellular Neurosciences, 2017, 80, 111-122. | 1.0 | 17 |
| 507 | Cancer systems biology: Live imaging of intestinal tissue in health and disease. Current Opinion in Systems Biology, 2017, 2, 19-28. | 1.3 | 4 |
| 508 | Selfâ€organized developmental patterning and differentiation in cerebral organoids. EMBO Journal, 2017, 36, 1316-1329. | 3.5 | 300 |
| 510 | Scaffolds for 3D in vitro culture of neural lineage cells. Acta Biomaterialia, 2017, 54, 1-20. | 4.1 | 136 |
| 511 | Diencephalic Size Is Restricted by a Novel Interplay Between GCN5 Acetyltransferase Activity and Retinoic Acid Signaling. Journal of Neuroscience, 2017, 37, 2565-2579. | 1.7 | 19 |
| 512 | Design and fabrication of a scalable liver-lobule-on-a-chip microphysiological platform. Biofabrication, 2017, 9, 015014. | 3.7 | 105 |
| 513 | Self-organisation after embryonic kidney dissociation is driven via selective adhesion of ureteric epithelial cells.. Development (Cambridge), 2017, 144, 1087-1096. | 1.2 | 22 |
| 514 | Clinical potentials of human pluripotent stem cells. Cell Biology and Toxicology, 2017, 33, 351-360. | 2.4 | 55 |
| 515 | Kidney Organoids: A Translational Journey. Trends in Molecular Medicine, 2017, 23, 246-263. | 3.5 | 114 |
| 516 | A process engineering approach to increase organoid yield. Development (Cambridge), 2017, 144, 1128-1136. | 1.2 | 51 |
| 517 | Simplified 3D protocol capable of generating early cortical neuroepithelium. Biology Open, 2017, 6, 402-406. | 0.6 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 518 | Assembly of embryonic and extraembryonic stem cells to mimic embryogenesis in vitro. Science, 2017, 356, . | 6.0 | 318 |
| 519 | Modeling neurodevelopmental and psychiatric diseases with human iPSCs. Journal of Neuroscience Research, 2017, 95, 1097-1109. | 1.3 | 11 |
| 520 | Brain imaging genetics in ADHD and beyond â€“ Mapping pathways from gene to disorder at different levels of complexity. Neuroscience and Biobehavioral Reviews, 2017, 80, 115-155. | 2.9 | 83 |
| 521 | Drug discovery using induced pluripotent stem cell models of neurodegenerative and ocular diseases. , 2017, 177, 32-43. | | 36 |
| 522 | Stem cell-derived organoids and their application for medical research and patient treatment. Journal of Molecular Medicine, 2017, 95, 729-738. | 1.7 | 147 |
| 523 | Application of induced pluripotent stem cells to understand neurobiological basis of bipolar disorder and schizophrenia. Psychiatry and Clinical Neurosciences, 2017, 71, 579-599. | 1.0 | 15 |
| 524 | Paving the Way Toward Complex Blood-Brain Barrier Models Using Pluripotent Stem Cells. Stem Cells and Development, 2017, 26, 857-874. | 1.1 | 40 |
| 525 | Derivation of Human Midbrain-Specific Organoids from Neuroepithelial StemÂCells. Stem Cell Reports, 2017, 8, 1144-1154. | 2.3 | 321 |
| 526 | Ethical issues in human organoid and gastruloid research. Development (Cambridge), 2017, 144, 942-945. | 1.2 | 80 |
| 527 | From organoids to organs: Bioengineering liver grafts fromÂhepatic stem cells and matrix. Bailliere's Best Practice and Research in Clinical Gastroenterology, 2017, 31, 151-159. | 1.0 | 36 |
| 528 | Development and Bioengineering of Lung Regeneration. , 2017, , 237-257. | | 0 |
| 529 | MicroRNAs as biomarkers for psychiatric disorders with a focus on autism spectrum disorder: Current progress in genetic association studies, expression profiling, and translational research. Autism Research, 2017, 10, 1184-1203. | 2.1 | 49 |
| 530 | Human induced pluripotent stem cells for modelling neurodevelopmental disorders. Nature Reviews Neurology, 2017, 13, 265-278. | 4.9 | 135 |
| 531 | iPSC-Derived Human Microglia-like Cells to Study Neurological Diseases. Neuron, 2017, 94, 278-293.e9. | 3.8 | 730 |
| 532 | Stem Cell Technologies in Neuroscience. Neuromethods, 2017, , . | 0.2 | 0 |
| 534 | Revealing the inner workings of organoids. EMBO Journal, 2017, 36, 1299-1301. | 3.5 | 9 |
| 535 | Fused cerebral organoids model interactions between brain regions. Nature Methods, 2017, 14, 743-751. | 9.0 | 574 |
| 536 | Emulating Host-Microbiome Ecosystem of Human Gastrointestinal Tract in Vitro. Stem Cell Reviews and Reports, 2017, 13, 321-334. | 5.6 | 66 |

| # | Article | IF | Citations |
|---|---|---|---|
| 537 | Harnessing the Potential of Human Pluripotent Stem Cells and Gene Editing for the Treatment of Retinal Degeneration. Current Stem Cell Reports, 2017, 3, 112-123. | 0.7 | 27 |
| 538 | Interactions of early-life stress with the genome and epigenome: from prenatal stress to psychiatric disorders. Current Opinion in Behavioral Sciences, 2017, 14, 167-171. | 2.0 | 18 |
| 539 | Dopamine Induces Oscillatory Activities in Human Midbrain Neurons with Parkin Mutations. Cell Reports, 2017, 19, 1033-1044. | 2.9 | 27 |
| 540 | Advances in mini-brain technology. Nature, 2017, 545, 39-40. | 13.7 | 15 |
| 542 | Trends in Scientific Discovery. , 2017, , 31-64. | | 0 |
| 543 | Cell diversity and network dynamics in photosensitive human brain organoids. Nature, 2017, 545, 48-53. | 13.7 | 933 |
| 544 | Assembly of functionally integrated human forebrain spheroids. Nature, 2017, 545, 54-59. | 13.7 | 931 |
| 545 | Organoid and Organ-on-a-Chip Systems: New Paradigms for Modeling Neurological and Gastrointestinal Disease. Current Stem Cell Reports, 2017, 3, 98-111. | 0.7 | 22 |
| 547 | Pseudostratified epithelia â€“ cell biology, diversity and roles in organ formation at a glance. Journal of Cell Science, 2017, 130, 1859-1863. | 1.2 | 59 |
| 548 | Human pluripotent stem cells in modeling human disorders: the case of fragile X syndrome. Regenerative Medicine, 2017, 12, 53-68. | 0.8 | 4 |
| 549 | Toward modeling the human nervous system in a dish: recent progress and outstanding challenges. Regenerative Medicine, 2017, 12, 15-23. | 0.8 | 2 |
| 550 | Drug discovery for remyelination and treatment of MS. Glia, 2017, 65, 1565-1589. | 2.5 | 41 |
| 551 | Colonic organoids derived from human induced pluripotent stem cells for modeling colorectal cancer and drug testing. Nature Medicine, 2017, 23, 878-884. | 15.2 | 285 |
| 552 | Minibrain Storm : Cerebral Organoids Aren't Real Brains?But They Provide a Powerful Platform for Modeling Brain Diseases Like Zika Infection, Alzheimer's, and Even Autism. IEEE Pulse, 2017, 8, 31-34. | 0.1 | 3 |
| 553 | 3D Bioprinting Human Induced Pluripotent Stem Cell Constructs for In Situ Cell Proliferation and Successive Multilineage Differentiation. Advanced Healthcare Materials, 2017, 6, 1700175. | 3.9 | 164 |
| 554 | Concise Review: Induced Pluripotent Stem Cell-Based Drug Discovery for Mitochondrial Disease. Stem Cells, 2017, 35, 1655-1662. | 1.4 | 29 |
| 555 | 3D Primary Culture Model to Study Human Mammary Development. Methods in Molecular Biology, 2017, 1612, 139-147. | 0.4 | 17 |
| 556 | Modeling neurodegenerative diseases with patient-derived induced pluripotent cells: Possibilities and challenges. New Biotechnology, 2017, 39, 190-198. | 2.4 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 557 | Cell Division Machinery and Disease. Advances in Experimental Medicine and Biology, 2017, , . | 0.8 | 4 |
| 558 | Hypoxia Epigenetically Confers Astrocytic Differentiation Potential on Human Pluripotent Cell-Derived Neural Precursor Cells. Stem Cell Reports, 2017, 8, 1743-1756. | 2.3 | 28 |
| 559 | Progress in human pluripotent stem cell-based modeling systems for neurological diseases. Neurogenesis (Austin, Tex ), 2017, 4, e1324258. | 1.5 | 0 |
| 560 | Application of CRISPR/Cas9 to the study of brain development and neuropsychiatric disease. Molecular and Cellular Neurosciences, 2017, 82, 157-166. | 1.0 | 25 |
| 561 | Organoids: a better in vitro model. Nature Methods, 2017, 14, 559-562. | 9.0 | 24 |
| 562 | Three-Dimensional Cell Cultures in Drug Discovery and Development. SLAS Discovery, 2017, 22, 456-472. | 1.4 | 617 |
| 563 | Guided self-organization and cortical plate formation in human brain organoids. Nature Biotechnology, 2017, 35, 659-666. | 9.4 | 606 |
| 564 | Uniform neural tissue models produced on synthetic hydrogels using standard culture techniques. Experimental Biology and Medicine, 2017, 242, 1679-1689. | 1.1 | 31 |
| 565 | Consequences of Centrosome Dysfunction During Brain Development. Advances in Experimental Medicine and Biology, 2017, 1002, 19-45. | 0.8 | 41 |
| 566 | In vitro differentiation of human embryonic stem cells into ovarian follicle-like cells. Nature Communications, 2017, 8, 15680. | 5.8 | 82 |
| 567 | Deriving, regenerating, and engineering CNS tissues using human pluripotent stem cells. Current Opinion in Biotechnology, 2017, 47, 36-42. | 3.3 | 7 |
| 568 | Stem cell models of Alzheimerâ€™s disease: progress and challenges. Alzheimer's Research and Therapy, 2017, 9, 42. | 3.0 | 112 |
| 569 | A Simple Method of Generating 3D Brain Organoids Using Standard Laboratory Equipment. Methods in Molecular Biology, 2017, 1576, 1-12. | 0.4 | 24 |
| 570 | Generation of Various Telencephalic Regions from Human Embryonic Stem Cells in Three-Dimensional Culture. Methods in Molecular Biology, 2017, 1597, 1-16. | 0.4 | 3 |
| 571 | Demethylation of induced pluripotent stem cells from type 1 diabetic patients enhances differentiation into functional pancreatic Î² cells. Journal of Biological Chemistry, 2017, 292, 14066-14079. | 1.6 | 38 |
| 572 | Telencephalic Tissue Formation in 3D Stem Cell Culture. , 2017, , 1-24. | | 0 |
| 573 | An Organoid-Based Model of Cortical Development Identifies Non-Cell-Autonomous Defects in Wnt Signaling Contributing to Miller-Dieker Syndrome. Cell Reports, 2017, 19, 50-59. | 2.9 | 223 |
| 574 | Architecture in 3D cell culture: An essential feature for in vitro toxicology. Toxicology in Vitro, 2017, 45, 287-295. | 1.1 | 47 |

| # | Article | IF | Citations |
|---|---|---|---|
| 576 | Pluripotent stem cells in neuropsychiatric disorders. Molecular Psychiatry, 2017, 22, 1241-1249. | 4.1 | 113 |
| 577 | CRISPR/Cas9-mediated heterozygous knockout of the autism gene CHD8 and characterization of its transcriptional networks in cerebral organoids derived from iPS cells. Molecular Autism, 2017, 8, 11. | 2.6 | 214 |
| 578 | CRISPR/Cas 9 genome editing and its applications in organoids. American Journal of Physiology - Renal Physiology, 2017, 312, G257-G265. | 1.6 | 105 |
| 579 | Testicular organoid generation by a novel inÂvitro three-layer gradient system. Biomaterials, 2017, 130, 76-89. | 5.7 | 109 |
| 580 | Katanin p80, NuMA and cytoplasmic dynein cooperate to control microtubule dynamics. Scientific Reports, 2017, 7, 39902. | 1.6 | 25 |
| 581 | Derivation of Functional Human Astrocytes from Cerebral Organoids. Scientific Reports, 2017, 7, 45091. | 1.6 | 75 |
| 582 | An update on stem cell biology and engineering for brain development. Molecular Psychiatry, 2017, 22, 808-819. | 4.1 | 27 |
| 583 | Potential mechanisms of Zikaâ€linked microcephaly. Wiley Interdisciplinary Reviews: Developmental Biology, 2017, 6, e273. | 5.9 | 38 |
| 584 | Liver Regeneration Using Cultured Liver Bud. , 2017, , 223-235. | | 0 |
| 585 | Of Mice and Men: Species-Specific Organoid Models of Neocortical Malformation. Cell Stem Cell, 2017, 20, 421-422. | 5.2 | 2 |
| 586 | TLRgeting Evasion of Immune Pathways in Glioblastoma. Cell Stem Cell, 2017, 20, 422-424. | 5.2 | 16 |
| 588 | Organ Regeneration Based on Developmental Biology. , 2017, , . | | 2 |
| 589 | Enhanced generation of human induced pluripotent stem cells by ectopic expression of Connexin 45. Scientific Reports, 2017, 7, 458. | 1.6 | 11 |
| 590 | Using brain organoids to understand Zika virus-induced microcephaly. Development (Cambridge), 2017, 144, 952-957. | 1.2 | 201 |
| 591 | Pluripotent stem cell-derived organoids: using principles of developmental biology to grow human tissues in a dish. Development (Cambridge), 2017, 144, 958-962. | 1.2 | 230 |
| 592 | Embryoids, organoids and gastruloids: new approaches to understanding embryogenesis. Development (Cambridge), 2017, 144, 976-985. | 1.2 | 153 |
| 593 | The physics of organoids: a biophysical approach to understanding organogenesis. Development (Cambridge), 2017, 144, 946-951. | 1.2 | 55 |
| 594 | The hope and the hype of organoid research. Development (Cambridge), 2017, 144, 938-941. | 1.2 | 303 |

| # | Article | IF | Citations |
|---|---|---|---|
| 595 | Editing the genome of hiPSC with CRISPR/Cas9: disease models. Mammalian Genome, 2017, 28, 348-364. | 1.0 | 72 |
| 596 | Neurodevelopmental Abnormalities and Congenital Heart Disease. Circulation Research, 2017, 120, 960-977. | 2.0 | 141 |
| 597 | Induced pluripotent stem cells from patients with focal cortical dysplasia and refractory epilepsy. Molecular Medicine Reports, 2017, 15, 2049-2056. | 1.1 | 12 |
| 598 | Three-Dimensional Cell Cultures in Drug Discovery and Development. SLAS Discovery, 0, , 247255521769679. | 1.4 | 10 |
| 599 | The case for applying tissue engineering methodologies to instruct human organoid morphogenesis. Acta Biomaterialia, 2017, 54, 35-44. | 4.1 | 51 |
| 600 | Disease Modeling in Stem Cell-Derived 3D Organoid Systems. Trends in Molecular Medicine, 2017, 23, 393-410. | 3.5 | 575 |
| 601 | Genetic heterogeneity in Pakistani microcephaly families revisited. Clinical Genetics, 2017, 92, 62-68. | 1.0 | 28 |
| 602 | Stem cell-derived kidney cells and organoids: Recent breakthroughs and emerging applications. Biotechnology Advances, 2017, 35, 150-167. | 6.0 | 32 |
| 603 | Down syndrome and the complexity of genome dosage imbalance. Nature Reviews Genetics, 2017, 18, 147-163. | 7.7 | 234 |
| 604 | Organoids: A historical perspective of thinking in three dimensions. Journal of Cell Biology, 2017, 216, 31-40. | 2.3 | 442 |
| 605 | Induction of Expansion and Folding in Human Cerebral Organoids. Cell Stem Cell, 2017, 20, 385-396.e3. | 5.2 | 346 |
| 606 | Human-specific genomic signatures of neocortical expansion. Current Opinion in Neurobiology, 2017, 42, 33-44. | 2.0 | 77 |
| 607 | Ex Vivo Engineering of the Tumor Microenvironment. Cancer Drug Discovery and Development, 2017, , . | 0.2 | 4 |
| 608 | Organoid Culture: Applications in Development and Cancer. Cancer Drug Discovery and Development, 2017, , 41-54. | 0.2 | 1 |
| 609 | Self-organized amniogenesis by human pluripotent stem cells in a biomimetic implantation-like niche. Nature Materials, 2017, 16, 419-425. | 13.3 | 189 |
| 610 | Genome and Epigenome Editing in Mechanistic Studies of Human Aging and Aging-Related Disease. Gerontology, 2017, 63, 103-117. | 1.4 | 11 |
| 611 | Control of signaling molecule range during developmental patterning. Cellular and Molecular Life Sciences, 2017, 74, 1937-1956. | 2.4 | 19 |
| 612 | oRGs and mitotic somal translocation â€" a role in development and disease. Current Opinion in Neurobiology, 2017, 42, 61-67. | 2.0 | 46 |

| # | Article | IF | Citations |
|---|---|---|---|
| 613 | Induced pluripotent stem cell technology: a decade of progress. Nature Reviews Drug Discovery, 2017, 16, 115-130. | 21.5 | 1,076 |
| 614 | Controlled Self-assembly of Stem Cell Aggregates Instructs Pluripotency and Lineage Bias. Scientific Reports, 2017, 7, 14070. | 1.6 | 31 |
| 615 | Murine pluripotent stem cells with a homozygous knockout of Foxg1 show reduced differentiation towards cortical progenitors in vitro. Stem Cell Research, 2017, 25, 50-60. | 0.3 | 10 |
| 616 | Comparative performance analysis of human iPSC-derived and primary neural progenitor cells (NPC) grown as neurospheres in vitro. Stem Cell Research, 2017, 25, 72-82. | 0.3 | 61 |
| 617 | Challenges for intraventricular hemorrhage research and emerging therapeutic targets. Expert Opinion on Therapeutic Targets, 2017, 21, 1111-1122. | 1.5 | 55 |
| 618 | Three-Dimensional Tissue Models and Available Probes for Multi-Parametric Live Cell Microscopy: A Brief Overview. Advances in Experimental Medicine and Biology, 2017, 1035, 49-67. | 0.8 | 10 |
| 619 | Organoid cystogenesis reveals a critical role of microenvironment in human polycystic kidneyÂdisease. Nature Materials, 2017, 16, 1112-1119. | 13.3 | 225 |
| 620 | Replication of early and recent Zika virus isolates throughout mouse brain development. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12273-12278. | 3.3 | 44 |
| 621 | Skeletal Muscle Development. Methods in Molecular Biology, 2017, , . | 0.4 | 3 |
| 622 | Short term changes in the proteome of human cerebral organoids induced by 5-MeO-DMT. Scientific Reports, 2017, 7, 12863. | 1.6 | 87 |
| 623 | Modelling Zika Virus Infection of the Developing Human Brain <em>In Vitro</em> Using Stem Cell Derived Cerebral Organoids. Journal of Visualized Experiments, 2017, , . | 0.2 | 23 |
| 624 | Human Cerebrospinal fluid promotes long-term neuronal viability and network function in human neocortical organotypic brain slice cultures. Scientific Reports, 2017, 7, 12249. | 1.6 | 58 |
| 625 | Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection. Cell Reports, 2017, 21, 517-532. | 2.9 | 305 |
| 626 | Concise Review: Induced Pluripotent Stem Cell Models for Neuropsychiatric Diseases. Stem Cells Translational Medicine, 2017, 6, 2062-2070. | 1.6 | 19 |
| 627 | Recapitulating cortical development with organoid culture in vitro and modeling abnormal spindle-like (ASPM related primary) microcephaly disease. Protein and Cell, 2017, 8, 823-833. | 4.8 | 124 |
| 628 | Cryoinjury Model for Tissue Injury and Repair in Bioengineered Human Striated Muscle. Methods in Molecular Biology, 2017, 1668, 209-224. | 0.4 | 7 |
| 629 | Liâ€“Fraumeni Syndrome Disease Model: A Platform to Develop Precision Cancer Therapy Targeting Oncogenic p53. Trends in Pharmacological Sciences, 2017, 38, 908-927. | 4.0 | 35 |
| 630 | Complexity of the Wnt/Î²â€‘catenin pathway: Searching for an activation model. Cellular Signalling, 2017, 40, 30-43. | 1.7 | 78 |

| # | Article | IF | Citations |
|---|---|---|---|
| 631 | Engineering Organoid Systems to Model Health and Disease. Molecular and Translational Medicine, 2017, , 197-226. | 0.4 | 0 |
| 632 | Lab-grown mini-brains upgraded. Nature Cell Biology, 2017, 19, 1010-1012. | 4.6 | 4 |
| 633 | Compartmentalized embryoid body culture for induction of spatially patterned differentiation. Biomicrofluidics, 2017, 11, 041101. | 1.2 | 1 |
| 634 | Deciphering Cell Intrinsic Properties: A Key Issue for Robust Organoid Production. Trends in Biotechnology, 2017, 35, 1035-1048. | 4.9 | 18 |
| 635 | A microfluidic trap array for longitudinal monitoring and multi-modal phenotypic analysis of individual stem cell aggregates. Lab on A Chip, 2017, 17, 3634-3642. | 3.1 | 18 |
| 636 | Organoid technology for brain and therapeutics research. CNS Neuroscience and Therapeutics, 2017, 23, 771-778. | 1.9 | 49 |
| 637 | Mutations of KIF14 cause primary microcephaly by impairing cytokinesis. Annals of Neurology, 2017, 82, 562-577. | 2.8 | 62 |
| 638 | Induced Pluripotent Stem Cell Therapy and Safety Concerns in Age-Related Chronic Neurodegenerative Diseases. Stem Cells in Clinical Applications, 2017, , 23-65. | 0.4 | 0 |
| 639 | Fast wide-volume functional imaging of engineered in vitro brain tissues. Scientific Reports, 2017, 7, 8499. | 1.6 | 26 |
| 640 | Biomimicry, Biofabrication, and Biohybrid Systems: The Emergence and Evolution of Biological Design. Advanced Healthcare Materials, 2017, 6, 1700496. | 3.9 | 49 |
| 641 | Putting Two Heads Together to Build a Better Brain. Cell Stem Cell, 2017, 21, 289-290. | 5.2 | 8 |
| 642 | The use of brain organoids to investigate neural development and disease. Nature Reviews Neuroscience, 2017, 18, 573-584. | 4.9 | 528 |
| 643 | Mimicking Parkinsonâ€™s Disease in a Dish: Merits and Pitfalls of the Most Commonly used Dopaminergic In Vitro Models. NeuroMolecular Medicine, 2017, 19, 241-255. | 1.8 | 25 |
| 644 | In situ generation of human brain organoids on a micropillar array. Lab on A Chip, 2017, 17, 2941-2950. | 3.1 | 106 |
| 645 | Generation of iPSC-derived Human Brain Organoids to Model Early Neurodevelopmental Disorders. Journal of Visualized Experiments, 2017, , . | 0.2 | 23 |
| 646 | Roles of Diffusion Dynamics in Stem Cell Signaling and Three-Dimensional Tissue Development. Stem Cells and Development, 2017, 26, 1293-1303. | 1.1 | 31 |
| 647 | The need for advanced three-dimensional neural models and developing enabling technologies. MRS Communications, 2017, 7, 309-319. | 0.8 | 7 |
| 648 | Inspiration from heart development: Biomimetic development of functional human cardiac organoids. Biomaterials, 2017, 142, 112-123. | 5.7 | 109 |

| # | Article | IF | Citations |
|---|---|---|---|
| 649 | Visualization of migration of human cortical neurons generated from induced pluripotent stem cells. Journal of Neuroscience Methods, 2017, 289, 57-63. | 1.3 | 9 |
| 650 | Fusion of Regionally Specified hPSC-Derived Organoids Models Human Brain Development and Interneuron Migration. Cell Stem Cell, 2017, 21, 383-398.e7. | 5.2 | 508 |
| 651 | Depolarization signatures map gold nanorods within biological tissue. Nature Photonics, 2017, 11, 583-588. | 15.6 | 25 |
| 652 | A pathologist's perspective on induced pluripotent stem cells. Laboratory Investigation, 2017, 97, 1126-1132. | 1.7 | 13 |
| 653 | Engineering-derived approaches for iPSC preparation, expansion, differentiation and applications. Biofabrication, 2017, 9, 032001. | 3.7 | 26 |
| 654 | <sup />Ethical Issues in the Use of Animal Models for Tissue Engineering: Reflections on Legal Aspects, Moral Theory, Three Rs Strategies, and Harmâ€“Benefit Analysis. Tissue Engineering - Part C: Methods, 2017, 23, 850-862. | 1.1 | 22 |
| 655 | Differentiation of neural stem cells regulated by three-dimensional tissue shape. , 2017, , . | | 0 |
| 656 | A Little Bit of Guidance: Mini Brains on Their Route to Adolescence. Cell Stem Cell, 2017, 21, 157-158. | 5.2 | 1 |
| 657 | Reprogramming to developmental plasticity in cancer stem cells. Developmental Biology, 2017, 430, 266-274. | 0.9 | 38 |
| 659 | 3D Differentiation of LUHMES Cell Line to Study Recovery and Delayed Neurotoxic Effects. Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al ], 2017, 73, 11.23.1-11.23.28. | 1.1 | 21 |
| 660 | Organoid culture systems to study hostâ€“pathogen interactions. Current Opinion in Immunology, 2017, 48, 15-22. | 2.4 | 131 |
| 661 | Tissue chips â€“ innovative tools for drug development and disease modeling. Lab on A Chip, 2017, 17, 3026-3036. | 3.1 | 103 |
| 662 | Spatiotemporal hydrogel biomaterials for regenerative medicine. Chemical Society Reviews, 2017, 46, 6532-6552. | 18.7 | 317 |
| 663 | A novel mutation in CDK5RAP2 gene causes primary microcephaly with speech impairment and sparse eyebrows in a consanguineous Pakistani family. European Journal of Medical Genetics, 2017, 60, 627-630. | 0.7 | 10 |
| 664 | A hollow fiber system for simple generation of human brain organoids. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 0.6 | 47 |
| 665 | Wntʃ²â€catenin signaling during early vertebrate neural development. Developmental Neurobiology, 2017, 77, 1239-1259. | 1.5 | 58 |
| 666 | Safety, Ethics and Regulations. Stem Cells in Clinical Applications, 2017, , . | 0.4 | 1 |
| 667 | Paper-based patterned 3D neural cultures as a tool to study network activity on multielectrode arrays. RSC Advances, 2017, 7, 39359-39371. | 1.7 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 668 | Flexible shape-memory scaffold for minimally invasive delivery of functional tissues. Nature Materials, 2017, 16, 1038-1046. | 13.3 | 295 |
| 669 | Integrated Experimental and Theoretical Studies of Stem Cells. Current Stem Cell Reports, 2017, 3, 248-252. | 0.7 | 1 |
| 670 | A pluripotent stem cell-based model for post-implantation human amniotic sac development. Nature Communications, 2017, 8, 208. | 5.8 | 203 |
| 671 | Present and future of modeling human brain development in 3D organoids. Current Opinion in Cell Biology, 2017, 49, 47-52. | 2.6 | 88 |
| 672 | New technologies for engineering neural tissue from stem cells. , 2017, , 181-204. | | 1 |
| 673 | Novel gene function and regulation in neocortex expansion. Current Opinion in Cell Biology, 2017, 49, 22-30. | 2.6 | 22 |
| 674 | Genetic maps and patterns of cerebral cortex folding. Current Opinion in Cell Biology, 2017, 49, 31-37. | 2.6 | 26 |
| 675 | Towards a holistic and mechanistic understanding of tumourigenesis via genetically engineered mouse models. Current Opinion in Systems Biology, 2017, 6, 74-79. | 1.3 | 2 |
| 676 | Convergence of microengineering and cellular self-organization towards functional tissue manufacturing. Nature Biomedical Engineering, 2017, 1, 939-956. | 11.6 | 90 |
| 677 | Cerebral cortex development: an outsideâ€in perspective. FEBS Letters, 2017, 591, 3978-3992. | 1.3 | 75 |
| 678 | In VivoImaging of CNS Injury and Disease. Journal of Neuroscience, 2017, 37, 10808-10816. | 1.7 | 24 |
| 679 | Scalable Production and Cryostorage of Organoids Using Coreâ€“Shell Decoupled Hydrogel Capsules. Advanced Biology, 2017, 1, 1700165. | 3.0 | 38 |
| 680 | Generation of â€œOff-the-Shelfâ€•Natural Killer Cells from Peripheral Blood Cell-Derived Induced Pluripotent Stem Cells. Stem Cell Reports, 2017, 9, 1796-1812. | 2.3 | 105 |
| 681 | Cerebral organoids reveal early cortical maldevelopment in schizophreniaâ€”computational anatomy and genomics, role of FGFR1. Translational Psychiatry, 2017, 7, 6. | 2.4 | 140 |
| 682 | Mechanisms of radial glia progenitor cell lineage progression. FEBS Letters, 2017, 591, 3993-4008. | 1.3 | 92 |
| 683 | Clinically Amendable, Defined, and Rapid Induction of Human Brain Organoids from Induced Pluripotent Stem Cells. Methods in Molecular Biology, 2017, 1576, 13-22. | 0.4 | 6 |
| 684 | Probing impaired neurogenesis in human brain organoids exposed to alcohol. Integrative Biology (United Kingdom), 2017, 9, 968-978. | 0.6 | 61 |
| 685 | Generation of a Motor Nerve Organoid with Human Stem Cell-Derived Neurons. Stem Cell Reports, 2017, 9, 1441-1449. | 2.3 | 87 |

| # | Article | IF | Citations |
|---|---|---|---|
| 686 | On-demand optogenetic activation of human stem-cell-derived neurons. Scientific Reports, 2017, 7, 14450. | 1.6 | 23 |
| 687 | Phenotypic Analysis of Organoids by Proteomics. Proteomics, 2017, 17, 1700023. | 1.3 | 29 |
| 688 | Aqueous cigarette tar extracts disrupt corticogenesis from human embryonic stem cells in vitro. Environmental Research, 2017, 158, 194-202. | 3.7 | 4 |
| 689 | New neurons in adult brain: distribution, molecular mechanisms and therapies. Biochemical Pharmacology, 2017, 141, 4-22. | 2.0 | 61 |
| 690 | Alzheimerâ€™s Disease: Insights from Genetic Mouse Models and Current Advances in Human IPSC-Derived Neurons. Advances in Neurobiology, 2017, 15, 3-29. | 1.3 | 4 |
| 692 | Non-model model organisms. BMC Biology, 2017, 15, 55. | 1.7 | 164 |
| 693 | Modeling schizophrenia pathogenesis using patient-derived induced pluripotent stem cells (iPSCs). Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 2382-2387. | 1.8 | 23 |
| 694 | A model of auto immune response. BMC Immunology, 2017, 18, 24. | 0.9 | 2 |
| 695 | Programming microphysiological systems for childrenâ€™s health protection. Experimental Biology and Medicine, 2017, 242, 1586-1592. | 1.1 | 13 |
| 696 | 21st Century Cell Culture for 21st Century Toxicology. Chemical Research in Toxicology, 2017, 30, 43-52. | 1.7 | 86 |
| 697 | Autism genetics â€“ an overview. Prenatal Diagnosis, 2017, 37, 14-30. | 1.1 | 49 |
| 698 | Intelligent biohybrid systems for functional brain repair. European Journal of Molecular and Clinical Medicine, 2017, 3, 162. | 0.5 | 9 |
| 699 | Pluripotent stem cell expansion and neural differentiation in 3-D scaffolds of tunable Poissonâ€™s ratio. Acta Biomaterialia, 2017, 49, 192-203. | 4.1 | 49 |
| 700 | Neural progenitor cells and their role in the development and evolutionary expansion of the neocortex. Wiley Interdisciplinary Reviews: Developmental Biology, 2017, 6, e256. | 5.9 | 102 |
| 701 | A Single-Cell Roadmap of Lineage Bifurcation in Human ESC Models of Embryonic Brain Development. Cell Stem Cell, 2017, 20, 120-134. | 5.2 | 118 |
| 702 | In vitro acute and developmental neurotoxicity screening: an overview of cellular platforms and high-throughput technical possibilities. Archives of Toxicology, 2017, 91, 1-33. | 1.9 | 132 |
| 703 | CYP3A5 Mediates Effects of Cocaine on Human Neocorticogenesis: Studies using an In Vitro 3D Self-Organized hPSC Model with a Single Cortex-Like Unit. Neuropsychopharmacology, 2017, 42, 774-784. | 2.8 | 68 |
| 704 | Human astrocytes are distinct contributors to the complexity of synaptic function. Brain Research Bulletin, 2017, 129, 66-73. | 1.4 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 705 | Development and characterization of a human embryonic stem cell-derived 3D neural tissue model for neurotoxicity testing. Toxicology in Vitro, 2017, 38, 124-135. | 1.1 | 50 |
| 706 | Are reprogrammed cells a useful tool for studying dopamine dysfunction in psychotic disorders? A review of the current evidence. European Journal of Neuroscience, 2017, 45, 45-57. | 1.2 | 4 |
| 707 | Protein bio-corona: critical issue in immune nanotoxicology. Archives of Toxicology, 2017, 91, 1031-1048. | 1.9 | 182 |
| 708 | Modeling of Autism Using Organoid Technology. Molecular Neurobiology, 2017, 54, 7789-7795. | 1.9 | 17 |
| 709 | Nutrigenomics in the modern era. Proceedings of the Nutrition Society, 2017, 76, 265-275. | 0.4 | 65 |
| 710 | Zika Virus Infection in Pregnancy, Microcephaly, and Maternal and Fetal Health: What We Think, What We Know, and What We Think We Know. Archives of Pathology and Laboratory Medicine, 2017, 141, 26-32. | 1.2 | 114 |
| 711 | Concise Review: Organ Engineering: Design, Technology, and Integration. Stem Cells, 2017, 35, 51-60. | 1.4 | 48 |
| 712 | Regeneration of complex oral organs using 3D cell organization technology. Current Opinion in Cell Biology, 2017, 49, 84-90. | 2.6 | 5 |
| 713 | Passive pumping for the parallel trapping of single neurons onto a microsieve electrode array. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, . | 0.6 | 5 |
| 714 | 1. Human pluripotent stem-cell-derived vascular cells: in vitro model for angiogenesis and drug discovery. , 2017, , 1-34. | | 2 |
| 715 | Immune Checkpoint in Glioblastoma: Promising and Challenging. Frontiers in Pharmacology, 2017, 8, 242. | 1.6 | 133 |
| 716 | Microgravity, Stem Cells, and Embryonic Development: Challenges and Opportunities for 3D Tissue Generation. Frontiers in Astronomy and Space Sciences, 2017, 4, . | 1.1 | 9 |
| 717 | CpG and Non-CpG Methylation in Epigenetic Gene Regulation and Brain Function. Genes, 2017, 8, 148. | 1.0 | 269 |
| 718 | Biofunctional Hydrogels for Three-Dimensional Stem Cell Culture. , 2017, , 345-362. | | 1 |
| 719 | Trace elements during primordial plexiform network formation in human cerebral organoids. PeerJ, 2017, 5, e2927. | 0.9 | 17 |
| 720 | Genetic Epilepsy Modeling With Human Pluripotent Stem Cells. , 2017, , 247-260. | | 0 |
| 721 | 3-D Bioprinting of Neural Tissue for Applications in Cell Therapy and Drug Screening. Frontiers in Bioengineering and Biotechnology, 2017, 5, 69. | 2.0 | 56 |
| 722 | Metabolic Reprogramming in Glioma. Frontiers in Cell and Developmental Biology, 2017, 5, 43. | 1.8 | 242 |

| # | Article | IF | Citations |
|---|---|---|---|
| 723 | The Role of Microfluidics for Organ on Chip Simulations. Bioengineering, 2017, 4, 39. | 1.6 | 56 |
| 724 | Microdevice Platform for In Vitro Nervous System and Its Disease Model. Bioengineering, 2017, 4, 77. | 1.6 | 15 |
| 725 | Driver or Passenger: Epigenomes in Alzheimerâ€™s Disease. Epigenomes, 2017, 1, 5. | 0.8 | 2 |
| 726 | Employing Microfluidic Devices to Induce Concentration Gradients. , 2017, , 429-442. | | 4 |
| 727 | Human Organ Culture: Updating the Approach to Bridge the Gap from In Vitro to In Vivo in Inflammation, Cancer, and Stem Cell Biology. Frontiers in Medicine, 2017, 4, 148. | 1.2 | 37 |
| 728 | Humans in a Dish: The Potential of Organoids in Modeling Immunity and Infectious Diseases. Frontiers in Microbiology, 2017, 8, 2402. | 1.5 | 42 |
| 729 | Port dâ€™EntrÃ©e for Respiratory Infections â€“ Does the Influenza A Virus Pave the Way for Bacteria?. Frontiers in Microbiology, 2017, 8, 2602. | 1.5 | 33 |
| 730 | Human iPSC-Derived Cerebellar Neurons from a Patient with Ataxia-Telangiectasia Reveal Disrupted Gene Regulatory Networks. Frontiers in Cellular Neuroscience, 2017, 11, 321. | 1.8 | 22 |
| 731 | Mechanisms of Long Non-Coding RNAs in the Assembly and Plasticity of Neural Circuitry. Frontiers in Neural Circuits, 2017, 11, 76. | 1.4 | 37 |
| 732 | Tranylcypromine Causes Neurotoxicity and Represses BHC110/LSD1 in Human-Induced Pluripotent Stem Cell-Derived Cerebral Organoids Model. Frontiers in Neurology, 2017, 8, 626. | 1.1 | 27 |
| 733 | Versatile Roles of the Chromatin Remodeler CHD7 during Brain Development and Disease. Frontiers in Molecular Neuroscience, 2017, 10, 309. | 1.4 | 25 |
| 734 | The Role of the Central Nervous System Microenvironment in Pediatric Acute Lymphoblastic Leukemia. Frontiers in Pediatrics, 2017, 5, 90. | 0.9 | 21 |
| 735 | Nuclear Receptor TLX in Development and Diseases. Current Topics in Developmental Biology, 2017, 125, 257-273. | 1.0 | 18 |
| 736 | Three-Dimensional Organoid System Transplantation Technologies in Future Treatment of Central Nervous System Diseases. Stem Cells International, 2017, 2017, 1-14. | 1.2 | 7 |
| 737 | Preventing Neurodegenerative Memory Loss in Hopfield Neuronal Networks Using Cerebral Organoids or External Microelectronics. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-13. | 0.7 | 5 |
| 738 | Effects of Propofol Treatment in Neural Progenitors Derived from Human-Induced Pluripotent Stem Cells. Neural Plasticity, 2017, 2017, 1-12. | 1.0 | 7 |
| 739 | The Human Brain. , 2017, , 125-149. | | 15 |
| 740 | Generation of Functional Lentoid Bodies From Human Induced Pluripotent Stem Cells Derived From Urinary Cells. , 2017, 58, 517. | | 51 |

| # | Article | IF | Citations |
|---|---|---|---|
| 741 | 2.9 Materials as Artificial Stem Cell Microenvironments â˜†. , 2017, , 179-201. | | 0 |
| 742 | In vivo differentiation of induced pluripotent stem cells into neural stem cells by chimera formation. PLoS ONE, 2017, 12, e0170735. | 1.1 | 13 |
| 743 | On the adhesion-cohesion balance and oxygen consumption characteristics of liver organoids. PLoS ONE, 2017, 12, e0173206. | 1.1 | 33 |
| 744 | Where There's Life There's Intelligence. , 2017, , 236-259. | | 2 |
| 745 | 3D brain Organoids derived from pluripotent stem cells: promising experimental models for brain development and neurodegenerative disorders. Journal of Biomedical Science, 2017, 24, 59. | 2.6 | 129 |
| 746 | Factors involved in cancer metastasis: a better understanding to â€œseed and soilâ€•hypothesis. Molecular Cancer, 2017, 16, 176. | 7.9 | 211 |
| 747 | Human pluripotent stem cell differentiation to functional pancreatic cells for diabetes therapies: Innovations, challenges and future directions. Journal of Biological Engineering, 2017, 11, 21. | 2.0 | 29 |
| 748 | Ips Progression a Decade Devoted. Journal of Cell Science & Therapy, 2017, 08, . | 0.3 | 0 |
| 749 | Regeneration of Kidney From Human Reprogrammed Stem Cells. , 2017, , 937-955. | | 0 |
| 750 | Advances in Organoid Culturing of Patient-Derived Tumors. , 2017, , 365-375. | | 0 |
| 751 | Neocortex Expansion in Development and Evolution: The Cell Biology ofÂNeural Stem and Progenitor Cells and the Impact of Human-Specific Gene Expression. , 2017, , 73-89. | | 6 |
| 752 | 3D High-Content Screening of Organoids for Drug Discovery. , 2017, , 388-415. | | 13 |
| 754 | Validated and Nonvalidated Mechanism-Based Methods for Testing Developmental Toxicity. , 2017, , 193-209. | | 1 |
| 755 | Six-month cultured cerebral organoids from human ES cells contain matured neural cells. Neuroscience Letters, 2018, 670, 75-82. | 1.0 | 49 |
| 756 | Pluripotent Stem Cells for Uncovering the Role of Mitochondria in Human Brain Function and Dysfunction. Journal of Molecular Biology, 2018, 430, 891-903. | 2.0 | 5 |
| 757 | In vitro 3D regeneration-like growth of human patient brain tissue. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1247-1260. | 1.3 | 15 |
| 758 | Out of the Cave, Into the Light? Modeling Mental Illness With Organoids. Biological Psychiatry, 2018, 83, e43-e44. | 0.7 | 3 |
| 759 | Translational potential of human brain organoids. Annals of Clinical and Translational Neurology, 2018, 5, 226-235. | 1.7 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 760 | Generation of human brain regionâ€“specific organoids using a miniaturized spinning bioreactor. Nature Protocols, 2018, 13, 565-580. | 5.5 | 335 |
| 761 | Retrograde interferonâ€gamma signaling induces major histocompatibility class I expression in humanâ€induced pluripotent stem cellâ€derived neurons. Annals of Clinical and Translational Neurology, 2018, 5, 172-185. | 1.7 | 14 |
| 762 | The Use of Ex Vivo Organ Cultures in Tick-Borne Virus Research. ACS Infectious Diseases, 2018, 4, 247-256. | 1.8 | 15 |
| 764 | Replicating and Cycling Stores of Information Perpetuate Life. BioEssays, 2018, 40, e1700161. | 1.2 | 7 |
| 765 | Cerebral organoids: ethical issues and consciousness assessment. Journal of Medical Ethics, 2018, 44, 606-610. | 1.0 | 101 |
| 766 | New tools for old drugs: Functional genetic screens to optimize current chemotherapy. Drug Resistance Updates, 2018, 36, 30-46. | 6.5 | 33 |
| 767 | Organs-on-a-Chip: A Fast Track for Engineered Human Tissues in Drug Development. Cell Stem Cell, 2018, 22, 310-324. | 5.2 | 479 |
| 769 | Enteroid Monolayers Reveal an Autonomous WNT and BMP Circuit Controlling Intestinal Epithelial Growth and Organization. Developmental Cell, 2018, 44, 624-633.e4. | 3.1 | 128 |
| 771 | Engineering Human Neural Tissue by 3D Bioprinting. Methods in Molecular Biology, 2018, 1758, 129-138. | 0.4 | 21 |
| 772 | Epigenetics and epitranscriptomics in temporal patterning of cortical neural progenitor competence. Journal of Cell Biology, 2018, 217, 1901-1914. | 2.3 | 69 |
| 773 | Perfusable Vascular Network with a Tissue Model in a Microfluidic Device. Journal of Visualized Experiments, 2018, , . | 0.2 | 6 |
| 774 | Vascularized microfluidic organ-chips for drug screening, disease models and tissue engineering. Current Opinion in Biotechnology, 2018, 52, 116-123. | 3.3 | 95 |
| 775 | An in vivo model of functional and vascularized human brain organoids. Nature Biotechnology, 2018, 36, 432-441. | 9.4 | 826 |
| 776 | Can mutationâ€mediated effects occurring early in development cause longâ€term seizure susceptibility in genetic generalized epilepsies?. Epilepsia, 2018, 59, 915-922. | 2.6 | 7 |
| 777 | Materials for Neural Differentiation, Transâ€Differentiation, and Modeling of Neurological Disease. Advanced Materials, 2018, 30, e1705684. | 11.1 | 30 |
| 778 | Selfâ€organization of human <scp>iPS</scp> cells into trophectoderm mimicking cysts induced by adhesion restriction using microstructured mesh scaffolds. Development Growth and Differentiation, 2018, 60, 183-194. | 0.6 | 11 |
| 779 | Coordinated Control of mRNA and rRNA Processing Controls Embryonic Stem Cell Pluripotency and Differentiation. Cell Stem Cell, 2018, 22, 543-558.e12. | 5.2 | 55 |
| 780 | Organoids have opened avenues into investigating numerous diseases. But how well do they mimic the real thing?. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3507-3509. | 3.3 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 781 | Cortical progenitor biology: key features mediating proliferation versus differentiation. Journal of Neurochemistry, 2018, 146, 500-525. | 2.1 | 77 |
| 782 | hPSC-Derived Striatal Cells Generated Using a Scalable 3D Hydrogel Promote Recovery in a Huntington Disease Mouse Model. Stem Cell Reports, 2018, 10, 1481-1491. | 2.3 | 46 |
| 783 | Effects of 3D culturing conditions on the transcriptomic profile of stem-cell-derived neurons. Nature Biomedical Engineering, 2018, 2, 540-554. | 11.6 | 78 |
| 784 | Directing neuronal cell fate in vitro: Achievements and challenges. Progress in Neurobiology, 2018, 168, 42-68. | 2.8 | 28 |
| 785 | Human organoid cultures: transformative new tools for human virus studies. Current Opinion in Virology, 2018, 29, 79-86. | 2.6 | 78 |
| 786 | Tissue engineering: Still facing a long way ahead. Journal of Controlled Release, 2018, 279, 181-197. | 4.8 | 34 |
| 787 | Shared effects of DISC1 disruption and elevated WNT signaling in human cerebral organoids. Translational Psychiatry, 2018, 8, 77. | 2.4 | 52 |
| 788 | Generation of Standardized and Reproducible Forebrain-type Cerebral Organoids from Human Induced Pluripotent Stem Cells. Journal of Visualized Experiments, 2018, , . | 0.2 | 30 |
| 789 | Human brain organoids on a chip reveal the physics of folding. Nature Physics, 2018, 14, 515-522. | 6.5 | 311 |
| 790 | Circulating tumor cell-derived organoids: Current challenges and promises in medical research and precision medicine. Biochimica Et Biophysica Acta: Reviews on Cancer, 2018, 1869, 117-127. | 3.3 | 106 |
| 791 | The road to synthetic multicellularity. Current Opinion in Systems Biology, 2018, 7, 60-67. | 1.3 | 14 |
| 792 | CDK5RAP2 gene and tau pathophysiology in lateâ€onset sporadic Alzheimer's disease. Alzheimer's and Dementia, 2018, 14, 787-796. | 0.4 | 15 |
| 793 | Relative biological effectiveness in proton beam therapy â€“ Current knowledge and future challenges. Clinical and Translational Radiation Oncology, 2018, 9, 35-41. | 0.9 | 96 |
| 794 | Human-cell-derived organoids as a new ex vivo model for drug assays in oncology. Drug Discovery Today, 2018, 23, 857-863. | 3.2 | 26 |
| 795 | Human iPSC-Derived Posterior Gut Progenitors Are Expandable and Capable of Forming Gut and Liver Organoids. Stem Cell Reports, 2018, 10, 780-793. | 2.3 | 60 |
| 796 | Rotenone exerts developmental neurotoxicity in a human brain spheroid model. Toxicology and Applied Pharmacology, 2018, 354, 101-114. | 1.3 | 102 |
| 797 | Zika Virus Alters DNA Methylation of Neural Genes in an Organoid Model of the Developing Human Brain. MSystems, 2018, 3, . | 1.7 | 53 |
| 798 | Looking into the Future: Toward Advanced 3D Biomaterials for Stemâ€Cellâ€Based Regenerative Medicine. Advanced Materials, 2018, 30, e1705388. | 11.1 | 120 |

| # | Article | IF | Citations |
|---|---|---|---|
| 799 | Folic Acid Exposure Rescues Spina Bifida Aperta Phenotypes in Human Induced Pluripotent Stem Cell Model. Scientific Reports, 2018, 8, 2942. | 1.6 | 18 |
| 800 | Biomimetic fetal rotation bioreactor for engineering bone tissuesâ€"Effect of cyclic strains on upregulation of osteogenic gene expression. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e2039-e2050. | 1.3 | 16 |
| 801 | Same but different: pleiotropy in centrosome-related microcephaly. Molecular Biology of the Cell, 2018, 29, 241-246. | 0.9 | 34 |
| 802 | Dynamic Changes of the Mitochondria in Psychiatric Illnesses: New Mechanistic Insights From Human Neuronal Models. Biological Psychiatry, 2018, 83, 751-760. | 0.7 | 41 |
| 803 | The Current Landscape of 3D In Vitro Tumor Models: What Cancer Hallmarks Are Accessible for Drug Discovery?. Advanced Healthcare Materials, 2018, 7, 1701174. | 3.9 | 66 |
| 804 | Human brain organoid-on-a-chip to model prenatal nicotine exposure. Lab on A Chip, 2018, 18, 851-860. | 3.1 | 227 |
| 805 | Is Parkinson's Disease a Neurodevelopmental Disorder and Will Brain Organoids Help Us to Understand It?. Stem Cells and Development, 2018, 27, 968-975. | 1.1 | 45 |
| 806 | In Vivo Imaging of Single Mammalian Cells in Development and Disease. Trends in Molecular Medicine, 2018, 24, 278-293. | 3.5 | 10 |
| 807 | Chromatin remodeler CHD7 regulates the stem cell identity of human neural progenitors. Genes and Development, 2018, 32, 165-180. | 2.7 | 28 |
| 808 | Development and disease in a dish: the epigenetics of neurodevelopmental disorders. Epigenomics, 2018, 10, 219-231. | 1.0 | 15 |
| 809 | Integrated biocircuits: engineering functional multicellular circuits and devices. Journal of Neural Engineering, 2018, 15, 023001. | 1.8 | 8 |
| 810 | Once and only once: mechanisms of centriole duplication and their deregulation in disease. Nature Reviews Molecular Cell Biology, 2018, 19, 297-312. | 16.1 | 367 |
| 811 | How Cells Fold the Cerebral Cortex. Journal of Neuroscience, 2018, 38, 776-783. | 1.7 | 99 |
| 812 | The rise of three-dimensional human brain cultures. Nature, 2018, 553, 437-445. | 13.7 | 373 |
| 813 | Modeling Neurodegenerative Microenvironment Using Cortical Organoids Derived from Human Stem Cells. Tissue Engineering - Part A, 2018, 24, 1125-1137. | 1.6 | 55 |
| 814 | Cerebral organoids derived from Sandhoff disease-induced pluripotent stem cells exhibit impaired neurodifferentiation. Journal of Lipid Research, 2018, 59, 550-563. | 2.0 | 82 |
| 815 | Disease modeling and functional screening using engineered heart tissue. Current Opinion in Physiology, 2018, 1, 80-88. | 0.9 | 17 |
| 816 | Erythrosin B is a potent and broad-spectrum orthosteric inhibitor of the flavivirus NS2B-NS3 protease. Antiviral Research, 2018, 150, 217-225. | 1.9 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 817 | Virus stamping for targeted single-cell infection in vitro and in vivo. Nature Biotechnology, 2018, 36, 81-88. | 9.4 | 39 |
| 818 | Engineering stem cell-derived 3D brain organoids in a perfusable organ-on-a-chip system. RSC Advances, 2018, 8, 1677-1685. | 1.7 | 134 |
| 819 | Faulty neuronal determination and cell polarization are reverted by modulating HD early phenotypes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E762-E771. | 3.3 | 117 |
| 820 | Testicular organoids: a new model to study the testicular microenvironment in vitro?. Human Reproduction Update, 2018, 24, 176-191. | 5.2 | 64 |
| 821 | Five steps to form neural rosettes: structure and function. Journal of Cell Science, 2018, 131, . | 1.2 | 40 |
| 822 | Imaging organoids: a bright future ahead. Nature Methods, 2018, 15, 24-26. | 9.0 | 118 |
| 823 | Human Accelerated Regions and Other Human-Specific Sequence Variations in the Context of Evolution and Their Relevance for Brain Development. Genome Biology and Evolution, 2018, 10, 166-188. | 1.1 | 61 |
| 824 | Modeling rare diseases with induced pluripotent stem cell technology. Molecular and Cellular Probes, 2018, 40, 52-59. | 0.9 | 26 |
| 825 | CRISPR/Cas9â€based Targeted Genome Editing for the Development of Monogenic Diseases Models with Human Pluripotent Stem Cells. Current Protocols in Stem Cell Biology, 2018, 45, e50. | 3.0 | 11 |
| 826 | Somatic mutations in neurons during aging and neurodegeneration. Acta Neuropathologica, 2018, 135, 811-826. | 3.9 | 35 |
| 827 | Efficient Generation of CA3 Neurons from Human Pluripotent Stem Cells Enables Modeling of Hippocampal Connectivity InÂVitro. Cell Stem Cell, 2018, 22, 684-697.e9. | 5.2 | 118 |
| 828 | Functional brain-specific microvessels from iPSC-derived human brain microvascular endothelial cells: the role of matrix composition on monolayer formation. Fluids and Barriers of the CNS, 2018, 15, 7. | 2.4 | 83 |
| 829 | Crinkle-Cut Brain Organoids. Cell Stem Cell, 2018, 22, 616-618. | 5.2 | 5 |
| 830 | Building three-dimensional human brain organoids. Nature Neuroscience, 2018, , . | 7.1 | 23 |
| 831 | Biology Explaining Tooth Repair and Regeneration: A Mini-Review. Gerontology, 2018, 64, 382-388. | 1.4 | 43 |
| 832 | Generation of spatial-patterned early-developing cardiac organoids using human pluripotent stem cells. Nature Protocols, 2018, 13, 723-737. | 5.5 | 121 |
| 833 | Spontaneous Glioblastoma Spheroid Infiltration of Early-Stage Cerebral Organoids Models Brain Tumor Invasion. SLAS Discovery, 2018, 23, 862-868. | 1.4 | 73 |
| 834 | Engineering Brain Organoids to Probe Impaired Neurogenesis Induced by Cadmium. ACS Biomaterials Science and Engineering, 2018, 4, 1908-1915. | 2.6 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 835 | Coordination of Cell Polarity, Mechanics and Fate in Tissue Self-organization. Trends in Cell Biology, 2018, 28, 541-550. | 3.6 | 38 |
| 836 | 3D tissue engineering, an emerging technique for pharmaceutical research. Acta Pharmaceutica Sinica B, 2018, 8, 756-766. | 5.7 | 49 |
| 837 | Human iPSC-Derived Endothelial Cells and Microengineered Organ-Chip Enhance Neuronal Development. Stem Cell Reports, 2018, 10, 1222-1236. | 2.3 | 125 |
| 838 | Generation of human vascularized brain organoids. NeuroReport, 2018, 29, 588-593. | 0.6 | 351 |
| 839 | Design and validation of an ontology-driven animal-free testing strategy for developmental neurotoxicity testing. Toxicology and Applied Pharmacology, 2018, 354, 136-152. | 1.3 | 23 |
| 840 | Modeling human diseases with induced pluripotent stem cells: from 2D to 3D and beyond. Development (Cambridge), 2018, 145, . | 1.2 | 182 |
| 841 | Adult Mouse DRG Explant and Dissociated Cell Models to Investigate Neuroplasticity and Responses to Environmental Insults Including Viral Infection. Journal of Visualized Experiments, 2018, , . | 0.2 | 18 |
| 842 | Mechanical stabilization of proteolytically degradable polyethylene glycol dimethacrylate hydrogels through peptide interaction. Acta Biomaterialia, 2018, 71, 271-278. | 4.1 | 9 |
| 843 | MeCP2-regulated miRNAs control early human neurogenesis through differential effects on ERK and AKT signaling. Molecular Psychiatry, 2018, 23, 1051-1065. | 4.1 | 206 |
| 844 | A simplified protocol for differentiation of electrophysiologically mature neuronal networks from human induced pluripotent stem cells. Molecular Psychiatry, 2018, 23, 1336-1344. | 4.1 | 166 |
| 845 | Human stem cell modeling in neurofibromatosis type 1 (NF1). Experimental Neurology, 2018, 299, 270-280. | 2.0 | 20 |
| 846 | Threeâ€dimensional patterning in biomedicine: Importance and applications in neuropharmacology. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1369-1382. | 1.6 | 20 |
| 847 | CRISPR-engineered genome editing for the next generation neurological disease modeling. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2018, 81, 459-467. | 2.5 | 11 |
| 848 | Automated Cell Culture Systems and Their Applications to Human Pluripotent Stem Cell Studies. SLAS Technology, 2018, 23, 315-325. | 1.0 | 48 |
| 849 | Toward a CRISPR Picture: Use of CRISPR/Cas9 to Model Diseases in Human Stem Cells In Vitro. Journal of Cellular Biochemistry, 2018, 119, 62-68. | 1.2 | 11 |
| 850 | Wnt/Yes-Associated Protein Interactions During Neural Tissue Patterning of Human Induced Pluripotent Stem Cells. Tissue Engineering - Part A, 2018, 24, 546-558. | 1.6 | 25 |
| 851 | Novel fluid shearâ€based dissociation device for improved single cell dissociation of spheroids and cell aggregates. Biotechnology Progress, 2018, 34, 293-298. | 1.3 | 1 |
| 852 | Next generation organoids for biomedical research and applications. Biotechnology Advances, 2018, 36, 132-149. | 6.0 | 91 |

| # | Article | IF | Citations |
|---|---|---|---|
| 853 | The state of the art in stem cell biology and regenerative medicine: the end of the beginning. Pediatric Research, 2018, 83, 191-204. | 1.1 | 6 |
| 854 | Understanding the role of steroids in typical and atypical brain development: Advantages of using a â€œbrain in a dishâ€• approach. Journal of Neuroendocrinology, 2018, 30, e12547. | 1.2 | 28 |
| 855 | Stem cells and genome editing: approaches to tissue regeneration and regenerative medicine. Journal of Human Genetics, 2018, 63, 165-178. | 1.1 | 18 |
| 856 | Genetics and mechanisms leading to human cortical malformations. Seminars in Cell and Developmental Biology, 2018, 76, 33-75. | 2.3 | 87 |
| 857 | The pathogenesis of microcephaly resulting from congenital infections: why is my babyâ€™s head so small?. European Journal of Clinical Microbiology and Infectious Diseases, 2018, 37, 209-226. | 1.3 | 28 |
| 858 | In Vitro Microfluidic Models for Neurodegenerative Disorders. Advanced Healthcare Materials, 2018, 7, 1700489. | 3.9 | 98 |
| 859 | Threeâ€Đimensional Models of the Human Brain Development and Diseases. Advanced Healthcare Materials, 2018, 7, 1700723. | 3.9 | 73 |
| 860 | Infectious causes of microcephaly: epidemiology, pathogenesis, diagnosis, and management. Lancet Infectious Diseases, The, 2018, 18, e1-e13. | 4.6 | 92 |
| 861 | Enhancing our brains: Genomic mechanisms underlying cortical evolution. Seminars in Cell and Developmental Biology, 2018, 76, 23-32. | 2.3 | 28 |
| 862 | Derivation of Cortical Spheroids from Human Induced Pluripotent Stem Cells in a Suspension Bioreactor. Tissue Engineering - Part A, 2018, 24, 418-431. | 1.6 | 35 |
| 863 | Neural stem cells and epilepsy: functional roles and disease-in-a-dish models. Cell and Tissue Research, 2018, 371, 47-54. | 1.5 | 20 |
| 864 | Controlling Differentiation of Stem Cells for Developing Personalized Organâ€on†Chip Platforms. Advanced Healthcare Materials, 2018, 7, 1700426. | 3.9 | 65 |
| 865 | Creating Scaffolds for 3D Neuronal Tissue Models. Irbm, 2018, 39, 4-8. | 3.7 | 1 |
| 866 | Organ-on-a-chip Systems. , 2018, , 55-78. | | 0 |
| 867 | Single-cell analysis of diversity in human stem cell-derived neurons. Cell and Tissue Research, 2018, 371, 171-179. | 1.5 | 9 |
| 868 | Differential Expression of Cholinergic System Components in Human Induced Pluripotent Stem Cells, Bone Marrow-Derived Multipotent Stromal Cells, and Induced Pluripotent Stem Cell-Derived Multipotent Stromal Cells. Stem Cells and Development, 2018, 27, 166-183. | 1.1 | 3 |
| 869 | Concise Review: The Cellular Conspiracy of Amyotrophic Lateral Sclerosis. Stem Cells, 2018, 36, 293-303. | 1.4 | 39 |
| 870 | The Emergence of Structured, Living, and Conscious Matter in the Evolution of the Universe: A Theory of Structural Evolution and Interaction of Matter. , 2018, , 231-262. | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 871 | Multiorgan Microphysiological Systems for Drug Development: Strategies, Advances, and Challenges. Advanced Healthcare Materials, 2018, 7, 1701000. | 3.9 | 100 |
| 872 | 3D axon growth by exogenous electrical stimulus and soluble factors. Brain Research, 2018, 1678, 288-296. | 1.1 | 31 |
| 873 | Transplantation of feederâ€free human induced pluripotent stem cellâ€“derived cortical neuron progenitors in adult male Wistar rats with focal brain ischemia. Journal of Neuroscience Research, 2018, 96, 863-874. | 1.3 | 15 |
| 874 | 3D neural tissue models: From spheroids to bioprinting. Biomaterials, 2018, 154, 113-133. | 5.7 | 207 |
| 875 | Mechanisms of dietary flavonoid action in neuronal function and neuroinflammation. Molecular Aspects of Medicine, 2018, 61, 50-62. | 2.7 | 59 |
| 876 | Psychiatry in a Dish: Stem Cells and Brain Organoids Modeling Autism Spectrum Disorders. Biological Psychiatry, 2018, 83, 558-568. | 0.7 | 48 |
| 877 | Synthetic AAV/CRISPR vectors for blocking HIVâ€1 expression in persistently infected astrocytes. Glia, 2018, 66, 413-427. | 2.5 | 55 |
| 878 | The promise of induced pluripotent stem cells for neurodevelopmental disorders. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2018, 84, 382-391. | 2.5 | 19 |
| 879 | Interdisciplinary Advances Towards Understanding and Enhancing the Therapeutic Potential of Stem Cell-Based Therapies for Ischaemic Stroke. Springer Series in Translational Stroke Research, 2018, , 21-45. | 0.1 | 0 |
| 880 | Morphological alterations of cultured human colorectal matched tumour and healthy organoids. Oncotarget, 2018, 9, 10572-10584. | 0.8 | 18 |
| 883 | Photoreceptor Cell Replacement Therapy from Stem Cells. Fundamental Biomedical Technologies, 2018, , 1-16. | 0.2 | 0 |
| 884 | hiPSC-Based Tissue Organoid Regeneration. , 0, , . | | 2 |
| 885 | Vascularization and Engraftment of Transplanted Human Cerebral Organoids in Mouse Cortex. ENeuro, 2018, 5, ENEURO.0219-18.2018. | 0.9 | 162 |
| 886 | Modeling Pediatric Epilepsy through iPSC-Based Technologies. Epilepsy Currents, 2018, 18, 240-245. | 0.4 | 18 |
| 887 | In situ differentiation and generation of functional liver organoids from human iPSCs in a 3D perfusable chip system. Lab on A Chip, 2018, 18, 3606-3616. | 3.1 | 147 |
| 888 | Recommendation on test readiness criteria for new approach methods in toxicology: Exemplified for developmental neurotoxicity. ALTEX: Alternatives To Animal Experimentation, 2018, 35, 306-352. | 0.9 | 121 |
| 890 | Mutations in MAST1 Cause Mega-Corpus-Callosum Syndrome with Cerebellar Hypoplasia and Cortical Malformations. Neuron, 2018, 100, 1354-1368.e5. | 3.8 | 35 |
| 891 | Single-Cell Transcriptomics Reveals Heterogeneity and Drug Response of Human Colorectal Cancer Organoids. , 2018, 2018, 2378-2381. | | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 892 | Modular approach for resolving and mapping complex neural and other cellular structures and their associated deformation fields in three dimensions. Nature Protocols, 2018, 13, 3042-3064. | 5.5 | 10 |
| 893 | Stem cell models of human synapse development and degeneration. Molecular Biology of the Cell, 2018, 29, 2913-2921. | 0.9 | 26 |
| 894 | Studying and modulating schizophrenia-associated dysfunctions of oligodendrocytes with patient-specific cell systems. NPJ Schizophrenia, 2018, 4, 23. | 2.0 | 31 |
| 895 | Best Practices for Translational Disease Modeling Using Human iPSC-Derived Neurons. Neuron, 2018, 100, 783-797. | 3.8 | 94 |
| 896 | Exploring landscapes of brain morphogenesis with organoids. Development (Cambridge), 2018, 145, . | 1.2 | 20 |
| 897 | Review: Synthetic scaffolds to control the biochemical, mechanical, and geometrical environment of stem cell-derived brain organoids. APL Bioengineering, 2018, 2, 041501. | 3.3 | 43 |
| 898 | Microglia Increase Inflammatory Responses in iPSC-Derived Human BrainSpheres. Frontiers in Microbiology, 2018, 9, 2766. | 1.5 | 88 |
| 899 | Modeling Inflammation in Autism Spectrum Disorders Using Stem Cells. Frontiers in Pediatrics, 2018, 6, 394. | 0.9 | 11 |
| 900 | Small-molecule induction of AÎ²-42 peptide production in human cerebral organoids to model Alzheimer's disease associated phenotypes. PLoS ONE, 2018, 13, e0209150. | 1.1 | 53 |
| 901 | Three-Dimensional Organoids in Cancer Research: The Search for the Holy Grail of Preclinical Cancer Modeling. OMICS A Journal of Integrative Biology, 2018, 22, 733-748. | 1.0 | 26 |
| 902 | ShinyCortex: Exploring Single-Cell Transcriptome Data From the Developing Human Cortex. Frontiers in Neuroscience, 2018, 12, 315. | 1.4 | 8 |
| 903 | <b><i>VRK2</i></b>, a Candidate Gene for Psychiatric and Neurological Disorders. Molecular Neuropsychiatry, 2018, 4, 119-133. | 3.0 | 28 |
| 904 | Screening-Based Chemical Approaches to Unravel Stem Cell Biology. Stem Cell Reports, 2018, 11, 1312-1323. | 2.3 | 7 |
| 905 | Transcriptome and epigenome landscape of human cortical development modeled in organoids. Science, 2018, 362, . | 6.0 | 220 |
| 906 | From Neuronal Differentiation of iPSCs to 3D Neuro-Organoids: Modelling and Therapy of Neurodegenerative Diseases. International Journal of Molecular Sciences, 2018, 19, 3972. | 1.8 | 44 |
| 907 | Human Models Are Needed for Studying Human Neurodevelopmental Disorders. American Journal of Human Genetics, 2018, 103, 829-857. | 2.6 | 103 |
| 908 | Cell-Biological Requirements for the Generation of Dentate Gyrus Granule Neurons. Frontiers in Cellular Neuroscience, 2018, 12, 402. | 1.8 | 16 |
| 909 | Patient-Derived Induced Pluripotent Stem Cells and Organoids for Modeling Alpha Synuclein Propagation in Parkinson's Disease. Frontiers in Cellular Neuroscience, 2018, 12, 413. | 1.8 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 910 | Organoid technology in disease modelling, drug development, personalized treatment and regeneration medicine. Experimental Hematology and Oncology, 2018, 7, 30. | 2.0 | 119 |
| 911 | An Onâ€Chip Method for Longâ€Term Growth and Realâ€Time Imaging of Brain Organoids. Current Protocols in Cell Biology, 2018, 81, e62. | 2.3 | 14 |
| 912 | Parkinsonâ€™s disease research: adopting a more human perspective to accelerate advances. Drug Discovery Today, 2018, 23, 1950-1961. | 3.2 | 15 |
| 913 | InÂVitro Systems in Neurotoxicological Studies. , 2018, , 451-461. | | 0 |
| 914 | Functional and Sustainable 3D Human Neural Network Models from Pluripotent Stem Cells. ACS Biomaterials Science and Engineering, 2018, 4, 4278-4288. | 2.6 | 40 |
| 915 | Multi-axial self-organization properties of mouse embryonic stem cells into gastruloids. Nature, 2018, 562, 272-276. | 13.7 | 347 |
| 916 | Molecular characterization and prospective isolation of human fetal cochlear hair cell progenitors. Nature Communications, 2018, 9, 4027. | 5.8 | 70 |
| 917 | Research Models of Neurodegenerative Diseases: Major Considerations for Translatability. , 2018, , 99-101. | | 0 |
| 918 | In vitro Models for Seizure-Liability Testing Using Induced Pluripotent Stem Cells. Frontiers in Neuroscience, 2018, 12, 590. | 1.4 | 64 |
| 919 | Pluripotent Stem Cell-Based Approaches to Explore and Treat Optic Neuropathies. Frontiers in Neuroscience, 2018, 12, 651. | 1.4 | 26 |
| 920 | Artificial niche microarrays for identifying extrinsic cell-fate determinants. Methods in Cell Biology, 2018, 148, 51-69. | 0.5 | 6 |
| 921 | Advances and Current Challenges Associated with the Use of Human Induced Pluripotent Stem Cells in Modeling Neurodegenerative Disease. Cells Tissues Organs, 2018, 205, 331-349. | 1.3 | 42 |
| 922 | In vivo modeling of human neuron dynamics and Down syndrome. Science, 2018, 362, . | 6.0 | 87 |
| 923 | Microcephaly Modeling of Kinetochore Mutation Reveals a Brain-Specific Phenotype. Cell Reports, 2018, 25, 368-382.e5. | 2.9 | 34 |
| 924 | Pluripotent stem cell-derived interneuron progenitors mature and restore memory deficits but do not suppress seizures in the epileptic mouse brain. Stem Cell Research, 2018, 33, 83-94. | 0.3 | 15 |
| 925 | Spinal cord organogenesis model reveals role of Flk1+ cells in self-organization of neural progenitor cells into complex spinal cord tissue. Stem Cell Research, 2018, 33, 156-165. | 0.3 | 1 |
| 926 | Human Huntingtonâ€™s Disease iPSC-Derived Cortical Neurons Display Altered Transcriptomics, Morphology, and Maturation. Cell Reports, 2018, 25, 1081-1096.e6. | 2.9 | 77 |
| 927 | Brain Organoids and the Study of Neurodevelopment. Trends in Molecular Medicine, 2018, 24, 982-990. | 3.5 | 83 |

| # | Article | IF | Citations |
|---|---|---|---|
| 928 | Tubular organotypic culture model of human kidney. PLoS ONE, 2018, 13, e0206447. | 1.1 | 19 |
| 929 | Modelling Sporadic Alzheimerâ€™s Disease Using Induced Pluripotent Stem Cells. Neurochemical Research, 2018, 43, 2179-2198. | 1.6 | 27 |
| 930 | Research Models and Tools for the Identification of Antivirals and Therapeutics against Zika Virus Infection. Viruses, 2018, 10, 593. | 1.5 | 16 |
| 931 | Differential Effects of Heparin and Hyaluronic Acid on Neural Patterning of Human Induced Pluripotent Stem Cells. ACS Biomaterials Science and Engineering, 2018, 4, 4354-4366. | 2.6 | 30 |
| 932 | Building Models of Brain Disorders with Three-Dimensional Organoids. Neuron, 2018, 100, 389-405. | 3.8 | 237 |
| 933 | Application of chemical reaction engineering principles to â€œbodyâ€•onâ€•aâ€•chipâ€•systems. AIChE Journal, 2018, 64, 4351-4360. | 1.8 | 15 |
| 934 | Perspective: The promise of multi-cellular engineered living systems. APL Bioengineering, 2018, 2, 040901. | 3.3 | 110 |
| 935 | Organotypic 3D Culture in Nanoscaffold Microwells Supports Salivary Gland Stem-Cell-Based Organization. ACS Biomaterials Science and Engineering, 2018, 4, 4311-4320. | 2.6 | 37 |
| 936 | Stem Cells, Genome Editing, and the Path to Translational Medicine. Cell, 2018, 175, 615-632. | 13.5 | 105 |
| 937 | Cell cycle inhibitors protect motor neurons in an organoid model of Spinal Muscular Atrophy. Cell Death and Disease, 2018, 9, 1100. | 2.7 | 72 |
| 938 | Neuroscience models: choose your dimension. Nature Methods, 2018, 15, 863-866. | 9.0 | 5 |
| 939 | The Elegance of Sonic Hedgehog: Emerging Novel Functions for a Classic Morphogen. Journal of Neuroscience, 2018, 38, 9338-9345. | 1.7 | 42 |
| 940 | Porous and responsive hydrogels for cell therapy. Current Opinion in Colloid and Interface Science, 2018, 38, 135-157. | 3.4 | 35 |
| 941 | Commentary: Human brain organoid-on-a-chip to model prenatal nicotine exposure. Frontiers in Bioengineering and Biotechnology, 2018, 6, 138. | 2.0 | 6 |
| 942 | Human Cortical Neuron Generation Using Cell Reprogramming: A Review of Recent Advances. Stem Cells and Development, 2018, 27, 1674-1692. | 1.1 | 14 |
| 943 | Generation and Fusion of Human Cortical and Medial Ganglionic Eminence Brain Organoids. Current Protocols in Stem Cell Biology, 2018, 47, e61. | 3.0 | 21 |
| 944 | Neural Stem Cell Dysfunction in Human Brain Disorders. Results and Problems in Cell Differentiation, 2018, 66, 283-305. | 0.2 | 7 |
| 945 | Engineering Neural Tissue from Human Pluripotent Stem Cells Using Novel Small Molecule Releasing Microspheres. Advanced Biology, 2018, 2, 1800133. | 3.0 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 946 | The Use of Stem Cell-Derived Neurons for Understanding Development and Disease of the Cerebellum. Frontiers in Neuroscience, 2018, 12, 646. | 1.4 | 5 |
| 947 | Modeling Host-Pathogen Interactions in the Context of the Microenvironment: Three-Dimensional Cell Culture Comes of Age. Infection and Immunity, 2018, 86, . | 1.0 | 108 |
| 948 | Synaptic dysfunction in neurodegenerative and neurodevelopmental diseases: an overview of induced pluripotent stem-cell-based disease models. Open Biology, 2018, 8, . | 1.5 | 126 |
| 949 | Towards Three-Dimensional Dynamic Regulation and In Situ Characterization of Single Stem Cell Phenotype Using Microfluidics. Molecular Biotechnology, 2018, 60, 843-861. | 1.3 | 5 |
| 950 | Human Neural Stem Cells. Results and Problems in Cell Differentiation, 2018, , . | 0.2 | 3 |
| 951 | Progress and potential in organoid research. Nature Reviews Genetics, 2018, 19, 671-687. | 7.7 | 693 |
| 952 | Millifluidic culture improves human midbrain organoid vitality and differentiation. Lab on A Chip, 2018, 18, 3172-3183. | 3.1 | 108 |
| 953 | Genome Editing in Human Neural Stem and Progenitor Cells. Results and Problems in Cell Differentiation, 2018, 66, 163-182. | 0.2 | 1 |
| 954 | Brain Organoids: Expanding Our Understanding of Human Development and Disease. Results and Problems in Cell Differentiation, 2018, 66, 183-206. | 0.2 | 16 |
| 955 | Bioengineering of the Human Neural Stem Cell Niche: A Regulatory Environment for Cell Fate and Potential Target for Neurotoxicity. Results and Problems in Cell Differentiation, 2018, 66, 207-230. | 0.2 | 4 |
| 956 | Inactivation of PLK4-STIL Module Prevents Self-Renewal and Triggers p53-Dependent Differentiation in Human Pluripotent Stem Cells. Stem Cell Reports, 2018, 11, 959-972. | 2.3 | 8 |
| 957 | Generation and assembly of human brain regionâ€“specific three-dimensional cultures. Nature Protocols, 2018, 13, 2062-2085. | 5.5 | 262 |
| 958 | Using mouse transgenic and human stem cell technologies to model genetic mutations associated with schizophrenia and autism. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170037. | 1.8 | 20 |
| 959 | Modeling amyloid beta and tau pathology in human cerebral organoids. Molecular Psychiatry, 2018, 23, 2363-2374. | 4.1 | 249 |
| 960 | Single-cell genomics to guide human stem cell and tissue engineering. Nature Methods, 2018, 15, 661-667. | 9.0 | 52 |
| 961 | 3D heterogeneous islet organoid generation from human embryonic stem cells using a novel engineered hydrogel platform. Biomaterials, 2018, 177, 27-39. | 5.7 | 110 |
| 962 | Strategies to improve the regulatory assessment of developmental neurotoxicity (DNT) using in vitro methods. Toxicology and Applied Pharmacology, 2018, 354, 7-18. | 1.3 | 105 |
| 963 | Perspective: The role of mechanobiology in the etiology of brain metastasis. APL Bioengineering, 2018, 2, 031801. | 3.3 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 964 | Concise Review: Current Status of Three-Dimensional Organoids as Preclinical Models. Stem Cells, 2018, 36, 1329-1340. | 1.4 | 116 |
| 965 | The Neurogenesis of Thought. Cell, 2018, 173, 1059-1061. | 13.5 | 0 |
| 966 | High-Throughput Screening Enhances Kidney Organoid Differentiation from Human Pluripotent Stem Cells and Enables Automated Multidimensional Phenotyping. Cell Stem Cell, 2018, 22, 929-940.e4. | 5.2 | 328 |
| 967 | Consent for governance in the ethical use of organoids. Nature Cell Biology, 2018, 20, 642-645. | 4.6 | 39 |
| 968 | Mechanics-guided embryonic patterning of neuroectoderm tissue from human pluripotent stem cells. Nature Materials, 2018, 17, 633-641. | 13.3 | 174 |
| 969 | Three-dimensional cell culture: from evolution to revolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170216. | 1.8 | 60 |
| 970 | Use and application of 3D-organoid technology. Human Molecular Genetics, 2018, 27, R99-R107. | 1.4 | 143 |
| 971 | An integrated biomanufacturing platform for the large-scale expansion and neuronal differentiation of human pluripotent stem cell-derived neural progenitor cells. Acta Biomaterialia, 2018, 74, 168-179. | 4.1 | 9 |
| 972 | Mary Jane Hogue (1883â€“1962): A pioneer in human brain tissue culture. Journal of the History of the Neurosciences, 2018, 27, 333-354. | 0.1 | 0 |
| 973 | Combining Induced Pluripotent Stem Cells and Genome Editing Technologies for Clinical Applications. Cell Transplantation, 2018, 27, 379-392. | 1.2 | 30 |
| 974 | Cellular Models: HD Patient-Derived Pluripotent Stem Cells. Methods in Molecular Biology, 2018, 1780, 41-73. | 0.4 | 7 |
| 975 | Simple Synthetic Molecular Hydrogels from Self-Assembling Alkylgalactonamides as Scaffold for 3D Neuronal Cell Growth. ACS Applied Materials & Interfaces, 2018, 10, 17004-17017. | 4.0 | 30 |
| 976 | Drug screening for human genetic diseases using iPSC models. Human Molecular Genetics, 2018, 27, R89-R98. | 1.4 | 99 |
| 977 | Induced pluripotent stem cells (iPSCs) as model to study inherited defects of neurotransmission in inborn errors of metabolism. Journal of Inherited Metabolic Disease, 2018, 41, 1103-1116. | 1.7 | 3 |
| 978 | Live cell-lineage tracing and machine learning reveal patterns of organ regeneration. ELife, 2018, 7, . | 2.8 | 35 |
| 979 | Elements of organoid design. , 2018, , 27-42. | | 2 |
| 980 | MTOR pathway in focal cortical dysplasia type 2: What do we know?. Epilepsy and Behavior, 2018, 85, 157-163. | 0.9 | 9 |
| 981 | Constrained spheroids/organoids in perfusion culture. Methods in Cell Biology, 2018, 146, 43-65. | 0.5 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 982 | Polymeric gels for tissue engineering applications. , 2018, , 305-330. | | 0 |
| 983 | Mechanics-guided developmental fate patterning. Nature Materials, 2018, 17, 571-572. | 13.3 | 3 |
| 984 | Patient-derived tumor organoids for prediction of cancer treatment response. Seminars in Cancer Biology, 2018, 53, 258-264. | 4.3 | 122 |
| 985 | Cerebral organoids. , 2018, , 157-174. | | 1 |
| 986 | Organoids for Modeling Genetic Diseases. International Review of Cell and Molecular Biology, 2018, 337, 49-81. | 1.6 | 13 |
| 989 | From Human Pluripotent Stem Cells to Cortical Circuits. Current Topics in Developmental Biology, 2018, 129, 67-98. | 1.0 | 16 |
| 990 | Three-Dimensional In Vitro Brain Tissue Models. Neuromethods, 2018, , 15-36. | 0.2 | 1 |
| 991 | Advances in organ-on-a-chip engineering. Nature Reviews Materials, 2018, 3, 257-278. | 23.3 | 690 |
| 992 | Transcriptional regulation of cell shape during organ morphogenesis. Journal of Cell Biology, 2018, 217, 2987-3005. | 2.3 | 11 |
| 993 | Modeling gene-regulatory networks to describe cell fate transitions and predict master regulators. Npj Systems Biology and Applications, 2018, 4, 29. | 1.4 | 15 |
| 994 | Use of bioreactors for culturing human retinal organoids improves photoreceptor yields. Stem Cell Research and Therapy, 2018, 9, 156. | 2.4 | 85 |
| 995 | Gene Editing of Stem Cells to Model and Treat Disease. Current Stem Cell Reports, 2018, 4, 253-263. | 0.7 | 0 |
| 996 | Organoids for modeling kidney disease. , 2018, , 227-245. | | 2 |
| 997 | Deconstructing and reconstructing the mouse and human early embryo. Nature Cell Biology, 2018, 20, 878-887. | 4.6 | 161 |
| 998 | Genetically engineered cerebral organoids model brain tumor formation. Nature Methods, 2018, 15, 631-639. | 9.0 | 286 |
| 999 | A Modular Assembly of Spinal Cordâ€"Like Tissue Allows Targeted Tissue Repair in the Transected Spinal Cord. Advanced Science, 2018, 5, 1800261. | 5.6 | 34 |
| 1000 | Human iPS derived progenitors bioengineered into liver organoids using an inverted colloidal crystal poly (ethylene glycol) scaffold. Biomaterials, 2018, 182, 299-311. | 5.7 | 93 |
| 1001 | The role of connexins during early embryonic development: pluripotent stem cells, gene editing, and artificial embryonic tissues as tools to close the knowledge gap. Histochemistry and Cell Biology, 2018, 150, 327-339. | 0.8 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1002 | Induction of myelinating oligodendrocytes in human cortical spheroids. Nature Methods, 2018, 15, 700-706. | 9.0 | 242 |
| 1003 | Rett Syndrome and Stem Cell Research. , 2018, , 27-41. | | 0 |
| 1004 | Heterocellular molecular contacts in the mammalian stem cell niche. European Journal of Cell Biology, 2018, 97, 442-461. | 1.6 | 15 |
| 1005 | Generation of three-dimensional human neuronal cultures: application to modeling CNS viral infections. Stem Cell Research and Therapy, 2018, 9, 134. | 2.4 | 36 |
| 1006 | Recent Advances: Decoding Alzheimerâ€™s Disease With Stem Cells. Frontiers in Aging Neuroscience, 2018, 10, 77. | 1.7 | 26 |
| 1007 | Mob2 Insufficiency Disrupts Neuronal Migration in the Developing Cortex. Frontiers in Cellular Neuroscience, 2018, 12, 57. | 1.8 | 23 |
| 1008 | Uncovering True Cellular Phenotypes: Using Induced Pluripotent Stem Cell-Derived Neurons to Study Early Insults in Neurodevelopmental Disorders. Frontiers in Neurology, 2018, 9, 237. | 1.1 | 19 |
| 1009 | Representing Diversity in the Dish: Using Patient-Derived in Vitro Models to Recreate the Heterogeneity of Neurological Disease. Frontiers in Neuroscience, 2018, 12, 56. | 1.4 | 29 |
| 1010 | Estradiol and the Development of the Cerebral Cortex: An Unexpected Role?. Frontiers in Neuroscience, 2018, 12, 245. | 1.4 | 43 |
| 1011 | Image-Based Profiling of Synaptic Connectivity in Primary Neuronal Cell Culture. Frontiers in Neuroscience, 2018, 12, 389. | 1.4 | 30 |
| 1012 | Modeling Neurological Diseases With Human Brain Organoids. Frontiers in Synaptic Neuroscience, 2018, 10, 15. | 1.3 | 136 |
| 1013 | 2D versus 3D human induced pluripotent stem cell-derived cultures for neurodegenerative disease modelling. Molecular Neurodegeneration, 2018, 13, 27. | 4.4 | 157 |
| 1014 | Towards Multi-Organoid Systems for Drug Screening Applications. Bioengineering, 2018, 5, 49. | 1.6 | 45 |
| 1015 | In vitro generation of mouse polarized embryo-like structures from embryonic and trophoblast stem cells. Nature Protocols, 2018, 13, 1586-1602. | 5.5 | 30 |
| 1016 | Latest developments in the field of stem cell research and regenerative medicine compiled from publicly available information and press releases from nonacademic institutions 1 January â€“28 February 28 2018. Regenerative Medicine, 2018, 13, 361-370. | 0.8 | 2 |
| 1017 | Microfabrication-Based Three-Dimensional (3-D) Extracellular Matrix Microenvironments for Cancer and Other Diseases. International Journal of Molecular Sciences, 2018, 19, 935. | 1.8 | 16 |
| 1018 | Disease Modeling Using 3D Organoids Derived from Human Induced Pluripotent Stem Cells. International Journal of Molecular Sciences, 2018, 19, 936. | 1.8 | 118 |
| 1019 | Bioprocesses for Cell Therapies. , 2018, , 899-930. | | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1020 | Quantum materials for brain sciences and artificial intelligence. MRS Bulletin, 2018, 43, 534-540. | 1.7 | 10 |
| 1021 | Modelling Alzheimer's disease: Insights fromin vivotoin vitrothree-dimensional culture platforms. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1944-1958. | 1.3 | 18 |
| 1022 | Pluripotent Stem Cell Platforms for Drug Discovery. Trends in Molecular Medicine, 2018, 24, 805-820. | 3.5 | 33 |
| 1023 | Brain organoids as models to study human neocortex development and evolution. Current Opinion in Cell Biology, 2018, 55, 8-16. | 2.6 | 59 |
| 1024 | Embryonic Stem Cells. , 2018, , 1-51. | | 1 |
| 1025 | Modeling Neuropsychiatric and Neurodegenerative Diseases With Induced Pluripotent Stem Cells. Frontiers in Pediatrics, 2018, 6, 82. | 0.9 | 16 |
| 1026 | Stem Cells to Inform the Neurobiology of Mental Illness. Current Topics in Behavioral Neurosciences, 2018, 40, 13-43. | 0.8 | 4 |
| 1027 | Advancing insights into stem cell niche complexities with next-generation technologies. Current Opinion in Cell Biology, 2018, 55, 87-95. | 2.6 | 24 |
| 1028 | Rett syndrome: insights into genetic, molecular and circuit mechanisms. Nature Reviews Neuroscience, 2018, 19, 368-382. | 4.9 | 164 |
| 1029 | Boosting the power of single-cell analysis. Nature Biotechnology, 2018, 36, 408-409. | 9.4 | 43 |
| 1030 | Brain organoids get vascularized. Nature Biotechnology, 2018, 36, 407-408. | 9.4 | 34 |
| 1031 | Human neural stem cells dispersed in artificial ECM form cerebral organoids when grafted inÂvivo. Journal of Anatomy, 2018, 233, 155-166. | 0.9 | 13 |
| 1032 | Development and Characterization of Human Cerebral Organoids. Cell Transplantation, 2018, 27, 393-406. | 1.2 | 38 |
| 1033 | Studying the Brain in a Dish: 3D Cell Culture Models of Human Brain Development and Disease. Current Topics in Developmental Biology, 2018, 129, 99-122. | 1.0 | 27 |
| 1034 | Synaptic Microcircuit Modeling with 3D Cocultures of Astrocytes and Neurons from Human Pluripotent Stem Cells. Journal of Visualized Experiments, 2018, , . | 0.2 | 13 |
| 1035 | Current Availability of Stem Cell-Based In Vitro Methods for Developmental Neurotoxicity (DNT) Testing. Toxicological Sciences, 2018, 165, 21-30. | 1.4 | 43 |
| 1036 | Mammalian body plan engineering: Lessons and challenges. Current Opinion in Systems Biology, 2018, 11, 50-56. | 1.3 | 2 |
| 1037 | Studying tissue macrophages in vitro: are iPSC-derived cells the answer?. Nature Reviews Immunology, 2018, 18, 716-725. | 10.6 | 92 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1039 | Direct Generation of Human Cortical Organoids from Primary Cells. Stem Cells and Development, 2018, 27, 1549-1556. | 1.1 | 9 |
| 1040 | Microglia support neural stem cell maintenance and growth. Biochemical and Biophysical Research Communications, 2018, 503, 1880-1884. | 1.0 | 24 |
| 1041 | Recapitulation of Human Neural Microenvironment Signatures in iPSC-Derived NPC 3D Differentiation. Stem Cell Reports, 2018, 11, 552-564. | 2.3 | 59 |
| 1042 | Neural precursor cells form integrated brain-like tissue when implanted into rat cerebrospinal fluid. Communications Biology, 2018, 1, 114. | 2.0 | 2 |
| 1043 | Hydrolytic Degradation and Mechanical Stability of Poly(Îµ-Caprolactone)/Reduced Graphene Oxide Membranes as Scaffolds for In Vitro Neural Tissue Regeneration. Membranes, 2018, 8, 12. | 1.4 | 62 |
| 1045 | Investigating pediatric disorders with induced pluripotent stem cells. Pediatric Research, 2018, 84, 499-508. | 1.1 | 9 |
| 1046 | Stem cell bioengineering: building from stem cell biology. Nature Reviews Genetics, 2018, 19, 595-614. | 7.7 | 76 |
| 1047 | Comprehensive review on the molecular genetics of autosomal recessive primary microcephaly (MCPH). Genetical Research, 2018, 100, e7. | 0.3 | 54 |
| 1048 | Genomics in neurodevelopmental disorders: an avenue to personalized medicine. Experimental and Molecular Medicine, 2018, 50, 1-7. | 3.2 | 57 |
| 1049 | Regenerative medicine in the retina: from stem cells to cell replacement therapy. Therapeutic Advances in Ophthalmology, 2018, 10, 251584141877443. | 0.8 | 36 |
| 1050 | Assessing functional connectivity across 3D tissue engineered axonal tracts using calcium fluorescence imaging. Journal of Neural Engineering, 2018, 15, 056008. | 1.8 | 16 |
| 1051 | Organ regeneration based on developmental biology: past and future. Current Opinion in Genetics and Development, 2018, 52, 42-47. | 1.5 | 19 |
| 1052 | Culture of human neurospheres in 3D scaffolds for developmental neurotoxicity testing. Toxicology in Vitro, 2018, 52, 106-115. | 1.1 | 11 |
| 1053 | Induced Pluripotent Stem Cells. Cell Transplantation, 2018, 27, 1588-1602. | 1.2 | 26 |
| 1054 | Generation of Liver Organoids and Their Potential Applications. , 2018, , 115-144. | | 0 |
| 1055 | Cortical organoids: why all this hype?. Current Opinion in Genetics and Development, 2018, 52, 22-28. | 1.5 | 13 |
| 1056 | Engineering a second brain in a dish. Brain Research, 2018, 1693, 165-168. | 1.1 | 6 |
| 1057 | CRISPR therapeutic tools for complex genetic disorders and cancer (Review). International Journal of Oncology, 2018, 53, 443-468. | 1.4 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1058 | hPSC Modeling Reveals that Fate Selection of Cortical Deep Projection Neurons Occurs in the Subplate. Cell Stem Cell, 2018, 23, 60-73.e6. | 5.2 | 59 |
| 1059 | Generation of Scaffold-free, Three-dimensional Insulin Expressing Pancreatoids from Mouse Pancreatic Progenitors In Vitro. Journal of Visualized Experiments, 2018, , . | 0.2 | 5 |
| 1060 | Modeling the Neurovascular Unit InÂVitro and In Silico. , 2018, , 127-142. | | 0 |
| 1061 | Human 3D In Vitro Models for Developmental Neurotoxicity. , 2018, , 163-172. | | 1 |
| 1062 | Stem Cells, Patterning and Regeneration in Planarians: Self-Organization at the Organismal Scale. Methods in Molecular Biology, 2018, 1774, 57-172. | 0.4 | 40 |
| 1063 | Differential antiviral immunity to Japanese encephalitis virus in developing cortical organoids. Cell Death and Disease, 2018, 9, 719. | 2.7 | 40 |
| 1064 | Stem cell-based retina models. Advanced Drug Delivery Reviews, 2019, 140, 33-50. | 6.6 | 57 |
| 1065 | Induced Pluripotent Stem Cells. , 2019, , 169-180. | | 0 |
| 1066 | Mechanical Determinants of Tissue Development. , 2019, , 391-404. | | 0 |
| 1067 | Applications of Human Brain Organoids to Clinical Problems. Developmental Dynamics, 2019, 248, 53-64. | 0.8 | 88 |
| 1068 | The effect of age-related risk factors and comorbidities on white matter injury and repair after ischemic stroke. Neurobiology of Disease, 2019, 126, 13-22. | 2.1 | 14 |
| 1069 | Contribution of induced pluripotent stem cell technologies to the understanding of cellular phenotypes in schizophrenia. Neurobiology of Disease, 2019, 131, 104162. | 2.1 | 24 |
| 1070 | Advances in exÂvivo models and lab-on-a-chip devices for neural tissue engineering. Biomaterials, 2019, 198, 146-166. | 5.7 | 49 |
| 1071 | Liver Buds and Liver Organoids: New Tools for Liver Development, Disease and Medical Application. Stem Cell Reviews and Reports, 2019, 15, 774-784. | 1.7 | 10 |
| 1072 | Construction of 3D in vitro models by bioprinting human pluripotent stem cells: Challenges and opportunities. Brain Research, 2019, 1723, 146393. | 1.1 | 64 |
| 1073 | The Evolving Neural Tissue Engineering Landscape of India. ACS Applied Bio Materials, 2019, 2, 5446-5459. | 2.3 | 3 |
| 1074 | 3D printing with peptideâ€“polymer conjugates for single-step fabrication of spatially functionalized scaffolds. Biomaterials Science, 2019, 7, 4237-4247. | 2.6 | 38 |
| 1075 | Brain Organoids as Tools for Modeling Human Neurodevelopmental Disorders. Physiology, 2019, 34, 365-375. | 1.6 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1076 | Mouse induced pluripotent stem cells-derived Alzheimerâ€™s disease cerebral organoid culture and neural differentiation disorders. Neuroscience Letters, 2019, 711, 134433. | 1.0 | 15 |
| 1077 | Advanced bioengineering technologies for preclinical research. Advances in Physics: X, 2019, 4, 1622451. | 1.5 | 6 |
| 1078 | Medicinal Biotechnology for Disease Modeling, Clinical Therapy, and Drug Discovery and Development. , 2019, , 89-128. | | 6 |
| 1079 | Disease Modeling of Neuropsychiatric Brain Disorders Using Human Stem Cell-Based Neural Models. Current Topics in Behavioral Neurosciences, 2019, 42, 159-183. | 0.8 | 9 |
| 1080 | Introduction to Biotech Entrepreneurship: From Idea to Business. , 2019, , . | | 0 |
| 1081 | Allometric Scaling of physiologically-relevant organoids. Scientific Reports, 2019, 9, 11890. | 1.6 | 12 |
| 1082 | Modelling mitochondrial dysfunction in Alzheimer's disease using human induced pluripotent stem cells. World Journal of Stem Cells, 2019, 11, 236-253. | 1.3 | 13 |
| 1084 | Engineered materials for organoid systems. Nature Reviews Materials, 2019, 4, 606-622. | 23.3 | 251 |
| 1085 | Functionalization of Brain Region-specific Spheroids with Isogenic Microglia-like Cells. Scientific Reports, 2019, 9, 11055. | 1.6 | 119 |
| 1086 | Recent advances in the applications of iPSC technology. Current Opinion in Biotechnology, 2019, 60, 250-258. | 3.3 | 53 |
| 1087 | Toward the formation of neural circuits in human brain organoids. Current Opinion in Cell Biology, 2019, 61, 86-91. | 2.6 | 13 |
| 1088 | Proteomics in the World of Induced Pluripotent Stem Cells. Cells, 2019, 8, 703. | 1.8 | 10 |
| 1089 | Single-cell multimodal transcriptomics to study neuronal diversity in human stem cell-derived brain tissue and organoid models. Journal of Neuroscience Methods, 2019, 325, 108350. | 1.3 | 26 |
| 1090 | Connecting environmental exposure and neurodegeneration using cheminformatics and high resolution mass spectrometry: potential and challenges. Environmental Sciences: Processes and Impacts, 2019, 21, 1426-1445. | 1.7 | 13 |
| 1091 | Distinct Vulnerability and Resilience of Human Neuroprogenitor Subtypes in Cerebral Organoid Model of Prenatal Hypoxic Injury. Frontiers in Cellular Neuroscience, 2019, 13, 336. | 1.8 | 38 |
| 1092 | Stem cells in tissues, organoids, and cancers. Cellular and Molecular Life Sciences, 2019, 76, 4043-4070. | 2.4 | 44 |
| 1093 | All Together Now: Modeling the Interaction of Neural With Non-neural Systems Using Organoid Models. Frontiers in Neuroscience, 2019, 13, 582. | 1.4 | 39 |
| 1094 | Liver organoids: from basic research to therapeutic applications. Gut, 2019, 68, 2228-2237. | 6.1 | 222 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1095 | Advances in Hydrogels in Organoids and Organsâ€onâ€aâ€Chip. Advanced Materials, 2019, 31, e1902042. | 11.1 | 212 |
| 1096 | Pathophysiology and Mechanisms of Zika Virus Infection in the Nervous System. Annual Review of Neuroscience, 2019, 42, 249-269. | 5.0 | 41 |
| 1097 | Presynaptic Dysfunction in Neurons Derived from Tayâ€“Sachs iPSCs. Neuroscience, 2019, 414, 128-140. | 1.1 | 19 |
| 1098 | Malformations of Human Neocortex in Development â€“ Their Progenitor Cell Basis and Experimental Model Systems. Frontiers in Cellular Neuroscience, 2019, 13, 305. | 1.8 | 32 |
| 1099 | In vitro and in silico Models to Study Mosquito-Borne Flavivirus Neuropathogenesis, Prevention, and Treatment. Frontiers in Cellular and Infection Microbiology, 2019, 9, 223. | 1.8 | 10 |
| 1100 | Interfacing cells with microengineered scaffolds for neural tissue reconstruction. Brain Research Bulletin, 2019, 152, 202-211. | 1.4 | 25 |
| 1101 | Microporous scaffolds support assembly and differentiation of pancreatic progenitors into Î²-cell clusters. Acta Biomaterialia, 2019, 96, 111-122. | 4.1 | 34 |
| 1102 | Self-Organized Synchronous Calcium Transients in a Cultured Human Neural Network Derived from Cerebral Organoids. Stem Cell Reports, 2019, 13, 458-473. | 2.3 | 92 |
| 1103 | Neural layer self-assembly in geometrically confined rat and human 3D cultures. Biofabrication, 2019, 11, 045011. | 3.7 | 12 |
| 1104 | Downâ€regulation of ATF1 leads to early neuroectoderm differentiation of human embryonic stem cells by increasing the expression level of SOX2. FASEB Journal, 2019, 33, 10577-10592. | 0.2 | 4 |
| 1105 | Microfluidic Brain-on-a-Chip: Perspectives for Mimicking Neural System Disorders. Molecular Neurobiology, 2019, 56, 8489-8512. | 1.9 | 84 |
| 1106 | The Convergence of Stem Cell Technologies and Phenotypic Drug Discovery. Cell Chemical Biology, 2019, 26, 1050-1066. | 2.5 | 31 |
| 1107 | The Emergence of Stem Cellâ€Based Brain Organoids: Trends and Challenges. BioEssays, 2019, 41, e1900011. | 1.2 | 29 |
| 1108 | Smart polymers for cell therapy and precision medicine. Journal of Biomedical Science, 2019, 26, 73. | 2.6 | 60 |
| 1109 | Human ESC-derived expandable hepatic organoids enable therapeutic liver repopulation and pathophysiological modeling of alcoholic liver injury. Cell Research, 2019, 29, 1009-1026. | 5.7 | 118 |
| 1110 | Building Bridges Between the Clinic and the Laboratory: A Meeting Review â€“ Brain Malformations: A Roadmap for Future Research. Frontiers in Cellular Neuroscience, 2019, 13, 434. | 1.8 | 3 |
| 1111 | Cerebral Organoid Models for Neurotropic Viruses. ACS Infectious Diseases, 2019, 5, 1976-1979. | 1.8 | 13 |
| 1112 | The Dynamic Partnership of Polycomb and Trithorax in Brain Development and Diseases. Epigenomes, 2019, 3, 17. | 0.8 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1113 | Human Cortical Organoids Expose a Differential Function of GSK3 on Cortical Neurogenesis. Stem Cell Reports, 2019, 13, 847-861. | 2.3 | 48 |
| 1114 | Building brains: using brain organoids to study neural development and disease. Brain, 2019, 142, e65-e65. | 3.7 | 1 |
| 1115 | Patient-derived organoids (PDOs) as a novel in vitro model for neuroblastoma tumours. BMC Cancer, 2019, 19, 970. | 1.1 | 27 |
| 1116 | Generation of complex human organoid models including vascular networks by incorporation of mesodermal progenitor cells. Scientific Reports, 2019, 9, 15663. | 1.6 | 153 |
| 1117 | Human Cerebral Organoids and Fetal Brain Tissue Share Proteomic Similarities. Frontiers in Cell and Developmental Biology, 2019, 7, 303. | 1.8 | 58 |
| 1118 | Cystatin B Involvement in Synapse Physiology of Rodent Brains and Human Cerebral Organoids. Frontiers in Molecular Neuroscience, 2019, 12, 195. | 1.4 | 47 |
| 1119 | Probing the Functional Role of Physical Motion in Development. Developmental Cell, 2019, 51, 135-144. | 3.1 | 3 |
| 1120 | 3-D geometry and irregular connectivity dictate neuronal firing in frequency domain and synchronization. Biomaterials, 2019, 197, 171-181. | 5.7 | 8 |
| 1121 | Long-Term Developmental Process of the Human Cortex Revealed In Vitro by Axon-Targeted Recording Using a Microtunnel-Augmented Microelectrode Array. IEEE Transactions on Biomedical Engineering, 2019, 66, 2538-2545. | 2.5 | 17 |
| 1122 | Recent advances in organoid culture for insulin production and diabetes therapy: methods and challenges. BMB Reports, 2019, 52, 295-303. | 1.1 | 20 |
| 1123 | Pluripotent Stem Cells for Brain Repair: Protocols and Preclinical Applications in Cortical and Hippocampal Pathologies. Frontiers in Neuroscience, 2019, 13, 684. | 1.4 | 9 |
| 1124 | Mathematical Models of Organoid Cultures. Frontiers in Genetics, 2019, 10, 873. | 1.1 | 42 |
| 1125 | Convergence of human cellular models and genetics to study neural stem cell signaling to enhance central nervous system regeneration and repair. Seminars in Cell and Developmental Biology, 2019, 95, 84-92. | 2.3 | 4 |
| 1126 | Organ-on-e-chip: Three-dimensional self-rolled biosensor array for electrical interrogations of human electrogenic spheroids. Science Advances, 2019, 5, eaax0729. | 4.7 | 132 |
| 1127 | Differential Effects of Extracellular Vesicles of Lineage-Specific Human Pluripotent Stem Cells on the Cellular Behaviors of Isogenic Cortical Spheroids. Cells, 2019, 8, 993. | 1.8 | 29 |
| 1128 | Fast 3-D Imaging of Brain Organoids With a New Single-Objective Planar-Illumination Two-Photon Microscope. Frontiers in Neuroanatomy, 2019, 13, 77. | 0.9 | 48 |
| 1129 | Genes and Mechanisms Involved in the Generation and Amplification of Basal Radial Glial Cells. Frontiers in Cellular Neuroscience, 2019, 13, 381. | 1.8 | 65 |
| 1130 | Getting to the Cores of Autism. Cell, 2019, 178, 1287-1298. | 13.5 | 204 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1131 | Biomanufacturing of organ-specific tissues with high cellular density and embedded vascular channels. Science Advances, 2019, 5, eaaw2459. | 4.7 | 563 |
| 1132 | Glucocerebrosidase and its relevance to Parkinson disease. Molecular Neurodegeneration, 2019, 14, 36. | 4.4 | 197 |
| 1133 | Mouse vs man: Organoid models of brain development & disease. Brain Research, 2019, 1724, 146427. | 1.1 | 40 |
| 1134 | Complex Oscillatory Waves Emerging from Cortical Organoids Model Early Human Brain Network Development. Cell Stem Cell, 2019, 25, 558-569.e7. | 5.2 | 520 |
| 1135 | Self-organizing neuruloids model developmental aspects of Huntingtonâ€™s disease in the ectodermal compartment. Nature Biotechnology, 2019, 37, 1198-1208. | 9.4 | 116 |
| 1136 | Mechanobiology of cells and cell systems, such as organoids. Biophysical Reviews, 2019, 11, 721-728. | 1.5 | 22 |
| 1137 | The Ethics of Cerebral Organoid Research: Being Conscious of Consciousness. Stem Cell Reports, 2019, 13, 440-447. | 2.3 | 56 |
| 1138 | Modeling cell-cell interactions in the brain using cerebral organoids. Brain Research, 2019, 1724, 146458. | 1.1 | 12 |
| 1139 | Human GLB1 knockout cerebral organoids: A model system for testing AAV9-mediated GLB1 gene therapy for reducing GM1 ganglioside storage in GM1 gangliosidosis. Molecular Genetics and Metabolism Reports, 2019, 21, 100513. | 0.4 | 41 |
| 1140 | The Applications of Lattice Light-sheet Microscopy for Functional Volumetric Imaging of Hippocampal Neurons in a Three-Dimensional Culture System. Micromachines, 2019, 10, 599. | 1.4 | 7 |
| 1141 | Experimental models and tools to tackle glioblastoma. DMM Disease Models and Mechanisms, 2019, 12, . | 1.2 | 70 |
| 1142 | Nanogroove-Enhanced Hydrogel Scaffolds for 3D Neuronal Cell Culture: An Easy Access Brain-on-Chip Model. Micromachines, 2019, 10, 638. | 1.4 | 14 |
| 1143 | The functional microscopic neuroanatomy of the human subthalamic nucleus. Brain Structure and Function, 2019, 224, 3213-3227. | 1.2 | 20 |
| 1144 | Exploiting nanogroove-induced cell culture anisotropy to advance in vitro brain models. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 061802. | 0.6 | 7 |
| 1145 | Patient-Derived Glioma Models: From Patients to Dish to Animals. Cells, 2019, 8, 1177. | 1.8 | 86 |
| 1146 | Neuroglia in Neurodegenerative Diseases. Advances in Experimental Medicine and Biology, 2019, , . | 0.8 | 18 |
| 1147 | 3D Bioprinted Human Cortical Neural Constructs Derived from Induced Pluripotent Stem Cells. Journal of Clinical Medicine, 2019, 8, 1595. | 1.0 | 43 |
| 1148 | Layer-By-Layer: The Case for 3D Bioprinting Neurons to Create Patient-Specific Epilepsy Models. Materials, 2019, 12, 3218. | 1.3 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1149 | Transplantation of Human Brain Organoids: Revisiting the Science and Ethics of Brain Chimeras. Cell Stem Cell, 2019, 25, 462-472. | 5.2 | 62 |
| 1150 | Kidney organoids: accurate models or fortunate accidents. Genes and Development, 2019, 33, 1319-1345. | 2.7 | 97 |
| 1151 | Single-cell RNA-Sequencing in Neuroscience. Neuroforum, 2019, 25, 251-258. | 0.2 | 2 |
| 1152 | Bundled Three-Dimensional Human Axon Tracts Derived from Brain Organoids. IScience, 2019, 21, 57-67. | 1.9 | 37 |
| 1153 | Engineering of human brain organoids with a functional vascular-like system. Nature Methods, 2019, 16, 1169-1175. | 9.0 | 551 |
| 1154 | Brain-on-a-chip Devices for Drug Screening and Disease Modeling Applications. Current Pharmaceutical Design, 2019, 24, 5419-5436. | 0.9 | 33 |
| 1155 | Pathological Progression Induced by the Frontotemporal Dementia-Associated R406W Tau Mutation in Patient-Derived iPSCs. Stem Cell Reports, 2019, 13, 684-699. | 2.3 | 46 |
| 1156 | Recent Trends in Decellularized Extracellular Matrix Bioinks for 3D Printing: An Updated Review. International Journal of Molecular Sciences, 2019, 20, 4628. | 1.8 | 160 |
| 1157 | Human brain development through the lens of cerebral organoid models. Brain Research, 2019, 1725, 146470. | 1.1 | 22 |
| 1158 | Vascularizing organogenesis: Lessons from developmental biology and implications for regenerative medicine. Current Topics in Developmental Biology, 2019, 132, 177-220. | 1.0 | 23 |
| 1159 | Human iPSC application in Alzheimerâ€™s disease and Tau-related neurodegenerative diseases. Neuroscience Letters, 2019, 699, 31-40. | 1.0 | 27 |
| 1160 | REST and Neural Gene Network Dysregulation in iPSC Models of Alzheimerâ€™s Disease. Cell Reports, 2019, 26, 1112-1127.e9. | 2.9 | 150 |
| 1161 | A New Era with Cerebral Organoids. Neuroscience, 2019, 404, 529. | 1.1 | 0 |
| 1162 | Broad applicability of a streamlined Ethyl Cinnamate-based clearing procedure. Development (Cambridge), 2019, 146, . | 1.2 | 92 |
| 1163 | Shared and derived features of cellular diversity in the human cerebral cortex. Current Opinion in Neurobiology, 2019, 56, 117-124. | 2.0 | 61 |
| 1164 | Engineering human islet organoids from iPSCs using an organ-on-chip platform. Lab on A Chip, 2019, 19, 948-958. | 3.1 | 140 |
| 1165 | Brain Organoidsâ€”A Bottom-Up Approach for Studying Human Neurodevelopment. Bioengineering, 2019, 6, 9. | 1.6 | 45 |
| 1166 | Decoding epigenetic cell signaling in neuronal differentiation. Seminars in Cell and Developmental Biology, 2019, 95, 12-24. | 2.3 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1167 | Developmental changes in interkinetic nuclear migration dynamics with respect to cellâ€cycle progression in the mouse cerebral cortex ventricular zone. Journal of Comparative Neurology, 2019, 527, 1545-1557. | 0.9 | 7 |
| 1168 | Are we listening to everything the PARK genes are telling us?. Journal of Comparative Neurology, 2019, 527, 1527-1540. | 0.9 | 13 |
| 1169 | Insights into GBA Parkinson's disease pathology and therapy with induced pluripotent stem cell model systems. Neurobiology of Disease, 2019, 127, 1-12. | 2.1 | 13 |
| 1170 | One-Hit Wonders and 2-Hit Tubers: A Second-Hit to TSC2 Causes Tuber-Like Cells in Spheroids. Epilepsy Currents, 2019, 19, 49-50. | 0.4 | 5 |
| 1171 | Making NSC and Neurons from Patient-Derived Tissue Samples. Methods in Molecular Biology, 2019, 1919, 9-24. | 0.4 | 13 |
| 1172 | Functional Cortical Axon Tracts Generated from Human Stem Cell-Derived Neurons. Tissue Engineering - Part A, 2019, 25, 736-745. | 1.6 | 10 |
| 1173 | Induced pluripotent stem cellâ€based modeling of mutant <scp>LRRK</scp>2â€associated Parkinson's disease. European Journal of Neuroscience, 2019, 49, 561-589. | 1.2 | 20 |
| 1174 | Differentiating human pluripotent stem cells into vascular smooth muscle cells in three dimensional thermoreversible hydrogels. Biomaterials Science, 2019, 7, 347-361. | 2.6 | 7 |
| 1175 | A Human Induced Pluripotent Stem Cell-Derived Tissue Model of a Cerebral Tract Connecting Two Cortical Regions. IScience, 2019, 14, 301-311. | 1.9 | 30 |
| 1176 | Modeling Alzheimerâ€™s disease with human iPS cells: advancements, lessons, and applications. Neurobiology of Disease, 2019, 130, 104503. | 2.1 | 24 |
| 1177 | Optogenetics in the Era of Cerebral Organoids. Trends in Biotechnology, 2019, 37, 1282-1294. | 4.9 | 28 |
| 1178 | Modeling of Fibrotic Lung Disease Using 3D Organoids Derived from Human Pluripotent Stem Cells. Cell Reports, 2019, 27, 3709-3723.e5. | 2.9 | 175 |
| 1179 | Engineering a 3D functional human peripheral nerve in vitro using the Nerve-on-a-Chip platform. Scientific Reports, 2019, 9, 8921. | 1.6 | 52 |
| 1180 | Human Cytomegalovirus Disruption of Calcium Signaling in Neural Progenitor Cells and Organoids. Journal of Virology, 2019, 93, . | 1.5 | 45 |
| 1181 | Human Cytomegalovirus Compromises Development of Cerebral Organoids. Journal of Virology, 2019, 93, . | 1.5 | 59 |
| 1182 | Advances in genetics of migraine. Journal of Headache and Pain, 2019, 20, 72. | 2.5 | 136 |
| 1183 | Apathetic pathogens. Microbes and Infection, 2019, 21, 419-422. | 1.0 | 1 |
| 1184 | Lzts1 controls both neuronal delamination and outer radial glial-like cell generation during mammalian cerebral development. Nature Communications, 2019, 10, 2780. | 5.8 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1185 | Effects of astrocyte on neuronal outgrowth in a layered 3D structure. BioMedical Engineering OnLine, 2019, 18, 74. | 1.3 | 9 |
| 1186 | Tyroxine Hydroxylase-Positive Neuronal Cell Population is Increased by Temporal Dioxin Exposure at Early Stage of Differentiation from Human Embryonic Stem Cells. International Journal of Molecular Sciences, 2019, 20, 2687. | 1.8 | 2 |
| 1187 | Cancer modeling meets human organoid technology. Science, 2019, 364, 952-955. | 6.0 | 577 |
| 1188 | Organoids-on-a-chip. Science, 2019, 364, 960-965. | 6.0 | 495 |
| 1189 | Multi-cellular engineered living systems: building a community around responsible research on emergence. Biofabrication, 2019, 11, 043001. | 3.7 | 13 |
| 1190 | Microengineered human amniotic ectoderm tissue array for high-content developmental phenotyping. Biomaterials, 2019, 216, 119244. | 5.7 | 22 |
| 1191 | Breakthrough Moments: Yoshiki Sasaiâ€™s Discoveries in the Third Dimension. Cell Stem Cell, 2019, 24, 837-838. | 5.2 | 8 |
| 1192 | Design Approaches for Generating Organ Constructs. Cell Stem Cell, 2019, 24, 877-894. | 5.2 | 26 |
| 1193 | The use of iPSC technology for modeling Autism Spectrum Disorders. Neurobiology of Disease, 2019, 130, 104483. | 2.1 | 22 |
| 1194 | The Need for Physiological Micro-Nanofluidic Systems of the Brain. Frontiers in Bioengineering and Biotechnology, 2019, 7, 100. | 2.0 | 22 |
| 1195 | Using Human Induced Pluripotent Stem Cell-derived Intestinal Organoids to Study and Modify Epithelial Cell Protection Against <em>Salmonella</em> and Other Pathogens. Journal of Visualized Experiments, 2019, , . | 0.2 | 9 |
| 1196 | At the Intersection of Epigenetics and Regeneration: An Analysis of the Experimental Outlook of Organoid Technology. , 2019, , 385-402. | | 3 |
| 1197 | iPSC- and Organoid-Based Biomedicine at the Intersection of Epigenetics and Regeneration: Charting the Normative Contours of Emerging Biomedical Platforms. , 2019, , 493-509. | | 3 |
| 1198 | Human cerebral organoids and neural 3D tissues in basic research, and their application to study neurological diseases. Future Neurology, 2019, 14, FNL3. | 0.9 | 6 |
| 1199 | Copper Transport and Disease: What Can We Learn from Organoids?. Annual Review of Nutrition, 2019, 39, 75-94. | 4.3 | 46 |
| 1200 | Genetic basis for primordial germ cells specification in mouse and human: Conserved and divergent roles of PRDM and SOX transcription factors. Current Topics in Developmental Biology, 2019, 135, 35-89. | 1.0 | 31 |
| 1201 | Suitability of 3D human brain spheroid models to distinguish toxic effects of gold and poly-lactic acid nanoparticles to assess biocompatibility for brain drug delivery. Particle and Fibre Toxicology, 2019, 16, 22. | 2.8 | 67 |
| 1202 | Individual brain organoids reproducibly form cell diversity of the human cerebral cortex. Nature, 2019, 570, 523-527. | 13.7 | 649 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1203 | Analysis of Synapses in Cerebral Organoids. Cell Transplantation, 2019, 28, 1173-1182. | 1.2 | 12 |
| 1204 | Use of human pluripotent stem cell-derived cells for neurodegenerative disease modeling and drug screening platform. Future Medicinal Chemistry, 2019, 11, 1305-1322. | 1.1 | 23 |
| 1205 | 3D bioprinting models of neural tissues: The current state of the field and future directions. Brain Research Bulletin, 2019, 150, 240-249. | 1.4 | 32 |
| 1206 | Sporadic Creutzfeldt-Jakob disease prion infection of human cerebral organoids. Acta Neuropathologica Communications, 2019, 7, 90. | 2.4 | 67 |
| 1207 | Preclinical Modelling of PDA: Is Organoid the New Black?. International Journal of Molecular Sciences, 2019, 20, 2766. | 1.8 | 14 |
| 1208 | Modeling microcephaly with cerebral organoids reveals a WDR62â€“CEP170â€“KIF2A pathway promoting cilium disassembly in neural progenitors. Nature Communications, 2019, 10, 2612. | 5.8 | 125 |
| 1209 | Tissue regeneration and the epididymal stem cell. Andrology, 2019, 7, 618-630. | 1.9 | 17 |
| 1210 | Biomimetic Spiking Neural Network (SNN) Systems for â€˜In Vitroâ€™ Cells Stimulation. , 2019, , . | | 0 |
| 1211 | Engineering biomaterials to control the neural differentiation of stem cells. Brain Research Bulletin, 2019, 150, 50-60. | 1.4 | 17 |
| 1212 | Explaining Pathogenicity of Congenital Zika and Guillainâ€“BarrÃ© Syndromes: Does Dysregulation of RNA Editing Play a Role?. BioEssays, 2019, 41, 1800239. | 1.2 | 14 |
| 1213 | Assessing drug response in engineered brain microenvironments. Brain Research Bulletin, 2019, 150, 21-34. | 1.4 | 10 |
| 1214 | Bioengineering an Artificial Human Bloodâ€“Brain Barrier in Rodents. Bioengineering, 2019, 6, 38. | 1.6 | 6 |
| 1215 | Past, Present, and Future of Neuronal Models In Vitro. Advances in Neurobiology, 2019, 22, 3-17. | 1.3 | 24 |
| 1216 | A Novel 3D In Vitro Platform for Pre-Clinical Investigations in Drug Testing, Gene Therapy, and Immuno-oncology. Scientific Reports, 2019, 9, 7154. | 1.6 | 50 |
| 1217 | Integrated cancer tissue engineering models for precision medicine. PLoS ONE, 2019, 14, e0216564. | 1.1 | 57 |
| 1218 | Organoid technology in cancer precision medicine. Cancer Letters, 2019, 457, 20-27. | 3.2 | 40 |
| 1219 | Cell Culture Techniques. Neuromethods, 2019, , . | 0.2 | 3 |
| 1220 | Biologically inspired approaches to enhance human organoid complexity. Development (Cambridge), 2019, 146, . | 1.2 | 68 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1221 | Integration of biological systems with electronic-mechanical assemblies. Acta Biomaterialia, 2019, 95, 91-111. | 4.1 | 23 |
| 1222 | Modelling Protein Synthesis as A Biomarker in Fragile X Syndrome Patient-Derived Cells. Brain Sciences, 2019, 9, 59. | 1.1 | 8 |
| 1223 | A Cleared View on Retinal Organoids. Cells, 2019, 8, 391. | 1.8 | 39 |
| 1224 | Filling the Gap: Neural Stem Cells as A Promising Therapy for Spinal Cord Injury. Pharmaceuticals, 2019, 12, 65. | 1.7 | 64 |
| 1225 | High-resolution 3D imaging of fixed and cleared organoids. Nature Protocols, 2019, 14, 1756-1771. | 5.5 | 317 |
| 1226 | Human organoids: a new dimension in cell biology. Molecular Biology of the Cell, 2019, 30, 1129-1137. | 0.9 | 83 |
| 1227 | Design Principles for Pluripotent Stem Cell-Derived Organoid Engineering. Stem Cells International, 2019, 2019, 1-17. | 1.2 | 25 |
| 1228 | Brain organoids: advances, applications and challenges. Development (Cambridge), 2019, 146, . | 1.2 | 385 |
| 1229 | Organs to Cells and Cells to Organoids: The Evolution of in vitro Central Nervous System Modelling. Frontiers in Cellular Neuroscience, 2019, 13, 129. | 1.8 | 66 |
| 1230 | Fibronectin-conjugated thermoresponsive nanobridges generate three dimensional human pluripotent stem cell cultures for differentiation towards the neural lineages. Stem Cell Research, 2019, 38, 101441. | 0.3 | 5 |
| 1231 | Epigenetic Regulations in Neuropsychiatric Disorders. Frontiers in Genetics, 2019, 10, 268. | 1.1 | 116 |
| 1232 | Microfluidic Devices for Eye Irritation Tests of Cosmetics and Cosmetic Ingredients. Biochip Journal, 2019, 13, 142-150. | 2.5 | 1 |
| 1233 | Micro-injection molded, poly(vinyl alcohol)-calcium salt templates for precise customization of 3D hydrogel internal architecture. Acta Biomaterialia, 2019, 95, 258-268. | 4.1 | 22 |
| 1234 | The complexity of tau in Alzheimerâ€™s disease. Neuroscience Letters, 2019, 705, 183-194. | 1.0 | 200 |
| 1235 | Generation of Vestibular Tissue-Like Organoids From Human Pluripotent Stem Cells Using the Rotary Cell Culture System. Frontiers in Cell and Developmental Biology, 2019, 7, 25. | 1.8 | 30 |
| 1236 | Fragile X Syndrome Pre-Clinical Research: Comparing Mouse- and Human-Based Models. Methods in Molecular Biology, 2019, 1942, 155-162. | 0.4 | 4 |
| 1237 | Glioblastoma heterogeneity and the tumour microenvironment: implications for preclinical research and development of new treatments. Biochemical Society Transactions, 2019, 47, 625-638. | 1.6 | 104 |
| 1238 | The Use of Pluripotent Stem Cell-Derived Organoids to Study Extracellular Matrix Development during Neural Degeneration. Cells, 2019, 8, 242. | 1.8 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1239 | Determinants of Zika virus host tropism uncovered by deep mutational scanning. Nature Microbiology, 2019, 4, 876-887. | 5.9 | 50 |
| 1240 | Cerebral organoids at the airâ€“liquid interface generate diverse nerve tracts with functional output. Nature Neuroscience, 2019, 22, 669-679. | 7.1 | 398 |
| 1241 | Modeling Patient-Derived Glioblastoma with Cerebral Organoids. Cell Reports, 2019, 26, 3203-3211.e5. | 2.9 | 293 |
| 1243 | Functional ectodermal organ regeneration as the next generation of organ replacement therapy. Open Biology, 2019, 9, 190010. | 1.5 | 8 |
| 1244 | Computational fluid dynamic analysis of physical forces playing a role in brain organoid cultures in two different multiplex platforms. BMC Developmental Biology, 2019, 19, 3. | 2.1 | 31 |
| 1245 | Kidney micro-organoids in suspension culture as a scalable source of human pluripotent stem cell-derived kidney cells. Development (Cambridge), 2019, 146, . | 1.2 | 97 |
| 1246 | Endothelial-neurosphere crosstalk in microwell arrays regulates self-renewal and differentiation of human neural stem cells. Journal of Industrial and Engineering Chemistry, 2019, 74, 148-157. | 2.9 | 6 |
| 1247 | Engineering Microfluidic Organoid-on-a-Chip Platforms. Micromachines, 2019, 10, 165. | 1.4 | 153 |
| 1248 | How the extracellular matrix shapes neural development. Open Biology, 2019, 9, 180216. | 1.5 | 166 |
| 1249 | 3D-3 Tumor Models in Drug Discovery for Analysis of Immune Cell Infiltration. Methods in Molecular Biology, 2019, 1953, 151-162. | 0.4 | 19 |
| 1250 | When 3 Rs meet a forth R: Replacement, reduction and refinement of animals in research on reproduction. Journal of Reproductive Immunology, 2019, 132, 54-59. | 0.8 | 15 |
| 1251 | The moral status of cerebral organoids. Regenerative Therapy, 2019, 10, 118-122. | 1.4 | 32 |
| 1252 | Modeling Human Brain Circuitry Using Pluripotent Stem Cell Platforms. Frontiers in Pediatrics, 2019, 7, 57. | 0.9 | 20 |
| 1253 | Altered neuronal migratory trajectories in human cerebral organoids derived from individuals with neuronal heterotopia. Nature Medicine, 2019, 25, 561-568. | 15.2 | 135 |
| 1254 | Cell migration promotes dynamic cellular interactions to control cerebral cortex morphogenesis. Nature Reviews Neuroscience, 2019, 20, 318-329. | 4.9 | 88 |
| 1255 | Grow your own brain. BioTechniques, 2019, 66, 108-112. | 0.8 | 1 |
| 1256 | Studying Human Neurological Disorders Using Induced Pluripotent Stem Cells: From 2D Monolayer to 3D Organoid and Blood Brain Barrier Models. , 2019, 9, 565-611. | | 88 |
| 1257 | hESC-Derived Thalamic Organoids Form Reciprocal Projections When Fused with Cortical Organoids. Cell Stem Cell, 2019, 24, 487-497.e7. | 5.2 | 305 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1258 | Modeling Parkinsonâ€™s disease in midbrain-like organoids. Npj Parkinson's Disease, 2019, 5, 5. | 2.5 | 204 |
| 1259 | Opportunities and challenges for the use of induced pluripotent stem cells in modelling neurodegenerative disease. Open Biology, 2019, 9, 180177. | 1.5 | 59 |
| 1260 | Organoid Models of Development and Disease Towards Therapy. Current Human Cell Research and Applications, 2019, , 149-168. | 0.1 | 0 |
| 1261 | Therapeutic Potential of Patient iPSC-Derived iMelanocytes in Autologous Transplantation. Cell Reports, 2019, 27, 455-466.e5. | 2.9 | 32 |
| 1262 | Engineering three-dimensional microenvironments towards in vitro disease models of the central nervous system. Biofabrication, 2019, 11, 032003. | 3.7 | 37 |
| 1263 | Derivation of adult canine intestinal organoids for translational research in gastroenterology. BMC Biology, 2019, 17, 33. | 1.7 | 82 |
| 1264 | Minocycline mitigates the effect of neonatal hypoxic insult on human brain organoids. Cell Death and Disease, 2019, 10, 325. | 2.7 | 27 |
| 1265 | Assembly of Human Stem Cell-Derived Cortical Spheroids and Vascular Spheroids to Model 3-D Brain-like Tissues. Scientific Reports, 2019, 9, 5977. | 1.6 | 104 |
| 1266 | Multifunctionalized hydrogels foster hNSC maturation in 3D cultures and neural regeneration in spinal cord injuries. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7483-7492. | 3.3 | 77 |
| 1267 | â€œNecessity Is the Mother of Inventionâ€•or Inexpensive, Reliable, and Reproducible Protocol for Generating Organoids. Biochemistry (Moscow), 2019, 84, 321-328. | 0.7 | 8 |
| 1268 | Specification of positional identity in forebrain organoids. Nature Biotechnology, 2019, 37, 436-444. | 9.4 | 226 |
| 1269 | Medical Applications of iPS Cells. Current Human Cell Research and Applications, 2019, , . | 0.1 | 0 |
| 1270 | Studying Heterotypic Cellâ€“Cell Interactions in the Human Brain Using Pluripotent Stem Cell Models for Neurodegeneration. Cells, 2019, 8, 299. | 1.8 | 15 |
| 1271 | Integrated Microphysiological Systems: Transferable Organ Models and Recirculating Flow. Advanced Biology, 2019, 3, 1900018. | 3.0 | 15 |
| 1272 | Distinct gene-selective roles for a network of core promoter factors inDrosophilaneural stem cell identity. Biology Open, 2019, 8, . | 0.6 | 7 |
| 1273 | Telomere-dependent and telomere-independent roles of RAP1 in regulating human stem cell homeostasis. Protein and Cell, 2019, 10, 649-667. | 4.8 | 35 |
| 1274 | Stress-induced precocious aging in PD-patient iPSC-derived NSCs may underlie the pathophysiology of Parkinsonâ€™s disease. Cell Death and Disease, 2019, 10, 105. | 2.7 | 23 |
| 1275 | Organoids â€” Preclinical Models of Human Disease. New England Journal of Medicine, 2019, 380, 569-579. | 13.9 | 212 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1276 | Establishing Cerebral Organoids as Models of Human-Specific Brain Evolution. Cell, 2019, 176, 743-756.e17. | 13.5 | 423 |
| 1277 | Induced pluripotent stem cells in disease modelling and drug discovery. Nature Reviews Genetics, 2019, 20, 377-388. | 7.7 | 411 |
| 1278 | Temporal Impact of Substrate Anisotropy on Differentiating Cardiomyocyte Alignment and Functionality. Tissue Engineering - Part A, 2019, 25, 1426-1437. | 1.6 | 17 |
| 1279 | Chasing the Paradigm: Clinical Translation of 25 Years of Tissue Engineering. Tissue Engineering - Part A, 2019, 25, 679-687. | 1.6 | 77 |
| 1280 | Important advances in Alzheimerâ€™s disease from the use of induced pluripotent stem cells. Journal of Biomedical Science, 2019, 26, 15. | 2.6 | 9 |
| 1281 | One Step Into the Future: New iPSC Tools to Advance Research in Parkinsonâ€™s Disease and Neurological Disorders. Journal of Parkinson's Disease, 2019, 9, 265-281. | 1.5 | 19 |
| 1282 | A radical switch in clonality reveals a stem cell niche in the epiphyseal growth plate. Nature, 2019, 567, 234-238. | 13.7 | 153 |
| 1283 | Brains Emerging: On Modularity and Self-organisation of Neural Development In Vivo and In Vitro. , 2019, , 145-169. | | 4 |
| 1284 | Modeling neuronopathic storage diseases with patient-derived culture systems. Neurobiology of Disease, 2019, 127, 147-162. | 2.1 | 14 |
| 1285 | Experimental and Computational Methods for the Study of Cerebral Organoids: A Review. Frontiers in Neuroscience, 2019, 13, 162. | 1.4 | 32 |
| 1286 | Grow with the Flow: When Morphogenesis Meets Microfluidics. Advanced Materials, 2019, 31, e1805764. | 11.1 | 42 |
| 1287 | There are Actual Brains in Vats Now. Logos and Episteme, 2019, 10, 135-145. | 0.1 | 1 |
| 1288 | Acute Lengthening of Progenitor Mitosis Influences Progeny Fate during Cortical Development in vivo. Developmental Neuroscience, 2019, 41, 300-317. | 1.0 | 18 |
| 1289 | Disease in a Dish: Cellular Models to Understand Human Conditions. , 2019, , 19-47. | | 0 |
| 1290 | Next-Generation Liver Medicine Using Organoid Models. Frontiers in Cell and Developmental Biology, 2019, 7, 345. | 1.8 | 48 |
| 1291 | New approaches to model glioblastoma in vitro using brain organoids: implications for precision oncology. Translational Cancer Research, 2019, 8, S606-S611. | 0.4 | 11 |
| 1292 | Inner ear organoids: new tools to understand neurosensory cell development, degeneration and regeneration. Development (Cambridge), 2019, 146, . | 1.2 | 50 |
| 1293 | Human Pluripotent Stem Cells: Applications and Challenges for Regenerative Medicine and Disease Modeling. Advances in Biochemical Engineering/Biotechnology, 2019, 171, 189-224. | 0.6 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1294 | Neuronal maturation reduces the type I IFN response to orthobunyavirus infection and leads to increased apoptosis of human neurons. Journal of Neuroinflammation, 2019, 16, 229. | 3.1 | 22 |
| 1295 | IPL Sublamination in Chicken Retinal Spheroids Is Initiated via MÃ¼ller Cells and Cholinergic Differentiation, and Is Disrupted by NMDA Signaling. , 2019, 60, 4759. | | 6 |
| 1296 | Neural microphysiological systems for in vitro modeling of peripheral nervous system disorders. Bioelectronics in Medicine, 2019, 2, 101-117. | 2.0 | 7 |
| 1297 | iPSCs-Based Neural 3D Systems: A Multidimensional Approach for Disease Modeling and Drug Discovery. Cells, 2019, 8, 1438. | 1.8 | 41 |
| 1298 | The Use of Human Induced Pluripotent Stem Cells for Testing Neuroprotective Activity of Pharmacological Compounds. Biochemistry (Moscow), 2019, 84, 1296-1305. | 0.7 | 2 |
| 1300 | Synapse alterations precede neuronal damage and storage pathology in a human cerebral organoid model of CLN3-juvenile neuronal ceroid lipofuscinosis. Acta Neuropathologica Communications, 2019, 7, 222. | 2.4 | 49 |
| 1301 | Modeling Brain Somatic Mosaicism With Cerebral Organoids, Including a Note on Mutant Microglia. Frontiers in Molecular Neuroscience, 2019, 12, 277. | 1.4 | 4 |
| 1302 | Derivation of familial iPSC lines from three ASD patients carrying NRXN1Î± and two controls (NUIGi022-A, NUIGi022-B; NUIGi023-A, NUIGi023-B; NUIGi025-A, NUIGi025-B; NUIGi024-A, NUIGi024-B;) Tj ETQq1 1 0.784314 rgBT /Ov | | |
| 1303 | Functional maturation of human neural stem cells in a 3D bioengineered brain model enriched with fetal brain-derived matrix. Scientific Reports, 2019, 9, 17874. | 1.6 | 46 |
| 1304 | High-throughput micropatterning platform reveals Nodal-dependent bisection of peri-gastrulationâ€“associated versus preneurulation-associated fate patterning. PLoS Biology, 2019, 17, e3000081. | 2.6 | 34 |
| 1305 | Disease modelling in human organoids. DMM Disease Models and Mechanisms, 2019, 12, . | 1.2 | 254 |
| 1306 | Modeling Polyglutamine Expansion Diseases with Induced Pluripotent Stem Cells. Neurotherapeutics, 2019, 16, 979-998. | 2.1 | 21 |
| 1307 | Neural Lineage Differentiation From Pluripotent Stem Cells to Mimic Human Brain Tissues. Frontiers in Bioengineering and Biotechnology, 2019, 7, 400. | 2.0 | 55 |
| 1308 | Dorsal-ventral patterned neural cyst from human pluripotent stem cells in a neurogenic niche. Science Advances, 2019, 5, eaax5933. | 4.7 | 59 |
| 1309 | Modelling heme-mediated brain injury associated with cerebral malaria in human brain cortical organoids. Scientific Reports, 2019, 9, 19162. | 1.6 | 39 |
| 1310 | Organoid single-cell genomic atlas uncovers human-specific features of brain development. Nature, 2019, 574, 418-422. | 13.7 | 496 |
| 1311 | Oxidative DNA Damage Signalling in Neural Stem Cells in Alzheimerâ€™s Disease. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-10. | 1.9 | 14 |
| 1313 | Early Actions of Neurotransmitters During Cortex Development and Maturation of Reprogrammed Neurons. Frontiers in Synaptic Neuroscience, 2019, 11, 33. | 1.3 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1315 | P.511 Deregulation of collapsin response mediator protein gene family in autism spectrum disorders. European Neuropsychopharmacology, 2019, 29, S360-S361. | 0.3 | 0 |
| 1316 | Genetic Modification of Brain Organoids. Frontiers in Cellular Neuroscience, 2019, 13, 558. | 1.8 | 32 |
| 1317 | Species-Specific miRNAs in Human Brain Development and Disease. Frontiers in Cellular Neuroscience, 2019, 13, 559. | 1.8 | 26 |
| 1318 | Putative Cellular and Molecular Roles of Zika Virus in Fetal and Pediatric Neuropathologies. Pediatric and Developmental Pathology, 2019, 22, 5-21. | 0.5 | 5 |
| 1319 | Neural tissue microphysiological systems in the era of patient-derived pluripotent stem cells. , 2019, , 249-296. | | 3 |
| 1320 | Beta-propeller protein-associated neurodegeneration (BPAN) as a genetically simple model of multifaceted neuropathology resulting from defects in autophagy. Reviews in the Neurosciences, 2019, 30, 261-277. | 1.4 | 18 |
| 1321 | Advances in Cerebral Organoid Systems and their Application in Disease Modeling. Neuroscience, 2019, 399, 28-38. | 1.1 | 17 |
| 1322 | Engineered Microenvironment for Manufacturing Human Pluripotent Stem Cell-Derived Vascular Smooth Muscle Cells. Stem Cell Reports, 2019, 12, 84-97. | 2.3 | 25 |
| 1323 | Application of human pluripotent stem cells and pluripotent stem cell-derived cellular models for assessing drug toxicity. Expert Opinion on Drug Metabolism and Toxicology, 2019, 15, 61-75. | 1.5 | 13 |
| 1324 | Generation of Pancreatic Ductal Organoids and Wholeâ€Mount Immunostaining of Intact Organoids. Current Protocols in Cell Biology, 2019, 83, e82. | 2.3 | 8 |
| 1325 | Effects of minocycline and rapamycin in gamma-irradiated human embryonic stem cells-derived cerebral organoids. Molecular Biology Reports, 2019, 46, 1343-1348. | 1.0 | 5 |
| 1326 | Vincristine Impairs Microtubules and Causes Neurotoxicity in Cerebral Organoids. Neuroscience, 2019, 404, 530-540. | 1.1 | 30 |
| 1327 | Constructing and Deconstructing Cancers using Human Pluripotent Stem Cells and Organoids. Cell Stem Cell, 2019, 24, 12-24. | 5.2 | 59 |
| 1328 | Evaluation of variability in human kidney organoids. Nature Methods, 2019, 16, 79-87. | 9.0 | 176 |
| 1329 | Reliability of human cortical organoid generation. Nature Methods, 2019, 16, 75-78. | 9.0 | 330 |
| 1330 | Personalized Hydrogels for Engineering Diverse Fully Autologous Tissue Implants. Advanced Materials, 2019, 31, e1803895. | 11.1 | 85 |
| 1331 | Reversal of proliferation deficits caused by chromosome 16p13.11 microduplication through targeting NFÎºB signaling: an integrated study of patient-derived neuronal precursor cells, cerebral organoids and in vivo brain imaging. Molecular Psychiatry, 2019, 24, 294-311. | 4.1 | 36 |
| 1332 | Human cardiomyocytes undergo enhanced maturation in embryonic stem cell-derived organoid transplants. Biomaterials, 2019, 192, 537-550. | 5.7 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1333 | Human SPG11 cerebral organoids reveal cortical neurogenesis impairment. Human Molecular Genetics, 2019, 28, 961-971. | 1.4 | 20 |
| 1334 | The effect of rho kinase inhibition on morphological and electrophysiological maturity in iPSC-derived neurons. Cell and Tissue Research, 2019, 375, 641-654. | 1.5 | 9 |
| 1335 | Human Cardiac Organoids for Disease Modeling. Clinical Pharmacology and Therapeutics, 2019, 105, 79-85. | 2.3 | 98 |
| 1336 | Transplantation of photoreceptors into the degenerative retina: Current state and future perspectives. Progress in Retinal and Eye Research, 2019, 69, 1-37. | 7.3 | 130 |
| 1337 | Harnessing stem cells and biomaterials to promote neural repair. British Journal of Pharmacology, 2019, 176, 355-368. | 2.7 | 34 |
| 1338 | Modern Ways of Obtaining Stem Cells. , 2019, , 17-36. | | 3 |
| 1339 | Engineering advanced neural tissue constructs to mitigate acute cerebral inflammation after brain transplantation in rats. Biomaterials, 2019, 192, 510-522. | 5.7 | 15 |
| 1340 | Reprogramming the brain with synthetic neurobiology. Current Opinion in Biotechnology, 2019, 58, 37-44. | 3.3 | 2 |
| 1341 | Cortical interneuron function in autism spectrum condition. Pediatric Research, 2019, 85, 146-154. | 1.1 | 32 |
| 1342 | Alginate Hydrogel Modified with a Ligand Interacting with Î±3Î²1 Integrin Receptor Promotes the Differentiation of 3D Neural Spheroids toward Oligodendrocytes in Vitro. ACS Applied Materials & Interfaces, 2019, 11, 5821-5833. | 4.0 | 48 |
| 1343 | Human Brain Slice Culture: A Useful Tool to Study Brain Disorders and Potential Therapeutic Compounds. Neuroscience Bulletin, 2019, 35, 244-252. | 1.5 | 28 |
| 1344 | Brain organoids: a next step for humanized Alzheimerâ€™s disease models?. Molecular Psychiatry, 2019, 24, 474-478. | 4.1 | 50 |
| 1345 | Pathological priming causes developmental gene network heterochronicity in autistic subject-derived neurons. Nature Neuroscience, 2019, 22, 243-255. | 7.1 | 209 |
| 1346 | Nonadhesive Alginate Hydrogels Support Growth of Pluripotent Stem Cell-Derived Intestinal Organoids. Stem Cell Reports, 2019, 12, 381-394. | 2.3 | 160 |
| 1347 | The Astrocyteâ€“Neuron Interface: An Overview on Molecular and Cellular Dynamics Controlling Formation and Maintenance of the Tripartite Synapse. Methods in Molecular Biology, 2019, 1938, 3-18. | 0.4 | 20 |
| 1348 | Disturbed redox homeostasis and oxidative stress: Potential players in the developmental regression in Rett syndrome. Neuroscience and Biobehavioral Reviews, 2019, 98, 154-163. | 2.9 | 44 |
| 1349 | Structurally Conserved Primate LncRNAs Are Transiently Expressed during Human Cortical Differentiation and Influence Cell-Type-Specific Genes. Stem Cell Reports, 2019, 12, 245-257. | 2.3 | 53 |
| 1350 | Neuronal migration in the CNS during development and disease: insights from in vivo and in vitro models. Development (Cambridge), 2019, 146, . | 1.2 | 110 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1351 | Glioblastomaâ€™s Next Top Model: Novel Culture Systems for Brain Cancer Radiotherapy Research. Cancers, 2019, 11, 44. | 1.7 | 59 |
| 1352 | In vitro and ex vivo systems at the forefront of infection modeling and drug discovery. Biomaterials, 2019, 198, 228-249. | 5.7 | 54 |
| 1353 | Use of induced pluripotent stem cells (iPSCs) and cerebral organoids in modeling the congenital infection and neuropathogenesis induced by Zika virus. Journal of Medical Virology, 2019, 91, 525-532. | 2.5 | 11 |
| 1354 | FACSâ€Mediated Isolation of Neuronal Cell Populations From Virusâ€Infected Human Embryonic Stem Cellâ€“Derived Cerebral Organoid Cultures. Current Protocols in Stem Cell Biology, 2019, 48, e65. | 3.0 | 13 |
| 1355 | Extracellular matrix: The ideal natural fibrous nanocomposite products. , 2019, , 263-286. | | 2 |
| 1356 | Inherited Disorders of Neurotransmitters: Classification and Practical Approaches for Diagnosis and Treatment. Neuropediatrics, 2019, 50, 002-014. | 0.3 | 55 |
| 1357 | From organotypic culture to bodyâ€onâ€aâ€chip: A neuroendocrine perspective. Journal of Neuroendocrinology, 2019, 31, e12650. | 1.2 | 10 |
| 1358 | Enrichment and Identification of Neural Stem Cells in Neurospheres Using Rigidity-Tunable Gels. Tissue Engineering - Part A, 2019, 25, 427-436. | 1.6 | 3 |
| 1359 | Human brain development and its in vitro recapitulation. Neuroscience Research, 2019, 138, 33-42. | 1.0 | 25 |
| 1360 | Acute Inflammation After Traumatic Brain Injury. , 2019, , 221-239. | | 1 |
| 1361 | Development of a human skeletal micro muscle platform with pacing capabilities. Biomaterials, 2019, 198, 217-227. | 5.7 | 38 |
| 1362 | Isolation of synaptic vesicles from genetically engineered cultured neurons. Journal of Neuroscience Methods, 2019, 312, 114-121. | 1.3 | 1 |
| 1363 | Organoids for Advanced Therapeutics and Disease Models. Advanced Therapeutics, 2019, 2, 1800087. | 1.6 | 22 |
| 1364 | Brain Organoids: A New, Transformative Investigational Tool for Neuroscience Research. Advanced Biology, 2019, 3, e1800174. | 3.0 | 4 |
| 1365 | Building an Artificial Stem Cell Niche: Prerequisites for Future 3Dâ€Formation of Inner Ear Structuresâ€”Toward 3D Inner Ear Biotechnology. Anatomical Record, 2020, 303, 408-426. | 0.8 | 9 |
| 1366 | New frontiers in modeling tuberous sclerosis with human stem cellâ€derived neurons and brain organoids. Developmental Dynamics, 2020, 249, 46-55. | 0.8 | 26 |
| 1367 | Using brain organoids to study human neurodevelopment, evolution and disease. Wiley Interdisciplinary Reviews: Developmental Biology, 2020, 9, e347. | 5.9 | 23 |
| 1368 | New Drug Discovery Paradigms for Retinal Diseases: A Focus on Retinal Organoids. Journal of Ocular Pharmacology and Therapeutics, 2020, 36, 18-24. | 0.6 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1369 | Modeling genetic epilepsies in a dish. Developmental Dynamics, 2020, 249, 56-75. | 0.8 | 27 |
| 1370 | Modeling neuropsychiatric disorders using human induced pluripotent stem cells. Protein and Cell, 2020, 11, 45-59. | 4.8 | 58 |
| 1371 | Human pluripotent stem cellâ€“derived models and drug screening in CNS precision medicine. Annals of the New York Academy of Sciences, 2020, 1471, 18-56. | 1.8 | 54 |
| 1372 | Kidney organoids in translational medicine: Disease modeling and regenerative medicine. Developmental Dynamics, 2020, 249, 34-45. | 0.8 | 33 |
| 1373 | Using induced pluripotent stem cell neuronal models to study neurodegenerative diseases. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165431. | 1.8 | 22 |
| 1374 | Neural tissue engineering with structured hydrogels in CNS models and therapies. Biotechnology Advances, 2020, 42, 107370. | 6.0 | 78 |
| 1375 | Hostâ€“parasite interaction associated with major mental illness. Molecular Psychiatry, 2020, 25, 194-205. | 4.1 | 26 |
| 1376 | Stem cells: A path towards improved epilepsy therapies. Neuropharmacology, 2020, 168, 107781. | 2.0 | 9 |
| 1377 | On Stem Cells, Organoids and Human Disease. European Review, 2020, 28, 1-5. | 0.4 | 5 |
| 1378 | 7-Ketocholesterol and 7Î²-hydroxycholesterol: In vitro and animal models used to characterize their activities and to identify molecules preventing their toxicity. Biochemical Pharmacology, 2020, 173, 113648. | 2.0 | 48 |
| 1379 | Reconstituting neurovascular unit based on the close relations between neural stem cells and endothelial cells: an effective method to explore neurogenesis and angiogenesis. Reviews in the Neurosciences, 2020, 31, 143-159. | 1.4 | 16 |
| 1380 | Blood vessel formation in cerebral organoids formed from human embryonic stem cells. Biochemical and Biophysical Research Communications, 2020, 521, 84-90. | 1.0 | 92 |
| 1381 | Biofabrication of neural microphysiological systems using magnetic spheroid bioprinting. Biofabrication, 2020, 12, 015002. | 3.7 | 43 |
| 1382 | Towards manufacturing of human organoids. Biotechnology Advances, 2020, 39, 107460. | 6.0 | 44 |
| 1383 | When Bio Meets Technology: Biohybrid Neural Interfaces. Advanced Materials, 2020, 32, e1903182. | 11.1 | 65 |
| 1384 | Three-dimensional modeling of human neurodegeneration: brain organoids coming of age. Molecular Psychiatry, 2020, 25, 254-274. | 4.1 | 78 |
| 1385 | Modeling Alzheimerâ€™s disease with iPSC-derived brain cells. Molecular Psychiatry, 2020, 25, 148-167. | 4.1 | 263 |
| 1386 | Probing disrupted neurodevelopment in autism using human stem cellâ€derived neurons and organoids: An outlook into future diagnostics and drug development. Developmental Dynamics, 2020, 249, 6-33. | 0.8 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1387 | CRISPR-based functional evaluation of schizophrenia risk variants. Schizophrenia Research, 2020, 217, 26-36. | 1.1 | 10 |
| 1388 | Opportunities and Challenges in Phenotypic Screening for Neurodegenerative Disease Research. Journal of Medicinal Chemistry, 2020, 63, 1823-1840. | 2.9 | 33 |
| 1389 | What would a synthetic connectome look like?. Physics of Life Reviews, 2020, 33, 1-15. | 1.5 | 11 |
| 1390 | Interneuron Types as Attractors and Controllers. Annual Review of Neuroscience, 2020, 43, 1-30. | 5.0 | 127 |
| 1391 | Abnormal organization during neurodevelopment in a mouse model of Sandhoff disease. Neuroscience Research, 2020, 155, 12-19. | 1.0 | 3 |
| 1392 | Human Tridimensional Neuronal Cultures for Phenotypic Drug Screening in Inherited Peripheral Neuropathies. Clinical Pharmacology and Therapeutics, 2020, 107, 1231-1239. | 2.3 | 12 |
| 1393 | Organotypic Neurovascular Models: Past Results and Future Directions. Trends in Molecular Medicine, 2020, 26, 273-284. | 3.5 | 11 |
| 1394 | 3D cell culture models and organâ€onâ€aâ€chip: Meet separation science and mass spectrometry. Electrophoresis, 2020, 41, 56-64. | 1.3 | 41 |
| 1395 | Developing a Multidisciplinary Approach for Engineering Stem Cell Organoids. Annals of Biomedical Engineering, 2020, 48, 1895-1904. | 1.3 | 10 |
| 1396 | Review of functional in vitro models of the blood-cerebrospinal fluid barrier in leukaemia research. Journal of Neuroscience Methods, 2020, 329, 108478. | 1.3 | 9 |
| 1397 | The Next 50 Years of Neuroscience. Journal of Neuroscience, 2020, 40, 101-106. | 1.7 | 23 |
| 1398 | Recreating Physiological Environments In Vitro: Design Rules for Microfluidicâ€Based Vascularized Tissue Constructs. Small, 2020, 16, 1905055. | 5.2 | 22 |
| 1399 | Microphysiological system design: simplicity is elegance. Current Opinion in Biomedical Engineering, 2020, 13, 94-102. | 1.8 | 16 |
| 1400 | Organoid and pluripotent stem cells in Parkinsonâ€™s disease modeling: an expert view on their value to drug discovery. Expert Opinion on Drug Discovery, 2020, 15, 427-441. | 2.5 | 21 |
| 1401 | A Patient-Derived Glioblastoma Organoid Model and Biobank Recapitulates Inter- and Intra-tumoral Heterogeneity. Cell, 2020, 180, 188-204.e22. | 13.5 | 529 |
| 1402 | Organoid and Assembloid Technologies for Investigating Cellular Crosstalk in Human Brain Development and Disease. Trends in Cell Biology, 2020, 30, 133-143. | 3.6 | 148 |
| 1403 | Cerebral Organoids Repair Ischemic Stroke Brain Injury. Translational Stroke Research, 2020, 11, 983-1000. | 2.3 | 70 |
| 1404 | Cell sources and methods for producing organotypic in vitro human tissue models. , 2020, , 13-45. | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1405 | Back to the origins: Human brain organoids to investigate neurodegeneration. Brain Research, 2020, 1727, 146561. | 1.1 | 12 |
| 1406 | Anchoring a dynamic in vitro model of human neuronal differentiation to key processes of early brain development in vivo. Reproductive Toxicology, 2020, 91, 116-130. | 1.3 | 2 |
| 1407 | Pluripotent stem cell biology and engineering. , 2020, , 1-31. | | 0 |
| 1408 | Human Pluripotent Stem Cell-Derived Extracellular Vesicles: Characteristics and Applications. Tissue Engineering - Part B: Reviews, 2020, 26, 129-144. | 2.5 | 34 |
| 1409 | iPSC modeling of rare pediatric disorders. Journal of Neuroscience Methods, 2020, 332, 108533. | 1.3 | 12 |
| 1410 | Are There Islands of Awareness?. Trends in Neurosciences, 2020, 43, 6-16. | 4.2 | 54 |
| 1411 | Development of an Anisotropically Organized Brain dECM Hydrogel-Based 3D Neuronal Culture Platform for Recapitulating the Brain Microenvironment in Vivo. ACS Biomaterials Science and Engineering, 2020, 6, 610-620. | 2.6 | 27 |
| 1412 | A critical look: Challenges in differentiating human pluripotent stem cells into desired cell types and organoids. Wiley Interdisciplinary Reviews: Developmental Biology, 2020, 9, e368. | 5.9 | 27 |
| 1413 | Organoids for cell therapy and drug discovery. , 2020, , 461-471. | | 3 |
| 1414 | Brain Organoids: Human Neurodevelopment in a Dish. Cold Spring Harbor Perspectives in Biology, 2020, 12, a035709. | 2.3 | 65 |
| 1415 | Reverse engineering human brain evolution using organoid models. Brain Research, 2020, 1729, 146582. | 1.1 | 25 |
| 1416 | CNS organoids: an innovative tool for neurological disease modeling and drug neurotoxicity screening. Drug Discovery Today, 2020, 25, 456-465. | 3.2 | 36 |
| 1417 | Organoids. , 2020, , 123-129. | | 3 |
| 1418 | Human Embryogenesis: A Comparative Perspective. Annual Review of Cell and Developmental Biology, 2020, 36, 411-440. | 4.0 | 39 |
| 1419 | Matisse and the Organoids: The Art of Science. Neuroscientist, 2020, , 107385842096136. | 2.6 | 0 |
| 1420 | Human Brain Organoid Models of Developmental Epilepsies. Epilepsy Currents, 2020, 20, 282-290. | 0.4 | 17 |
| 1421 | Isolation and Culture of Human-Induced Pluripotent Stem Cell-Derived Cerebral Organoid Cells. Methods in Molecular Biology, 2020, , 483-494. | 0.4 | 3 |
| 1422 | Human stem cell-derived oligodendrocytes: From humanized animal models to cell therapy in myelin diseases. Seminars in Cell and Developmental Biology, 2021, 116, 53-61. | 2.3 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1423 | Modeling alcohol-induced neurotoxicity using human induced pluripotent stem cell-derived three-dimensional cerebral organoids. Translational Psychiatry, 2020, 10, 347. | 2.4 | 47 |
| 1424 | Modeling the function of BAX and BAK in early human brain development using iPSC-derived systems. Cell Death and Disease, 2020, 11, 808. | 2.7 | 9 |
| 1425 | Role of miRNA-mRNA Interaction in Neural Stem Cell Differentiation of Induced Pluripotent Stem Cells. International Journal of Molecular Sciences, 2020, 21, 6980. | 1.8 | 6 |
| 1426 | Organoids, Assembloids, and Novel Biotechnology: Steps Forward in Developmental and Disease-Related Neuroscience. Neuroscientist, 2021, 27, 463-472. | 2.6 | 22 |
| 1427 | When glia meet induced pluripotent stem cells (iPSCs). Molecular and Cellular Neurosciences, 2020, 109, 103565. | 1.0 | 15 |
| 1428 | Generation of human induced pluripotent stem cell-derived liver buds with chemically defined and animal origin-free media. Scientific Reports, 2020, 10, 17937. | 1.6 | 21 |
| 1429 | Complete inhibition of ABCB1 and ABCG2 at the bloodâ€“brain barrier by co-infusion of erlotinib and tariquidar to improve brain delivery of the model ABCB1/ABCG2 substrate [<sup>11</sup>C]erlotinib. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 1634-1646. | 2.4 | 17 |
| 1430 | Engineering Three-Dimensional Tumor Models to Study Glioma Cancer Stem Cells and Tumor Microenvironment. Frontiers in Cellular Neuroscience, 2020, 14, 558381. | 1.8 | 38 |
| 1431 | Human Cerebral Organoids Reveal Early Spatiotemporal Dynamics and Pharmacological Responses of UBE3A. Stem Cell Reports, 2020, 15, 845-854. | 2.3 | 15 |
| 1432 | Recent progress in translational engineeredin vitromodels of the central nervous system. Brain, 2020, 143, 3181-3213. | 3.7 | 64 |
| 1433 | Functional Characterization of Three-Dimensional Cortical Cultures for InÂVitro Modeling of Brain Networks. IScience, 2020, 23, 101434. | 1.9 | 28 |
| 1434 | Temporal Modulations of NODAL, BMP, and WNT Signals Guide the Spatial Patterning in Self-Organized Human Ectoderm Tissues. Matter, 2020, 2, 1621-1638. | 5.0 | 6 |
| 1435 | Genetic developmental timing revealed by inter-species transplantations in fish. Development (Cambridge), 2020, 147, . | 1.2 | 10 |
| 1436 | Neural Stem Cells and Methods for Their Generation From Induced Pluripotent Stem Cells in vitro. Frontiers in Cell and Developmental Biology, 2020, 8, 815. | 1.8 | 45 |
| 1437 | Organotypic Models to Study Human Glioblastoma: Studying the Beast in Its Ecosystem. IScience, 2020, 23, 101633. | 1.9 | 12 |
| 1438 | Artificial Intelligence, Brains, and Beyond: Imperial College London Neurotechnology Symposium, 2020. Bioelectricity, 2020, 2, 310-313. | 0.6 | 2 |
| 1439 | New era of personalised epilepsy management. BMJ, The, 2020, 371, m3658. | 3.0 | 20 |
| 1440 | Engineered microtissue as an anatomicallyÂinspired model of Parkinson's disease. Current Opinion in Biomedical Engineering, 2020, 14, 75-83. | 1.8 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1441 | Toward Brain-on-a-Chip: Human Induced Pluripotent Stem Cell-Derived Guided Neuronal Networks in Tailor-Made 3D Nanoprinted Microscaffolds. ACS Nano, 2020, 14, 13091-13102. | 7.3 | 44 |
| 1442 | Human cerebral organoids establish subcortical projections in the mouse brain after transplantation. Molecular Psychiatry, 2021, 26, 2964-2976. | 4.1 | 55 |
| 1443 | Generation of cortical neurons through large-scale expanding neuroepithelial stem cell from human pluripotent stem cells. Stem Cell Research and Therapy, 2020, 11, 431. | 2.4 | 4 |
| 1444 | Modeling the Interaction between the Microenvironment and Tumor Cells in Brain Tumors. Neuron, 2020, 108, 1025-1044. | 3.8 | 31 |
| 1445 | Organotypic culture assays for murine and human primary and metastatic-site tumors. Nature Protocols, 2020, 15, 2413-2442. | 5.5 | 40 |
| 1446 | Detection of amyloid aggregation in living systems. , 2020, , 127-152. | | 0 |
| 1447 | Neurodevelopmental impairment induced by prenatal valproic acid exposure shown with the human cortical organoid-on-a-chip model. Microsystems and Nanoengineering, 2020, 6, 49. | 3.4 | 39 |
| 1448 | Towards brain-tissue-like biomaterials. Nature Communications, 2020, 11, 3423. | 5.8 | 71 |
| 1449 | Cerebral organoids as tools to identify the developmental roots of autism. Molecular Autism, 2020, 11, 58. | 2.6 | 34 |
| 1450 | Microengineered hiPSC-Derived 3D Amnion Tissue Model to Probe Amniotic Inflammatory Responses under Bacterial Exposure. ACS Biomaterials Science and Engineering, 2020, 6, 4644-4652. | 2.6 | 5 |
| 1451 | Human Induced Pluripotent Stem Cell Models of Neurodegenerative Disorders for Studying the Biomedical Implications of Autophagy. Journal of Molecular Biology, 2020, 432, 2754-2798. | 2.0 | 15 |
| 1452 | Innovations in the Neurosurgical Management of Epilepsy. World Neurosurgery, 2020, 139, 775-788. | 0.7 | 8 |
| 1453 | Modeling endodermal organ development and diseases using human pluripotent stem cell-derived organoids. Journal of Molecular Cell Biology, 2020, 12, 580-592. | 1.5 | 4 |
| 1454 | The Rise of Retinal Organoids for Vision Research. International Journal of Molecular Sciences, 2020, 21, 8484. | 1.8 | 13 |
| 1455 | The Application of Brain Organoids: From Neuronal Development to Neurological Diseases. Frontiers in Cell and Developmental Biology, 2020, 8, 579659. | 1.8 | 65 |
| 1456 | Simplified Brain Organoids for Rapid and Robust Modeling of Brain Disease. Frontiers in Cell and Developmental Biology, 2020, 8, 594090. | 1.8 | 21 |
| 1457 | 3D Bioprinting of Neural Tissues. Advanced Healthcare Materials, 2021, 10, e2001600. | 3.9 | 48 |
| 1458 | NR2F1 regulates regional progenitor dynamics in the mouse neocortex and cortical gyrification in BBSOAS patients. EMBO Journal, 2020, 39, e104163. | 3.5 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1459 | The need to develop a framework for human-relevant research in India: Towards better disease models and drug discovery. Journal of Biosciences, 2020, 45, 1. | 0.5 | 2 |
| 1460 | Microglia Play an Essential Role in Synapse Development and Neuron Maturation in Tissue-Engineered Neural Tissues. Frontiers in Neuroscience, 2020, 14, 586452. | 1.4 | 6 |
| 1461 | Intelligent Microfluidics: The Convergence of Machine Learning and Microfluidics in Materials Science and Biomedicine. Matter, 2020, 3, 1893-1922. | 5.0 | 85 |
| 1462 | Dissecting the Genetic and Etiological Causes of Primary Microcephaly. Frontiers in Neurology, 2020, 11, 570830. | 1.1 | 47 |
| 1463 | The Organoid Era Permits the Development of New Applications to Study Glioblastoma. Cancers, 2020, 12, 3303. | 1.7 | 24 |
| 1464 | Modeling neurodegenerative diseases with cerebral organoids and other three-dimensional culture systems: focus on Alzheimerâ€™s disease. Stem Cell Reviews and Reports, 2022, 18, 696-717. | 1.7 | 28 |
| 1465 | Translating Embryogenesis to Generate Organoids: Novel Approaches to Personalized Medicine. IScience, 2020, 23, 101485. | 1.9 | 30 |
| 1466 | Editorial: Brain Organoids: Modeling in Neuroscience. Frontiers in Cellular Neuroscience, 2020, 14, 602946. | 1.8 | 2 |
| 1467 | Generation of brain organoids from mouse ESCs via teratoma formation. Stem Cell Research, 2020, 49, 102100. | 0.3 | 3 |
| 1468 | Generation of human striatal organoids and cortico-striatal assembloids from human pluripotent stem cells. Nature Biotechnology, 2020, 38, 1421-1430. | 9.4 | 206 |
| 1469 | Applying hiPSCs and Biomaterials Towards an Understanding and Treatment of Traumatic Brain Injury. Frontiers in Cellular Neuroscience, 2020, 14, 594304. | 1.8 | 10 |
| 1470 | Epidermal Growth Factor Is Essential for the Maintenance of Novel Prostate Epithelial Cells Isolated From Patient-Derived Organoids. Frontiers in Cell and Developmental Biology, 2020, 8, 571677. | 1.8 | 14 |
| 1471 | Tailoring Common Hydrogels into 3D Cell Culture Templates. Advanced Healthcare Materials, 2020, 9, e2000519. | 3.9 | 12 |
| 1472 | Choroid Plexus Organoids: Harnessing CSF Gatekeepers for Brain Therapeutics. Cell Stem Cell, 2020, 27, 191-192. | 5.2 | 3 |
| 1473 | A Fresh Approach to Targeting Aging Cells: CAR-T Cells Enhance Senolytic Specificity. Cell Stem Cell, 2020, 27, 192-194. | 5.2 | 4 |
| 1474 | In vitro modeling for inherited neurological diseases using induced pluripotent stem cells: from 2D to organoid. Archives of Pharmacal Research, 2020, 43, 877-889. | 2.7 | 12 |
| 1475 | Acrylamide exposure represses neuronal differentiation, induces cell apoptosis and promotes tau hyperphosphorylation in hESC-derived 3D cerebral organoids. Food and Chemical Toxicology, 2020, 144, 111643. | 1.8 | 23 |
| 1476 | Developmental excitation-inhibition imbalance underlying psychoses revealed by single-cell analyses of discordant twins-derived cerebral organoids. Molecular Psychiatry, 2020, 25, 2695-2711. | 4.1 | 73 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1477 | Formation and optimization of three-dimensional organoids generated from urine-derived stem cells for renal function in vitro. Stem Cell Research and Therapy, 2020, 11, 309. | 2.4 | 18 |
| 1478 | Axonal Extensions along Corticospinal Tracts from Transplanted Human Cerebral Organoids. Stem Cell Reports, 2020, 15, 467-481. | 2.3 | 49 |
| 1479 | Rapid Processing and Drug Evaluation in Glioblastoma Patient-Derived Organoid Models with 4D Bioprinted Arrays. IScience, 2020, 23, 101365. | 1.9 | 46 |
| 1480 | Aging and Rejuvenation of Neural Stem Cells and Their Niches. Cell Stem Cell, 2020, 27, 202-223. | 5.2 | 118 |
| 1481 | Brain Organoids: Tiny Mirrors of Human Neurodevelopment and Neurological Disorders. Neuroscientist, 2021, 27, 388-426. | 2.6 | 11 |
| 1482 | Single-cell transcriptomics reveals multiple neuronal cell types in human midbrain-specific organoids. Cell and Tissue Research, 2020, 382, 463-476. | 1.5 | 30 |
| 1483 | A novel decellularization method to produce brain scaffolds. Tissue and Cell, 2020, 67, 101412. | 1.0 | 14 |
| 1484 | Rapid induction of gliogenesis in OLIG2 and NKX2.2-expressing progenitors-derived spheroids. Stem Cells Translational Medicine, 2020, 9, 1643-1650. | 1.6 | 4 |
| 1485 | Application of organoids in translational research of human diseases with a particular focus on gastrointestinal cancers. Biochimica Et Biophysica Acta: Reviews on Cancer, 2020, 1873, 188350. | 3.3 | 16 |
| 1486 | Brain organoids: Human 3D models to investigate neuronal circuits assembly, function and dysfunction. Brain Research, 2020, 1746, 147028. | 1.1 | 25 |
| 1487 | Loss of NARS1 impairs progenitor proliferation in cortical brain organoids and leads to microcephaly. Nature Communications, 2020, 11, 4038. | 5.8 | 44 |
| 1488 | Advanced Materials to Enhance Central Nervous System Tissue Modeling and Cell Therapy. Advanced Functional Materials, 2020, 30, 2002931. | 7.8 | 7 |
| 1489 | Application of induced pluripotent stem cells in epilepsy. Molecular and Cellular Neurosciences, 2020, 108, 103535. | 1.0 | 13 |
| 1490 | Induced pluripotent stem cells as a platform to understand patientâ€specific responses to opioids and anaesthetics. British Journal of Pharmacology, 2020, 177, 4581-4594. | 2.7 | 7 |
| 1491 | APOE4 exacerbates synapse loss and neurodegeneration in Alzheimerâ€™s disease patient iPSC-derived cerebral organoids. Nature Communications, 2020, 11, 5540. | 5.8 | 172 |
| 1492 | Brain organoids for the study of human neurobiology at the interface of in vitro and in vivo. Nature Neuroscience, 2020, 23, 1496-1508. | 7.1 | 171 |
| 1493 | Identification of Molecular Signatures in Neural Differentiation and Neurological Diseases Using Digital Color-Coded Molecular Barcoding. Stem Cells International, 2020, 2020, 1-9. | 1.2 | 3 |
| 1494 | A simple metastatic brain cancer model using human embryonic stem cellâ€derived cerebral organoids. FASEB Journal, 2020, 34, 16464-16475. | 0.2 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1495 | Microtechnology-based methods for organoid models. Microsystems and Nanoengineering, 2020, 6, 76. | 3.4 | 145 |
| 1496 | Modelling frontotemporal dementia using patient-derived induced pluripotent stem cells. Molecular and Cellular Neurosciences, 2020, 109, 103553. | 1.0 | 19 |
| 1497 | GNAO1organizes the cytoskeletal remodeling and firing of developing neurons. FASEB Journal, 2020, 34, 16601-16621. | 0.2 | 14 |
| 1498 | A human tissue screen identifies a regulator of ER secretion as a brain-size determinant. Science, 2020, 370, 935-941. | 6.0 | 101 |
| 1499 | Herpes simplex virus type 1 infection leads to neurodevelopmental disorder-associated neuropathological changes. PLoS Pathogens, 2020, 16, e1008899. | 2.1 | 49 |
| 1500 | Transport of ultrasmall gold nanoparticles (2Ânm) across the bloodâ€“brain barrier in a six-cell brain spheroid model. Scientific Reports, 2020, 10, 18033. | 1.6 | 55 |
| 1501 | Shape-memory materials and their clinical applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2022, 71, 315-335. | 1.8 | 17 |
| 1502 | A loss-of-function NUAK2 mutation in humans causes anencephaly due to impaired Hippo-YAP signaling. Journal of Experimental Medicine, 2020, 217, . | 4.2 | 25 |
| 1503 | Comparative Transcriptomic Analysis of Cerebral Organoids and Cortical Neuron Cultures Derived from Human Induced Pluripotent Stem Cells. Stem Cells and Development, 2020, 29, 1370-1381. | 1.1 | 11 |
| 1504 | Is the Immunological Response a Bottleneck for Cell Therapy in Neurodegenerative Diseases?. Frontiers in Cellular Neuroscience, 2020, 14, 250. | 1.8 | 20 |
| 1505 | CSS: cluster similarity spectrum integration of single-cell genomics data. Genome Biology, 2020, 21, 224. | 3.8 | 30 |
| 1506 | In vitro generation of functional murine heart organoids via FGF4 and extracellular matrix. Nature Communications, 2020, 11, 4283. | 5.8 | 80 |
| 1507 | Toxicity Assessment of SiO2 and TiO2 in Normal Colon Cells, In Vivo and in Human Colon Organoids. Molecules, 2020, 25, 3594. | 1.7 | 17 |
| 1508 | Development of an N-Cadherin Biofunctionalized Hydrogel to Support the Formation of Synaptically Connected Neural Networks. ACS Biomaterials Science and Engineering, 2020, 6, 5811-5822. | 2.6 | 16 |
| 1509 | Human iPSCâ€Derived Bloodâ€Brain Barrier Models: Valuable Tools for Preclinical Drug Discovery and Development?. Current Protocols in Stem Cell Biology, 2020, 55, e122. | 3.0 | 26 |
| 1510 | Human Pluripotent Stem Cell-Derived Neural Cells as a Relevant Platform for Drug Screening in Alzheimerâ€™s Disease. International Journal of Molecular Sciences, 2020, 21, 6867. | 1.8 | 26 |
| 1511 | Electrophysiological Maturation of Cerebral Organoids Correlates with Dynamic Morphological and Cellular Development. Stem Cell Reports, 2020, 15, 855-868. | 2.3 | 94 |
| 1512 | Upgrading the Physiological Relevance of Human Brain Organoids. Neuron, 2020, 107, 1014-1028. | 3.8 | 55 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1513 | Resolving Neurodevelopmental and Vision Disorders Using Organoid Single-Cell Multi-omics. Neuron, 2020, 107, 1000-1013. | 3.8 | 24 |
| 1514 | Silk fibroin sponge combined with cell-derived ECM for tissue-engineered 3D functional neural tissues. Science China Technological Sciences, 2020, 63, 2113-2122. | 2.0 | 4 |
| 1515 | Biocompatibility of Î±-Al2O3 Ceramic Substrates with Human Neural Precursor Cells. Journal of Functional Biomaterials, 2020, 11, 65. | 1.8 | 7 |
| 1516 | Modeling Human Nonalcoholic Fatty Liver Disease (NAFLD) with an Organoids-on-a-Chip System. ACS Biomaterials Science and Engineering, 2020, 6, 5734-5743. | 2.6 | 50 |
| 1517 | iPSCs-Derived Platform: A Feasible Tool for Probing the Neurotropism of SARS-CoV-2. ACS Chemical Neuroscience, 2020, 11, 2489-2491. | 1.7 | 10 |
| 1518 | Are Organoids Ready for Prime Time?. Cell Stem Cell, 2020, 27, 361-365. | 5.2 | 24 |
| 1519 | Autism spectrum disorder at the crossroad between genes and environment: contributions, convergences, and interactions in ASD developmental pathophysiology. Molecular Autism, 2020, 11, 69. | 2.6 | 125 |
| 1520 | Establishment of patient-derived cancer organoids for drug-screening applications. Nature Protocols, 2020, 15, 3380-3409. | 5.5 | 313 |
| 1521 | Looking at neurodevelopment through a big data lens. Science, 2020, 369, . | 6.0 | 28 |
| 1522 | Human cerebral organoids and consciousness: a double-edged sword. Monash Bioethics Review, 2020, 38, 105-128. | 0.4 | 38 |
| 1523 | Immune Factor, TNFÎ±, Disrupts Human Brain Organoid Development Similar to Schizophreniaâ€”Schizophrenia Increases Developmental Vulnerability to TNFÎ±. Frontiers in Cellular Neuroscience, 2020, 14, 233. | 1.8 | 23 |
| 1524 | Cerebral Organoids: A Model of Brain Development. Russian Journal of Developmental Biology, 2020, 51, 231-245. | 0.1 | 1 |
| 1525 | SMARCB1 loss interacts with neuronal differentiation state to block maturation and impact cell stability. Genes and Development, 2020, 34, 1316-1329. | 2.7 | 30 |
| 1526 | Total Recall: Lateral Habenula and Psychedelics in the Study of Depression and Comorbid Brain Disorders. International Journal of Molecular Sciences, 2020, 21, 6525. | 1.8 | 4 |
| 1527 | Animal and translational models of SARS-CoV-2 infection and COVID-19. Mucosal Immunology, 2020, 13, 877-891. | 2.7 | 155 |
| 1528 | Integrative analyses prioritize GNL3 as a risk gene for bipolar disorder. Molecular Psychiatry, 2020, 25, 2672-2684. | 4.1 | 18 |
| 1529 | Modelling Toxoplasma gondii infection in human cerebral organoids. Emerging Microbes and Infections, 2020, 9, 1943-1954. | 3.0 | 31 |
| 1530 | Applications of organoids for cancer biology and precision medicine. Nature Cancer, 2020, 1, 761-773. | 5.7 | 93 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1531 | Practical Review on Preclinical Human 3D Glioblastoma Models: Advances and Challenges for Clinical Translation. Cancers, 2020, 12, 2347. | 1.7 | 25 |
| 1532 | The road ahead in genetics and genomics. Nature Reviews Genetics, 2020, 21, 581-596. | 7.7 | 118 |
| 1533 | Mammary epithelial morphogenesis in 3D combinatorial microenvironments. Scientific Reports, 2020, 10, 21635. | 1.6 | 4 |
| 1534 | Modeling Rett Syndrome With Human Patient-Specific Forebrain Organoids. Frontiers in Cell and Developmental Biology, 2020, 8, 610427. | 1.8 | 49 |
| 1535 | Methadone Suppresses Neuronal Function and Maturation in Human Cortical Organoids. Frontiers in Neuroscience, 2020, 14, 593248. | 1.4 | 9 |
| 1536 | Combinatorial Effect of Magnetic Field and Radiotherapy in PDAC Organoids: A Pilot Study. Biomedicines, 2020, 8, 609. | 1.4 | 6 |
| 1537 | The Extracellular Matrix in the Evolution of Cortical Development and Folding. Frontiers in Cell and Developmental Biology, 2020, 8, 604448. | 1.8 | 24 |
| 1538 | Glioblastoma Organoids: Pre-Clinical Applications and Challenges in the Context of Immunotherapy. Frontiers in Oncology, 2020, 10, 604121. | 1.3 | 55 |
| 1539 | Toward Spatial Identities in Human Brain Organoids-on-Chip Induced by Morphogen-Soaked Beads. Bioengineering, 2020, 7, 164. | 1.6 | 15 |
| 1540 | Human iNSC-derived brain organoid model of lysosomal storage disorder in Niemannâ€“Pick disease type C. Cell Death and Disease, 2020, 11, 1059. | 2.7 | 19 |
| 1541 | Stem Cells and Organoid Technology in Precision Medicine in Inflammation: Are We There Yet?. Frontiers in Immunology, 2020, 11, 573562. | 2.2 | 13 |
| 1542 | Challenges in Modeling Human Neural Circuit Formation via Brain Organoid Technology. Frontiers in Cellular Neuroscience, 2020, 14, 607399. | 1.8 | 15 |
| 1543 | Review: In vitro Cell Platform for Understanding Developmental Toxicity. Frontiers in Genetics, 2020, 11, 623117. | 1.1 | 6 |
| 1544 | Advanced 3D Cell Culture Techniques in Micro-Bioreactors, Part I: A Systematic Analysis of the Literature Published between 2000 and 2020. Processes, 2020, 8, 1656. | 1.3 | 8 |
| 1545 | Surfaceâ€Functionalized Selfâ€Standing Microdevices Exhibit Predictive Localization and Seamless Integration in 3D Neural Spheroids. Advanced Biology, 2020, 4, 2000114. | 3.0 | 7 |
| 1546 | Multiscale 3D phenotyping of human cerebral organoids. Scientific Reports, 2020, 10, 21487. | 1.6 | 46 |
| 1547 | Neuronal differentiation strategies: insights from single-cell sequencing and machine learning. Development (Cambridge), 2020, 147, . | 1.2 | 12 |
| 1548 | Patient-Derived Tumor Organoids for Drug Repositioning in Cancer Care: A Promising Approach in the Era of Tailored Treatment. Cancers, 2020, 12, 3636. | 1.7 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1549 | TGF-Î²1 Suppresses Proliferation and Induces Differentiation in Human iPSC Neural in vitro Models. Frontiers in Cell and Developmental Biology, 2020, 8, 571332. | 1.8 | 6 |
| 1550 | Expression of a novel brain specific isoform of C3G is regulated during development. Scientific Reports, 2020, 10, 18838. | 1.6 | 8 |
| 1551 | Human pluripotent stem cellâ€derived lung organoids: Potential applications in development and disease modeling. Wiley Interdisciplinary Reviews: Developmental Biology, 2021, 10, e399. | 5.9 | 32 |
| 1552 | Meeting report on the NIDDK/AUA Workshop on Congenital Anomalies of External Genitalia: challenges and opportunities for translational research. Journal of Pediatric Urology, 2020, 16, 791-804. | 0.6 | 7 |
| 1553 | Updated perspectives on vascular cell specification and pluripotent stem cell-derived vascular organoids for studying vasculopathies. Cardiovascular Research, 2020, , . | 1.8 | 9 |
| 1554 | Brain Organoids as Model Systems for Genetic Neurodevelopmental Disorders. Frontiers in Cell and Developmental Biology, 2020, 8, 590119. | 1.8 | 31 |
| 1555 | Modeling cancer progression using human pluripotent stem cell-derived cells and organoids. Stem Cell Research, 2020, 49, 102063. | 0.3 | 12 |
| 1556 | Solving the Issue of Ionizing Radiation Induced Neurotoxicity by Using Novel Cell Models and State of the Art Accelerator Facilities. Frontiers in Physics, 2020, 8, . | 1.0 | 4 |
| 1557 | Polymer Hydrogels to Guide Organotypic and Organoid Cultures. Advanced Functional Materials, 2020, 30, 2000097. | 7.8 | 61 |
| 1558 | Glaucoma as a Neurodegenerative Disease Caused by Intrinsic Vulnerability Factors. Progress in Neurobiology, 2020, 193, 101817. | 2.8 | 27 |
| 1559 | Single cell transcriptomics identifies stem cell-derived graft composition in a model of Parkinsonâ€™s disease. Nature Communications, 2020, 11, 2434. | 5.8 | 54 |
| 1560 | Multi-Functionalized Self-Assembling Peptides as Reproducible 3D Cell Culture Systems Enabling Differentiation and Survival of Various Human Neural Stem Cell Lines. Frontiers in Neuroscience, 2020, 14, 413. | 1.4 | 27 |
| 1561 | A Primer on Human Brain Organoids for the Neurosurgeon. Neurosurgery, 2020, 87, 620-629. | 0.6 | 7 |
| 1562 | Molecular causes of primary microcephaly and related diseases: a report from the UNIA Workshop. Chromosoma, 2020, 129, 115-120. | 1.0 | 5 |
| 1563 | Microfluidic Control of Tumor and Stromal Cell Spheroids Pairing and Merging for Three-Dimensional Metastasis Study. Analytical Chemistry, 2020, 92, 7638-7645. | 3.2 | 24 |
| 1564 | Modeling traumatic brain injury with human brain organoids. Current Opinion in Biomedical Engineering, 2020, 14, 52-58. | 1.8 | 15 |
| 1565 | CD49f Is a Novel Marker of Functional and Reactive Human iPSC-Derived Astrocytes. Neuron, 2020, 107, 436-453.e12. | 3.8 | 115 |
| 1566 | Transposable Elements: A Common Feature of Neurodevelopmental and Neurodegenerative Disorders. Trends in Genetics, 2020, 36, 610-623. | 2.9 | 64 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1567 | Dynamic Characterization of Structural, Molecular, and Electrophysiological Phenotypes of Human-Induced Pluripotent Stem Cell-Derived Cerebral Organoids, and Comparison with Fetal and Adult Gene Profiles. Cells, 2020, 9, 1301. | 1.8 | 35 |
| 1568 | Modeling Controlled Cortical Impact Injury in 3D Brainâ€Like Tissue Cultures. Advanced Healthcare Materials, 2020, 9, e2000122. | 3.9 | 21 |
| 1569 | Do not keep it simple: recent advances in the generation of complex organoids. Journal of Neural Transmission, 2020, 127, 1569-1577. | 1.4 | 31 |
| 1570 | Vascularized human cortical organoids (vOrganoids) model cortical development in vivo. PLoS Biology, 2020, 18, e3000705. | 2.6 | 202 |
| 1571 | Ultrasmall gold nanoparticles (2Ânm) can penetrate and enter cell nuclei in an in vitro 3D brain spheroid model. Acta Biomaterialia, 2020, 111, 349-362. | 4.1 | 51 |
| 1572 | FASN-Dependent Lipid Metabolism Links Neurogenic Stem/Progenitor Cell Activity to Learning and Memory Deficits. Cell Stem Cell, 2020, 27, 98-109.e11. | 5.2 | 62 |
| 1573 | Microphysiological Systems: Design, Fabrication, and Applications. ACS Biomaterials Science and Engineering, 2020, 6, 3231-3257. | 2.6 | 32 |
| 1575 | Single-cell genomic analysis of human cerebral organoids. Methods in Cell Biology, 2020, 159, 229-256. | 0.5 | 14 |
| 1576 | Neurotransmitters as Modulators of Neural Progenitor Cell Proliferation During Mammalian Neocortex Development. Frontiers in Cell and Developmental Biology, 2020, 8, 391. | 1.8 | 23 |
| 1577 | Generating ventral spinal organoids from human induced pluripotent stem cells. Methods in Cell Biology, 2020, 159, 257-277. | 0.5 | 13 |
| 1578 | The Use of Patient-Derived Induced Pluripotent Stem Cells for Alzheimerâ€™s Disease Modeling. Progress in Neurobiology, 2020, 192, 101804. | 2.8 | 15 |
| 1579 | Synthetic alternatives to Matrigel. Nature Reviews Materials, 2020, 5, 539-551. | 23.3 | 498 |
| 1580 | â€œTissues in a Dishâ€• Plastic and Reconstructive Surgery - Global Open, 2020, 8, e2787. | 0.3 | 4 |
| 1581 | A brief history of organoids. American Journal of Physiology - Cell Physiology, 2020, 319, C151-C165. | 2.1 | 189 |
| 1582 | Human Brain Organoids to Decode Mechanisms of Microcephaly. Frontiers in Cellular Neuroscience, 2020, 14, 115. | 1.8 | 33 |
| 1583 | Human Cerebrospinal Fluid Promotes Neuronal Circuit Maturation of Human Induced Pluripotent Stem Cell-Derived 3D Neural Aggregates. Stem Cell Reports, 2020, 14, 1044-1059. | 2.3 | 14 |
| 1584 | Human CNS barrier-forming organoids with cerebrospinal fluid production. Science, 2020, 369, . | 6.0 | 244 |
| 1585 | Lipidâ€Bilayerâ€Supported 3D Printing of Human Cerebral Cortex Cells Reveals Developmental Interactions. Advanced Materials, 2020, 32, e2002183. | 11.1 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1586 | Reproducible generation of human midbrain organoids for in vitro modeling of Parkinsonâ€™s disease. Stem Cell Research, 2020, 46, 101870. | 0.3 | 68 |
| 1587 | Genome Engineering Evolves Brain Tumor Modeling. Neurologia Medico-Chirurgica, 2020, 60, 329-336. | 1.0 | 7 |
| 1588 | Scalable Generation of Mature Cerebellar Organoids from Human Pluripotent Stem Cells and Characterization by Immunostaining. Journal of Visualized Experiments, 2020, , . | 0.2 | 26 |
| 1589 | zâ€Wire: A Microscaffold That Supports Guided Tissue Assembly and Intramyocardium Delivery for Cardiac Repair. Advanced Healthcare Materials, 2020, 9, 2000358. | 3.9 | 4 |
| 1590 | Bioinspired flexible electronics for seamless neural interfacing and chronic recording. Nanoscale Advances, 2020, 2, 3095-3102. | 2.2 | 20 |
| 1591 | Generation of Vascularized Neural Organoids by Co-culturing with Mesodermal Progenitor Cells. STAR Protocols, 2020, 1, 100041. | 0.5 | 29 |
| 1592 | Modelling neurodegenerative diseases with <scp>3D</scp> brain organoids. Biological Reviews, 2020, 95, 1497-1509. | 4.7 | 30 |
| 1593 | Negative Symptoms of Schizophrenia and Dopaminergic Transmission: Translational Models and Perspectives Opened by iPSC Techniques. Frontiers in Neuroscience, 2020, 14, 632. | 1.4 | 17 |
| 1594 | Using Pharmacology to Squeeze the Life Out of Childhood Leukemia, and Potential Strategies to Achieve Breakthroughs in Medulloblastoma Treatment. Pharmacological Reviews, 2020, 72, 668-691. | 7.1 | 6 |
| 1595 | Retinal and Brain Organoids: Bridging the Gap Between in vivo Physiology and in vitro Micro-Physiology for the Study of Alzheimerâ€™s Diseases. Frontiers in Neuroscience, 2020, 14, 655. | 1.4 | 16 |
| 1597 | A Defined and Scalable Peptide-Based Platform for the Generation of Human Pluripotent Stem Cell-Derived Astrocytes. ACS Biomaterials Science and Engineering, 2020, 6, 3477-3490. | 2.6 | 6 |
| 1598 | Cerebral Organoids: A Human Model for AAV Capsid Selection and Therapeutic Transgene Efficacy in the Brain. Molecular Therapy - Methods and Clinical Development, 2020, 18, 167-175. | 1.8 | 22 |
| 1599 | Recommended Guidelines for Developing, Qualifying, and Implementing Complex In Vitro Models (CIVMs) for Drug Discovery. SLAS Discovery, 2020, 25, 1174-1190. | 1.4 | 33 |
| 1600 | Decreased nuclear Pten in neural stem cells contributes to deficits in neuronal maturation. Molecular Autism, 2020, 11, 43. | 2.6 | 10 |
| 1601 | Cells grown in three-dimensional spheroids mirror in vivo metabolic response of epithelial cells. Communications Biology, 2020, 3, 246. | 2.0 | 91 |
| 1602 | SHP2 mutations induce precocious gliogenesis of Noonan syndrome-derived iPSCs during neural development in vitro. Stem Cell Research and Therapy, 2020, 11, 209. | 2.4 | 9 |
| 1603 | The Effect of Thiol Structure on Allyl Sulfide Photodegradable Hydrogels and their Application as a Degradable Scaffold for Organoid Passaging. Advanced Materials, 2020, 32, e1905366. | 11.1 | 58 |
| 1604 | Commentary: A Primer on Human Brain Organoids for the Neurosurgeon. Neurosurgery, 2020, 87, E443-E444. | 0.6 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1605 | Age-Dependent Statistical Changes of Involuntary Head Motion Signatures Across Autism and Controls of the ABIDE Repository. Frontiers in Integrative Neuroscience, 2020, 14, 23. | 1.0 | 10 |
| 1606 | In vitro models for ASD-patient-derived iPSCs and cerebral organoids. Progress in Molecular Biology and Translational Science, 2020, 173, 355-375. | 0.9 | 4 |
| 1607 | Determinants of Resident Tissue Macrophage Identity and Function. Immunity, 2020, 52, 957-970. | 6.6 | 280 |
| 1608 | The sociability spectrum: evidence from reciprocal genetic copy number variations. Molecular Autism, 2020, 11, 50. | 2.6 | 10 |
| 1609 | Microfluidics as a Novel Tool for Biological and Toxicological Assays in Drug Discovery Processes: Focus on Microchip Electrophoresis. Micromachines, 2020, 11, 593. | 1.4 | 22 |
| 1610 | A Static Self-Directed Method for Generating Brain Organoids from Human Embryonic Stem Cells. Journal of Visualized Experiments, 2020, , . | 0.2 | 2 |
| 1611 | Midbrain Organoids: A New Tool to Investigate Parkinsonâ€™s Disease. Frontiers in Cell and Developmental Biology, 2020, 8, 359. | 1.8 | 46 |
| 1612 | Brain organoids as a model system for human neurodevelopment in health and disease. , 2020, , 205-221. | | 0 |
| 1613 | Toward Cardiac Regeneration: Combination of Pluripotent Stem Cell-Based Therapies and Bioengineering Strategies. Frontiers in Bioengineering and Biotechnology, 2020, 8, 455. | 2.0 | 49 |
| 1614 | Urine Sample-Derived Cerebral Organoids Suitable for Studying Neurodevelopment and Pharmacological Responses. Frontiers in Cell and Developmental Biology, 2020, 8, 304. | 1.8 | 9 |
| 1615 | In vitro Models of Neurodegenerative Diseases. Frontiers in Cell and Developmental Biology, 2020, 8, 328. | 1.8 | 149 |
| 1616 | Application of Fused Organoid Models to Study Human Brain Development and Neural Disorders. Frontiers in Cellular Neuroscience, 2020, 14, 133. | 1.8 | 30 |
| 1617 | Development of an animal-free methodology for mechanical performance assessment of engineered skin substitutes. Biomedical Science and Engineering, 2020, 3, . | 0.0 | 0 |
| 1618 | Clarifying mid-brain organoids: Application of the CLARITY protocol to unperfusable samples. Biomedical Science and Engineering, 2020, 3, . | 0.0 | 1 |
| 1619 | Routine Optical Clearing of 3D-Cell Cultures: Simplicity Forward. Frontiers in Molecular Biosciences, 2020, 7, 20. | 1.6 | 50 |
| 1620 | The â€œHSF connectionâ€• Pleiotropic regulation and activities of Heat Shock Factors shape pathophysiological brain development. Neuroscience Letters, 2020, 725, 134895. | 1.0 | 9 |
| 1621 | Transcription and Beyond: Delineating FOXG1 Function in Cortical Development and Disorders. Frontiers in Cellular Neuroscience, 2020, 14, 35. | 1.8 | 46 |
| 1622 | Fabrication of Dentin-Pulp-Like Organoids Using Dental-Pulp Stem Cells. Cells, 2020, 9, 642. | 1.8 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1623 | The roles of human induced pluripotent stem cell-derived cardiomyocytes in drug discovery: managing in vitro safety study expectations. Expert Opinion on Drug Discovery, 2020, 15, 719-729. | 2.5 | 7 |
| 1624 | Engineering of brain-like tissue constructs via 3D Cell-printing technology. Biofabrication, 2020, 12, 035016. | 3.7 | 19 |
| 1625 | Building a Human Brain for Research. Frontiers in Molecular Neuroscience, 2020, 13, 22. | 1.4 | 9 |
| 1626 | Environmental Pressures on Transgenerational Epigenetic Inheritance. , 2020, , 97-122. | | 0 |
| 1627 | Assembly of FN-silk with laminin-521 to integrate hPSCs into a three-dimensional culture for neural differentiation. Biomaterials Science, 2020, 8, 2514-2525. | 2.6 | 10 |
| 1628 | Gaining New Biological and Therapeutic Applications into the Liver with 3D In Vitro Liver Models. Tissue Engineering and Regenerative Medicine, 2020, 17, 731-745. | 1.6 | 13 |
| 1629 | Recent Overview of the Use of iPSCs Huntingtonâ€™s Disease Modeling and Therapy. International Journal of Molecular Sciences, 2020, 21, 2239. | 1.8 | 39 |
| 1630 | Modeling and Targeting Alzheimerâ€™s Disease With Organoids. Frontiers in Pharmacology, 2020, 11, 396. | 1.6 | 71 |
| 1631 | The Beauty and the Dish: Brain Organoids Go Active. Epilepsy Currents, 2020, 20, 105-107. | 0.4 | 0 |
| 1632 | Organoid cultures of MELAS neural cells reveal hyperactive Notch signaling that impacts neurodevelopment. Cell Death and Disease, 2020, 11, 182. | 2.7 | 26 |
| 1633 | Centrosomes: The good and the bad for brain development. Biology of the Cell, 2020, 112, 153-172. | 0.7 | 24 |
| 1634 | CDK5RAP2 primary microcephaly is associated with hypothalamic, retinal and cochlear developmental defects. Journal of Medical Genetics, 2020, 57, 389-399. | 1.5 | 17 |
| 1635 | Innovations in 3D Tissue Models of Human Brain Physiology and Diseases. Advanced Functional Materials, 2020, 30, 1909146. | 7.8 | 50 |
| 1636 | Unraveling Mechanisms of Patient-Specific NRXN1 Mutations in Neuropsychiatric Diseases Using Human Induced Pluripotent Stem Cells. Stem Cells and Development, 2020, 29, 1142-1144. | 1.1 | 3 |
| 1637 | Standardized GMP-compliant scalable production of human pancreas organoids. Stem Cell Research and Therapy, 2020, 11, 94. | 2.4 | 34 |
| 1638 | Differentiation of human pluripotent stem cells toward pharyngeal endoderm derivatives: Current status and potential. Current Topics in Developmental Biology, 2020, 138, 175-208. | 1.0 | 5 |
| 1639 | Visualizing the Synaptic and Cellular Ultrastructure in Neurons Differentiated from Human Induced Neural Stem Cellsâ€”An Optimized Protocol. International Journal of Molecular Sciences, 2020, 21, 1708. | 1.8 | 5 |
| 1640 | Multi-lineage Human iPSC-Derived Platforms for Disease Modeling and Drug Discovery. Cell Stem Cell, 2020, 26, 309-329. | 5.2 | 174 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1641 | Brainstem Organoids From Human Pluripotent Stem Cells. Frontiers in Neuroscience, 2020, 14, 538. | 1.4 | 43 |
| 1642 | Mechanisms of tangential migration of interneurons in the developing forebrain. , 2020, , 345-363. | | 2 |
| 1643 | Developmental basis of Zika virus-induced neuropathology. , 2020, , 79-97. | | 0 |
| 1644 | Induced pluripotent stem cells as models of human neurodevelopmental disorders. , 2020, , 99-127. | | 0 |
| 1645 | Three-dimensional culture systems in central nervous system research. , 2020, , 571-601. | | 2 |
| 1646 | InÂVitro Differentiated Human Stem Cell-Derived Neurons Reproduce Synaptic Synchronicity Arising during Neurodevelopment. Stem Cell Reports, 2020, 15, 22-37. | 2.3 | 15 |
| 1647 | Motor cortex connections. , 2020, , 167-199. | | 8 |
| 1648 | Cohen Syndrome Patient iPSC-Derived Neurospheres and Forebrain-Like Glutamatergic Neurons Reveal Reduced Proliferation of Neural Progenitor Cells and Altered Expression of Synapse Genes. Journal of Clinical Medicine, 2020, 9, 1886. | 1.0 | 9 |
| 1649 | An American Physiological Society cross-journal Call for Papers on â€œDeconstructing Organs: Single-Cell Analyses, Decellularized Organs, Organoids, and Organ-on-a-Chip Modelsâ€• American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 319, L266-L272. | 1.3 | 7 |
| 1650 | Neural induction of embryonic stem/induced pluripotent stem cells. , 2020, , 185-203. | | 2 |
| 1651 | Formation of gyri and sulci. , 2020, , 223-252. | | 0 |
| 1652 | Specification of cortical projection neurons. , 2020, , 427-459. | | 1 |
| 1653 | Human neurogenesis. , 2020, , 751-767. | | 0 |
| 1654 | Engineered Perineural Vascular Plexus for Modeling Developmental Toxicity. Advanced Healthcare Materials, 2020, 9, e2000825. | 3.9 | 14 |
| 1655 | Loss of function of the mitochondrial peptidase PITRM1 induces proteotoxic stress and Alzheimerâ€™s disease-like pathology in human cerebral organoids. Molecular Psychiatry, 2021, 26, 5733-5750. | 4.1 | 79 |
| 1656 | Human organoids: model systems for human biology and medicine. Nature Reviews Molecular Cell Biology, 2020, 21, 571-584. | 16.1 | 1,082 |
| 1657 | 3D Brain Organoids: Studying Brain Development and Disease Outside the Embryo. Annual Review of Neuroscience, 2020, 43, 375-389. | 5.0 | 59 |
| 1658 | CRISPR-based functional genomics for neurological disease. Nature Reviews Neurology, 2020, 16, 465-480. | 4.9 | 89 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1659 | Quality Prediction of Embryonic Bodies on Integrated Spheroid Culture Chip by Using 3D Convolutional Neural Network. , 2020, , . | | 0 |
| 1660 | Single-Cell Resolution Three-Dimensional Imaging of Intact Organoids. Journal of Visualized Experiments, 2020, , . | 0.2 | 22 |
| 1661 | Robust detection of undifferentiated iPSC among differentiated cells. Scientific Reports, 2020, 10, 10293. | 1.6 | 32 |
| 1662 | Hydrogel-based milliwell arrays for standardized and scalable retinal organoid cultures. Scientific Reports, 2020, 10, 10275. | 1.6 | 45 |
| 1663 | Role of the cytoskeleton and membrane trafficking in axonâ€“dendrite morphogenesis. , 2020, , 21-56. | | 2 |
| 1664 | Genome-wide studies reveal the essential and opposite roles of ARID1A in controlling human cardiogenesis and neurogenesis from pluripotent stem cells. Genome Biology, 2020, 21, 169. | 3.8 | 28 |
| 1666 | Engineered hydrogels for brain tumor culture and therapy. Bio-Design and Manufacturing, 2020, 3, 203-226. | 3.9 | 24 |
| 1667 | A Rainbow Reporter Tracks Single Cells and Reveals Heterogeneous Cellular Dynamics among Pluripotent Stem Cells and Their Differentiated Derivatives. Stem Cell Reports, 2020, 15, 226-241. | 2.3 | 16 |
| 1668 | Exploiting CRISPR Cas9 in Three-Dimensional Stem Cell Cultures to Model Disease. Frontiers in Bioengineering and Biotechnology, 2020, 8, 692. | 2.0 | 21 |
| 1669 | Engineering Prostate Cancer from Induced Pluripotent Stem Cellsâ€”New Opportunities to Develop Preclinical Tools in Prostate and Prostate Cancer Studies. International Journal of Molecular Sciences, 2020, 21, 905. | 1.8 | 15 |
| 1670 | NeuroCore formation during differentiation of neurospheres of mouse embryonic neural stem cells. Stem Cell Research, 2020, 43, 101691. | 0.3 | 15 |
| 1671 | Optogenetics for neural transplant manipulation and functional analysis. Biochemical and Biophysical Research Communications, 2020, 527, 343-349. | 1.0 | 12 |
| 1672 | Using human induced pluripotent stem cells (hiPSCs) to investigate the mechanisms by which Apolipoprotein E (APOE) contributes to Alzheimerâ€™s disease (AD) risk. Neurobiology of Disease, 2020, 138, 104788. | 2.1 | 23 |
| 1673 | Mechanics of human brain organoids. Physical Review E, 2020, 101, 022403. | 0.8 | 17 |
| 1674 | Organoid models of gastrointestinal cancers in basic and translational research. Nature Reviews Gastroenterology and Hepatology, 2020, 17, 203-222. | 8.2 | 108 |
| 1675 | Derivation of two iPSC lines from a sporadic ASD patient (NUIGi033-A) and a paternal control (NUIGi034-A). Stem Cell Research, 2020, 44, 101722. | 0.3 | 1 |
| 1676 | Cortical and Striatal Circuits in Huntingtonâ€™s Disease. Frontiers in Neuroscience, 2020, 14, 82. | 1.4 | 64 |
| 1677 | Multiscale brain research on a microfluidic chip. Lab on A Chip, 2020, 20, 1531-1543. | 3.1 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1678 | Cerebral organoid and mouse models reveal a RAB39bâ€“PI3Kâ€“mTOR pathway-dependent dysregulation of cortical development leading to macrocephaly/autism phenotypes. Genes and Development, 2020, 34, 580-597. | 2.7 | 105 |
| 1679 | A Longâ€Living Bioengineered Neural Tissue Platform to Study Neurodegeneration. Macromolecular Bioscience, 2020, 20, e2000004. | 2.1 | 36 |
| 1680 | Long Term Gene Expression in Human Induced Pluripotent Stem Cells and Cerebral Organoids to Model a Neurodegenerative Disease. Frontiers in Cellular Neuroscience, 2020, 14, 14. | 1.8 | 23 |
| 1681 | Generation of homogeneous midbrain organoids with in vivo-like cellular composition facilitates neurotoxin-based Parkinson's disease modeling. Stem Cells, 2020, 38, 727-740. | 1.4 | 64 |
| 1682 | Modeling Down syndrome in cells: From stem cells to organoids. Progress in Brain Research, 2020, 251, 55-90. | 0.9 | 14 |
| 1683 | Modeling of human neurulation using bioengineered pluripotent stem cell culture. Current Opinion in Biomedical Engineering, 2020, 13, 127-133. | 1.8 | 4 |
| 1684 | In vitro testicular organogenesis from human fetal gonads produces fertilization-competent spermatids. Cell Research, 2020, 30, 244-255. | 5.7 | 36 |
| 1685 | Cerebral organoids transplantation improves neurological motor function in rat brain injury. CNS Neuroscience and Therapeutics, 2020, 26, 682-697. | 1.9 | 42 |
| 1686 | Assessing Toxicity with Human Cell-Based In Vitro Methods. Trends in Molecular Medicine, 2020, 26, 570-582. | 3.5 | 43 |
| 1687 | One-Stop Microfluidic Assembly of Human Brain Organoids To Model Prenatal Cannabis Exposure. Analytical Chemistry, 2020, 92, 4630-4638. | 3.2 | 91 |
| 1688 | Gastrointestinal tract modeling using organoids engineered with cellular and microbiota niches. Experimental and Molecular Medicine, 2020, 52, 227-237. | 3.2 | 96 |
| 1689 | Accelerated neuronal and synaptic maturation by BrainPhys medium increases AÎ² secretion and alters AÎ² peptide ratios from iPSC-derived cortical neurons. Scientific Reports, 2020, 10, 601. | 1.6 | 26 |
| 1690 | Uncovering cell biology in the third dimension. Molecular Biology of the Cell, 2020, 31, 319-323. | 0.9 | 1 |
| 1691 | miRNA-Based Rapid Differentiation of Purified Neurons from hPSCs Advancestowards Quick Screening for Neuronal Disease Phenotypes In Vitro. Cells, 2020, 9, 532. | 1.8 | 27 |
| 1692 | Emergence and Developmental Roles of the Cerebrospinal Fluid System. Developmental Cell, 2020, 52, 261-275. | 3.1 | 126 |
| 1693 | Harnessing the Potential of Stem Cells for Disease Modeling: Progress and Promises. Journal of Personalized Medicine, 2020, 10, 8. | 1.1 | 16 |
| 1694 | Synthetic Analyses of Single-Cell Transcriptomes from Multiple Brain Organoids and Fetal Brain. Cell Reports, 2020, 30, 1682-1689.e3. | 2.9 | 150 |
| 1695 | Smad anchor for receptor activation nuclear localization during development identifies Layers V and VI of the neocortex. Journal of Comparative Neurology, 2020, 528, 2161-2173. | 0.9 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1696 | Constitutive activity of a G protein-coupled receptor, DRD1, contributes to human cerebral organoid formation. Stem Cells, 2020, 38, 653-665. | 1.4 | 20 |
| 1697 | Invited Review: Epigenetics in neurodevelopment. Neuropathology and Applied Neurobiology, 2020, 46, 6-27. | 1.8 | 34 |
| 1698 | Nanocage encapsulation improves antiepileptic efficiency of phenytoin. Biomaterials, 2020, 240, 119849. | 5.7 | 25 |
| 1699 | Ex-Vivo Treatment of Tumor Tissue Slices as a Predictive Preclinical Method to Evaluate Targeted Therapies for Patients with Renal Carcinoma. Cancers, 2020, 12, 232. | 1.7 | 40 |
| 1700 | p53 controls genomic stability and temporal differentiation of human neural stem cells and affects neural organization in human brain organoids. Cell Death and Disease, 2020, 11, 52. | 2.7 | 33 |
| 1701 | Self-Organizing 3D Human Trunk Neuromuscular Organoids. Cell Stem Cell, 2020, 26, 172-186.e6. | 5.2 | 177 |
| 1702 | Gardenia jasminoides Enhances CDDP-Induced Apoptosis of Glioblastoma Cells via AKT/mTOR Pathway While Protecting Death of Astrocytes. Nutrients, 2020, 12, 196. | 1.7 | 6 |
| 1703 | Modeling Cell-Cell Interactions in Parkinsonâ€™s Disease Using Human Stem Cell-Based Models. Frontiers in Cellular Neuroscience, 2019, 13, 571. | 1.8 | 19 |
| 1704 | Brain Organoids: A Promising Living Biobank Resource for Neuroscience Research. Biopreservation and Biobanking, 2020, 18, 136-143. | 0.5 | 15 |
| 1705 | FICD activity and AMPylation remodelling modulate human neurogenesis. Nature Communications, 2020, 11, 517. | 5.8 | 39 |
| 1706 | Cell stress in cortical organoids impairs molecular subtype specification. Nature, 2020, 578, 142-148. | 13.7 | 387 |
| 1707 | Organ-On-A-Chip in vitro Models of the Brain and the Blood-Brain Barrier and Their Value to Study the Microbiota-Gut-Brain Axis in Neurodegeneration. Frontiers in Bioengineering and Biotechnology, 2019, 7, 435. | 2.0 | 73 |
| 1708 | Emerging technologies to study glial cells. Glia, 2020, 68, 1692-1728. | 2.5 | 32 |
| 1709 | An update on human astrocytes and their role in development and disease. Glia, 2020, 68, 685-704. | 2.5 | 46 |
| 1710 | Human iPSCâ€derived microglia: A growing toolset to study the brain's innate immune cells. Glia, 2020, 68, 721-739. | 2.5 | 77 |
| 1711 | Ethical issues related to brain organoid research. Brain Research, 2020, 1732, 146653. | 1.1 | 63 |
| 1712 | Studying Human Neurodevelopment and Diseases Using 3D Brain Organoids. Journal of Neuroscience, 2020, 40, 1186-1193. | 1.7 | 37 |
| 1713 | The bioprinting roadmap. Biofabrication, 2020, 12, 022002. | 3.7 | 291 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1714 | Induced Pluripotent Stem Cell (iPSC)-Based Neurodegenerative Disease Models for Phenotype Recapitulation and Drug Screening. Molecules, 2020, 25, 2000. | 1.7 | 75 |
| 1715 | Benchmarking pluripotent stem cell-derived organoid models. Experimental Neurology, 2020, 330, 113333. | 2.0 | 0 |
| 1717 | Applications for stem cells. , 2020, , 445-455. | | 0 |
| 1718 | Biofabricated three-dimensional tissue models. , 2020, , 1417-1441. | | 0 |
| 1719 | Tissue organoid models and applications. , 2020, , 1537-1549. | | 3 |
| 1720 | Induced pluripotent stem cell technology: venturing into the second decade. , 2020, , 435-443. | | 2 |
| 1721 | Human organoids to model the developing human neocortex in health and disease. Brain Research, 2020, 1742, 146803. | 1.1 | 12 |
| 1722 | Cerebral organoids as a model for glioblastoma multiforme. Current Opinion in Biomedical Engineering, 2020, 13, 152-159. | 1.8 | 11 |
| 1723 | DNAJB6, a Key Factor in Neuronal Sensitivity to Amyloidogenesis. Molecular Cell, 2020, 78, 346-358.e9. | 4.5 | 62 |
| 1724 | Organoid technology for tissue engineering. Journal of Molecular Cell Biology, 2020, 12, 569-579. | 1.5 | 38 |
| 1725 | Organoid Models of Glioblastoma to Study Brain Tumor Stem Cells. Frontiers in Cell and Developmental Biology, 2020, 8, 220. | 1.8 | 38 |
| 1726 | JNK Signaling in Stem Cell Self-Renewal and Differentiation. International Journal of Molecular Sciences, 2020, 21, 2613. | 1.8 | 50 |
| 1727 | Microglia alterations in neurodegenerative diseases and their modeling with human induced pluripotent stem cell and other platforms. Progress in Neurobiology, 2020, 190, 101805. | 2.8 | 35 |
| 1728 | Direct cell-fate conversion of somatic cells: Toward regenerative medicine and industries. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2020, 96, 131-158. | 1.6 | 22 |
| 1729 | Bioprinting Neural Systems to Model Central Nervous System Diseases. Advanced Functional Materials, 2020, 30, 1910250. | 7.8 | 38 |
| 1730 | Emerging proteomic approaches to identify the underlying pathophysiology of neurodevelopmental and neurodegenerative disorders. Molecular Autism, 2020, 11, 27. | 2.6 | 15 |
| 1731 | Modeling Psychiatric Disorder Biology with Stem Cells. Current Psychiatry Reports, 2020, 22, 24. | 2.1 | 25 |
| 1732 | Engineering Human Brain Organoids: From Basic Research to Tissue Regeneration. Tissue Engineering and Regenerative Medicine, 2020, 17, 747-757. | 1.6 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1733 | From cell lines to pluripotent stem cells for modelling Parkinson's Disease. Journal of Neuroscience Methods, 2020, 340, 108741. | 1.3 | 26 |
| 1734 | Modeling Human Cytomegalovirus-Induced Microcephaly in Human iPSC-Derived Brain Organoids. Cell Reports Medicine, 2020, 1, 100002. | 3.3 | 67 |
| 1735 | Development of two-photon polymerised scaffolds for optical interrogation and neurite guidance of human iPSC-derived cortical neuronal networks. Lab on A Chip, 2020, 20, 1792-1806. | 3.1 | 20 |
| 1736 | Interfacing human induced pluripotent stem cell-derived neurons with designed nanowire arrays as a future platform for medical applications. Biomaterials Science, 2020, 8, 2434-2446. | 2.6 | 15 |
| 1737 | Human in vitro models for understanding mechanisms of autism spectrum disorder. Molecular Autism, 2020, 11, 26. | 2.6 | 18 |
| 1738 | Modeling Parkinsonâ€™s Disease Using Induced Pluripotent Stem Cells. Stem Cells International, 2020, 2020, 1-15. | 1.2 | 18 |
| 1739 | CRISPRi-based radiation modifier screen identifies long non-coding RNA therapeutic targets in glioma. Genome Biology, 2020, 21, 83. | 3.8 | 76 |
| 1740 | SCN2A channelopathies in the autism spectrum of neuropsychiatric disorders: a role for pluripotent stem cells?. Molecular Autism, 2020, 11, 23. | 2.6 | 16 |
| 1741 | Modeling Cell Communication in Cancer With Organoids: Making the Complex Simple. Frontiers in Cell and Developmental Biology, 2020, 8, 166. | 1.8 | 71 |
| 1742 | Therapeutic Plasticity of Neural Stem Cells. Frontiers in Neurology, 2020, 11, 148. | 1.1 | 65 |
| 1743 | Cholangiocarcinoma Disease Modelling Through Patients Derived Organoids. Cells, 2020, 9, 832. | 1.8 | 13 |
| 1744 | Biomaterials and Culture Systems for Development of Organoid and Organ-on-a-Chip Models. Annals of Biomedical Engineering, 2020, 48, 2002-2027. | 1.3 | 33 |
| 1745 | Airway organoids as models of human disease. Journal of Internal Medicine, 2021, 289, 604-613. | 2.7 | 55 |
| 1746 | The application of in vitroâ€derived human neurons in neurodegenerative disease modeling. Journal of Neuroscience Research, 2021, 99, 124-140. | 1.3 | 26 |
| 1747 | Brain organoids: an ensemble of bioassays to investigate human neurodevelopment and disease. Cell Death and Differentiation, 2021, 28, 52-67. | 5.0 | 104 |
| 1748 | Cellular complexity in brain organoids: Current progress and unsolved issues. Seminars in Cell and Developmental Biology, 2021, 111, 32-39. | 2.3 | 32 |
| 1749 | Modeling neurological disorders using brain organoids. Seminars in Cell and Developmental Biology, 2021, 111, 4-14. | 2.3 | 23 |
| 1750 | Deconstructing and reconstructing the human brain with regionally specified brain organoids. Seminars in Cell and Developmental Biology, 2021, 111, 40-51. | 2.3 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1751 | Atypical Neurogenesis in Induced Pluripotent Stem Cells From Autistic Individuals. Biological Psychiatry, 2021, 89, 486-496. | 0.7 | 40 |
| 1752 | Bioengineering tissue morphogenesis and function in human neural organoids. Seminars in Cell and Developmental Biology, 2021, 111, 52-59. | 2.3 | 22 |
| 1753 | Glial cell diversity and methamphetamine-induced neuroinflammation in human cerebral organoids. Molecular Psychiatry, 2021, 26, 1194-1207. | 4.1 | 68 |
| 1754 | Modeling neurodevelopment in a dish with pluripotent stem cells. Development Growth and Differentiation, 2021, 63, 18-25. | 0.6 | 12 |
| 1755 | Rethinking embryology in vitro: A synergy between engineering, data science and theory. Developmental Biology, 2021, 474, 48-61. | 0.9 | 15 |
| 1756 | Using multi-organ culture systems to study Parkinsonâ€™s disease. Molecular Psychiatry, 2021, 26, 725-735. | 4.1 | 16 |
| 1757 | Brain organoids: A new frontier of human neuroscience research. Seminars in Cell and Developmental Biology, 2021, 111, 1-3. | 2.3 | 3 |
| 1758 | A Transcriptomeâ€Based Drug Discovery Paradigm for Neurodevelopmental Disorders. Annals of Neurology, 2021, 89, 199-211. | 2.8 | 14 |
| 1759 | A matrigel-free method to generate matured human cerebral organoids using 3D-Printed microwell arrays. Bioactive Materials, 2021, 6, 1130-1139. | 8.6 | 37 |
| 1760 | Cerebral organoids to unravel the mechanisms underlying malformations of human cortical development. Seminars in Cell and Developmental Biology, 2021, 111, 15-22. | 2.3 | 5 |
| 1761 | PsychENCODE and beyond: transcriptomics and epigenomics of brain development and organoids. Neuropsychopharmacology, 2021, 46, 70-85. | 2.8 | 15 |
| 1762 | Identifying adaptive alleles in the human genome: from selection mapping to functional validation. Human Genetics, 2021, 140, 241-276. | 1.8 | 13 |
| 1763 | Taming human brain organoids one cell at a time. Seminars in Cell and Developmental Biology, 2021, 111, 23-31. | 2.3 | 14 |
| 1764 | The future of cerebral organoids in drug discovery. Seminars in Cell and Developmental Biology, 2021, 111, 67-73. | 2.3 | 15 |
| 1765 | The science and engineering of stem cellâ€derived organoidsâ€examples from hepatic, biliary, and pancreatic tissues. Biological Reviews, 2021, 96, 179-204. | 4.7 | 13 |
| 1766 | Modeling the pathophysiology of Parkinsonâ€™s disease in patient-specific neurons. Experimental Biology and Medicine, 2021, 246, 298-304. | 1.1 | 0 |
| 1767 | Extracellular vesicles from organoids and 3D culture systems. Biotechnology and Bioengineering, 2021, 118, 1029-1049. | 1.7 | 27 |
| 1768 | Cancer research using organoid technology. Journal of Molecular Medicine, 2021, 99, 501-515. | 1.7 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1769 | Potential ethical problems with human cerebral organoids: Consciousness and moral status of future brains in a dish. Brain Research, 2021, 1750, 147146. | 1.1 | 32 |
| 1770 | Dissecting Alzheimer's disease pathogenesis in human 2D and 3D models. Molecular and Cellular Neurosciences, 2021, 110, 103568. | 1.0 | 30 |
| 1771 | Engineered Microsystems for Spheroid and Organoid Studies. Advanced Healthcare Materials, 2021, 10, e2001284. | 3.9 | 51 |
| 1772 | A comprehensive library of human transcription factors for cell fate engineering. Nature Biotechnology, 2021, 39, 510-519. | 9.4 | 110 |
| 1773 | Current experimental human tissueâ€derived models for prostate cancer research. International Journal of Urology, 2021, 28, 150-162. | 0.5 | 7 |
| 1774 | Innovative approaches in CNS drug discovery. Therapie, 2021, 76, 101-109. | 0.6 | 11 |
| 1775 | The epidermal growth factor receptor variant type III mutation frequently found in gliomas induces astrogenesis in human cerebral organoids. Cell Proliferation, 2021, 54, e12965. | 2.4 | 12 |
| 1776 | Engineering organoid microfluidic system for biomedical and health engineering: A review. Chinese Journal of Chemical Engineering, 2021, 30, 244-254. | 1.7 | 5 |
| 1777 | Rethinking organoid technology through bioengineering. Nature Materials, 2021, 20, 145-155. | 13.3 | 150 |
| 1778 | Learning about cell lineage, cellular diversity and evolution of the human brain through stem cell models. Current Opinion in Neurobiology, 2021, 66, 166-177. | 2.0 | 5 |
| 1779 | Biomaterials Regulate Mechanosensors YAP/TAZ in Stem Cell Growth and Differentiation. Tissue Engineering and Regenerative Medicine, 2021, 18, 199-215. | 1.6 | 22 |
| 1780 | Dissecting the non-neuronal cell contribution to Parkinsonâ€™s disease pathogenesis using induced pluripotent stem cells. Cellular and Molecular Life Sciences, 2021, 78, 2081-2094. | 2.4 | 8 |
| 1781 | Behavior and lineage progression of neural progenitors in the mammalian cortex. Current Opinion in Neurobiology, 2021, 66, 144-157. | 2.0 | 30 |
| 1782 | From <scp>iPS</scp> Cells to Rodents and Nonhuman Primates: Filling Gaps in Modeling Parkinson's Disease. Movement Disorders, 2021, 36, 832-841. | 2.2 | 10 |
| 1783 | The emerging role of chromatin remodelers in neurodevelopmental disorders: a developmental perspective. Cellular and Molecular Life Sciences, 2021, 78, 2517-2563. | 2.4 | 58 |
| 1784 | A novel integrated system using patient-derived glioma cerebral organoids and xenografts for disease modeling and drug screening. Cancer Letters, 2021, 500, 87-97. | 3.2 | 29 |
| 1785 | Cellular reprogramming: Mathematics meets medicine. WIREs Mechanisms of Disease, 2021, 13, e1515. | 1.5 | 5 |
| 1786 | Returning to kidney development to deliver synthetic kidneys. Developmental Biology, 2021, 474, 22-36. | 0.9 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1787 | Modeling human embryo development with embryonic and extra-embryonic stem cells. Developmental Biology, 2021, 474, 91-99. | 0.9 | 35 |
| 1788 | Human mini-brain models. Nature Biomedical Engineering, 2021, 5, 11-25. | 11.6 | 49 |
| 1789 | Spheroids and organoids as humanized 3D scaffoldâ€free engineered tissues for SARSâ€CoVâ€2 viral infection and drug screening. Artificial Organs, 2021, 45, 548-558. | 1.0 | 21 |
| 1790 | The Impact of Oxygen Availability and Multilineage Communication on Organoid Maturation. Antioxidants and Redox Signaling, 2021, 35, 217-233. | 2.5 | 6 |
| 1791 | Enhanced Neuronal Activity and Asynchronous Calcium Transients Revealed in a 3D Organoid Model of Alzheimerâ€™s Disease. ACS Biomaterials Science and Engineering, 2021, 7, 254-264. | 2.6 | 37 |
| 1792 | Great Expectations: Induced pluripotent stem cell technologies in neurodevelopmental impairments. International Journal of Medical Sciences, 2021, 18, 459-473. | 1.1 | 7 |
| 1793 | ApoE-Isoform-Dependent SARS-CoV-2 Neurotropism and Cellular Response. Cell Stem Cell, 2021, 28, 331-342.e5. | 5.2 | 156 |
| 1794 | Generation and long-term culture of advanced cerebral organoids for studying later stages of neural development. Nature Protocols, 2021, 16, 579-602. | 5.5 | 123 |
| 1795 | The Role of Toll-Like Receptor 4 in Infectious and Non Infectious Inflammation. Agents and Actions Supplements, 2021, , . | 0.2 | 2 |
| 1796 | Towards Advanced iPSC-based Drug Development for Neurodegenerative Disease. Trends in Molecular Medicine, 2021, 27, 263-279. | 3.5 | 37 |
| 1797 | Modeling brain development and diseases with human cerebral organoids. Current Opinion in Neurobiology, 2021, 66, 103-115. | 2.0 | 15 |
| 1798 | Spotlight on the Replisome: Aetiology of DNA Replication-Associated Genetic Diseases. Trends in Genetics, 2021, 37, 317-336. | 2.9 | 33 |
| 1800 | Recent advances in gene therapy for neurodevelopmental disorders with epilepsy. Journal of Neurochemistry, 2021, 157, 229-262. | 2.1 | 36 |
| 1801 | Evaluating Neurodevelopmental Consequences of Perinatal Exposure to Antiretroviral Drugs: Current Challenges and New Approaches. Journal of NeuroImmune Pharmacology, 2021, 16, 113-129. | 2.1 | 26 |
| 1802 | Advances in Engineering Human Tissue Models. Frontiers in Bioengineering and Biotechnology, 2020, 8, 620962. | 2.0 | 72 |
| 1803 | Shape Retaining and Sacrificial Molding Fabrication Method for ECM-Based in vitro Vascular Model. , 2021, , . | | 1 |
| 1804 | Background: Evolution. , 2021, , 1-26. | | 0 |
| 1805 | Modeling Poliovirus Infection Using Human Engineered Neural Tissue Enriched With Motor Neuron Derived From Embryonic Stem Cells. Frontiers in Cell and Developmental Biology, 2020, 8, 593106. | 1.8 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1806 | Bipolar disorder as a gliopathy. , 2021, , 175-182. | | 1 |
| 1807 | Bio-3D Printed Organs as Drug Testing Tools. , 2021, , 149-164. | | 0 |
| 1808 | Genome editing in stem cells for genetic neurodisorders. Progress in Molecular Biology and Translational Science, 2021, 182, 403-438. | 0.9 | 6 |
| 1809 | Human iPSCs and their uses in developmental toxicology. , 2021, , 1-44. | | 1 |
| 1810 | Experimental Models to Study COVID-19 Effect in Stem Cells. Cells, 2021, 10, 91. | 1.8 | 12 |
| 1811 | Application of developmental principles for spinal cord repair after injury. International Journal of Developmental Biology, 2021, , . | 0.3 | 0 |
| 1812 | Lymphoblastoid-derived human-induced pluripotent stem cells. , 2021, , 57-70. | | 2 |
| 1813 | Techno-Economic Analysis of Automated iPSC Production. Processes, 2021, 9, 240. | 1.3 | 15 |
| 1814 | Generation and Maintenance of Homogeneous Human Midbrain Organoids. Bio-protocol, 2021, 11, e4049. | 0.2 | 4 |
| 1815 | Molecular mechanisms of Zika virus-induced neurological pathology. , 2021, , 83-93. | | 0 |
| 1817 | Brain organoid formation on decellularized porcine brain ECM hydrogels. PLoS ONE, 2021, 16, e0245685. | 1.1 | 55 |
| 1818 | Human Striatal Organoids Derived from Pluripotent Stem Cells Recapitulate Striatal Development and Compartments. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 1819 | Induced pluripotent stem cells for modeling Angelman syndrome. , 2021, , 217-238. | | 1 |
| 1820 | Neuroinvasion of SARS-CoV-2 in human and mouse brain. Journal of Experimental Medicine, 2021, 218, . | 4.2 | 677 |
| 1821 | Human stem cell models to study hostâ€“virus interactions in the central nervous system. Nature Reviews Immunology, 2021, 21, 441-453. | 10.6 | 35 |
| 1822 | Pluripotent Stem Cells for Cell Therapy. Methods in Molecular Biology, 2021, 2269, 25-33. | 0.4 | 1 |
| 1823 | 3D Alzheimer's disease in a dish: Implications for drug discovery. , 2021, , 311-331. | | 1 |
| 1824 | Production of Phenotypically Uniform Human Cerebral Organoids from Pluripotent Stem Cells. Bio-protocol, 2021, 11, e3985. | 0.2 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1825 | Building the brain from scratch: Engineering region-specific brain organoids from human stem cells to study neural development and disease. Current Topics in Developmental Biology, 2021, 142, 477-530. | 1.0 | 15 |
| 1826 | Mapping the molecular and cellular complexity of cortical malformations. Science, 2021, 371, . | 6.0 | 57 |
| 1827 | Pituitary Remodeling Throughout Life: Are Resident Stem Cells Involved?. Frontiers in Endocrinology, 2020, 11, 604519. | 1.5 | 20 |
| 1828 | Application of Airy beam light sheet microscopy to examine early neurodevelopmental structures in 3D hiPSC-derived human cortical spheroids. Molecular Autism, 2021, 12, 4. | 2.6 | 14 |
| 1829 | Evolution of Experimental Models in the Study of Glioblastoma: Toward Finding Efficient Treatments. Frontiers in Oncology, 2020, 10, 614295. | 1.3 | 51 |
| 1830 | Using iPSC Models to Understand the Role of Estrogen in Neuronâ€“Glia Interactions in Schizophrenia and Bipolar Disorder. Cells, 2021, 10, 209. | 1.8 | 7 |
| 1831 | Electrophysiological Analysis of Brain Organoids: Current Approaches and Advancements. Frontiers in Neuroscience, 2020, 14, 622137. | 1.4 | 43 |
| 1832 | Progress in human embryonic stem cell research and aging. , 2021, , 9-52. | | 0 |
| 1833 | Use of iPSC-derived brain organoids to study human brain evolution. , 2021, , 157-177. | | 1 |
| 1834 | Human induced pluripotent stem cellâ€“ based modeling of Alzheimerâ€™s disease, a glial perspective. , 2021, , 21-35. | | 2 |
| 1836 | Present and future of adult stem cells and induced pluripotent stem cells therapy for ischemic stroke. , 2021, , 67-95. | | 2 |
| 1837 | Realizing the potential of organoidsâ€”an interview with Hans Clevers. Journal of Molecular Medicine, 2021, 99, 443-447. | 1.7 | 6 |
| 1838 | Animal models: value and translational potency. , 2021, , 95-103. | | 2 |
| 1839 | Historical evolution of spheroids and organoids, and possibilities of use in life sciences and medicine. Biotechnology Journal, 2021, 16, e2000463. | 1.8 | 44 |
| 1841 | Use of induced pluripotent stem cells and cerebral organoids to profile Zika virus infection: Features and findings. , 2021, , 85-95. | | 0 |
| 1842 | Tubular human brain organoids to model microglia-mediated neuroinflammation. Lab on A Chip, 2021, 21, 2751-2762. | 3.1 | 41 |
| 1843 | Electrophysiology Read-Out Tools for Brain-on-Chip Biotechnology. Micromachines, 2021, 12, 124. | 1.4 | 26 |
| 1844 | Current and future applications of induced pluripotent stem cell-based models to study pathological proteins in neurodegenerative disorders. Molecular Psychiatry, 2021, 26, 2685-2706. | 4.1 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1845 | Induced pluripotent stem cells for modeling schizophrenia pathogenesis. , 2021, , 105-127. | | 0 |
| 1846 | Molecular and Cellular Basis of Hyper-Assembly, Protein Aggregation and Impaired Neurodevelopment Driven by a Rare Pathogenic Mutation in DDX3X. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 1848 | Stem cell-derived three-dimensional (organoid) models of Alzheimerâ€™s disease: a precision medicine approach. Neural Regeneration Research, 2021, 16, 1546. | 1.6 | 3 |
| 1849 | Human iPSC-Based Modeling of Central Nerve System Disorders for Drug Discovery. International Journal of Molecular Sciences, 2021, 22, 1203. | 1.8 | 26 |
| 1850 | From Cell Culture to Organoids-Model Systems for Investigating Prion Strain Characteristics. Biomolecules, 2021, 11, 106. | 1.8 | 10 |
| 1851 | Fluorescence-based Single-cell Analysis of Whole-mount-stained and Cleared Microtissues and Organoids for High Throughput Screening. Bio-protocol, 2021, 11, e4050. | 0.2 | 4 |
| 1852 | Controlled orientation and sustained rotation of biological samples in a sono-optical microfluidic device. Lab on A Chip, 2021, 21, 1563-1578. | 3.1 | 13 |
| 1853 | Differentiation of Stem Cells into Neuronal Lineage: In Vitro Cell Culture and In Vivo Transplantation in Animal Models. Pancreatic Islet Biology, 2021, , 73-102. | 0.1 | 0 |
| 1854 | Phenocopying Glioblastoma: A Review. IEEE Reviews in Biomedical Engineering, 2023, 16, 456-471. | 13.1 | 3 |
| 1855 | A logical network-based drug-screening platform for Alzheimerâ€™s disease representing pathological features of human brain organoids. Nature Communications, 2021, 12, 280. | 5.8 | 88 |
| 1856 | Toward three-dimensional in vitro models to study neurovascular unit functions in health and disease. Neural Regeneration Research, 2021, 16, 2132. | 1.6 | 21 |
| 1858 | Downregulation of Neurodevelopmental Gene Expression in iPSC-Derived Cerebral Organoids Upon Infection by Human Cytomegalovirus. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 1859 | Drug Discovery in Induced Pluripotent Stem Cell Models. , 2021, , . | | 0 |
| 1860 | Application of Scaffold-Free 3D Models. Learning Materials in Biosciences, 2021, , 147-174. | 0.2 | 0 |
| 1861 | Regulation of Cell Types Within Testicular Organoids. Endocrinology, 2021, 162, . | 1.4 | 5 |
| 1862 | Characterization of mitochondrial health from human peripheral blood mononuclear cells to cerebral organoids derived from induced pluripotent stem cells. Scientific Reports, 2021, 11, 4523. | 1.6 | 16 |
| 1863 | PAUPARand PAX6 sequentially regulate human embryonic stem cell cortical differentiation. Nucleic Acids Research, 2021, 49, 1935-1950. | 6.5 | 17 |
| 1864 | Modeling Neurodevelopmental and Neuropsychiatric Diseases with Astrocytes Derived from Human-Induced Pluripotent Stem Cells. International Journal of Molecular Sciences, 2021, 22, 1692. | 1.8 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1865 | Generation of human midbrain organoids from induced pluripotent stem cells. MNI Open Research, 0, 3, 1. | 1.0 | 7 |
| 1866 | Long-term live imaging and multiscale analysis identify heterogeneity and core principles of epithelial organoid morphogenesis. BMC Biology, 2021, 19, 37. | 1.7 | 54 |
| 1867 | Microfluidic Organoids-on-a-Chip: Quantum Leap in Cancer Research. Cancers, 2021, 13, 737. | 1.7 | 49 |
| 1868 | Recent progress in induced pluripotent stem cell-derived 3D cultures for cardiac regeneration. Cell and Tissue Research, 2021, 384, 231-240. | 1.5 | 10 |
| 1869 | Engineering organoids. Nature Reviews Materials, 2021, 6, 402-420. | 23.3 | 497 |
| 1870 | Long-term maturation of human cortical organoids matches key early postnatal transitions. Nature Neuroscience, 2021, 24, 331-342. | 7.1 | 188 |
| 1871 | Reactive astrocyte nomenclature, definitions, and future directions. Nature Neuroscience, 2021, 24, 312-325. | 7.1 | 1,098 |
| 1873 | Clinical Application of Human Induced Pluripotent Stem Cell-Derived Organoids as an Alternative to Organ Transplantation. Stem Cells International, 2021, 2021, 1-16. | 1.2 | 16 |
| 1874 | Patient-derived iPSC modeling of rare neurodevelopmental disorders: Molecular pathophysiology and prospective therapies. Neuroscience and Biobehavioral Reviews, 2021, 121, 201-219. | 2.9 | 25 |
| 1875 | Cell-to-Cell Adhesion and Neurogenesis in Human Cortical Development: A Study Comparing 2D Monolayers with 3D Organoid Cultures. Stem Cell Reports, 2021, 16, 264-280. | 2.3 | 16 |
| 1876 | Organoids of the female reproductive tract. Journal of Molecular Medicine, 2021, 99, 531-553. | 1.7 | 42 |
| 1877 | Advances in modelling the human microbiomeâ€“gutâ€“brain axis in vitro. Biochemical Society Transactions, 2021, 49, 187-201. | 1.6 | 25 |
| 1879 | Neurodevelopmental defects and neurodegenerative phenotypes in human brain organoids carrying Parkinsonâ€™s disease-linked DNAJC6 mutations. Science Advances, 2021, 7, . | 4.7 | 52 |
| 1880 | Biogenesis of Extracellular Vesicles Produced from Human-Stem-Cell-Derived Cortical Spheroids Exposed to Iron Oxides. ACS Biomaterials Science and Engineering, 2021, 7, 1111-1122. | 2.6 | 20 |
| 1881 | Advances in microfluidic in vitro systems for neurological disease modeling. Journal of Neuroscience Research, 2021, 99, 1276-1307. | 1.3 | 56 |
| 1882 | Mind the translational gap: using iPS cell models to bridge from genetic discoveries to perturbed pathways and therapeutic targets. Molecular Autism, 2021, 12, 10. | 2.6 | 15 |
| 1883 | Narrative review of stem cell therapy for ischemic brain injury. Translational Pediatrics, 2021, 10, 435-445. | 0.5 | 3 |
| 1884 | SARS-CoV-2 Infection and Disease Modelling Using Stem Cell Technology and Organoids. International Journal of Molecular Sciences, 2021, 22, 2356. | 1.8 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1885 | Cognitive effects of low dose of ionizing radiation â€“ Lessons learned and research gaps from epidemiological and biological studies. Environment International, 2021, 147, 106295. | 4.8 | 31 |
| 1886 | The Emerging Role of Neuronal Organoid Models in Drug Discovery: Potential Applications and Hurdles to Implementation. Molecular Pharmacology, 2021, 99, 256-265. | 1.0 | 9 |
| 1887 | Physiological and Pathological Ageing of Astrocytes in the Human Brain. Neurochemical Research, 2021, 46, 2662-2675. | 1.6 | 30 |
| 1888 | Organoid and Spheroid Tumor Models: Techniques and Applications. Cancers, 2021, 13, 874. | 1.7 | 178 |
| 1890 | Organoid Models of Glioblastoma and Their Role in Drug Discovery. Frontiers in Cellular Neuroscience, 2021, 15, 605255. | 1.8 | 31 |
| 1891 | Three-dimensional model of glioblastoma by co-culturing tumor stem cells with human brain organoids. Biology Open, 2021, 10, . | 0.6 | 18 |
| 1892 | Patient-Derived Induced Pluripotent Stem Cells (iPSCs) and Cerebral Organoids for Drug Screening and Development in Autism Spectrum Disorder: Opportunities and Challenges. Pharmaceutics, 2021, 13, 280. | 2.0 | 14 |
| 1893 | Biologia Futura: the importance of 3D organoidsâ€"a new approach for research on neurological and rare diseases. Biologia Futura, 2021, 72, 281-290. | 0.6 | 1 |
| 1894 | Creative Destruction: A Basic Computational Model of Cortical Layer Formation. Cerebral Cortex, 2021, 31, 3237-3253. | 1.6 | 6 |
| 1895 | Comparison of Acute Effects of Neurotoxic Compounds on Network Activity in Human and Rodent Neural Cultures. Toxicological Sciences, 2021, 180, 295-312. | 1.4 | 12 |
| 1896 | Current Challenges Associated with the Use of Human Induced Pluripotent Stem Cell-Derived Organoids in Regenerative Medicine. International Journal of Stem Cells, 2021, 14, 9-20. | 0.8 | 12 |
| 1897 | Retinoic Acid Benefits Glomerular Organotypic Differentiation from Adult Renal Progenitor Cells In Vitro. Stem Cell Reviews and Reports, 2021, 17, 1406-1419. | 1.7 | 2 |
| 1899 | Engineering Co-Emergence in Organoid Models. Progress in Biomedical Engineering, 0, , . | 2.8 | 0 |
| 1900 | Electromembrane Extraction and Mass Spectrometry for Liver Organoid Drug Metabolism Studies. Analytical Chemistry, 2021, 93, 3576-3585. | 3.2 | 19 |
| 1901 | Human heart-forming organoids recapitulate early heart and foregut development. Nature Biotechnology, 2021, 39, 737-746. | 9.4 | 196 |
| 1902 | How well do brain organoids capture your brain?. IScience, 2021, 24, 102063. | 1.9 | 27 |
| 1903 | 3D bioprinting of high cell-density heterogeneous tissue models through spheroid fusion within self-healing hydrogels. Nature Communications, 2021, 12, 753. | 5.8 | 247 |
| 1904 | 3D organotypic cell structures for drug development and Microorganism-Host interaction research. Research Results in Pharmacology, 2021, 7, 47-64. | 0.1 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1905 | Bioelectrical interfaces with cortical spheroids in three-dimensions. Journal of Neural Engineering, 2021, 18, 055005. | 1.8 | 19 |
| 1906 | Three-dimensional, multifunctional neural interfaces for cortical spheroids and engineered assembloids. Science Advances, 2021, 7, . | 4.7 | 128 |
| 1908 | Advances in Central Nervous System Organoids: A Focus on Organoid-Based Models for Motor Neuron Disease. Tissue Engineering - Part C: Methods, 2021, 27, 213-224. | 1.1 | 15 |
| 1910 | A Possible Association Between Zika Virus Infection and CDK5RAP2 Mutation. Frontiers in Genetics, 2021, 12, 530028. | 1.1 | 1 |
| 1911 | Mapping the Ethical Issues of Brain Organoid Research and Application. AJOB Neuroscience, 2022, 13, 81-94. | 0.6 | 49 |
| 1912 | Animal and Cellular Models of Alzheimerâ€™s Disease: Progress, Promise, and Future Approaches. Neuroscientist, 2022, 28, 572-593. | 2.6 | 11 |
| 1913 | Neurotropic Effects of SARS-CoV-2 Modeled by the Human Brain Organoids. Stem Cell Reports, 2021, 16, 373-384. | 2.3 | 43 |
| 1914 | Advanced Spheroid, Tumouroid and 3D Bioprinted In-Vitro Models of Adult and Paediatric Glioblastoma. International Journal of Molecular Sciences, 2021, 22, 2962. | 1.8 | 16 |
| 1915 | Nanotherapeutic approach to treat diabetic foot ulcers using tissue-engineered nanofiber skin substitutes: A review. Diabetes and Metabolic Syndrome: Clinical Research and Reviews, 2021, 15, 487-491. | 1.8 | 5 |
| 1916 | Evaluation of UBE3A antibodies in mice and human cerebral organoids. Scientific Reports, 2021, 11, 6323. | 1.6 | 1 |
| 1917 | Mass spectrometry analysis of tau and amyloidâ€beta in iPSCâ€derived models of Alzheimerâ€™s disease and dementia. Journal of Neurochemistry, 2021, 159, 305-317. | 2.1 | 8 |
| 1919 | Interspecies chimeric conditions affect the developmental rate of human pluripotent stem cells. PLoS Computational Biology, 2021, 17, e1008778. | 1.5 | 11 |
| 1920 | Advancing Drug Discovery for Neurological Disorders Using iPSC-Derived Neural Organoids. International Journal of Molecular Sciences, 2021, 22, 2659. | 1.8 | 33 |
| 1921 | From stem and progenitor cells to neurons in the developing neocortex: key differences among hominids. FEBS Journal, 2022, 289, 1524-1535. | 2.2 | 11 |
| 1922 | Stem cells based in vitro models: trends and prospects in biomaterials cytotoxicity studies. Biomedical Materials (Bristol), 2021, 16, 042003. | 1.7 | 19 |
| 1923 | Establishment of a Robust Platform for Induced Pluripotent Stem Cell Research Using Maholo LabDroid. SLAS Technology, 2021, 26, 441-453. | 1.0 | 6 |
| 1924 | Organoids as a new model system to study neural tube defects. FASEB Journal, 2021, 35, e21545. | 0.2 | 13 |
| 1925 | Current State-of-the-Art and Unresolved Problems in Using Human Induced Pluripotent Stem Cell-Derived Dopamine Neurons for Parkinsonâ€™s Disease Drug Development. International Journal of Molecular Sciences, 2021, 22, 3381. | 1.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1927 | Enfermedad de Parkinson: actualizaciÃ³n de estudios preclÃnicos con el uso de cÃ©lulas troncales pluripotentes inducidas. NeurologÃa, 2021, , . | 0.3 | 1 |
| 1928 | Establishment of 3D Neuro-Organoids Derived from Pig Embryonic Stem-Like Cells. International Journal of Molecular Sciences, 2021, 22, 2600. | 1.8 | 1 |
| 1931 | The Path to Progress Preclinical Studies of Age-Related Neurodegenerative Diseases: A Perspective on Rodent and hiPSC-Derived Models. Molecular Therapy, 2021, 29, 949-972. | 3.7 | 10 |
| 1932 | Defective metabolic programming impairs early neuronal morphogenesis in neural cultures and an organoid model of Leigh syndrome. Nature Communications, 2021, 12, 1929. | 5.8 | 55 |
| 1933 | Minimalist Tissue Engineering Approaches Using Low Materialâ€Based Bioengineered Systems. Advanced Healthcare Materials, 2021, 10, e2002110. | 3.9 | 16 |
| 1934 | 3D Tissue Models as an Effective Tool for Studying Viruses and Vaccine Development. Frontiers in Materials, 2021, 8, . | 1.2 | 10 |
| 1935 | Genome Editing in iPSC-Based Neural Systems: From Disease Models to Future Therapeutic Strategies. Frontiers in Genome Editing, 2021, 3, 630600. | 2.7 | 22 |
| 1936 | Patterning Neuroepithelial Cell Sheet via a Sustained Chemical Gradient Generated by Localized Passive Diffusion Devices. ACS Biomaterials Science and Engineering, 2021, 7, 1713-1721. | 2.6 | 3 |
| 1937 | Human cerebral organoids as a therapeutic drug screening model for Creutzfeldtâ€“Jakob disease. Scientific Reports, 2021, 11, 5165. | 1.6 | 40 |
| 1938 | Regional specification and complementation with non-neuroectodermal cells in human brain organoids. Journal of Molecular Medicine, 2021, 99, 489-500. | 1.7 | 14 |
| 1939 | SOX Transcription Factors as Important Regulators of Neuronal and Glial Differentiation During Nervous System Development and Adult Neurogenesis. Frontiers in Molecular Neuroscience, 2021, 14, 654031. | 1.4 | 64 |
| 1940 | Organoids: a promising new in vitro platform in livestock and veterinary research. Veterinary Research, 2021, 52, 43. | 1.1 | 29 |
| 1941 | Organoids in domestic animals: with which stem cells?. Veterinary Research, 2021, 52, 38. | 1.1 | 5 |
| 1942 | Culture Variabilities of Human iPSC-Derived Cerebral Organoids Are a Major Issue for the Modelling of Phenotypes Observed in Alzheimerâ€™s Disease. Stem Cell Reviews and Reports, 2022, 18, 718-731. | 1.7 | 40 |
| 1943 | Primate cell fusion disentangles gene regulatory divergence in neurodevelopment. Nature, 2021, 592, 421-427. | 13.7 | 52 |
| 1944 | A lysosomal enigma CLN5 and its significance in understanding neuronal ceroid lipofuscinosis. Cellular and Molecular Life Sciences, 2021, 78, 4735-4763. | 2.4 | 15 |
| 1945 | An early cell shape transition drives evolutionary expansion of the human forebrain. Cell, 2021, 184, 2084-2102.e19. | 13.5 | 139 |
| 1946 | Transcriptome Regulation by Oncogenic ALK Pathway in Mammalian Cortical Development Revealed by Single-Cell RNA Sequencing. Cerebral Cortex, 2021, 31, 3911-3924. | 1.6 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1947 | Modeling Rett Syndrome with Human Pluripotent Stem Cells: Mechanistic Outcomes and Future Clinical Perspectives. International Journal of Molecular Sciences, 2021, 22, 3751. | 1.8 | 10 |
| 1948 | 3D-printed microplate inserts for long term high-resolution imaging of live brain organoids. BMC Biomedical Engineering, 2021, 3, 6. | 1.7 | 27 |
| 1949 | A Closer Look to the Evolution of Neurons in Humans and Apes Using Stem-Cell-Derived Model Systems. Frontiers in Cell and Developmental Biology, 2021, 9, 661113. | 1.8 | 1 |
| 1950 | Utilising Induced Pluripotent Stem Cells in Neurodegenerative Disease Research: Focus on Glia. International Journal of Molecular Sciences, 2021, 22, 4334. | 1.8 | 14 |
| 1951 | Glutamatergic Neurons Differentiated from Embryonic Stem Cells: An Investigation of Differentiation and Associated Diseases. International Journal of Molecular Sciences, 2021, 22, 4592. | 1.8 | 4 |
| 1952 | Artificially Induced Pluripotent Stem Cell-Derived Whole-Brain Organoid for Modelling the Pathophysiology of Metachromatic Leukodystrophy and Drug Repurposing. Biomedicines, 2021, 9, 440. | 1.4 | 5 |
| 1953 | Role of SHH in Patterning Human Pluripotent Cells towards Ventral Forebrain Fates. Cells, 2021, 10, 914. | 1.8 | 10 |
| 1954 | Harnessing pluripotent stem cells as models to decipher human evolution. FEBS Journal, 2022, 289, 2992-3010. | 2.2 | 11 |
| 1955 | Using organoids to study human brain development and evolution. Developmental Neurobiology, 2021, 81, 608-622. | 1.5 | 5 |
| 1957 | Neuronal deletion of Wwox, associated with WOREE syndrome, causes epilepsy and myelin defects. Brain, 2021, 144, 3061-3077. | 3.7 | 21 |
| 1958 | Gene Expression of Mouse Hippocampal Stem Cells Grown in a Galactose-Derived Molecular Gel Compared to In Vivo and Neurospheres. Processes, 2021, 9, 716. | 1.3 | 3 |
| 1959 | Tools and approaches for analyzing the role of mitochondria in health, development and disease using human cerebral organoids. Developmental Neurobiology, 2021, 81, 591-607. | 1.5 | 4 |
| 1961 | Basic and Preclinical Research for Personalized Medicine. Journal of Personalized Medicine, 2021, 11, 354. | 1.1 | 8 |
| 1962 | Derivation of iPSC lines from two patients with autism spectrum disorder carrying NRXN1Î± deletion (NUIGi041-A, NUIG041-B; NUIGi045-A) and one sibling control (NUIGi042-A, NUIGi042-B). Stem Cell Research, 2021, 52, 102222. | 0.3 | 0 |
| 1963 | Centrosomeâ€mediated microtubule remodeling during axon formation in human iPSCâ€derived neurons. EMBO Journal, 2021, 40, e106798. | 3.5 | 8 |
| 1964 | Recent advances in organoid development and applications in disease modeling. Biochimica Et Biophysica Acta: Reviews on Cancer, 2021, 1875, 188527. | 3.3 | 35 |
| 1965 | Molecular Components of Store-Operated Calcium Channels in the Regulation of Neural Stem Cell Physiology, Neurogenesis, and the Pathology of Huntingtonâ€™s Disease. Frontiers in Cell and Developmental Biology, 2021, 9, 657337. | 1.8 | 9 |
| 1966 | Neurological Disorders Associated with WWOX Germline Mutationsâ€”A Comprehensive Overview. Cells, 2021, 10, 824. | 1.8 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1967 | The Contribution of Microglia to Neuroinflammation in Parkinsonâ€™s Disease. International Journal of Molecular Sciences, 2021, 22, 4676. | 1.8 | 114 |
| 1968 | Applications of brain organoids in neurodevelopment and neurological diseases. Journal of Biomedical Science, 2021, 28, 30. | 2.6 | 44 |
| 1969 | Sulfonated cryogel scaffolds for focal delivery in ex-vivo brain tissue cultures. Biomaterials, 2021, 271, 120712. | 5.7 | 12 |
| 1970 | Design and Evaluation of an In Vitro Mild Traumatic Brain Injury Modeling System Using 3D Printed Mini Impact Device on the 3D Cultured Human iPSC Derived Neural Progenitor Cells. Advanced Healthcare Materials, 2021, 10, e2100180. | 3.9 | 13 |
| 1971 | Towards physiologically relevant human pluripotent stem cell (hPSC) models of Parkinsonâ€™s disease. Stem Cell Research and Therapy, 2021, 12, 253. | 2.4 | 9 |
| 1972 | Integrating Biomaterials and Genome Editing Approaches to Advance Biomedical Science. Annual Review of Biomedical Engineering, 2021, 23, 493-516. | 5.7 | 4 |
| 1974 | Trabecular bone organoids: a micron-scale â€˜humanisedâ€™ prototype designed to study the effects of microgravity and degeneration. Npj Microgravity, 2021, 7, 17. | 1.9 | 29 |
| 1975 | Three-dimensional in vitro tissue culture models of brain organoids. Experimental Neurology, 2021, 339, 113619. | 2.0 | 11 |
| 1976 | The Combination of Cell Cultured Technology and In Silico Model to Inform the Drug Development. Pharmaceutics, 2021, 13, 704. | 2.0 | 11 |
| 1977 | Transparent, Compliant 3D Mesostructures for Precise Evaluation of Mechanical Characteristics of Organoids. Advanced Materials, 2021, 33, e2100026. | 11.1 | 23 |
| 1978 | Modeling Neurological Disorders in 3D Organoids Using Human-Derived Pluripotent Stem Cells. Frontiers in Cell and Developmental Biology, 2021, 9, 640212. | 1.8 | 19 |
| 1979 | Two-Dimensional and Three-Dimensional Cartilage Model Platforms for Drug Evaluation and High-Throughput Screening Assays. Tissue Engineering - Part B: Reviews, 2022, 28, 421-436. | 2.5 | 7 |
| 1980 | Brain organoids: A promising model to assess oxidative stressâ€induced central nervous system damage. Developmental Neurobiology, 2021, 81, 653-670. | 1.5 | 15 |
| 1981 | Organoids, Where We Stand and Where We Go. Trends in Molecular Medicine, 2021, 27, 416-418. | 3.5 | 14 |
| 1983 | Translational Block in Stroke: A Constructive and â€œOut-of-the-Boxâ€•Reappraisal. Frontiers in Neuroscience, 2021, 15, 652403. | 1.4 | 21 |
| 1985 | Maternal sevoflurane exposure induces temporary defects in interkinetic nuclear migration of radial glial progenitors in the fetal cerebral cortex through the Notch signalling pathway. Cell Proliferation, 2021, 54, e13042. | 2.4 | 9 |
| 1986 | Synthetic living machines: A new window on life. IScience, 2021, 24, 102505. | 1.9 | 35 |
| 1987 | Cardiac organoid â€” a promising perspective of preclinical model. Stem Cell Research and Therapy, 2021, 12, 272. | 2.4 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1988 | Liquid Biopsy for Colorectal Adenoma: Is the Exosomal miRNA Derived From Organoid a Potential Diagnostic Biomarker?. Clinical and Translational Gastroenterology, 2021, 12, e00356. | 1.3 | 22 |
| 1991 | Emerging Brainâ€Pathophysiologyâ€Mimetic Platforms for Studying Neurodegenerative Diseases: Brain Organoids and Brainsâ€onâ€aâ€Chip. Advanced Healthcare Materials, 2021, 10, e2002119. | 3.9 | 27 |
| 1992 | Development in a Dishâ€"In Vitro Models of Mammalian Embryonic Development. Frontiers in Cell and Developmental Biology, 2021, 9, 655993. | 1.8 | 13 |
| 1993 | Advances in development and application of human organoids. 3 Biotech, 2021, 11, 257. | 1.1 | 31 |
| 1994 | Transcriptome profiling of human pluripotent stem cellâ€derived cerebellar organoids reveals faster commitment under dynamic conditions. Biotechnology and Bioengineering, 2021, 118, 2781-2803. | 1.7 | 20 |
| 1995 | Running the full human developmental clock in interspecies chimeras using alternative human stem cells with expanded embryonic potential. Npj Regenerative Medicine, 2021, 6, 25. | 2.5 | 7 |
| 1996 | From Laboratory Studies to Clinical Trials: Temozolomide Use in IDH-Mutant Gliomas. Cells, 2021, 10, 1225. | 1.8 | 17 |
| 1997 | A versatile polypharmacology platform promotes cytoprotection and viability of human pluripotent and differentiated cells. Nature Methods, 2021, 18, 528-541. | 9.0 | 72 |
| 1998 | Human-Specific Genes, Cortical Progenitor Cells, and Microcephaly. Cells, 2021, 10, 1209. | 1.8 | 23 |
| 1999 | All models are wrong, but some are useful: Establishing standards for stem cell-based embryo models. Stem Cell Reports, 2021, 16, 1117-1141. | 2.3 | 24 |
| 2000 | Human pluripotent stem cell-derived brain organoids as in vitro models for studying neural disorders and cancer. Cell and Bioscience, 2021, 11, 99. | 2.1 | 11 |
| 2001 | Ethical Aspects of Brain Organoid Research in News Reports: An Exploratory Descriptive Analysis. Medicina (Lithuania), 2021, 57, 532. | 0.8 | 7 |
| 2002 | Organoids: A new approach in toxicity testing of nanotherapeutics. Journal of Applied Toxicology, 2022, 42, 52-72. | 1.4 | 21 |
| 2003 | Development of 3D Cerebral Aggregates in the Brain Ventricles of Adult Mice. Russian Journal of Developmental Biology, 2021, 52, 164-175. | 0.1 | 1 |
| 2004 | Patient-Derived Cancer Organoids for Precision Oncology Treatment. Journal of Personalized Medicine, 2021, 11, 423. | 1.1 | 18 |
| 2005 | Human Induced Pluripotent Stem Cell-Based Modelling of Spinocerebellar Ataxias. Stem Cell Reviews and Reports, 2022, 18, 441-456. | 1.7 | 7 |
| 2006 | In Vitro Glioblastoma Models: A Journey into the Third Dimension. Cancers, 2021, 13, 2449. | 1.7 | 27 |
| 2007 | Predictable fabrication of pre-made alginate hydrogel microtubes for stem cell aggregation using needle-in-needle devices. Biofabrication, 2021, 13, 035043. | 3.7 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2008 | Length of the Neurogenic Periodâ€"A Key Determinant for the Generation of Upper-Layer Neurons During Neocortex Development and Evolution. Frontiers in Cell and Developmental Biology, 2021, 9, 676911. | 1.8 | 27 |
| 2009 | Cerebral organoids and their potential for studies of brain diseases in domestic animals. Veterinary Research, 2021, 52, 65. | 1.1 | 3 |
| 2010 | The Potential of Induced Pluripotent Stem Cells to Treat and Model Alzheimerâ€™s Disease. Stem Cells International, 2021, 2021, 1-16. | 1.2 | 4 |
| 2012 | Organoids for toxicology and genetic toxicology: applications with drugs and prospects for environmental carcinogenesis. Mutagenesis, 2022, 37, 143-154. | 1.0 | 12 |
| 2013 | Resolving organoid brain region identities by mapping single-cell genomic data to reference atlases. Cell Stem Cell, 2021, 28, 1148-1159.e8. | 5.2 | 63 |
| 2014 | Cardioids reveal self-organizing principles of human cardiogenesis. Cell, 2021, 184, 3299-3317.e22. | 13.5 | 227 |
| 2015 | A simple method to improve the quality and yield of human pluripotent stem cell-derived cerebral organoids. Heliyon, 2021, 7, e07350. | 1.4 | 6 |
| 2016 | Human iPSCs and Genome Editing Technologies for Precision Cardiovascular Tissue Engineering. Frontiers in Cell and Developmental Biology, 2021, 9, 639699. | 1.8 | 16 |
| 2017 | Proteasome stress in skeletal muscle mounts a long-range protective response that delays retinal and brain aging. Cell Metabolism, 2021, 33, 1137-1154.e9. | 7.2 | 45 |
| 2018 | Toward the nanoengineering of mature, well-patterned and vascularized organoids. Nanomedicine, 2021, 16, 1255-1258. | 1.7 | 3 |
| 2020 | Dissecting the Role of PCDH19 in Clustering Epilepsy by Exploiting Patient-Specific Models of Neurogenesis. Journal of Clinical Medicine, 2021, 10, 2754. | 1.0 | 13 |
| 2021 | Modeling Liver Organogenesis by Recreating Three-Dimensional Collective Cell Migration: A Role for TGFÎ² Pathway. Frontiers in Bioengineering and Biotechnology, 2021, 9, 621286. | 2.0 | 3 |
| 2022 | Structurally Dynamic Hydrogels for Biomedical Applications: Pursuing a Fine Balance between Macroscopic Stability and Microscopic Dynamics. Chemical Reviews, 2021, 121, 11149-11193. | 23.0 | 161 |
| 2023 | Gene Expression Profiles of Human Cerebral Organoids Identify PPAR Pathway and PKM2 as Key Markers for Oxygen-Glucose Deprivation and Reoxygenation. Frontiers in Cellular Neuroscience, 2021, 15, 605030. | 1.8 | 8 |
| 2025 | Neurodevelopmental signatures of narcotic and neuropsychiatric risk factors in 3D human-derived forebrain organoids. Molecular Psychiatry, 2021, 26, 7760-7783. | 4.1 | 20 |
| 2026 | Defense of COVID-19 by Human Organoids. Phenomics, 2021, 1, 113-128. | 0.9 | 8 |
| 2027 | Perspective: Extending the Utility of Three-Dimensional Organoids by Tissue Clearing Technologies. Frontiers in Cell and Developmental Biology, 2021, 9, 679226. | 1.8 | 12 |
| 2029 | Academic collaborative models fostering the translation of physiological in vitro systems from basic research into drug discovery. Drug Discovery Today, 2021, 26, 1369-1381. | 3.2 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2030 | Ethical Challenges in Organoid Use. BioTech, 2021, 10, 12. | 1.3 | 29 |
| 2031 | Exploiting hiPSCs in Leber's Hereditary Optic Neuropathy (LHON): Present Achievements and Future Perspectives. Frontiers in Neurology, 2021, 12, 648916. | 1.1 | 7 |
| 2032 | SETBP1 accumulation induces P53 inhibition and genotoxic stress in neural progenitors underlying neurodegeneration in Schinzel-Giedion syndrome. Nature Communications, 2021, 12, 4050. | 5.8 | 24 |
| 2034 | Three-Dimensional Cell Cultures as a Research Platform in Lung Diseases and COVID-19. Tissue Engineering and Regenerative Medicine, 2021, 18, 735-745. | 1.6 | 10 |
| 2035 | Generation and validation of APOE knockout human iPSC-derived cerebral organoids. STAR Protocols, 2021, 2, 100571. | 0.5 | 4 |
| 2037 | Dopamine Neuron Diversity: Recent Advances and Current Challenges in Human Stem Cell Models and Single Cell Sequencing. Cells, 2021, 10, 1366. | 1.8 | 9 |
| 2038 | Experimental Models for SARS-CoV-2 Infection. Molecules and Cells, 2021, 44, 377-383. | 1.0 | 6 |
| 2039 | Advanced Bio-Based Polymers for Astrocyte Cell Models. Materials, 2021, 14, 3664. | 1.3 | 7 |
| 2040 | The CTNNBIP1-CLSTN1 fusion transcript regulates human neocortical development. Cell Reports, 2021, 35, 109290. | 2.9 | 9 |
| 2041 | Balancing serendipity and reproducibility: Pluripotent stem cells as experimental systems for intellectual and developmental disorders. Stem Cell Reports, 2021, 16, 1446-1457. | 2.3 | 20 |
| 2042 | Harnessing organs-on-a-chip to model tissue regeneration. Cell Stem Cell, 2021, 28, 993-1015. | 5.2 | 36 |
| 2043 | From Brain Organoids to Networking Assembloids: Implications for Neuroendocrinology and Stress Medicine. Frontiers in Physiology, 2021, 12, 621970. | 1.3 | 22 |
| 2044 | Modeling pancreatic pathophysiology using genome editing of adult stem cell-derived and induced pluripotent stem cell (iPSC)-derived organoids. American Journal of Physiology - Renal Physiology, 2021, 320, G1142-G1150. | 1.6 | 4 |
| 2045 | The Effects of Environmental Adversities on Human Neocortical Neurogenesis Modeled in Brain Organoids. Frontiers in Molecular Biosciences, 2021, 8, 686410. | 1.6 | 14 |
| 2046 | Organoid Technology and the COVID Pandemic. , 0, , . | | 4 |
| 2047 | Synthetic scaffolds for 3D cell cultures and organoids: applications in regenerative medicine. Critical Reviews in Biotechnology, 2022, 42, 468-486. | 5.1 | 24 |
| 2048 | Analyzing Olfactory Neuron Precursors Non-Invasively Isolated through NADH FLIM as a Potential Tool to Study Oxidative Stress in Alzheimerâ€™s Disease. International Journal of Molecular Sciences, 2021, 22, 6311. | 1.8 | 7 |
| 2049 | DSCAM/PAK1 pathway suppression reverses neurogenesis deficits in iPSC-derived cerebral organoids from patients with Down syndrome. Journal of Clinical Investigation, 2021, 131, . | 3.9 | 67 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2050 | Progress in mimicking brain microenvironments to understand and treat neurological disorders. APL Bioengineering, 2021, 5, 020902. | 3.3 | 9 |
| 2051 | Developing liver organoids from induced pluripotent stem cells (iPSCs): An alternative source of organoid generation for liver cancer research. Cancer Letters, 2021, 508, 13-17. | 3.2 | 27 |
| 2052 | Axial elongation of caudalized human organoids mimics aspects of neural tube development. Development (Cambridge), 2021, 148, . | 1.2 | 47 |
| 2053 | The Application of Brain Organoid Technology in Stroke Research: Challenges and Prospects. Frontiers in Cellular Neuroscience, 2021, 15, 646921. | 1.8 | 14 |
| 2054 | Development of a quantitative prediction algorithm for target organ-specific similarity of human pluripotent stem cell-derived organoids and cells. Nature Communications, 2021, 12, 4492. | 5.8 | 3 |
| 2055 | Kidney organoid systems for studies of immune-mediated kidney diseases: challenges and opportunities. Cell and Tissue Research, 2021, 385, 457-473. | 1.5 | 11 |
| 2057 | Cerebral Organoidsâ€"Challenges to Establish a Brain Prototype. Cells, 2021, 10, 1790. | 1.8 | 12 |
| 2058 | Focus on the road to modelling cardiomyopathy in muscular dystrophy. Cardiovascular Research, 2022, 118, 1872-1884. | 1.8 | 1 |
| 2059 | Brain organoid: a 3D technology for investigating cellular composition and interactions in human neurological development and disease models in vitro. Stem Cell Research and Therapy, 2021, 12, 430. | 2.4 | 22 |
| 2060 | RGCC balances selfâ€renewal and neuronal differentiation of neural stem cells in the developing mammalian neocortex. EMBO Reports, 2021, 22, e51781. | 2.0 | 12 |
| 2061 | Multifaceted roles of centrosomes in development, health, and disease. Journal of Molecular Cell Biology, 2021, 13, 611-621. | 1.5 | 14 |
| 2062 | Epigenetic regulation during human cortical development: Seq-ing answers from the brain to the organoid. Neurochemistry International, 2021, 147, 105039. | 1.9 | 12 |
| 2063 | Microfabricated disk technology: Rapid scale up in midbrain organoid generation. Methods, 2022, 203, 465-477. | 1.9 | 15 |
| 2064 | Emerging hiPSC Models for Drug Discovery in Neurodegenerative Diseases. International Journal of Molecular Sciences, 2021, 22, 8196. | 1.8 | 9 |
| 2065 | To Better Generate Organoids, What Can We Learn From Teratomas?. Frontiers in Cell and Developmental Biology, 2021, 9, 700482. | 1.8 | 6 |
| 2066 | Human neuromuscular junction three-dimensional organoid models and the insight in motor disorders. Journal of Molecular Cell Biology, 2022, 13, 767-773. | 1.5 | 3 |
| 2067 | Aiding and Abetting Anhedonia: Impact of Inflammation on the Brain and Pharmacological Implications. Pharmacological Reviews, 2021, 73, 1084-1117. | 7.1 | 36 |
| 2068 | Human Induced Pluripotent Stem Cellâ€Derived Neural Progenitor Cells Produce Distinct Neural 3D In Vitro Models Depending on Alginate/Gellan Gum/Laminin Hydrogel Blend Properties. Advanced Healthcare Materials, 2021, 10, e2100131. | 3.9 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2069 | Phenotyping Neurodegeneration in Human iPSCs. Annual Review of Biomedical Data Science, 2021, 4, 83-100. | 2.8 | 3 |
| 2070 | An isoform of Dicer protects mammalian stem cells against multiple RNA viruses. Science, 2021, 373, 231-236. | 6.0 | 67 |
| 2071 | 3D organoids derived from the small intestine: An emerging tool for drug transport research. Acta Pharmaceutica Sinica B, 2021, 11, 1697-1707. | 5.7 | 14 |
| 2072 | Increased connectivity of hiPSC-derived neural networks in multiphase granular hydrogel scaffolds. Bioactive Materials, 2022, 9, 358-372. | 8.6 | 21 |
| 2073 | Three decades of ASD genetics: building a foundation for neurobiological understanding and treatment. Human Molecular Genetics, 2021, 30, R236-R244. | 1.4 | 22 |
| 2074 | The complexity of Alzheimerâ€™s disease: an evolving puzzle. Physiological Reviews, 2021, 101, 1047-1081. | 13.1 | 110 |
| 2075 | 3D biomaterial models of human brain disease. Neurochemistry International, 2021, 147, 105043. | 1.9 | 31 |
| 2076 | Newly established patient-derived organoid model of intracranial meningioma. Neuro-Oncology, 2021, 23, 1936-1948. | 0.6 | 26 |
| 2078 | Recent Trends and Perspectives in Cerebral Organoids Imaging and Analysis. Frontiers in Neuroscience, 2021, 15, 629067. | 1.4 | 17 |
| 2080 | The Use of Stem Cell-Derived Organoids in Disease Modeling: An Update. International Journal of Molecular Sciences, 2021, 22, 7667. | 1.8 | 34 |
| 2081 | Geneâ€“Environment Interactions in Developmental Neurotoxicity: a Case Study of Synergy between Chlorpyrifos and CHD8 Knockout in Human BrainSpheres. Environmental Health Perspectives, 2021, 129, 77001. | 2.8 | 41 |
| 2082 | Chick fetal organ spheroids as a model to study development and disease. BMC Molecular and Cell Biology, 2021, 22, 37. | 1.0 | 1 |
| 2083 | The evolution of our understanding of human development over the last 10 years. Nature Communications, 2021, 12, 4615. | 5.8 | 3 |
| 2084 | Modeling genetic epileptic encephalopathies using brain organoids. EMBO Molecular Medicine, 2021, 13, e13610. | 3.3 | 25 |
| 2085 | Future Match Making: When Pediatric Oncology Meets Organoid Technology. Frontiers in Cell and Developmental Biology, 2021, 9, 674219. | 1.8 | 6 |
| 2088 | Comparison of gene expression and activation of transcription factors in organoid-derived monolayer intestinal epithelial cells and organoids. Bioscience, Biotechnology and Biochemistry, 2021, 85, 2137-2144. | 0.6 | 6 |
| 2089 | Emerging Bioelectronics for Brain Organoid Electrophysiology. Journal of Molecular Biology, 2022, 434, 167165. | 2.0 | 29 |
| 2090 | Long Noncoding RNAs in Human Stemness and Differentiation. Trends in Cell Biology, 2021, 31, 542-555. | 3.6 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2091 | Spatial organization and transitions of spontaneous neuronal activities in the developing sensory cortex. Development Growth and Differentiation, 2021, 63, 323-339. | 0.6 | 7 |
| 2092 | Cell-Type-Specific High Throughput Toxicity Testing in Human Midbrain Organoids. Frontiers in Molecular Neuroscience, 2021, 14, 715054. | 1.4 | 19 |
| 2093 | Novel Scalable and Simplified System to Generate Microglia-Containing Cerebral Organoids From Human Induced Pluripotent Stem Cells. Frontiers in Cellular Neuroscience, 2021, 15, 682272. | 1.8 | 23 |
| 2094 | Making Sense of Patient-Derived iPSCs, Transdifferentiated Neurons, Olfactory Neuronal Cells, and Cerebral Organoids as Models for Psychiatric Disorders. International Journal of Neuropsychopharmacology, 2021, 24, 759-775. | 1.0 | 8 |
| 2095 | Human brain organoids assemble functionally integrated bilateral optic vesicles. Cell Stem Cell, 2021, 28, 1740-1757.e8. | 5.2 | 77 |
| 2096 | The Gut-Brain Axis in Inflammatory Bowel Diseaseâ€"Current and Future Perspectives. International Journal of Molecular Sciences, 2021, 22, 8870. | 1.8 | 36 |
| 2097 | Real-Time Non-Invasive and Direct Determination of Lactate Dehydrogenase Activity in Cerebral Organoidsâ€"A New Method to Characterize the Metabolism of Brain Organoids?. Pharmaceuticals, 2021, 14, 878. | 1.7 | 2 |
| 2098 | Microfluidic device with brain extracellular matrix promotes structural and functional maturation of human brain organoids. Nature Communications, 2021, 12, 4730. | 5.8 | 164 |
| 2099 | A human forebrain organoid model of fragile X syndrome exhibits altered neurogenesis and highlights new treatment strategies. Nature Neuroscience, 2021, 24, 1377-1391. | 7.1 | 80 |
| 2100 | Organoids in modelling infectious diseases. Drug Discovery Today, 2022, 27, 223-233. | 3.2 | 14 |
| 2101 | An Afro-Communitarian Relational Approach to Brain Surrogates Research. Neuroethics, 2021, 14, 561-574. | 1.7 | 4 |
| 2103 | Augmin deficiency in neural stem cells causes p53-dependent apoptosis and aborts brain development. ELife, 2021, 10, . | 2.8 | 11 |
| 2107 | Generation of caudal-type serotonin neurons and hindbrain-fate organoids from hPSCs. Stem Cell Reports, 2021, 16, 1938-1952. | 2.3 | 29 |
| 2110 | Modeling Sporadic Alzheimer's Disease in Human Brain Organoids under Serum Exposure. Advanced Science, 2021, 8, e2101462. | 5.6 | 66 |
| 2111 | Organoid modeling of Zika and herpes simplex virus 1 infections reveals virus-specific responses leading to microcephaly. Cell Stem Cell, 2021, 28, 1362-1379.e7. | 5.2 | 67 |
| 2112 | Deafness-in-a-dish: modeling hereditary deafness with inner ear organoids. Human Genetics, 2022, 141, 347-362. | 1.8 | 10 |
| 2113 | Brain Organoids: Filling the Need for a Human Model of Neurological Disorder. Biology, 2021, 10, 740. | 1.3 | 12 |
| 2114 | Engineering mechanobiology through organoidsâ€onâ€chip: AÂstrategy to boost therapeutics. Journal of Tissue Engineering and Regenerative Medicine, 2021, 15, 883-899. | 1.3 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2115 | Modeling schizophrenia with iPS cell technology and disease mouse models. Neuroscience Research, 2022, 175, 46-52. | 1.0 | 5 |
| 2116 | Characterization of an in vitro 3D intestinal organoid modelÂby using massive RNAseq-based transcriptome profiling. Scientific Reports, 2021, 11, 16668. | 1.6 | 8 |
| 2118 | Organoids: a novel modality in disease modeling. Bio-Design and Manufacturing, 2021, 4, 689-716. | 3.9 | 33 |
| 2119 | Optimization of cerebral organoids: a more qualified model for Alzheimerâ€™s disease research. Translational Neurodegeneration, 2021, 10, 27. | 3.6 | 14 |
| 2120 | The Age of Brain Organoids: Tailoring Cell Identity and Functionality for Normal Brain Development and Disease Modeling. Frontiers in Neuroscience, 2021, 15, 674563. | 1.4 | 18 |
| 2121 | Modeling neurodegeneration with mutant-tau organoids. Cell, 2021, 184, 4377-4379. | 13.5 | 7 |
| 2122 | Bioengineered embryoids mimic post-implantation development in vitro. Nature Communications, 2021, 12, 5140. | 5.8 | 35 |
| 2123 | The power and the promise of organoid models for cancer precision medicine with next-generation functional diagnostics and pharmaceutical exploitation. Translational Oncology, 2021, 14, 101126. | 1.7 | 8 |
| 2124 | Generation of hiPSC-Derived Functional Dopaminergic Neurons in Alginate-Based 3D Culture. Frontiers in Cell and Developmental Biology, 2021, 9, 708389. | 1.8 | 13 |
| 2125 | The San Diego Nathan Shock Center: tackling the heterogeneity of aging. GeroScience, 2021, 43, 2139-2148. | 2.1 | 2 |
| 2126 | Pre-clinical Investigation of Rett Syndrome Using Human Stem Cell-Based Disease Models. Frontiers in Neuroscience, 2021, 15, 698812. | 1.4 | 10 |
| 2127 | Modeling the Human Body on Microfluidic Chips. Trends in Biotechnology, 2021, 39, 838-852. | 4.9 | 53 |
| 2128 | Advancing models of neural development with biomaterials. Nature Reviews Neuroscience, 2021, 22, 593-615. | 4.9 | 60 |
| 2129 | Chlorpyrifos Disrupts Acetylcholine Metabolism Across Model Blood-Brain Barrier. Frontiers in Bioengineering and Biotechnology, 2021, 9, 622175. | 2.0 | 7 |
| 2130 | Next-Generation Human Cerebral Organoids as Powerful Tools To Advance NeuroHIV Research. MBio, 2021, 12, e0068021. | 1.8 | 10 |
| 2131 | Heart Organoids and Engineered Heart Tissues: Novel Tools for Modeling Human Cardiac Biology and Disease. Biomolecules, 2021, 11, 1277. | 1.8 | 24 |
| 2132 | Neural differentiation medium for human pluripotent stem cells to model physiological glucose levels in human brain. Brain Research Bulletin, 2021, 173, 141-149. | 1.4 | 1 |
| 2133 | ELAVL4, splicing, and glutamatergic dysfunction precede neuron loss in MAPT mutation cerebral organoids. Cell, 2021, 184, 4547-4563.e17. | 13.5 | 73 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2135 | Modeling PTEN overexpression-induced microcephaly in human brain organoids. Molecular Brain, 2021, 14, 131. | 1.3 | 12 |
| 2136 | Cortical organoids model early brain development disrupted by 16p11.2 copy number variants in autism. Molecular Psychiatry, 2021, 26, 7560-7580. | 4.1 | 61 |
| 2137 | Pediatric brain tumors as a developmental disease. Current Opinion in Oncology, 2021, 33, 608-614. | 1.1 | 2 |
| 2138 | Bioengineering Approaches for the Advanced Organoid Research. Advanced Materials, 2021, 33, e2007949. | 11.1 | 48 |
| 2139 | Generating Self-Assembling Human Heart Organoids Derived from Pluripotent Stem Cells. Journal of Visualized Experiments, 2021, , . | 0.2 | 6 |
| 2140 | Complex Organ Construction from Human Pluripotent Stem Cells for Biological Research and Disease Modeling with New Emerging Techniques. International Journal of Molecular Sciences, 2021, 22, 10184. | 1.8 | 4 |
| 2142 | Asymmetric cell division of mammary stem cells. Cell Division, 2021, 16, 5. | 1.1 | 15 |
| 2143 | Three-dimensional-engineered bioprinted in vitro human neural stem cell self-assembling culture model constructs of Alzheimer's disease. Bioactive Materials, 2022, 11, 192-205. | 8.6 | 15 |
| 2144 | Deciphering and reconstitution of positional information in the human brain development. Cell Regeneration, 2021, 10, 29. | 1.1 | 4 |
| 2145 | iPSC toolbox for understanding and repairing disrupted brain circuits in autism. Molecular Psychiatry, 2021, , . | 4.1 | 3 |
| 2146 | Multiplexed single-cell analysis of organoid signaling networks. Nature Protocols, 2021, 16, 4897-4918. | 5.5 | 23 |
| 2147 | Bioengineering methods for organoid systems. Biology of the Cell, 2021, 113, 475-491. | 0.7 | 8 |
| 2148 | Advance in Human Epithelial-Derived Organoids Research. Molecular Pharmaceutics, 2021, 18, 3931-3950. | 2.3 | 3 |
| 2149 | Brain Organoids: Studying Human Brain Development and Diseases in a Dish. Stem Cells International, 2021, 2021, 1-16. | 1.2 | 10 |
| 2150 | Environmental exposures impact the nervous system in a life stage-specific manner. Neuroforum, 2021, . | 0.2 | 0 |
| 2151 | Organ-Chip Models: Opportunities for Precision Medicine in Pancreatic Cancer. Cancers, 2021, 13, 4487. | 1.7 | 17 |
| 2152 | Drug screening by uniform patient derived colorectal cancer hydro-organoids. Biomaterials, 2021, 276, 121004. | 5.7 | 12 |
| 2154 | Synthetic modified Fezf2 mRNA (modRNA) with concurrent small molecule SIRT1 inhibition enhances refinement of cortical subcerebral/corticospinal neuron identity from mouse embryonic stem cells. PLoS ONE, 2021, 16, e0254113. | 1.1 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2155 | Human iPSC-Derived Glia as a Tool for Neuropsychiatric Research and Drug Development. International Journal of Molecular Sciences, 2021, 22, 10254. | 1.8 | 8 |
| 2156 | Brain regionalization by Polycombâ€group proteins and chromatin accessibility. BioEssays, 2021, 43, e2100155. | 1.2 | 2 |
| 2157 | Vascular deficiencies in renal organoids and ex vivo kidney organogenesis. Developmental Biology, 2021, 477, 98-116. | 0.9 | 23 |
| 2158 | The Role of Sonic Hedgehog in Human Holoprosencephaly and Short-Rib Polydactyly Syndromes. International Journal of Molecular Sciences, 2021, 22, 9854. | 1.8 | 8 |
| 2159 | Engineered Human Induced Pluripotent Cells Enable Genetic Code Expansion in Brain Organoids. ChemBioChem, 2021, 22, 3208-3213. | 1.3 | 3 |
| 2160 | Current tools to interrogate microglial biology. Neuron, 2021, 109, 2805-2819. | 3.8 | 30 |
| 2161 | Histopathological features of SARS-CoV-2 infection and relationships with organoid technology. Journal of International Medical Research, 2021, 49, 030006052110443. | 0.4 | 0 |
| 2162 | Drug discovery oncology in a mouse: concepts, models and limitations. Future Science OA, 2021, 7, FSO737. | 0.9 | 6 |
| 2163 | Modelling the central nervous system: tissue engineering of the cellular microenvironment. Emerging Topics in Life Sciences, 2021, 5, 507-517. | 1.1 | 9 |
| 2164 | Establishment of the vertebrate body plan: Rethinking gastrulation through stem cell models of early embryogenesis. Developmental Cell, 2021, 56, 2405-2418. | 3.1 | 21 |
| 2165 | Engineering hydrogels for personalized disease modeling and regenerative medicine. Acta Biomaterialia, 2021, 132, 4-22. | 4.1 | 27 |
| 2166 | Light-Induced Differentiation of Forebrain Organoids by NVOC-SAG. Methods in Molecular Biology, 2022, 2374, 185-194. | 0.4 | 0 |
| 2167 | Organoid Models for Cancer Researchâ€"From Bed to Bench Side and Back. Cancers, 2021, 13, 4812. | 1.7 | 11 |
| 2168 | Viscoelasticity and Adhesion Signaling in Biomaterials Control Human Pluripotent Stem Cell Morphogenesis in 3D Culture. Advanced Materials, 2021, 33, e2101966. | 11.1 | 60 |
| 2169 | Neural stem cells derived from human midbrain organoids as a stable source for treating Parkinsonâ€™s disease. Progress in Neurobiology, 2021, 204, 102086. | 2.8 | 26 |
| 2170 | Screening Platforms for Genetic Epilepsiesâ€"Zebrafish, iPSC-Derived Neurons, and Organoids. Neurotherapeutics, 2021, 18, 1478-1489. | 2.1 | 10 |
| 2171 | Advances in neural organoid systems and their application in neurotoxicity testing of environmental chemicals. Genes and Environment, 2021, 43, 39. | 0.9 | 7 |
| 2172 | A roadmap for the Human Developmental Cell Atlas. Nature, 2021, 597, 196-205. | 13.7 | 114 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2173 | Cortical overgrowth in a preclinical forebrain organoid model of CNTNAP2-associated autism spectrum disorder. Nature Communications, 2021, 12, 4087. | 5.8 | 51 |
| 2174 | Human Embryos, Induced Pluripotent Stem Cells, and Organoids: Models to Assess the Effects of Environmental Plastic Pollution. Frontiers in Cell and Developmental Biology, 2021, 9, 709183. | 1.8 | 6 |
| 2175 | Biomaterial-guided stem cell organoid engineering for modeling development and diseases. Acta Biomaterialia, 2021, 132, 23-36. | 4.1 | 27 |
| 2176 | An Individual Patient's â€œBodyâ€•on Chipsâ€”How Organismoid Theory Can Translate Into Your Personal Precision Therapy Approach. Frontiers in Medicine, 2021, 8, 728866. | 1.2 | 6 |
| 2177 | Combining Automated Organoid Workflows with Artificial Intelligenceâ€Based Analyses: Opportunities to Build a New Generation of Interdisciplinary Highâ€Throughput Screens for Parkinson's Disease and Beyond. Movement Disorders, 2021, 36, 2745-2762. | 2.2 | 10 |
| 2178 | Generating Cerebral Organoids from Human Pluripotent Stem Cells. Methods in Molecular Biology, 2022, 2389, 177-199. | 0.4 | 5 |
| 2179 | The One-Stop Gyrification Station - Challenges and New Technologies. Progress in Neurobiology, 2021, 204, 102111. | 2.8 | 4 |
| 2180 | Organoid Technology: A Reliable Developmental Biology Tool for Organ-Specific Nanotoxicity Evaluation. Frontiers in Cell and Developmental Biology, 2021, 9, 696668. | 1.8 | 22 |
| 2181 | Inducible Pluripotent Stem Cells to Model and Treat Inherited Degenerative Diseases of the Outer Retina: 3D-Organoids Limitations and Bioengineering Solutions. Cells, 2021, 10, 2489. | 1.8 | 6 |
| 2182 | Applications of Brain Organoids for Infectious Diseases. Journal of Molecular Biology, 2022, 434, 167243. | 2.0 | 17 |
| 2183 | Human neural organoids: Models for developmental neurobiology and disease. Developmental Biology, 2021, 478, 102-121. | 0.9 | 18 |
| 2184 | Restoration of the defect in radial glial fiber migration and cortical plate organization in a brain organoid model of Fukuyama muscular dystrophy. IScience, 2021, 24, 103140. | 1.9 | 5 |
| 2185 | Heart organoids and tissue models for modeling development and disease. Seminars in Cell and Developmental Biology, 2021, 118, 119-128. | 2.3 | 23 |
| 2186 | Challenges for the Applications of Human Pluripotent Stem Cell-Derived Liver Organoids. Frontiers in Cell and Developmental Biology, 2021, 9, 748576. | 1.8 | 13 |
| 2187 | Induced pluripotent stem cells for 2D and 3D modelling the biological basis of schizophrenia and screening possible therapeutics. Brain Research Bulletin, 2021, 175, 48-62. | 1.4 | 4 |
| 2188 | Developmental dysregulation of excitatory-to-inhibitory GABA-polarity switch may underlie schizophrenia pathology: A monozygotic-twin discordant case analysis in human iPS cell-derived neurons. Neurochemistry International, 2021, 150, 105179. | 1.9 | 9 |
| 2189 | Exposure to cadmium induces neuroinflammation and impairs ciliogenesis in hESC-derived 3D cerebral organoids. Science of the Total Environment, 2021, 797, 149043. | 3.9 | 35 |
| 2190 | Engineering microcapsules to construct vascularized human brain organoids. Chemical Engineering Journal, 2021, 424, 130427. | 6.6 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2191 | The Evolving Role of Induced Pluripotent Stem Cells and Cerebral Organoids in Treating and Modeling Neurosurgical Diseases. World Neurosurgery, 2021, 155, 171-179. | 0.7 | 3 |
| 2192 | Abnormal amyloid beta metabolism in systemic abnormalities and Alzheimerâ€™s pathology: Insights and therapeutic approaches from periphery. Ageing Research Reviews, 2021, 71, 101451. | 5.0 | 20 |
| 2193 | Breaking the barrier: InÂvitro models to study choroid plexus development. Current Opinion in Cell Biology, 2021, 73, 41-49. | 2.6 | 5 |
| 2194 | Velvet antler polypeptide-loaded polyvinyl alcohol-sodium alginate hydrogels promote the differentiation of neural progenitor cells in 3D towards oligodendrocytes in vitro. European Journal of Pharmaceutical Sciences, 2021, 167, 106003. | 1.9 | 4 |
| 2195 | Tissue engineering, 3D-Bioprinting, morphogenesis modelling and simulation of biostructures: Relevance, underpinning biological principles and future trends. Bioprinting, 2021, 24, e00171. | 2.9 | 5 |
| 2196 | Reprogramming toward kidney regeneration: New technologies and future promises. , 2022, , 379-394. | | 0 |
| 2197 | Local tissue interactions govern pLL patterning in medaka. Developmental Biology, 2022, 481, 1-13. | 0.9 | 4 |
| 2198 | From human pluripotent stem cells to cerebral cortical neurons. , 2021, , 69-96. | | 0 |
| 2199 | Preparation and Culture of Organotypic Hippocampal Slices for the Analysis of Brain Metastasis and Primary Brain Tumor Growth. Methods in Molecular Biology, 2021, 2294, 59-77. | 0.4 | 1 |
| 2200 | Engineering human hepato-biliary-pancreatic organoids from pluripotent stem cells. Nature Protocols, 2021, 16, 919-936. | 5.5 | 30 |
| 2201 | Internet of Things Architecture for High Throughput Biology. SSRN Electronic Journal, 0, , . | 0.4 | 2 |
| 2202 | Development of Robust and Reproducible Murine Brain Organoids Endowed WithÂNetworks of Functional Neurons and Specific Brain-Region Signature. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2204 | Next generation human brain models: engineered flat brain organoids featuring gyrification. Biofabrication, 2021, 13, 011001. | 3.7 | 26 |
| 2205 | Self-Organizing Single-Rosette Brain Organoids From Human Pluripotent Stem Cells. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2206 | Microfluidic Culture Platforms in Neuroscience Research. , 2021, , 1-39. | | 1 |
| 2207 | Advances in 3D neuronal microphysiological systems: towards a functional nervous system on a chip. In Vitro Cellular and Developmental Biology - Animal, 2021, 57, 191-206. | 0.7 | 30 |
| 2208 | Modeling SARS-CoV-2 infection in individuals with opioid use disorder with brain organoids. Journal of Tissue Engineering, 2021, 12, 204173142098529. | 2.3 | 6 |
| 2209 | Generation of Human iPSC-derived Neural Progenitor Cells (NPCs) as Drug Discovery Model for Neurological and Mitochondrial Disorders. Bio-protocol, 2021, 11, e3939. | 0.2 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2210 | Investigating the pathophysiology of anorexia nervosa using induced pluripotent stem cells. , 2021, , 293-323. | | 0 |
| 2211 | Human induced pluripotent stem cell-based studies; a new route toward modeling autism spectrum disorders. , 2021, , 37-81. | | 0 |
| 2212 | Familial Alzheimerâ€™s Disease Mutations in PSEN1 Lead to Premature Human Stem Cell Neurogenesis. Cell Reports, 2021, 34, 108615. | 2.9 | 53 |
| 2213 | Microglia Orchestrate Neuronal Activity in Brain Organoids. SSRN Electronic Journal, 0, , . | 0.4 | 2 |
| 2214 | Human primary epidermal organoids enable modeling of dermatophyte infections. Cell Death and Disease, 2021, 12, 35. | 2.7 | 16 |
| 2215 | Neurons derived from human-induced pluripotent stem cells express mu and kappa opioid receptors. Neural Regeneration Research, 2021, 16, 653. | 1.6 | 7 |
| 2216 | Modeling of Hypoxic Brain Injury through 3D Human Neural Organoids. Cells, 2021, 10, 234. | 1.8 | 19 |
| 2217 | The construction of 3D cognitive networks from iPSCs through precise spatiotemporal specification. , 2021, , 45-76. | | 0 |
| 2218 | Pluripotent stem cellâ€“derived brain-region-specific organoids. , 2021, , 1-43. | | 0 |
| 2220 | Targeting Poison Exons to Treat Developmental and Epileptic Encephalopathy. Developmental Neuroscience, 2021, 43, 241-246. | 1.0 | 8 |
| 2221 | Types and Classification of Stem Cells. Pancreatic Islet Biology, 2021, , 25-49. | 0.1 | 2 |
| 2222 | Harnessing stem cells and biomaterials to promote neural repair. British Journal of Pharmacology, 2019, 176, 355-368. | 2.7 | 1 |
| 2227 | Stem Cells for Next Level Toxicity Testing in the 21st Century. Small, 2021, 17, e2006252. | 5.2 | 41 |
| 2228 | Vascularization of Human Brain Organoids. Stem Cells, 2021, 39, 1017-1024. | 1.4 | 63 |
| 2229 | Tissue Engineering for Musculoskeletal Regeneration and Disease Modeling. Handbook of Experimental Pharmacology, 2020, 265, 235-268. | 0.9 | 9 |
| 2230 | Gastruloids: Embryonic Organoids from Mouse Embryonic Stem Cells to Study Patterning and Development in Early Mammalian Embryos. Methods in Molecular Biology, 2021, 2258, 131-147. | 0.4 | 8 |
| 2231 | Human Stem/Progenitor Cell-Based Assays for Neurodevelopmental Toxicity Testing. Methods in Pharmacology and Toxicology, 2014, , 351-373. | 0.1 | 2 |
| 2232 | MTOC Organization and Competition During Neuron Differentiation. Results and Problems in Cell Differentiation, 2019, 67, 337-357. | 0.2 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2233 | Three-Dimensional Models for Studying Neurodegenerative and Neurodevelopmental Diseases. Advances in Experimental Medicine and Biology, 2020, 1195, 35-41. | 0.8 | 1 |
| 2234 | Organs-on-a-Chip. Advances in Experimental Medicine and Biology, 2020, 1230, 27-42. | 0.8 | 21 |
| 2235 | Zika virus Infection and Potential Mechanisms Implicated in Neuropsychiatric Complications. Agents and Actions Supplements, 2020, , 207-221. | 0.2 | 1 |
| 2236 | 3D Cell Culture Systems for the Development of Neural Interfaces. , 2020, , 201-236. | | 2 |
| 2237 | Using Two- and Three-Dimensional Human iPSC Culture Systems to Model Psychiatric Disorders. Advances in Neurobiology, 2020, 25, 237-257. | 1.3 | 6 |
| 2238 | Tissue Engineering Modalities and Nanotechnology. Learning Materials in Biosciences, 2020, , 289-322. | 0.2 | 4 |
| 2239 | Modelling Autistic Neurons with Induced Pluripotent Stem Cells. Advances in Anatomy, Embryology and Cell Biology, 2017, 224, 49-64. | 1.0 | 5 |
| 2240 | Engineering Cellular Assembly for Applications in Regenerative Medicine. Nanomedicine and Nanotoxicology, 2014, , 131-145. | 0.1 | 1 |
| 2241 | Microfluidic Approach to Cell Handling and Measurement. , 2016, , 85-106. | | 2 |
| 2242 | Induced Pluripotent Stem Cell-Derived Astroglia: A New Tool for Research Towards the Treatment of Alzheimerâ€™s Disease. Advances in Experimental Medicine and Biology, 2019, 1175, 383-405. | 0.8 | 5 |
| 2243 | A systems biology approach for studying neurodegenerative diseases. Drug Discovery Today, 2020, 25, 1146-1159. | 3.2 | 23 |
| 2244 | Impact of environmental neurotoxic: current methods and usefulness of human stem cells. Heliyon, 2020, 6, e05773. | 1.4 | 7 |
| 2245 | Spinâˆž: an updated miniaturized spinning bioreactor design for the generation of human cerebral organoids from pluripotent stem cells. HardwareX, 2019, 6, e00084. | 1.1 | 27 |
| 2246 | The Utility of Human Kidney Organoids in Modeling Kidney Disease. Seminars in Nephrology, 2020, 40, 188-198. | 0.6 | 11 |
| 2247 | Engineering organoids: a promising platform to understand biology and treat diseases. Cell Death and Differentiation, 2021, 28, 1-4. | 5.0 | 14 |
| 2248 | Human Brain Surrogates Research: The Onrushing Ethical Dilemma. American Journal of Bioethics, 2021, 21, 34-45. | 0.5 | 56 |
| 2249 | Pluripotent stem cells for neurodegenerative disease modeling: an expert view on their value to drug discovery. Expert Opinion on Drug Discovery, 2020, 15, 1081-1094. | 2.5 | 8 |
| 2250 | Better understanding the neurobiology of primary lateral sclerosis. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2020, 21, 35-46. | 1.1 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2251 | Trapping cell spheroids and organoids using digital acoustofluidics. Biofabrication, 2020, 12, 035025. | 3.7 | 29 |
| 2252 | Flow enhances phenotypic and maturation of adult rat liver organoids. Biofabrication, 2020, 12, 045035. | 3.7 | 6 |
| 2253 | Toward a neurospheroid niche model: optimizing embedded 3D bioprinting for fabrication of neurospheroid brain-like co-culture constructs. Biofabrication, 2021, 13, 015014. | 3.7 | 32 |
| 2254 | Investigation of human trophoblast invasion in vitro. Human Reproduction Update, 2020, 26, 501-513. | 5.2 | 155 |
| 2255 | Adult precision medicine: learning from the past to enhance the future. Neuro-Oncology Advances, 2021, 3, vdaa145. | 0.4 | 11 |
| 2318 | Models for discovery of targeted therapy in genetic epileptic encephalopathies. Journal of Neurochemistry, 2017, 143, 30-48. | 2.1 | 38 |
| 2319 | Integrated RNA Sequencing Reveals Epigenetic Impacts of Diesel Particulate Matter Exposure in Human Cerebral Organoids. Developmental Neuroscience, 2020, 42, 195-207. | 1.0 | 12 |
| 2320 | The endothelium, a key actor in organ development and hPSC-derived organoid vascularization. Journal of Biomedical Science, 2020, 27, 67. | 2.6 | 45 |
| 2321 | Generation of 3D human gastrointestinal organoids: principle and applications. Cell Regeneration, 2020, 9, 6. | 1.1 | 22 |
| 2322 | Organoid based personalized medicine: from bench to bedside. Cell Regeneration, 2020, 9, 21. | 1.1 | 67 |
| 2323 | Brain organoids and insights on human evolution. F1000Research, 2019, 8, 760. | 0.8 | 7 |
| 2324 | Recent advances in understanding neocortical development. F1000Research, 2019, 8, 1791. | 0.8 | 29 |
| 2325 | Generation of human midbrain organoids from induced pluripotent stem cells. MNI Open Research, 0, 3, 1. | 1.0 | 10 |
| 2326 | Heat Shock Alters the Expression of Schizophrenia and Autism Candidate Genes in an Induced Pluripotent Stem Cell Model of the Human Telencephalon. PLoS ONE, 2014, 9, e94968. | 1.1 | 39 |
| 2327 | Towards Long Term Cultivation of Drosophila Wing Imaginal Discs In Vitro. PLoS ONE, 2014, 9, e107333. | 1.1 | 30 |
| 2328 | Heterozygous Disruption of Autism susceptibility candidate 2 Causes Impaired Emotional Control and Cognitive Memory. PLoS ONE, 2015, 10, e0145979. | 1.1 | 36 |
| 2329 | Experimental study of tuberculosis: From animal models to complex cell systems and organoids. PLoS Pathogens, 2017, 13, e1006421. | 2.1 | 70 |
| 2330 | Past, Present, and Future of Brain Organoid Technology. Molecules and Cells, 2019, 42, 617-627. | 1.0 | 63 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2331 | EEG Signals based Brain Source Localization Approaches. International Journal of Advanced Computer Science and Applications, 2018, 9, . | 0.5 | 5 |
| 2332 | State-of-the-art of 3D cultures (organs-on-a-chip) in safety testing and pathophysiology. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 441-477. | 0.9 | 101 |
| 2333 | A human brain microphysiological system derived from induced pluripotent stem cells to study neurological diseases and toxicity. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 362-376. | 0.9 | 195 |
| 2334 | <scp>SARS</scp> â€CoVâ€2 targets neurons of 3D human brain organoids. EMBO Journal, 2020, 39, e106230. | 3.5 | 401 |
| 2335 | Cystatin B is essential for proliferation and interneuron migration in individuals with <scp>EPM</scp> 1 epilepsy. EMBO Molecular Medicine, 2020, 12, e11419. | 3.3 | 32 |
| 2336 | Vascularized Organoids: A More Complete Model. International Journal of Stem Cells, 2020, 14, 127-137. | 0.8 | 17 |
| 2337 | Human pluripotent stem cells in regenerative medicine: where do we stand?. Reproduction, 2018, 156, R143-R153. | 1.1 | 5 |
| 2338 | A review of the current understanding of nanoparticles protein corona composition. Medicine and Pharmacy Reports, 2020, 93, 342-350. | 0.2 | 12 |
| 2339 | Remodeling of mitochondrial morphology and function: an emerging hallmark of cellular reprogramming. Cell Stress, 2019, 3, 181-194. | 1.4 | 26 |
| 2340 | Recapitulating Amyloid ÃŸ and Tau Pathology in Human Neural Cell Culture Modelsâ€"Clinical Implications. US Neurology, 2015, 11, 102. | 0.2 | 19 |
| 2341 | Approach to Neurotoxicity using Human iPSC Neurons: Consortium for Safety Assessment using Human iPS Cells. Current Pharmaceutical Biotechnology, 2020, 21, 780-786. | 0.9 | 14 |
| 2342 | Organotypic Brain Slices of ADULT Transgenic Mice: A Tool to Study Alzheimerâ€™s Disease. Current Alzheimer Research, 2019, 16, 172-181. | 0.7 | 10 |
| 2343 | Tissue Regeneration: From Synthetic Scaffolds to Self-Organizing Morphogenesis. Current Stem Cell Research and Therapy, 2014, 9, 432-443. | 0.6 | 13 |
| 2344 | Breeding brains? Patientsâ€™ and laymenâ€™s perspectives on cerebral organoids. Regenerative Medicine, 2020, 15, 2351-2360. | 0.8 | 28 |
| 2345 | Modelos tridimensionais de cultura de cÃ©lulas: aproximando o in vitro do in vivo. VigilÃ¢ncia SanitÃ¡ria Em Debate: Sociedade, CiÃªncia & Tecnologia, 2018, 6, 72. | 0.3 | 3 |
| 2346 | Robust production of uniform human cerebral organoids from pluripotent stem cells. Life Science Alliance, 2020, 3, e202000707. | 1.3 | 52 |
| 2347 | Challenges and future perspectives for 3D cerebral organoids as a model for complex brain disorders. Neuroscience Research Notes, 2019, 2, 1-6. | 0.5 | 6 |
| 2348 | Human Induced Pluripotent Stem Cells : Clinical Significance and Applications in Neurologic Diseases. Journal of Korean Neurosurgical Society, 2019, 62, 493-501. | 0.5 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2349 | Directed midbrain and spinal cord neurogenesis from pluripotent stem cells to model development and disease in a dish. Frontiers in Neuroscience, 2014, 8, 109. | 1.4 | 22 |
| 2350 | Human Induced Pluripotent Stem Cell-Derived 3D-Neurospheres Are Suitable for Neurotoxicity Screening. Cells, 2020, 9, 1122. | 1.8 | 39 |
| 2351 | Advanced 3D Cell Culture Techniques in Micro-Bioreactors, Part II: Systems and Applications. Processes, 2021, 9, 21. | 1.3 | 9 |
| 2352 | Organoids of liver diseases: From bench to bedside. World Journal of Gastroenterology, 2019, 25, 1913-1927. | 1.4 | 12 |
| 2353 | Engineered 3D Silk-collagen-based Model of Polarized Neural Tissue. Journal of Visualized Experiments, 2015, , e52970. | 0.2 | 22 |
| 2354 | Modelling neurodegenerative diseases <em>in vitro</em>: Recent advances in 3D iPSC technologies. AIMS Cell and Tissue Engineering, 2018, 2, 1-23. | 0.4 | 7 |
| 2355 | Modeling rare pediatric neurogenetic disorders with IPSCs. AIMS Cell and Tissue Engineering, 2019, 3, 1-25. | 0.4 | 1 |
| 2356 | Stem cells, progenitors & regenerative medicine: A retrospection. Indian Journal of Medical Research, 2015, 141, 154. | 0.4 | 23 |
| 2357 | Novel advancements in three-dimensional neural tissue engineering and regenerative medicine. Neural Regeneration Research, 2015, 10, 352. | 1.6 | 15 |
| 2358 | Cerebral organoids exhibit mature neurons and astrocytes and recapitulate electrophysiological activity of the human brain. Neural Regeneration Research, 2019, 14, 757. | 1.6 | 48 |
| 2359 | Spinal cord organoids add an extra dimension to traditional motor neuron cultures. Neural Regeneration Research, 2019, 14, 1515. | 1.6 | 17 |
| 2360 | Using our mini-brains: cerebral organoids as an improved cellular model for human prion disease. Neural Regeneration Research, 2020, 15, 1019. | 1.6 | 9 |
| 2361 | HEAVEN: The Frankenstein effect. , 2016, 7, 623. | | 5 |
| 2362 | Molecular genetics of epilepsy: A clinician's perspective. Annals of Indian Academy of Neurology, 2017, 20, 96. | 0.2 | 11 |
| 2363 | Trends in the development of human stem cell-based non-animal drug testing models. Korean Journal of Physiology and Pharmacology, 2020, 24, 441-452. | 0.6 | 15 |
| 2364 | Application of Bioreactor in Stem Cell Culture. Journal of Biomedical Science and Engineering, 2017, 10, 485-499. | 0.2 | 7 |
| 2365 | Induced pluripotent stem cells for therapy personalization in pediatric patients: Focus on drug-induced adverse events. World Journal of Stem Cells, 2019, 11, 1020-1044. | 1.3 | 14 |
| 2366 | Importance of being Nernst: Synaptic activity and functional relevance in stem cell-derived neurons. World Journal of Stem Cells, 2015, 7, 899. | 1.3 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2367 | Differences and similarities between human and chimpanzee neural progenitors during cerebral cortex development. ELife, 2016, 5, . | 2.8 | 200 |
| 2368 | Addressing the ethical issues raised by synthetic human entities with embryo-like features. ELife, 2017, 6, . | 2.8 | 77 |
| 2369 | Speed and segmentation control mechanisms characterized in rhythmically-active circuits created from spinal neurons produced from genetically-tagged embryonic stem cells. ELife, 2017, 6, . | 2.8 | 40 |
| 2370 | Engineering induction of singular neural rosette emergence within hPSC-derived tissues. ELife, 2018, 7, . | 2.8 | 81 |
| 2371 | A fully automated high-throughput workflow for 3D-based chemical screening in human midbrain organoids. ELife, 2020, 9, . | 2.8 | 117 |
| 2372 | The analysis of living systems can generate both knowledge and illusions. ELife, 2020, 9, . | 2.8 | 6 |
| 2373 | mTOR signaling regulates the morphology and migration of outer radial glia in developing human cortex. ELife, 2020, 9, . | 2.8 | 74 |
| 2374 | Generation of human liver organoids from pluripotent stem cell-derived hepatic endoderms. PeerJ, 2020, 8, e9968. | 0.9 | 24 |
| 2375 | Tumor organoids for cancer research and personalized medicine. Cancer Biology and Medicine, 2021, 18, 0-0. | 1.4 | 7 |
| 2376 | A cis-acting structural variation at the ZNF558 locus controls a gene regulatory network in human brain development. Cell Stem Cell, 2022, 29, 52-69.e8. | 5.2 | 37 |
| 2377 | New guidelines for embryo and stem cell research. Nature Reviews Molecular Cell Biology, 2021, 22, 773-774. | 16.1 | 5 |
| 2378 | Opportunities and challenges of glioma organoids. Cell Communication and Signaling, 2021, 19, 102. | 2.7 | 19 |
| 2379 | iPSC-Derived Organoids as Therapeutic Models in Regenerative Medicine and Oncology. Frontiers in Medicine, 2021, 8, 728543. | 1.2 | 14 |
| 2380 | Organoid Models for Infectious Disease. Annual Review of Medicine, 2022, 73, 167-182. | 5.0 | 20 |
| 2381 | Folding brains: from development to disease modeling. Physiological Reviews, 2022, 102, 511-550. | 13.1 | 28 |
| 2383 | Organoids in image-based phenotypic chemical screens. Experimental and Molecular Medicine, 2021, 53, 1495-1502. | 3.2 | 50 |
| 2384 | Parkinson's Disease Phenotypes in Patient Neuronal Cultures and Brain Organoids Improved by <scp>2â€Hydroxypropylâ€Îî²â€€Cyclodextrin</scp> Treatment. Movement Disorders, 2022, 37, 80-94. | 2.2 | 37 |
| 2385 | Induction of inverted morphology in brain organoids by vertical-mixing bioreactors. Communications Biology, 2021, 4, 1213. | 2.0 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2386 | Human ALS/FTD brain organoid slice cultures display distinct early astrocyte and targetable neuronal pathology. Nature Neuroscience, 2021, 24, 1542-1554. | 7.1 | 72 |
| 2387 | Electron cryo-tomography reveals the subcellular architecture of growing axons in human brain organoids. ELife, 2021, 10, . | 2.8 | 21 |
| 2388 | Plexin-B2 orchestrates collective stem cell dynamics via actomyosin contractility, cytoskeletal tension and adhesion. Nature Communications, 2021, 12, 6019. | 5.8 | 16 |
| 2389 | Modeling Traumatic Brain Injury in Human Cerebral Organoids. Cells, 2021, 10, 2683. | 1.8 | 24 |
| 2390 | Autism in Three Dimensions: Using Brain Organoids to Study Potential Geneâ€“Environment Interactions. Environmental Health Perspectives, 2021, 129, 104003. | 2.8 | 2 |
| 2391 | Brain Organoids and Consciousness: Late Night Musings Inspired by Lewis Thomas. Cambridge Quarterly of Healthcare Ethics, 2021, 30, 557-560. | 0.5 | 3 |
| 2392 | Effects of early geometric confinement on the transcriptomic profile of human cerebral organoids. BMC Biotechnology, 2021, 21, 59. | 1.7 | 11 |
| 2393 | Recent Advances in Three-Dimensional Stem Cell Culture Systems and Applications. Stem Cells International, 2021, 2021, 1-13. | 1.2 | 23 |
| 2394 | Neuronal excitatory-to-inhibitory balance is altered in cerebral organoid models of genetic neurological diseases. Molecular Brain, 2021, 14, 156. | 1.3 | 25 |
| 2396 | Patient-Derived Induced Pluripotent Stem Cell Models for Phenotypic Screening in the Neuronal Ceroid Lipofuscinoses. Molecules, 2021, 26, 6235. | 1.7 | 4 |
| 2397 | Biobanking of human gut organoids for translational research. Experimental and Molecular Medicine, 2021, 53, 1451-1458. | 3.2 | 21 |
| 2398 | The proteomic architecture of schizophrenia iPSC-derived cerebral organoids reveals alterations in GWAS and neuronal development factors. Translational Psychiatry, 2021, 11, 541. | 2.4 | 28 |
| 2399 | Unraveling Human Brain Development and Evolution Using Organoid Models. Frontiers in Cell and Developmental Biology, 2021, 9, 737429. | 1.8 | 9 |
| 2401 | The potential and limitations of intrahepatic cholangiocyte organoids to study inborn errors of metabolism. Journal of Inherited Metabolic Disease, 2022, 45, 353-365. | 1.7 | 4 |
| 2402 | Neurotransmitter signaling regulates distinct phases of multimodal human interneuron migration. EMBO Journal, 2021, 40, e108714. | 3.5 | 16 |
| 2403 | Current Status and Challenges of Stem Cell Treatment for Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2021, 84, 917-935. | 1.2 | 8 |
| 2405 | Neocortical development and epilepsy: insights from focal cortical dysplasia and brain tumours. Lancet Neurology, The, 2021, 20, 943-955. | 4.9 | 47 |
| 2406 | Deciphering the mechanisms underlying brain alterations and cognitive impairment in congenital myotonic dystrophy. Neurobiology of Disease, 2021, 160, 105532. | 2.1 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2407 | Three-dimensionalÂculture models to study glioblastoma â€" current trends and future perspectives. Current Opinion in Pharmacology, 2021, 61, 91-97. | 1.7 | 11 |
| 2408 | Micro/nanoengineered technologies for human pluripotent stem cells maintenance and differentiation. Nano Today, 2021, 41, 101310. | 6.2 | 11 |
| 2409 | Generation of offspring-producing 3D ovarian organoids derived from female germline stem cells and their application in toxicological detection. Biomaterials, 2021, 279, 121213. | 5.7 | 29 |
| 2410 | è‡¨åºŠå¿œç”¨ã«å‘ã‘ãŸè…Žè‡“å†ç”Ÿç”©ç©¶ â€"ç¬¬58å›žæ—¥æœ¬é€æžå»»å¦ä¼šæ•™è‚²è¬›æ¼”ã‚ˆã‚Šâ€". Nihon Tōseki Igakkai Zasshi | 0.0 | 0 |
| 2411 | Stem cells mimic human brain. Nature, 0, , . | 13.7 | 0 |
| 2412 | Towards the use of human embryonic stem cells in the clinical setting: recent progress. Postdoc Journal, 0, , . | 0.4 | 0 |
| 2413 | Advances in Human Pluripotent Stem Cells for Regenerative Medicine and Drug Discovery. Journal of Tissue Science & Engineering, 2014, 05, . | 0.2 | 0 |
| 2414 | Researches for iPS Cell-based Transplantation : Current Status and Issues. Spinal Surgery, 2014, 28, 252-257. | 0.0 | 0 |
| 2415 | The Future Challenges for the Clinical Application of Reprogrammed Cells. , 2014, 04, . | | 0 |
| 2416 | The Potential Brain Drain from Environmental Exposures on the Methylome and Genome Across Generations. , 2014, , 375-406. | | 0 |
| 2417 | The launch of Advances in Regenerative Biology. Advances in Regenerative Biology, 2014, 1, 25850. | 0.2 | 0 |
| 2418 | Directed Differentiation of Human Pluripotent Stem Cells into Lung and Airway Epithelial Cells. Pancreatic Islet Biology, 2015, , 265-285. | 0.1 | 0 |
| 2420 | How induced pluripotent stem cells are informing drug discovery in psychiatry. Swiss Medical Weekly, 2016, 146, w14241. | 0.8 | 2 |
| 2421 | Migration Guidance of Human iPSC-derived Neurons by a Two-dimensional Patterning. IEEJ Transactions on Electronics, Information and Systems, 2016, 136, 1268-1276. | 0.1 | 0 |
| 2422 | Use of Stem Cells in Toxicology. , 2017, , 177-194. | | 0 |
| 2423 | 6 Huntingtonâ€™s Disease and Stem Cells. , 2017, , 115-144. | | 0 |
| 2428 | Spatio-Temporally Patterned Neuroectoderm Tissue Recapitulates Early Neural Tube Morphogenesis and Pathogenesis. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2431 | Three-dimensional Human Axon Tracts Derived From Cerebral Organoids. SSRN Electronic Journal, 0, , . | 0.4 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2432 | Cerebral organoids: a promising model in cellular technologies. Vavilovskii Zhurnal Genetiki I Selektsii, 2018, 22, 168-178. | 0.4 | 0 |
| 2440 | Organoids: The Future of Medicine. California Agriculture, 2019, 23, . | 0.0 | 0 |
| 2441 | miRNA as a Marker for In Vitro Neurotoxicity Testing and Related Neurological Disorders. Neuromethods, 2019, , 255-281. | 0.2 | 1 |
| 2442 | Comparative Efficacy of 3Dimensional (3D) Cell Culture Organoids Vs 2Dimensional (2D) Cell Cultures Vs Experimental Animal Models In Disease modeling, Drug development, And Drug Toxicity Testing. International Journal of Current Research and Review (discontinued), 2019, 11, 11-17. | 0.1 | 4 |
| 2444 | Systems Biology Perspectives for Studying Neurodevelopmental Events. , 0, , . | | 0 |
| 2452 | Building a better model of the retina. ELife, 2019, 8, . | 2.8 | 3 |
| 2454 | Biopharmaceutical molecules. , 2020, , 31-68. | | 1 |
| 2455 | The Dilemma of Human Brain Surrogates: Scientific Opportunities, Ethical Concerns. , 2020, , 371-399. | | 12 |
| 2463 | Human Forebrain Organoids from Induced Pluripotent Stem Cells: A Novel Approach to Model Repair of Ionizing Radiation-Induced DNA Damage in Human Neurons. Radiation Research, 2020, 194, 191. | 0.7 | 10 |
| 2467 | â€˜Consciousnessoidsâ€™: clues and insights from human cerebral organoids for the study of consciousness. Neuroscience of Consciousness, 2021, 2021, niab029. | 1.4 | 14 |
| 2468 | Tumor organoids: synergistic applications, current challenges, and future prospects in cancer therapy. Cancer Communications, 2021, 41, 1331-1353. | 3.7 | 48 |
| 2469 | Cep55 regulation of PI3K/Akt signaling is required for neocortical development and ciliogenesis. PLoS Genetics, 2021, 17, e1009334. | 1.5 | 4 |
| 2470 | Advances in Modeling Alzheimer's Disease In Vitro. Advanced NanoBiomed Research, 2021, 1, 2100097. | 1.7 | 10 |
| 2471 | Non-Animal Models in Experimental Subarachnoid Hemorrhage Research: Potentials and the Dilemma of the Translation from Bench to Bedside. Translational Stroke Research, 2022, 13, 218-221. | 2.3 | 1 |
| 2472 | Vascularization of iNSC spheroid in a 3D spheroidâ€onâ€aâ€chip platform enhances neural maturation. Biotechnology and Bioengineering, 2022, 119, 566-574. | 1.7 | 20 |
| 2473 | Human Organoids for Predictive Toxicology Research and Drug Development. Frontiers in Genetics, 2021, 12, 767621. | 1.1 | 40 |
| 2474 | Loss of Oligodendrocytes by Oxidative Phosphorylation Inhibitor Rotenone and its Reversal by Phenylbutyrate (PB) in Human Brain Developmental Organoid Model. Translational Neuroscience Research and Reviews, 2020, 3, . | 0.0 | 0 |
| 2475 | Cell Therapy for Stroke: A Mechanistic Analysis. Neurosurgery, 2021, 88, 733-745. | 0.6 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2476 | Building a Non-ionic, Non-electronic, Non-algorithmic Artificial Brain: Cortex and Connectome Interaction in a Humanoid Bot Subject (HBS). Advances in Intelligent Systems and Computing, 2021, , 245-278. | 0.5 | 5 |
| 2478 | Methods for Controlled Induction of Singular Rosette Cytoarchitecture Within Human Pluripotent Stem Cell-Derived Neural Multicellular Assemblies. Methods in Molecular Biology, 2021, 2258, 193-203. | 0.4 | 1 |
| 2480 | Ariadneâ€™s Thread in the Developing Cerebral Cortex: Mechanisms Enabling the Guiding Role of the Radial Glia Basal Process during Neuron Migration. Cells, 2021, 10, 3. | 1.8 | 8 |
| 2481 | Alternative Models in Biomedical Research: In Silico, InÂVitro, ExÂVivo, and Nontraditional InÂVivo Approaches. , 2022, , 925-966. | | 1 |
| 2482 | Cortical spheroids display oscillatory network dynamics. Lab on A Chip, 2021, 21, 4586-4595. | 3.1 | 4 |
| 2483 | In vitro disease and organ model. , 2020, , 629-668. | | 0 |
| 2485 | Embryonic Stem Cells. , 2020, , 315-365. | | 0 |
| 2486 | Holistic Thinking and the Worldviews-Based Learning Framework. Encyclopedia of the UN Sustainable Development Goals, 2020, , 407-419. | 0.0 | 0 |
| 2487 | Three-dimensional models of human brain development. , 2020, , 257-278. | | 2 |
| 2488 | Introduction: A Decade Teaching Stem Cell Biology. Learning Materials in Biosciences, 2020, , 1-9. | 0.2 | 0 |
| 2489 | The contribution of human pluripotent stem cells to the study of myotonic dystrophy type 1. , 2020, , 161-186. | | 0 |
| 2490 | Development of a 3-D Organoid System Using Human Induced Pluripotent Stem Cells to Model Idiopathic Autism. Advances in Neurobiology, 2020, 25, 259-297. | 1.3 | 3 |
| 2495 | PARP Inhibition in Prostate Cancer With Homologous Recombination Repair Alterations. JCO Precision Oncology, 2021, 5, 1639-1649. | 1.5 | 7 |
| 2496 | Establishment and characterization of prostate organoids from treatmentâ€'naÃ¯ve patients with prostate cancer. Oncology Letters, 2021, 23, 6. | 0.8 | 12 |
| 2497 | Materials Chemistry of Neural Interface Technologies and Recent Advances in Three-Dimensional Systems. Chemical Reviews, 2022, 122, 5277-5316. | 23.0 | 31 |
| 2498 | Dissecting the complexities of Alzheimer disease with in vitro models of the human brain. Nature Reviews Neurology, 2022, 18, 25-39. | 4.9 | 30 |
| 2499 | Developmental defects and impaired network excitability in a cerebral organoidÂmodel ofÂKCNJ11 p.V59M-related neonatal diabetes. Scientific Reports, 2021, 11, 21590. | 1.6 | 7 |
| 2500 | Regenerative Engineering: Current Applications and Future Perspectives. Frontiers in Surgery, 2021, 8, 731031. | 0.6 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2501 | Extracellular LGALS3BP regulates neural progenitor position and relates to human cortical complexity. Nature Communications, 2021, 12, 6298. | 5.8 | 21 |
| 2502 | Biofidelic dynamic compression of human cortical spheroids reproduces neurotrauma phenotypes. DMM Disease Models and Mechanisms, 2021, 14, . | 1.2 | 7 |
| 2509 | Human Glioblastoma Organoids to Model Brain Tumor Heterogeneity Ex Vivo. Neuromethods, 2021, , 133-158. | 0.2 | 0 |
| 2517 | Your brain under the microscope: the promise of stem cells. Cerebrum: the Dana Forum on Brain Science, 2014, 2014, 1. | 0.1 | 5 |
| 2518 | The use of stem cells to study autism spectrum disorder. Yale Journal of Biology and Medicine, 2015, 88, 5-16. | 0.2 | 11 |
| 2520 | Value of Organoids from Comparative Epithelia Models. Yale Journal of Biology and Medicine, 2015, 88, 367-74. | 0.2 | 7 |
| 2521 | Generating CNS organoids from human induced pluripotent stem cells for modeling neurological disorders. International Journal of Physiology, Pathophysiology and Pharmacology, 2017, 9, 101-111. | 0.8 | 20 |
| 2522 | Generation of Isthmic Organizer-Like Cells from Human Embryonic Stem Cells. Molecules and Cells, 2018, 41, 110-118. | 1.0 | 0 |
| 2523 | Gene Expression Patterns of Royan Human Embryonic Stem Cells Correlate with Their Propensity and Culture Systems. Cell Journal, 2019, 21, 290-299. | 0.2 | 0 |
| 2524 | Real-time observation of pancreatic beta cell differentiation from human induced pluripotent stem cells. American Journal of Translational Research (discontinued), 2019, 11, 3490-3504. | 0.0 | 6 |
| 2525 | Organoid models of glioblastoma: advances, applications and challenges. American Journal of Cancer Research, 2020, 10, 2242-2257. | 1.4 | 8 |
| 2526 | Differentiation of Human Pluripotent Stem Cells Into Specific Neural Lineages. Cell Transplantation, 2021, 30, 9636897211017829. | 1.2 | 0 |
| 2527 | Differentiation of Human Pluripotent Stem Cells Into Specific Neural Lineages. Cell Transplantation, 2021, 30, 096368972110178. | 1.2 | 5 |
| 2528 | Human induced pluripotent stem cellâ€“derived astrocytes progenitors as discovery platforms. , 2022, , 45-89. | | 0 |
| 2529 | Human induced pluripotent stem cell modeling of neurofibromatosis type 1. , 2022, , 1-30. | | 0 |
| 2530 | Modeling heritable kidney disease using human kidney iPSC-derived organoids. , 2022, , 275-296. | | 0 |
| 2531 | Induced pluripotent stem cells for modeling Noonan, Noonan Syndrome with Multiple Lentigines, and Costello Syndromes. , 2022, , 65-110. | | 0 |
| 2532 | Induced pluripotent stem cellâ€“derived neural stem cells. , 2022, , 1-17. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2533 | Modeling hereditary spastic paraplegias using induced pluripotent stem cells. , 2022, , 185-215. | | 0 |
| 2534 | Organoid Technology: Current Standing and Future Perspectives. Stem Cells, 2021, 39, 1625-1649. | 1.4 | 29 |
| 2535 | The ECM: To Scaffold, or Not to Scaffold, That Is the Question. International Journal of Molecular Sciences, 2021, 22, 12690. | 1.8 | 54 |
| 2536 | Harnessing the Potential of Human Pluripotent Stem Cell-Derived Motor Neurons for Drug Discovery in Amyotrophic Lateral Sclerosis: From the Clinic to the Laboratory and Back to the Patient. Frontiers in Drug Discovery, 2021, 1, . | 1.1 | 8 |
| 2537 | Energy Metabolism and Intracellular pH Alteration in Neural Spheroids Carrying Down Syndrome. Biomedicines, 2021, 9, 1741. | 1.4 | 2 |
| 2538 | Generation of heart-forming organoids from human pluripotent stem cells. Nature Protocols, 2021, 16, 5652-5672. | 5.5 | 24 |
| 2539 | A familiar study on self-limited childhood epilepsy patients using hIPSC-derived neurons shows a bias towards immaturity at the morphological, electrophysiological and gene expression levels. Stem Cell Research and Therapy, 2021, 12, 590. | 2.4 | 3 |
| 2540 | Building on a Solid Foundation: Adding Relevance and Reproducibility to Neurological Modeling Using Human Pluripotent Stem Cells. Frontiers in Cellular Neuroscience, 2021, 15, 767457. | 1.8 | 0 |
| 2541 | Generation of Interconnected Neural Clusters in Multiscale Scaffolds from Human-Induced Pluripotent Stem Cells. ACS Applied Materials & Interfaces, 2021, 13, 55939-55952. | 4.0 | 8 |
| 2543 | Methodologies for Generating Brain Organoids to Model Viral Pathogenesis in the CNS. Pathogens, 2021, 10, 1510. | 1.2 | 5 |
| 2544 | WWOX-Related Neurodevelopmental Disorders: Models and Future Perspectives. Cells, 2021, 10, 3082. | 1.8 | 8 |
| 2546 | Lipopolysaccharide-induced neuroinflammation disrupts functional connectivity and community structure in primary cortical microtissues. Scientific Reports, 2021, 11, 22303. | 1.6 | 3 |
| 2547 | In Vitro Recapitulation of Neuropsychiatric Disorders with Pluripotent Stem Cells-Derived Brain Organoids. International Journal of Environmental Research and Public Health, 2021, 18, 12431. | 1.2 | 5 |
| 2548 | Light-weight electrophysiology hardware and software platform for cloud-based neural recording experiments. Journal of Neural Engineering, 2021, 18, 066004. | 1.8 | 7 |
| 2549 | Human brain organogenesis: Toward a cellular understanding of development and disease. Cell, 2022, 185, 42-61. | 13.5 | 97 |
| 2550 | Rare Does Not Mean Worthless: How Rare Diseases Have Shaped Neurodevelopment Research in the NGS Era. Biomolecules, 2021, 11, 1713. | 1.8 | 3 |
| 2552 | Evaluation of growth, viability, and structural integrity of equine endometrial organoids following cryopreservation. Cryobiology, 2022, 104, 56-62. | 0.3 | 6 |
| 2553 | Schizophrenia is defined by cell-specific neuropathology and multiple neurodevelopmental mechanisms in patient-derived cerebral organoids. Molecular Psychiatry, 2022, 27, 1416-1434. | 4.1 | 57 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2554 | Insights to Heart Development and Cardiac Disease Models Using Pluripotent Stem Cell Derived 3D Organoids. Frontiers in Cell and Developmental Biology, 2021, 9, 788955. | 1.8 | 8 |
| 2555 | Protocol for controlled cortical impact in human cerebral organoids to model traumatic brain injury. STAR Protocols, 2021, 2, 100987. | 0.5 | 5 |
| 2556 | Murine cerebral organoids develop network of functional neurons and hippocampal brain region identity. IScience, 2021, 24, 103438. | 1.9 | 15 |
| 2558 | Time is of the essence: the molecular mechanisms of primary microcephaly. Genes and Development, 2021, 35, 1551-1578. | 2.7 | 34 |
| 2559 | Culturing human iPSC-derived neural progenitor cells on nanowire arrays: mapping the impact of nanowire length and array pitch on proliferation, viability, and membrane deformation. Nanoscale, 2021, 13, 20052-20066. | 2.8 | 3 |
| 2560 | Making neurons, made easy: The use of Neurogenin-2 in neuronal differentiation. Stem Cell Reports, 2022, 17, 14-34. | 2.3 | 35 |
| 2562 | When stem cells meet COVID-19: recent advances, challenges and future perspectives. Stem Cell Research and Therapy, 2022, 13, 9. | 2.4 | 9 |
| 2563 | CLARITY and Light-Sheet microscopy sample preparation in application to human cerebral organoids. Vavilovskii Zhurnal Genetiki I Selektsii, 2022, 25, 889-895. | 0.4 | 1 |
| 2564 | A Microfluidic Chip for Growth and Characterization of Adult Rat Hippocampal Progenitor Cell Neurospheroids. Journal of Microelectromechanical Systems, 2022, 31, 37-44. | 1.7 | 3 |
| 2565 | Redox modulation by plant polyphenols targeting vitagenes for chemoprevention and therapy: Relevance to novel anti-cancer interventions and mini-brain organoid technology. Free Radical Biology and Medicine, 2022, 179, 59-75. | 1.3 | 22 |
| 2566 | Two new applications in the study of angiogenesis the CAM assay: Acellular scaffolds and organoids. Microvascular Research, 2022, 140, 104304. | 1.1 | 9 |
| 2567 | Chapter 10. Post-Genomics, Cell Reprogramming, and the Obstacle to Biomedicine. , 2020, , 409-439. | | 0 |
| 2568 | Organoids in Tissue Transplantation. Advances in Experimental Medicine and Biology, 2021, , 45-64. | 0.8 | 3 |
| 2569 | Engineered models for studying blood-brain-barrier-associated brain physiology and pathology. Organoid, 0, 1, e10. | 0.0 | 2 |
| 2570 | Trends in the global organoid technology and industry: from organogenesis in a dish to the commercialization of organoids. Organoid, 0, 1, e11. | 0.0 | 1 |
| 2571 | è‚è„ç±»å™¨å®˜çš„ç”Ÿç©¿å±•åŠå°”ç”¨. Scientia Sinica Vitae, 2021, , . | 0.1 | 0 |
| 2572 | Fabrication of Biomaterials and Biostructures Based On Microfluidic Manipulation. Small, 2022, 18, e2105867. | 5.2 | 16 |
| 2573 | Regenerative Neurology and Regenerative Cardiology: Shared Hurdles and Achievements. International Journal of Molecular Sciences, 2022, 23, 855. | 1.8 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2574 | Organoids for modeling prion diseases. Cell and Tissue Research, 2023, 392, 97-111. | 1.5 | 6 |
| 2575 | Applications of noncoding RNAs in brain cancer patients. , 2022, , 17-64. | | 0 |
| 2577 | Gene-Edited Fluorescent and Mixed Cerebral Organoids. CRISPR Journal, 2022, 5, 53-65. | 1.4 | 3 |
| 2579 | Human Brain Organoids as an In Vitro Model System of Viral Infectious Diseases. Frontiers in Immunology, 2021, 12, 792316. | 2.2 | 12 |
| 2580 | Electrophysiological Monitoring of Neurochemical-Based Neural Signal Transmission in a Human Brainâ€“Spinal Cord Assembloid. ACS Sensors, 2022, 7, 409-414. | 4.0 | 12 |
| 2581 | Three-dimensional tissue model in direct contact with an on-chip vascular bed enabled by removable membranes. Lab on A Chip, 2022, 22, 641-651. | 3.1 | 9 |
| 2582 | Emerging Threeâ€Dimensional Integrated Systems for Biomimetic Neural InÂVitro Cultures. Advanced Materials Interfaces, 2022, 9, . | 1.9 | 10 |
| 2583 | Can We Ever Make a Humanoid Bot that Runs by Itself Without Any Software?. Studies in Rhythm Engineering, 2022, , 197-238. | 0.1 | 0 |
| 2584 | Central nervous system organoids for modeling neurodegenerative diseases. IUBMB Life, 2022, 74, 812-825. | 1.5 | 4 |
| 2585 | Bioengineering of brain organoids: Advancements and challenges. , 2022, , 399-414. | | 2 |
| 2586 | Emerging Roles of Microfluidics in Brain Research: From Cerebral Fluids Manipulation to Brain-on-a-Chip and Neuroelectronic Devices Engineering. Chemical Reviews, 2022, 122, 7142-7181. | 23.0 | 21 |
| 2587 | Androgens increase excitatory neurogenic potential in human brain organoids. Nature, 2022, 602, 112-116. | 13.7 | 47 |
| 2588 | Aligned Poly-<scp>l</scp>-lactic Acid Nanofibers Induce Self-Assembly of Primary Cortical Neurons into 3D Cell Clusters. ACS Biomaterials Science and Engineering, 2022, 8, 765-776. | 2.6 | 5 |
| 2590 | Revealing nervous and cardiac system interactions by iPSC-Based platforms. , 2022, , 1-28. | | 0 |
| 2591 | Toward the inÂvitro understanding of iPSC nucleoskeletal and cytoskeletal biology, and their relevance for organoid development. , 2022, , 137-150. | | 0 |
| 2592 | Challenges of Organoid Research. Annual Review of Neuroscience, 2022, 45, 23-39. | 5.0 | 59 |
| 2593 | High-throughput formation and image-based analysis of basal-in mammary organoids in 384-well plates. Scientific Reports, 2022, 12, 317. | 1.6 | 15 |
| 2594 | Stretchable Mesh Nanoelectronics for 3D Singleâ€Cell Chronic Electrophysiology from Developing Brain Organoids. Advanced Materials, 2022, 34, e2106829. | 11.1 | 44 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2595 | Autosomal Recessive Primary Microcephaly: Not Just a Small Brain. Frontiers in Cell and Developmental Biology, 2021, 9, 784700. | 1.8 | 28 |
| 2596 | Engineering Organoids for in vitro Modeling of Phenylketonuria. Frontiers in Molecular Neuroscience, 2021, 14, 787242. | 1.4 | 6 |
| 2597 | Patient-Derived InÂVitro Models of Microglial Function and Synaptic Engulfment in Schizophrenia. Biological Psychiatry, 2022, 92, 470-479. | 0.7 | 20 |
| 2598 | hiPSC disease modeling with 3D organoids. , 2022, , 63-93. | | 0 |
| 2599 | Epilepsy Research Now in 3D: Harnessing the Power of Brain Organoids in Epilepsy. Epilepsy Currents, 2022, 22, 135-136. | 0.4 | 1 |
| 2600 | Induced pluripotent stem cell models for mitochondrial disorders. , 2022, , 151-165. | | 0 |
| 2601 | Modeling Somatic Mutations Associated With Neurodevelopmental Disorders in Human Brain Organoids. Frontiers in Molecular Neuroscience, 2021, 14, 787243. | 1.4 | 4 |
| 2602 | Organotypic and Microphysiological Human Tissue Models for Drug Discovery and Developmentâ€"Current State-of-the-Art and Future Perspectives. Pharmacological Reviews, 2022, 74, 141-206. | 7.1 | 23 |
| 2603 | Biomaterials-based strategies for in vitro neural models. Biomaterials Science, 2022, 10, 1134-1165. | 2.6 | 7 |
| 2604 | Reaching into the toolbox: Stem cell models to study neuropsychiatric disorders. Stem Cell Reports, 2022, 17, 187-210. | 2.3 | 13 |
| 2605 | IPSC-derived models in Africa: An HIV perspective. Biochimie, 2022, 196, 153-160. | 1.3 | 1 |
| 2606 | Overcoming the barriers of two-dimensional cell culture systems with three-dimensional cell culture systems: techniques, drug discovery, and biomedical applications. , 2022, , 179-229. | | 0 |
| 2607 | Single-cell transcription profiles in Bloom syndrome patients link BLM deficiency with altered condensin complex expression signatures. Human Molecular Genetics, 2022, 31, 2185-2193. | 1.4 | 2 |
| 2608 | Applications of human induced pluripotent stem cell and human embryonic stem cell models for substance use disorders. , 2022, , 153-177. | | 1 |
| 2610 | A multimodal 3D neuro-microphysiological system with neurite-trapping microelectrodes. Biofabrication, 2022, 14, 025004. | 3.7 | 11 |
| 2611 | Therapeutic potential of induced pluripotent stem cellâ€"derived extracellular vesicles. , 2022, , 393-449. | | 0 |
| 2612 | Expression of the transcription factor PU.1 induces the generation of microglia-like cells in human cortical organoids. Nature Communications, 2022, 13, 430. | 5.8 | 49 |
| 2613 | Amplification of human interneuron progenitors promotes brain tumors and neurological defects. Science, 2022, 375, eabf5546. | 6.0 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2614 | Modeling human neurodevelopmental diseases with brain organoids. Cell Regeneration, 2022, 11, 1. | 1.1 | 22 |
| 2615 | Harnessing the Power of Stem Cell Models to Study Shared Genetic Variants in Congenital Heart Diseases and Neurodevelopmental Disorders. Cells, 2022, 11, 460. | 1.8 | 0 |
| 2616 | Long-Term Effects of Nanoscale Magnetite on Human Forebrain-like Tissue Development in Stem-Cell-Derived Cortical Spheroids. ACS Biomaterials Science and Engineering, 2022, 8, 801-813. | 2.6 | 5 |
| 2617 | Human iPSC-Derived Neural Models for Studying Alzheimerâ€™s Disease: from Neural Stem Cells to Cerebral Organoids. Stem Cell Reviews and Reports, 2022, 18, 792-820. | 1.7 | 25 |
| 2619 | Modeling Developmental Brain Diseases Using Human Pluripotent Stem Cells-Derived Brain Organoids â€“ Progress and Perspective. Journal of Molecular Biology, 2022, 434, 167386. | 2.0 | 15 |
| 2621 | Human Organoids and Organsâ€onâ€Chips for Addressing COVIDâ€19 Challenges. Advanced Science, 2022, 9, e2105187. | 5.6 | 19 |
| 2622 | Injection and electroporation of plasmid DNA into human cortical organoids. STAR Protocols, 2022, 3, 101129. | 0.5 | 4 |
| 2624 | Bio-inspired engineering of a perfusion culture platform for guided three-dimensional nerve cell growth and differentiation. Lab on A Chip, 2022, 22, 1006-1017. | 3.1 | 13 |
| 2625 | iPSC-based disease modeling and drug discovery in cardinal neurodegenerative disorders. Cell Stem Cell, 2022, 29, 189-208. | 5.2 | 71 |
| 2626 | The Application of Brain Organoids in Assessing Neural Toxicity. Frontiers in Molecular Neuroscience, 2022, 15, 799397. | 1.4 | 11 |
| 2627 | In vivo development and singleâ€cell transcriptome profiling of human brain organoids. Cell Proliferation, 2022, , e13201. | 2.4 | 3 |
| 2628 | Human Brain Organoids and Consciousness. Neuroethics, 2022, 15, 1. | 1.7 | 23 |
| 2629 | The microbiotaâ€gutâ€brain axis and epilepsy from a multidisciplinary perspective: Clinical evidence and technological solutions for improvement of in vitro preclinical models. Bioengineering and Translational Medicine, 2022, 7, . | 3.9 | 10 |
| 2630 | Generation of human induced pluripotent stem cell-derived cerebral organoids for cellular and molecular characterization. STAR Protocols, 2022, 3, 101173. | 0.5 | 4 |
| 2631 | Lineage recording in human cerebral organoids. Nature Methods, 2022, 19, 90-99. | 9.0 | 93 |
| 2632 | Microglia-like Cells Promote Neuronal Functions in Cerebral Organoids. Cells, 2022, 11, 124. | 1.8 | 50 |
| 2633 | From Spheroids to Organoids: The Next Generation of Model Systems of Human Cardiac Regeneration in a Dish. International Journal of Molecular Sciences, 2021, 22, 13180. | 1.8 | 27 |
| 2634 | Generation of iPSC-Derived Brain Organoids for Drug Testing and Toxicological Evaluation. Methods in Molecular Biology, 2022, 2474, 93-105. | 0.4 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2635 | Towards More Human and Humane Testing: The Role of the Device Supplier Industry. ATLA Alternatives To Laboratory Animals, 2022, 50, 62-70. | 0.7 | 2 |
| 2636 | Toward Understanding Neurodegeneration Using Brain Organoids. Pancreatic Islet Biology, 2022, , 91-107. | 0.1 | 0 |
| 2637 | Plumbing our organs: Lessons from vascular development to instruct lab generated tissues. Current Topics in Developmental Biology, 2022, 148, 165-194. | 1.0 | 5 |
| 2638 | Establishment of In Vitro Brain Models for AON Delivery. Methods in Molecular Biology, 2022, 2434, 257-264. | 0.4 | 1 |
| 2640 | Patient-derived functional organoids as a personalized approach for drug screening against hepatobiliary cancers. Advances in Cancer Research, 2022, , 319-341. | 1.9 | 2 |
| 2641 | The Organoids: Derivations and Applications. Pancreatic Islet Biology, 2022, , 1-19. | 0.1 | 0 |
| 2642 | Engineering neurovascular organoids with 3D printed microfluidic chips. Lab on A Chip, 2022, 22, 1615-1629. | 3.1 | 73 |
| 2643 | From engineered heart tissue to cardiac organoid. Theranostics, 2022, 12, 2758-2772. | 4.6 | 21 |
| 2645 | Unraveling pathological mechanisms in neurological disorders: the impact of cell-based and organoid models. Neural Regeneration Research, 2022, 17, 2131. | 1.6 | 6 |
| 2647 | A Simple Method for Generating Cerebral Organoids from Human Pluripotent Stem Cells. International Journal of Stem Cells, 2022, 15, 95-103. | 0.8 | 3 |
| 2648 | Human spinal cord in vitro differentiation pace is initially maintained in heterologous embryonic environments. ELife, 2022, 11, . | 2.8 | 7 |
| 2649 | Modeling the Human Brain With ex vivo Slices and in vitro Organoids for Translational Neuroscience. Frontiers in Neuroscience, 2022, 16, 838594. | 1.4 | 16 |
| 2650 | Application Progress of Organoids in Colorectal Cancer. Frontiers in Cell and Developmental Biology, 2022, 10, 815067. | 1.8 | 8 |
| 2651 | Impaired p53-Mediated DNA Damage Response Contributes to Microcephaly in Nijmegen Breakage Syndrome Patient-Derived Cerebral Organoids. Cells, 2022, 11, 802. | 1.8 | 7 |
| 2652 | Heart in a Dish: From Traditional 2D Differentiation Protocols to Cardiac Organoids. Frontiers in Cell and Developmental Biology, 2022, 10, 855966. | 1.8 | 6 |
| 2653 | Generation of Cortical Brain Organoid with Vascularization by Assembling with Vascular Spheroid. International Journal of Stem Cells, 2022, 15, 85-94. | 0.8 | 20 |
| 2654 | BrewerIX enables allelic expression analysis of imprinted and X-linked genes from bulk and single-cell transcriptomes. Communications Biology, 2022, 5, 146. | 2.0 | 2 |
| 2655 | Biosensors to Monitor Cell Activity in 3D Hydrogel-Based Tissue Models. Sensors, 2022, 22, 1517. | 2.1 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2656 | Neural Organoids, a Versatile Model for Neuroscience. Molecules and Cells, 2022, 45, 53-64. | 1.0 | 6 |
| 2657 | Cerebral Organoids Maintain the Expression of Neural Stem Cell-Associated Glycoepitopes and Extracellular Matrix. Cells, 2022, 11, 760. | 1.8 | 8 |
| 2658 | Patient-derived cellular models of primary ciliopathies. Journal of Medical Genetics, 2022, , jmedgenet-2021-108315. | 1.5 | 5 |
| 2659 | Engineering Brain Organoids: Toward Mature Neural Circuitry with an Intact Cytoarchitecture. International Journal of Stem Cells, 2022, 15, 41-59. | 0.8 | 11 |
| 2660 | Post-transcriptional and Post-translational Modifications of Primary Cilia: How to Fine Tune Your Neuronal Antenna. Frontiers in Cellular Neuroscience, 2022, 16, 809917. | 1.8 | 6 |
| 2663 | Region Specific Brain Organoids to Study Neurodevelopmental Disorders. International Journal of Stem Cells, 2022, 15, 26-40. | 0.8 | 14 |
| 2666 | Pursuit of Perfection? On Brain Organoids as Models. AJOB Neuroscience, 2022, 13, 79-80. | 0.6 | 4 |
| 2667 | Brain and Retinal Organoids for Disease Modeling: The Importance of In Vitro Bloodâ€“Brain and Retinal Barriers Studies. Cells, 2022, 11, 1120. | 1.8 | 5 |
| 2669 | Physiological Electric Field: A Potential Construction Regulator of Human Brain Organoids. International Journal of Molecular Sciences, 2022, 23, 3877. | 1.8 | 8 |
| 2670 | Present Application and Perspectives of Organoid Imaging Technology. Bioengineering, 2022, 9, 121. | 1.6 | 18 |
| 2671 | Modeling PCDH19-CE: From 2D Stem Cell Model to 3D Brain Organoids. International Journal of Molecular Sciences, 2022, 23, 3506. | 1.8 | 1 |
| 2672 | Production of human spinal-cord organoids recapitulating neural-tube morphogenesis. Nature Biomedical Engineering, 2022, 6, 435-448. | 11.6 | 40 |
| 2673 | Application of tumoroids derived from advanced colorectal cancer patients to predict individual response to chemotherapy. Journal of Chemotherapy, 2023, 35, 104-116. | 0.7 | 6 |
| 2674 | Transcellular propagation of fibrillar Î±-synuclein from enteroendocrine to neuronal cells requires cell-to-cell contact and is Rab35-dependent. Scientific Reports, 2022, 12, 4168. | 1.6 | 19 |
| 2677 | Stem cellâ€based regionâ€specific brain organoids: Novel models to understand neurodevelopmental defects. Birth Defects Research, 2022, 114, 1003-1013. | 0.8 | 1 |
| 2678 | Principles for the design of multicellular engineered living systems. APL Bioengineering, 2022, 6, 010903. | 3.3 | 17 |
| 2679 | Human Brain Organoids as Models for Central Nervous System Viral Infection. Viruses, 2022, 14, 634. | 1.5 | 20 |
| 2680 | Optical tissue clearing associated with 3D imaging: application in preclinical and clinical studies. Histochemistry and Cell Biology, 2022, 157, 497-511. | 0.8 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2681 | Moving To A New Dimension: 3D Kidney Cultures For Kidney Regeneration. Current Opinion in Biomedical Engineering, 2022, , 100379. | 1.8 | 0 |
| 2682 | Modeling Human Primary Microcephaly With hiPSC-Derived Brain Organoids Carrying CPAP-E1235V Disease-Associated Mutant Protein. Frontiers in Cell and Developmental Biology, 2022, 10, 830432. | 1.8 | 8 |
| 2683 | Deficiency of N-glycanase 1 perturbs neurogenesis and cerebral development modeled by human organoids. Cell Death and Disease, 2022, 13, 262. | 2.7 | 4 |
| 2684 | AUTS2 Syndrome: Molecular Mechanisms and Model Systems. Frontiers in Molecular Neuroscience, 2022, 15, 858582. | 1.4 | 14 |
| 2686 | Orthogonally induced differentiation of stem cells for the programmatic patterning of vascularized organoids and bioprinted tissues. Nature Biomedical Engineering, 2022, 6, 449-462. | 11.6 | 52 |
| 2687 | Microglia integration into human midbrain organoids leads to increased neuronal maturation and functionality. Glia, 2022, 70, 1267-1288. | 2.5 | 51 |
| 2691 | Superoxide dismutase isozymes in cerebral organoids from autism spectrum disorder patients. Journal of Neural Transmission, 2022, , 1. | 1.4 | 1 |
| 2692 | Long-term adherence of human brain cells inÂvitro is enhanced by charged amine-based plasma polymer coatings. Stem Cell Reports, 2022, 17, 489-506. | 2.3 | 11 |
| 2694 | The Subventricular Zone in Glioblastoma: Genesis, Maintenance, and Modeling. Frontiers in Oncology, 2022, 12, 790976. | 1.3 | 11 |
| 2695 | Protective Effect of Human-Neural-Crest-Derived Nasal Turbinate Stem Cells against Amyloid-Î² Neurotoxicity through Inhibition of Osteopontin in a Human Cerebral Organoid Model of Alzheimerâ€™s Disease. Cells, 2022, 11, 1029. | 1.8 | 5 |
| 2696 | Creation and Development of Patient-Derived Organoids for Therapeutic Screening in Solid Cancer. Current Stem Cell Reports, 2022, 8, 107-117. | 0.7 | 2 |
| 2698 | Retinal Organoids and Retinal Prostheses: An Overview. International Journal of Molecular Sciences, 2022, 23, 2922. | 1.8 | 10 |
| 2699 | Synthetic developmental biology: Engineering approaches to guide multicellular organization. Stem Cell Reports, 2022, 17, 715-733. | 2.3 | 13 |
| 2700 | ZIKV Teratogenesis: Clinical Findings in Humans, Mechanisms and Experimental Models. Frontiers in Virology, 2022, 1, . | 0.7 | 0 |
| 2701 | Human forebrain organoids reveal connections between valproic acid exposure and autism risk. Translational Psychiatry, 2022, 12, 130. | 2.4 | 21 |
| 2702 | Mitigating Effect of Estrogen in Alzheimerâ€™s Disease-Mimicking Cerebral Organoid. Frontiers in Neuroscience, 2022, 16, 816174. | 1.4 | 10 |
| 2703 | Brain organoids, consciousness, ethics and moral status. Seminars in Cell and Developmental Biology, 2023, 144, 97-102. | 2.3 | 19 |
| 2704 | Emerging scaffold- and cellular-based strategies for brain tissue regeneration and imaging. In Vitro Models, 2022, 1, 129-150. | 1.0 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2705 | Application of Organoids in Carcinogenesis Modeling and Tumor Vaccination. Frontiers in Oncology, 2022, 12, 855996. | 1.3 | 2 |
| 2706 | In-vitro engineered human cerebral tissues mimic pathological circuit disturbances in 3D. Communications Biology, 2022, 5, 254. | 2.0 | 4 |
| 2707 | Prenatal Drugs and Their Effects on the Developing Brain: Insights From Three-Dimensional Human Organoids. Frontiers in Neuroscience, 2022, 16, 848648. | 1.4 | 4 |
| 2708 | 3D and organoid culture in research: physiology, hereditary genetic diseases and cancer. Cell and Bioscience, 2022, 12, 39. | 2.1 | 23 |
| 2709 | Advanced human developmental toxicity and teratogenicity assessment using human organoid models. Ecotoxicology and Environmental Safety, 2022, 235, 113429. | 2.9 | 32 |
| 2710 | Translational organoid technology â€“ the convergence of chemical, mechanical, and computational biology. Trends in Biotechnology, 2022, 40, 1121-1135. | 4.9 | 7 |
| 2711 | Consequences of Viral Infection and Cytokine Production During Pregnancy on Brain Development in Offspring. Frontiers in Immunology, 2022, 13, 816619. | 2.2 | 15 |
| 2712 | Chromatin Structure and Dynamics: Focus on Neuronal Differentiation and Pathological Implication. Genes, 2022, 13, 639. | 1.0 | 8 |
| 2713 | Upscaling biological complexity to boost neuronal and oligodendroglia maturation and improve in vitro developmental neurotoxicity (DNT) evaluation. Reproductive Toxicology, 2022, , . | 1.3 | 7 |
| 2714 | Astrocytes derived from ASD individuals alter behavior and destabilize neuronal activity through aberrant Ca2+ signaling. Molecular Psychiatry, 2022, 27, 2470-2484. | 4.1 | 26 |
| 2715 | Large-Scale Cortex-Core Structure Formation in Brain Organoids. Frontiers in Physics, 2022, 10, . | 1.0 | 2 |
| 2716 | Downregulation of neurodevelopmental gene expression in iPSC-derived cerebral organoids upon infection by human cytomegalovirus. IScience, 2022, 25, 104098. | 1.9 | 12 |
| 2718 | The Evolution of Complex Muscle Cell In Vitro Models to Study Pathomechanisms and Drug Development of Neuromuscular Disease. Cells, 2022, 11, 1233. | 1.8 | 7 |
| 2719 | Impaired neurogenesis alters brain biomechanics in a neuroprogenitor-based genetic subtype of congenital hydrocephalus. Nature Neuroscience, 2022, 25, 458-473. | 7.1 | 46 |
| 2720 | Zika virus infection accelerates Alzheimerâ€™s disease phenotypes in brain organoids. Cell Death Discovery, 2022, 8, 153. | 2.0 | 22 |
| 2721 | A suspension technique for efficient large-scale cancer organoid culturing and perturbation screens. Scientific Reports, 2022, 12, 5571. | 1.6 | 11 |
| 2722 | Human organoid models to study SARS-CoV-2 infection. Nature Methods, 2022, 19, 418-428. | 9.0 | 73 |
| 2723 | Heads or tails: making the spinal cord. Developmental Biology, 2022, 485, 80-92. | 0.9 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2724 | Human airway organoids and microplastic fibers: A new exposure model for emerging contaminants. Environment International, 2022, 163, 107200. | 4.8 | 25 |
| 2725 | Patterning of brain organoids derived from human pluripotent stem cells. Current Opinion in Neurobiology, 2022, 74, 102536. | 2.0 | 13 |
| 2726 | Abnormal mitochondria in Down syndrome iPSC-derived GABAergic interneurons and organoids. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2022, 1868, 166388. | 1.8 | 6 |
| 2727 | The application and research advances of organoids in clinical medicine. Scientia Sinica Vitae, 2023, 53, 221-237. | 0.1 | 1 |
| 2728 | Ethical Dimensions of Human Organoids Research. American Biology Teacher, 2021, 83, 575-578. | 0.1 | 0 |
| 2729 | Hydrogel Mechanics Influence the Growth and Development of Embedded Brain Organoids. ACS Applied Bio Materials, 2022, 5, 214-224. | 2.3 | 23 |
| 2730 | Patient-Derived Organoids in Precision Medicine: Drug Screening, Organoid-on-a-Chip and Living Organoid Biobank. Frontiers in Oncology, 2021, 11, 762184. | 1.3 | 53 |
| 2731 | The good, the bad, and the ugly: Evolutionary and pathological aspects of gene dosage alterations. PLoS Genetics, 2021, 17, e1009906. | 1.5 | 5 |
| 2733 | PNPLA3 as a therapeutic target for fatty liver disease: the evidence to date. Expert Opinion on Therapeutic Targets, 2021, 25, 1033-1043. | 1.5 | 22 |
| 2734 | Transcriptome Dynamics of Human Neuronal Differentiation From iPSC. Frontiers in Cell and Developmental Biology, 2021, 9, 727747. | 1.8 | 4 |
| 2735 | Altering Cell-Cell Interaction in Prenatal Alcohol Exposure Models: Insight on Cell-Adhesion Molecules During Brain Development. Frontiers in Molecular Neuroscience, 2021, 14, 753537. | 1.4 | 4 |
| 2737 | Establishment of Human Pluripotent Stem Cellâ€Derived Skin Organoids Enabled Pathophysiological Model of SARSâ€CoVâ€2 Infection. Advanced Science, 2022, 9, e2104192. | 5.6 | 18 |
| 2738 | A Cerebral Organoid Connectivity Apparatus to Model Neuronal Tract Circuitry. Micromachines, 2021, 12, 1574. | 1.4 | 5 |
| 2739 | Beyond Mendelian Inheritance: Genetic Buffering and Phenotype Variability. Phenomics, 2022, 2, 79-87. | 0.9 | 4 |
| 2740 | Guided Self-Assembly of ES-Derived Lung Progenitors into Biomimetic Tube Structures That Impact Cell Differentiation. Bioengineering, 2021, 8, 209. | 1.6 | 2 |
| 2741 | Assessment of Normal Tissue Radiosensitivity by Evaluating DNA Damage and Repair Kinetics in Human Brain Organoids. International Journal of Molecular Sciences, 2021, 22, 13195. | 1.8 | 3 |
| 2742 | Focus on organoids: cooperation and interconnection with extracellular vesicles â€“ Is this the future of in vitro modeling?. Seminars in Cancer Biology, 2022, 86, 367-381. | 4.3 | 5 |
| 2743 | Evolving features of human cortical development and the emerging roles of non-coding RNAs in neural progenitor cell diversity and function. Cellular and Molecular Life Sciences, 2022, 79, 1. | 2.4 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2744 | CDK5RAP2 loss-of-function causes premature cell senescence via the GSK3Î²/Î²-catenin-WIP1 pathway. Cell Death and Disease, 2022, 13, 9. | 2.7 | 2 |
| 2745 | Single-cell transcriptomics captures features of human midbrain development and dopamine neuron diversity in brain organoids. Nature Communications, 2021, 12, 7302. | 5.8 | 39 |
| 2746 | Gold nanoparticle-assisted delivery of brain-derived neurotrophic factor to cerebral organoids. Nano Research, 2022, 15, 3099-3105. | 5.8 | 0 |
| 2747 | Human iPSC-Derived Astrocytes: A Powerful Tool to Study Primary Astrocyte Dysfunction in the Pathogenesis of Rare Leukodystrophies. International Journal of Molecular Sciences, 2022, 23, 274. | 1.8 | 5 |
| 2748 | Effect of duty cycles of tumorâ€'treating fields onÂglioblastoma cells and normal brain organoids. International Journal of Oncology, 2021, 60, . | 1.4 | 4 |
| 2749 | Robotic high-throughput biomanufacturing and functional differentiation ofÂhuman pluripotent stem cells. Stem Cell Reports, 2021, 16, 3076-3092. | 2.3 | 34 |
| 2750 | Toward Construction of a Brain in a Dish: Cultured Neurons, Brain Organoids, and Beyond. The Brain & Neural Networks, 2021, 28, 151-161. | 0.1 | 0 |
| 2751 | LncRNA SOX1â€OT V1 acts as a decoy of HDAC10 to promote SOX1â€dependent hESC neuronal differentiation. EMBO Reports, 2022, 23, e53015. | 2.0 | 11 |
| 2752 | Activity-induced instabilities of brain organoids. European Physical Journal E, 2021, 44, 147. | 0.7 | 4 |
| 2753 | Transcriptomic Mapping of Neural Diversity, Differentiation and Functional Trajectory in iPSC-Derived 3D Brain Organoid Models. Cells, 2021, 10, 3422. | 1.8 | 7 |
| 2754 | Automatic Differentiation of Human Induced Pluripotent Stem Cells Toward Synchronous Neural Networks on an Arrayed Monolayer of Nanofiber Membrane. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2755 | What Makes Organoids Good Models of Human Neurogenesis?. Frontiers in Neuroscience, 2022, 16, 872794. | 1.4 | 5 |
| 2756 | Modeling common and rare genetic risk factors of neuropsychiatric disorders in human induced pluripotent stem cells. Schizophrenia Research, 2022, , . | 1.1 | 6 |
| 2757 | Media portrayal of ethical and social issues in brain organoid research. Philosophy, Ethics, and Humanities in Medicine, 2022, 17, 8. | 0.7 | 15 |
| 2758 | Development of Living â€œBio-Robotsâ€•for Autonomous Actuations. Journal of Robotics and Mechatronics, 2022, 34, 279-284. | 0.5 | 4 |
| 2759 | Transcending Dimensions in Apicomplexan Research: from Two-Dimensional to Three-Dimensional In Vitro Cultures. Microbiology and Molecular Biology Reviews, 2022, 86, e0002522. | 2.9 | 9 |
| 2760 | Current progress in brain organoid technology. Scientia Sinica Vitae, 2023, 53, 161-174. | 0.1 | 1 |
| 2761 | Specific metabolic response of patient-derived organoids to curcumin of colorectal cancer. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2022, 1203, 123260. | 1.2 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2762 | Perspectives on Mechanisms Supporting Neuronal Polarity From Small Animals to Humans. Frontiers in Cell and Developmental Biology, 2022, 10, 878142. | 1.8 | 2 |
| 2763 | In Vitro Model of Human Trophoblast in Early Placentation. Biomedicines, 2022, 10, 904. | 1.4 | 8 |
| 2764 | Characterization of HIV-1 Infection in Microglia-Containing Human Cerebral Organoids. Viruses, 2022, 14, 829. | 1.5 | 24 |
| 2766 | Engineered Neutral Phosphorous Dendrimers Protect Mouse Cortical Neurons and Brain Organoids from Excitotoxic Death. International Journal of Molecular Sciences, 2022, 23, 4391. | 1.8 | 6 |
| 2767 | What Are the Human-Specific Aspects of Neocortex Development?. Frontiers in Neuroscience, 2022, 16, 878950. | 1.4 | 7 |
| 2768 | Connecting past and present: single-cell lineage tracing. Protein and Cell, 2022, 13, 790-807. | 4.8 | 30 |
| 2769 | â€˜Channelingâ€™ therapeutic discovery for epileptic encephalopathy through iPSC technologies. Trends in Pharmacological Sciences, 2022, 43, 392-405. | 4.0 | 10 |
| 2849 | Therapeutic strategies of three-dimensional stem cell spheroids and organoids for tissue repair and regeneration. Bioactive Materials, 2023, 19, 50-74. | 8.6 | 57 |
| 2850 | Mapping and exploring the organoid state space using synthetic biology. Seminars in Cell and Developmental Biology, 2022, , . | 2.3 | 3 |
| 2851 | Extracellular Microenvironmental Control for Organoid Assembly. Tissue Engineering - Part B: Reviews, 2022, 28, 1209-1222. | 2.5 | 10 |
| 2852 | Characterization of human nasal organoids from chronic rhinosinusitis patients. Biology Open, 2022, , . | 0.6 | 1 |
| 2855 | Differentiation of Human Induced Pluripotent Stem Cells into Cortical Neurons to Advance Precision Medicine. Methods in Molecular Biology, 2022, 2429, 143-174. | 0.4 | 2 |
| 2856 | The application of intestinal organoids and their co-culture systems in the study of gastrointestinal diseases. Organoid, 0, 2, e3. | 0.0 | 3 |
| 2858 | Promising Developments in the Use of Induced Pluripotent Stem Cells in Research of ADHD. Current Topics in Behavioral Neurosciences, 2022, , . | 0.8 | 1 |
| 2859 | Assessment of a 3D neural spheroid model to detect pharmaceutical-induced neurotoxicity. ALTEX: Alternatives To Animal Experimentation, 0, , . | 0.9 | 2 |
| 2860 | Dysfunction of vesicular storage in young-onset Parkinson's patient-derived dopaminergic neurons and organoids revealed by single cell electrochemical cytometry. Chemical Science, 2022, 13, 6217-6223. | 3.7 | 8 |
| 2861 | Revealing the Impact of Mitochondrial Fitness During Early Neural Development Using Human Brain Organoids. Frontiers in Molecular Neuroscience, 2022, 15, 840265. | 1.4 | 1 |
| 2862 | Recent advances and challenges in organoid-on-a-chip technology. Organoid, 0, 2, e4. | 0.0 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2863 | Synthetic developmental biology: New tools to deconstruct and rebuild developmental systems. Seminars in Cell and Developmental Biology, 2023, 141, 33-42. | 2.3 | 12 |
| 2864 | Applications of Neural Organoids in Neurodevelopment and Regenerative Medicine. , 0, , . | | 0 |
| 2865 | The Patient-Derived Cancer Organoids: Promises and Challenges as Platforms for Cancer Discovery. Cancers, 2022, 14, 2144. | 1.7 | 5 |
| 2866 | A Blood Vessel Organoid Model Recapitulating Aspects of Vasculogenesis, Angiogenesis and Vessel Wall Maturation. Organoids, 2022, 1, 41-53. | 1.8 | 12 |
| 2867 | Organoids as Model Systems to Investigate Circadian Clock-Related Diseases and Treatments. Frontiers in Genetics, 2022, 13, 874288. | 1.1 | 1 |
| 2868 | Singling out motor neurons in the age of single-cell transcriptomics. Trends in Genetics, 2022, 38, 904-919. | 2.9 | 9 |
| 2869 | Organoids, Assembloids and Embryoids: New Avenues for Developmental Biology, Disease Modeling, Drug Testing and Toxicity Assessment without Animal Experimentation. Organoids, 2022, 1, 37-40. | 1.8 | 6 |
| 2870 | Recombinant Limb Assay as in Vivo Organoid Model. Frontiers in Cell and Developmental Biology, 2022, 10, 863140. | 1.8 | 1 |
| 2871 | Organoids and Commercialization. , 0, , . | | 2 |
| 2872 | To Model Developmental Risk in a Dish. American Journal of Psychiatry, 2022, 179, 319-321. | 4.0 | 2 |
| 2873 | Generation of vascularized brain organoids to study neurovascular interactions. ELife, 2022, 11, . | 2.8 | 94 |
| 2874 | Effects of spike protein and toxin-like peptides found in COVID-19 patients on human 3D neuronal/glial model undergoing differentiation: Possible implications for SARS-CoV-2 impact on brain development. Reproductive Toxicology, 2022, 111, 34-48. | 1.3 | 13 |
| 2875 | Neurotoxicity of phenylalanine on human iPSC-derived cerebral organoids. Molecular Genetics and Metabolism, 2022, 136, 132-144. | 0.5 | 7 |
| 2876 | Engineering multiscale structural orders for high-fidelity embryoids and organoids. Cell Stem Cell, 2022, 29, 722-743. | 5.2 | 19 |
| 2877 | Buprenorphine Exposure Alters the Development and Migration of Interneurons in the Cortex. Frontiers in Molecular Neuroscience, 2022, 15, . | 1.4 | 8 |
| 2878 | Use of standard U-bottom and V-bottom well plates to generate neuroepithelial embryoid bodies. PLoS ONE, 2022, 17, e0262062. | 1.1 | 4 |
| 2880 | Gastruloids: Pluripotent stem cell models of mammalian gastrulation and embryo engineering. Developmental Biology, 2022, 488, 35-46. | 0.9 | 20 |
| 2881 | Differentiation of brain and retinal organoids from confluent cultures of pluripotent stem cells connected by nerve-like axonal projections of optic origin. Stem Cell Reports, 2022, 17, 1476-1492. | 2.3 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2883 | The uses of 3D human brain organoids for neurotoxicity evaluations: A review. NeuroToxicology, 2022, 91, 84-93. | 1.4 | 18 |
| 2884 | Advances in three-dimensional bioprinted stem cell-based tissue engineering for cardiovascular regeneration. Journal of Molecular and Cellular Cardiology, 2022, 169, 13-27. | 0.9 | 8 |
| 2885 | Neuregulin-1/ErbB4 signaling modulates Plasmodium falciparum HRP2-induced damage to brain cortical organoids. IScience, 2022, 25, 104407. | 1.9 | 4 |
| 2886 | Organoids as a tool for understanding immune-mediated intestinal regeneration and development. Development (Cambridge), 2022, 149, . | 1.2 | 7 |
| 2887 | The ciliary gene INPP5E confers dorsal telencephalic identity to human cortical organoids by negatively regulating Sonic hedgehog signaling. Cell Reports, 2022, 39, 110811. | 2.9 | 3 |
| 2888 | Cell-line dependency in cerebral organoid induction: cautionary observations in Alzheimerâ€™s disease patient-derived induced pluripotent stem cells. Molecular Brain, 2022, 15, 46. | 1.3 | 1 |
| 2889 | Human Brain-Based Models Provide a Powerful Tool for the Advancement of Parkinsonâ€™s Disease Research and Therapeutic Development. Frontiers in Neuroscience, 2022, 16, . | 1.4 | 4 |
| 2890 | Bioelectric Potential in Next-Generation Organoids: Electrical Stimulation to Enhance 3D Structures of the Central Nervous System. Frontiers in Cell and Developmental Biology, 2022, 10, . | 1.8 | 8 |
| 2893 | Why Can Organoids Improve Current Organ-on-Chip Platforms?. Organoids, 2022, 1, 69-84. | 1.8 | 3 |
| 2895 | Cerebral Organoids for Modeling of HSV-1-Induced-Amyloid Î² Associated Neuropathology and Phenotypic Rescue. International Journal of Molecular Sciences, 2022, 23, 5981. | 1.8 | 9 |
| 2896 | Regionally defined proteomic profiles of human cerebral tissue and organoids reveal conserved molecular modules of neurodevelopment. Cell Reports, 2022, 39, 110846. | 2.9 | 7 |
| 2897 | 3D Neural Network Composed of Neurospheroid and Bionanohybrid on Microelectrode Array to Realize the Spatial Input Signal Recognition in Neurospheroid. Small Methods, 0, , 2200127. | 4.6 | 2 |
| 2898 | Advancing Tissue Decellularized Hydrogels for Engineering Human Organoids. Advanced Functional Materials, 2022, 32, . | 7.8 | 21 |
| 2899 | Across Dimensions: Developing 2D and 3D Human iPSC-Based Models of Fragile X Syndrome. Cells, 2022, 11, 1725. | 1.8 | 3 |
| 2900 | Metabolomics-based mass spectrometry methods to analyze the chemical content of 3D organoid models. Analyst, The, 2022, 147, 2918-2929. | 1.7 | 6 |
| 2901 | Hepatobiliary Organoids: The Current Status and Biomedical Applications. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2902 | AAEGAN Optimization by Purposeful Noise Injection for the Generation of Bright-Field Brain Organoid Images. , 2022, , . | | 1 |
| 2903 | Granular Matrigel: restructuring a trusted extracellular matrix material for improved permeability. Biomedical Materials (Bristol), 2022, 17, 045020. | 1.7 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2905 | Human organoids in basic research and clinical applications. Signal Transduction and Targeted Therapy, 2022, 7, . | 7.1 | 83 |
| 2907 | Exposure to the Amino Acids Histidine, Lysine, and Threonine Reduces mTOR Activity and Affects Neurodevelopment in a Human Cerebral Organoid Model. Nutrients, 2022, 14, 2175. | 1.7 | 2 |
| 2908 | Experimental approaches for manipulating choroid plexus epithelial cells. Fluids and Barriers of the CNS, 2022, 19, . | 2.4 | 17 |
| 2910 | Human cerebral spheroids undergo 4-aminopyridine-induced, activity associated changes in cellular composition and microrna expression. Scientific Reports, 2022, 12, . | 1.6 | 2 |
| 2912 | The future of stem cell therapies of Alzheimerâ€™s disease. Ageing Research Reviews, 2022, 80, 101655. | 5.0 | 5 |
| 2913 | Microglia in a Dishâ€"Which Techniques Are on the Menu for Functional Studies?. Frontiers in Cellular Neuroscience, 0, 16, . | 1.8 | 6 |
| 2914 | Cellular and molecular neurobiology of autism spectrum disorder. , 2022, , 215-244. | | 1 |
| 2915 | Transformational Applications of Human Cardiac Organoids in Cardiovascular Diseases. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 4 |
| 2916 | Modeling Neurodegenerative Diseases Using In Vitro Compartmentalized Microfluidic Devices. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 11 |
| 2917 | Utility of iPSC-Derived Cells for Disease Modeling, Drug Development, and Cell Therapy. Cells, 2022, 11, 1853. | 1.8 | 19 |
| 2919 | Automated high-speed 3D imaging of organoid cultures with multi-scale phenotypic quantification. Nature Methods, 2022, 19, 881-892. | 9.0 | 41 |
| 2920 | Zika Virus Strains and Dengue Virus Induce Distinct Proteomic Changes in Neural Stem Cells and Neurospheres. Molecular Neurobiology, 2022, 59, 5549-5563. | 1.9 | 2 |
| 2921 | Forebrain Organoids to Model the Cell Biology of Basal Radial Glia in Neurodevelopmental Disorders and Brain Evolution. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 5 |
| 2922 | Functional characterization of the schizophrenia associated gene <scp> AS3MT </scp> identifies a role in neuronal development. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 0, , . | 1.1 | 2 |
| 2923 | Enhanced cortical neural stem cell identity through short SMAD and WNT inhibition in human cerebral organoids facilitates emergence of outer radial glial cells. Nature Cell Biology, 2022, 24, 981-995. | 4.6 | 26 |
| 2924 | Disease Modeling of Neurodegenerative Disorders Using Direct Neural Reprogramming. Cellular Reprogramming, 0, , . | 0.5 | 4 |
| 2925 | Mitochondrial HSF1 triggers mitochondrial dysfunction and neurodegeneration in Huntington's disease. EMBO Molecular Medicine, 2022, 14, . | 3.3 | 18 |
| 2926 | Centrosome function is critical during terminal erythroid differentiation. EMBO Journal, 2022, 41, . | 3.5 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2927 | 264th ENMC International Workshop: Multi-system involvement in spinal muscular atrophy Hoofddorp, the Netherlands, November 19th â€“ 21st 2021. Neuromuscular Disorders, 2022, 32, 697-705. | 0.3 | 4 |
| 2929 | New Insights into the Neurodegeneration Mechanisms Underlying Riboflavin Transporter Deficiency (RTD): Involvement of Energy Dysmetabolism and Cytoskeletal Derangement. Biomedicines, 2022, 10, 1329. | 1.4 | 5 |
| 2930 | Human Brain Models of Intellectual Disability: Experimental Advances and Novelties. International Journal of Molecular Sciences, 2022, 23, 6476. | 1.8 | 0 |
| 2931 | 100 plus years of stem cell researchâ€”20 years of ISSCR. Stem Cell Reports, 2022, 17, 1248-1267. | 2.3 | 1 |
| 2932 | Application and prospects of high-throughput screening for in vitro neurogenesis. World Journal of Stem Cells, 2022, 14, 393-419. | 1.3 | 1 |
| 2933 | Global Trends of Stem Cell Precision Medicine Research (2018â€“2022): A Bibliometric Analysis. Frontiers in Surgery, 0, 9, . | 0.6 | 4 |
| 2934 | Aberrant induction of p19Arf-mediated cellular senescence contributes to neurodevelopmental defects. PLoS Biology, 2022, 20, e3001664. | 2.6 | 7 |
| 2935 | Molecular genetics of human developmental neurocranial anomalies: towards â€œprecision surgeryâ€• Cerebral Cortex, 2023, 33, 2912-2918. | 1.6 | 1 |
| 2936 | Study of BBB Dysregulation in Neuropathogenicity Using Integrative Human Model of Bloodâ€“Brain Barrier. Frontiers in Cellular Neuroscience, 0, 16, . | 1.8 | 12 |
| 2937 | Orgo-Seq integrates single-cell and bulk transcriptomic data to identify cell type specific-driver genes associated with autism spectrum disorder. Nature Communications, 2022, 13, . | 5.8 | 11 |
| 2939 | Stem-Cell-Based Modeling and Single-Cell Multiomics Reveal Gene Regulatory Mechanisms Underlying Human Skeletal Development. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 2941 | The Legal Requirements forâ€”and Limits toâ€”the Donorâ€™s and the Patientâ€™s Consent. Advances in Neuroethics, 2022, , 131-190. | 0.1 | 4 |
| 2942 | Building a Better Beast: Enhancing the Minds of Animals. Advances in Neuroethics, 2022, , 223-239. | 0.1 | 2 |
| 2943 | Development of Brain Organoids with Genome-Edited iPSC-Derived Brain Cells. Advances in Neuroethics, 2022, , 21-33. | 0.1 | 2 |
| 2944 | A gastruloid model of the interaction between embryonic and extra-embryonic cell types. Journal of Tissue Engineering, 2022, 13, 204173142211030. | 2.3 | 12 |
| 2946 | Glioblastoma, from disease understanding towards optimal cell-based in vitro models. Cellular Oncology (Dordrecht), 2022, 45, 527-541. | 2.1 | 8 |
| 2947 | Progress in Modeling Neural Tube Development and Defects by Organoid Reconstruction. Neuroscience Bulletin, 2022, 38, 1409-1419. | 1.5 | 1 |
| 2948 | A Survey of the Metabolic Landscape of the Developing Cerebellum at Single-Cell Resolution. Cerebellum, 2022, 21, 838-850. | 1.4 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2949 | Î²-Arrestin 2 and Epac2 Cooperatively Mediate DRD1-Stimulated Proliferation of Human Neural Stem Cells and Growth of Human Cerebral Organoids. Stem Cells, 2022, 40, 857-869. | 1.4 | 1 |
| 2951 | Cerebral Organoids and Antisense Oligonucleotide Therapeutics: Challenges and Opportunities. Frontiers in Molecular Neuroscience, 0, 15, . | 1.4 | 5 |
| 2952 | 3D Human Organoids: The Next â€œViralâ€•Model for the Molecular Basis of Infectious Diseases. Biomedicines, 2022, 10, 1541. | 1.4 | 6 |
| 2954 | Promising Strategies for the Development of Advanced In Vitro Models with High Predictive Power in Ischaemic Stroke Research. International Journal of Molecular Sciences, 2022, 23, 7140. | 1.8 | 4 |
| 2955 | Application of Induced Pluripotent Stem Cells in Moyamoya Disease: Progress and Promises. Current Stem Cell Research and Therapy, 2023, 18, 733-739. | 0.6 | 2 |
| 2957 | Comparison of the Response to the CXCR4 Antagonist AMD3100 during the Development of Retinal Organoids Derived from ES Cells and Zebrafish Retina. International Journal of Molecular Sciences, 2022, 23, 7088. | 1.8 | 1 |
| 2958 | Functional imaging of brain organoids using high-density microelectrode arrays. MRS Bulletin, 2022, 47, 530-544. | 1.7 | 6 |
| 2959 | 3D printed human organoids: High throughput system for drug screening and testing in current COVIDâ€19 pandemic. Biotechnology and Bioengineering, 2022, 119, 2669-2688. | 1.7 | 21 |
| 2960 | Organoid transduction using recombinant adenoâ€associated viral vectors: Challenges and opportunities. BioEssays, 2022, 44, . | 1.2 | 2 |
| 2961 | Modeling infectious diseases of the central nervous system with human brain organoids. Translational Research, 2022, 250, 18-35. | 2.2 | 2 |
| 2963 | Cerebral organoids as an in vitro model to study autism spectrum disorders. Gene Therapy, 0, , . | 2.3 | 7 |
| 2964 | Cortical Organoids to Model Microcephaly. Cells, 2022, 11, 2135. | 1.8 | 3 |
| 2965 | Design of an Integrated Microvascularized Human Skin-on-a-Chip Tissue Equivalent Model. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 8 |
| 2966 | Nitric Oxide Attenuates Human Cytomegalovirus Infection yet Disrupts Neural Cell Differentiation and Tissue Organization. Journal of Virology, 2022, 96, . | 1.5 | 9 |
| 2967 | Tissue Engineering Approaches to Uncover Therapeutic Targets for Endothelial Dysfunction in Pathological Microenvironments. International Journal of Molecular Sciences, 2022, 23, 7416. | 1.8 | 2 |
| 2968 | The integration of spheroids and organoids into organ-on-a-chip platforms for tumour research: A review. Bioprinting, 2022, 27, e00224. | 2.9 | 10 |
| 2969 | Applications of singleâ€cell multiâ€omics sequencing in deep understanding of brain diseases. Clinical and Translational Discovery, 2022, 2, . | 0.2 | 0 |
| 2971 | Multifaceted analysis of nanotoxicity using primary cultured neurons. Nano Express, 2022, 3, 035003. | 1.2 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2972 | Cerebral organoids containing an AUTS2 missense variant model microcephaly. Brain, 2023, 146, 387-404. | 3.7 | 11 |
| 2973 | Electrochemically Synthesized Polyacrylamide Gel and Coreâ€“Shell Nanoparticles for 3D Cell Culture Formation. ACS Applied Materials & Interfaces, 2022, 14, 32836-32844. | 4.0 | 3 |
| 2974 | Cerebral malaria â€“ modelling interactions at the bloodâ€“brain barrier in vitro. DMM Disease Models and Mechanisms, 2022, 15, . | 1.2 | 5 |
| 2975 | Emerging organoid models to study the epididymis in male reproductive toxicology. Reproductive Toxicology, 2022, 112, 88-99. | 1.3 | 4 |
| 2976 | Silver nanoparticles exposure induces developmental neurotoxicity in hiPSC-derived cerebral organoids. Science of the Total Environment, 2022, 845, 157047. | 3.9 | 14 |
| 2977 | Recent advances in organoid engineering: A comprehensive review. Applied Materials Today, 2022, 29, 101582. | 2.3 | 8 |
| 2979 | Cellâ€Laden Gradient Microgel Suspensions for Spatial Control of Differentiation During Biofabrication. Advanced Healthcare Materials, 2022, 11, . | 3.9 | 7 |
| 2980 | Interfacing brain organoids with precision medicine and machine learning. Cell Reports Physical Science, 2022, 3, 100974. | 2.8 | 6 |
| 2982 | Organoids: a systematic review of ethical issues. Stem Cell Research and Therapy, 2022, 13, . | 2.4 | 32 |
| 2983 | Biomanufacturing of glioblastoma organoids exhibiting hierarchical and spatially organized tumor microenvironment via transdifferentiation. Biotechnology and Bioengineering, 2022, 119, 3252-3274. | 1.7 | 4 |
| 2984 | 3D Cell Cultures: Evolution of an Ancient Tool for New Applications. Frontiers in Physiology, 0, 13, . | 1.3 | 18 |
| 2985 | Automatic differentiation of human induced pluripotent stem cells toward synchronous neural networks on an arrayed monolayer of nanofiber membrane. Acta Biomaterialia, 2022, 150, 168-180. | 4.1 | 3 |
| 2987 | Disease Modeling of Pituitary Adenoma Using Human Pluripotent Stem Cells. Cancers, 2022, 14, 3660. | 1.7 | 3 |
| 2988 | Human fibroblasts facilitate the generation of iPSCs-derived mammary-like organoids. Stem Cell Research and Therapy, 2022, 13, . | 2.4 | 5 |
| 2989 | Anti-glioblastoma activity of monensin and its analogs in an organoid model of cancer. Biomedicine and Pharmacotherapy, 2022, 153, 113440. | 2.5 | 8 |
| 2990 | Progress, prospects, and limitations of organoid technology. Organoid, 0, 2, e9. | 0.0 | 5 |
| 2991 | Patient-derived cells â€“ an irreplaceable tool for research of reduced penetrance in movement disorders. Medizinische Genetik, 2022, 34, 125-130. | 0.1 | 0 |
| 2992 | Label-free three-photon imaging of intact human cerebral organoids for tracking early events in brain development and deficits in Rett syndrome. ELife, 0, 11, . | 2.8 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2993 | Functional neuronal circuitry and oscillatory dynamics in human brain organoids. Nature Communications, 2022, 13, . | 5.8 | 57 |
| 2994 | Longer metaphase and fewer chromosome segregation errors in modern human than Neanderthal brain development. Science Advances, 2022, 8, . | 4.7 | 26 |
| 2995 | Establishment and characterization of human pluripotent stem cells-derived brain organoids to model cerebellar diseases. Scientific Reports, 2022, 12, . | 1.6 | 4 |
| 2996 | Rapid and robust directed differentiation of mouse epiblast stem cells into definitive endoderm and forebrain organoids. Development (Cambridge), 2022, 149, . | 1.2 | 3 |
| 2997 | Using 2D and 3D pluripotent stem cell models to study neurotropic viruses. Frontiers in Virology, 0, 2, . | 0.7 | 3 |
| 2998 | Human organoids: New strategies and methods for analyzing human development and disease. Cell, 2022, 185, 2756-2769. | 13.5 | 42 |
| 2999 | DNA Methylation Profiles of GAD1 in Human Cerebral Organoids of Autism Indicate Disrupted Epigenetic Regulation during Early Development. International Journal of Molecular Sciences, 2022, 23, 9188. | 1.8 | 4 |
| 3000 | Post-gastrulation synthetic embryos generated ex utero from mouse naive ESCs. Cell, 2022, 185, 3290-3306.e25. | 13.5 | 102 |
| 3002 | Bilirubin-Induced Neurological Damage: Current and Emerging iPSC-Derived Brain Organoid Models. Cells, 2022, 11, 2647. | 1.8 | 11 |
| 3003 | Ascendancy of semi-synthetic biomaterials from design towards democratization. Nature Materials, 2022, 21, 989-992. | 13.3 | 7 |
| 3004 | Urological cancer organoids, patients' avatars for precision medicine: past, present and future. Cell and Bioscience, 2022, 12, . | 2.1 | 1 |
| 3005 | Advances in construction and modeling of functional neural circuits in vitro. Neurochemical Research, 2022, 47, 2529-2544. | 1.6 | 2 |
| 3006 | Novel compound heterozygous mutation in STAMBP causes a neurodevelopmental disorder by disrupting cortical proliferation. Frontiers in Neuroscience, 0, 16, . | 1.4 | 1 |
| 3007 | Imaging three-dimensional brain organoid architecture from meso- to nanoscale across development. Development (Cambridge), 2022, 149, . | 1.2 | 11 |
| 3008 | Teleost Fish and Organoids: Alternative Windows Into the Development of Healthy and Diseased Brains. Frontiers in Molecular Neuroscience, 0, 15, . | 1.4 | 1 |
| 3009 | Human Brain Organoid: A Versatile Tool for Modeling Neurodegeneration Diseases and for Drug Screening. Stem Cells International, 2022, 2022, 1-20. | 1.2 | 5 |
| 3010 | Modeling maternal cholesterol exposure reveals a reduction of neural progenitor proliferation using human cerebral organoids. , 2023, 2, . | | 2 |
| 3011 | Shell microelectrode arrays (MEAs) for brain organoids. Science Advances, 2022, 8, . | 4.7 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3012 | Toward the next generation of vascularized human neural organoids. Medicinal Research Reviews, 2023, 43, 31-54. | 5.0 | 11 |
| 3013 | Advancement of Organoid Technology in Regenerative Medicine. Regenerative Engineering and Translational Medicine, 2023, 9, 83-96. | 1.6 | 9 |
| 3014 | Advancing preclinical models of psychiatric disorders with human brain organoid cultures. Molecular Psychiatry, 2023, 28, 83-95. | 4.1 | 10 |
| 3015 | Current progress of cerebral organoids for modeling Alzheimer's disease origins and mechanisms. Bioengineering and Translational Medicine, 2023, 8, . | 3.9 | 4 |
| 3016 | Motor neuron-derived induced pluripotent stem cells as a drug screening platform for amyotrophic lateral sclerosis. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 1 |
| 3017 | Hybrid brains: the ethics of transplanting human neurons into animals. Nature, 2022, 608, 22-25. | 13.7 | 3 |
| 3018 | The Brain Protein Atlas: A conglomerate of proteomics datasets of human neural tissue. Proteomics, 2022, 22, . | 1.3 | 8 |
| 3019 | Recent progresses in novel in vitro models of primary neurons: A biomaterial perspective. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 3 |
| 3020 | Breasi-CRISPR: an efficient genome-editing method to interrogate protein localization and proteinâ€“protein interactions in the embryonic mouse cortex. Development (Cambridge), 2022, 149, . | 1.2 | 3 |
| 3022 | Gruffi: an algorithm for computational removal of stressed cells from brain organoid transcriptomic datasets. EMBO Journal, 2022, 41, . | 3.5 | 19 |
| 3024 | Technical advances in pluripotent stem cell-derived and tumorigenic organoids. Organoid, 0, 2, e18. | 0.0 | 0 |
| 3025 | Modelling skeletal pain harnessing tissue engineering. In Vitro Models, 2022, 1, 289-307. | 1.0 | 6 |
| 3026 | Griottes: a generalist tool for network generation from segmented tissue images. BMC Biology, 2022, 20, . | 1.7 | 6 |
| 3028 | Generation and Characterization of Novel iPSC Lines from a Portuguese Family Bearing Heterozygous and Homozygous GRN Mutations. Biomedicines, 2022, 10, 1905. | 1.4 | 1 |
| 3029 | Bioengineering the human spinal cord. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 5 |
| 3030 | Multiplex viral tropism assay in complex cell populations with single-cell resolution. Gene Therapy, 2022, 29, 555-565. | 2.3 | 1 |
| 3031 | Human-Induced Pluripotent Stem Cell Technology: Toward the Future of Personalized Psychiatry. Journal of Personalized Medicine, 2022, 12, 1340. | 1.1 | 6 |
| 3032 | Disruption of the gene regulatory programme in neurodevelopmental disorders. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2022, , 194860. | 0.9 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3033 | Recent Advances in 3D-Cultured Brain Tissue Models Derived from Human iPSCs. Biochip Journal, 2022, 16, 246-254. | 2.5 | 7 |
| 3034 | An insight into the iPSCs-derived two-dimensional culture and three-dimensional organoid models for neurodegenerative disorders. Interface Focus, 2022, 12, . | 1.5 | 2 |
| 3035 | The multifaceted role of LRRK2 in Parkinson's disease: From human iPSC to organoids. Neurobiology of Disease, 2022, 173, 105837. | 2.1 | 8 |
| 3036 | The presence of BBB hastens neuronal differentiation of cerebral organoids â€“ The potential role of endothelial derived BDNF. Biochemical and Biophysical Research Communications, 2022, 626, 30-37. | 1.0 | 2 |
| 3037 | Strategies for Generating Human Pluripotent Stem Cell-Derived-Organoid Culture for Disease Modeling, Drug Screening, and Regenerative Therapy. Future Pharmacology, 2022, 2, 360-376. | 0.6 | 5 |
| 3038 | Humanized cerebral organoids-based ischemic stroke model for discovering of potential anti-stroke agents. Acta Pharmacologica Sinica, 2023, 44, 513-523. | 2.8 | 11 |
| 3039 | Human PSCs determine the competency of cerebral organoid differentiation via FGF signaling and epigenetic mechanisms. IScience, 2022, 25, 105140. | 1.9 | 3 |
| 3040 | An alternative splice isoform of mouse CDK5RAP2 induced cytoplasmic microtubule nucleation. IBRO Neuroscience Reports, 2022, 13, 264-273. | 0.7 | 0 |
| 3041 | Modeling Human Organ Development and Diseases With Fetal Tissueâ€“Derived Organoids. Cell Transplantation, 2022, 31, 096368972211244. | 1.2 | 2 |
| 3042 | 3D Culture of Primary Patient-Derived Hepatoblastoma Tumoroids. Methods in Molecular Biology, 2022, , 259-267. | 0.4 | 3 |
| 3043 | Modeling Schizophrenia In Vitro: Challenges and Insights on Studying Brain Cells. Advances in Experimental Medicine and Biology, 2022, , 35-51. | 0.8 | 0 |
| 3044 | Rotenone, an environmental toxin, causes abnormal methylation of the mouse brain organoid's genome and ferroptosis. International Journal of Medical Sciences, 2022, 19, 1184-1197. | 1.1 | 10 |
| 3045 | Human mini brains and spinal cords in a dish: Modeling strategies, current challenges, and prospective advances. Journal of Tissue Engineering, 2022, 13, 204173142211133. | 2.3 | 12 |
| 3046 | Human Excitatory Cortical Neurospheroids Coupled to High-Density MEAs: A Valid Platform for Functional Tests. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 3047 | Biotechnology applications in regenerative medicine. , 2022, , 131-142. | | 0 |
| 3048 | Glioblastoma organoid technology: an emerging preclinical models for drug discovery. Organoid, 0, 2, e7. | 0.0 | 1 |
| 3049 | Effects of matrigel on growth and development of cerebral organoids. Materials Express, 2022, 12, 616-627. | 0.2 | 1 |
| 3051 | Chemical strategies to engineer hydrogels for cell culture. Nature Reviews Chemistry, 2022, 6, 726-744. | 13.8 | 64 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3052 | Multiscale Analysis of Cellular Composition and Morphology in Intact Cerebral Organoids. Biology, 2022, 11, 1270. | 1.3 | 3 |
| 3053 | Generation of Human Ventral Midbrain Organoids Derived from Pluripotent Stem Cells. Current Protocols, 2022, 2, . | 1.3 | 10 |
| 3054 | Mitochondrial dysfunction in psychiatric disorders. Schizophrenia Research, 2022, , . | 1.1 | 3 |
| 3056 | Self-Organizing Brain Organoids with Ventricles Amenable to Injection and Electroporation. Neuromethods, 2023, , 1-16. | 0.2 | 0 |
| 3058 | The World of Organoids: Gastrointestinal Disease Modelling in the Age of 3R and One Health with Specific Relevance to Dogs and Cats. Animals, 2022, 12, 2461. | 1.0 | 6 |
| 3060 | Enterovirus D68 Infection in Human Primary Airway and Brain Organoids: No Additional Role for Heparan Sulfate Binding for Neurotropism. Microbiology Spectrum, 2022, 10, . | 1.2 | 13 |
| 3061 | A Zebrafish/Drosophila Dual System Model for Investigating Human Microcephaly. Cells, 2022, 11, 2727. | 1.8 | 0 |
| 3063 | Human tau mutations in cerebral organoids induce a progressive dyshomeostasis of cholesterol. Stem Cell Reports, 2022, 17, 2127-2140. | 2.3 | 16 |
| 3064 | Micro/nano devices for integration with human brain organoids. Biosensors and Bioelectronics, 2022, 218, 114750. | 5.3 | 3 |
| 3066 | Microfluidics for Neuronal Cell and Circuit Engineering. Chemical Reviews, 2022, 122, 14842-14880. | 23.0 | 22 |
| 3067 | Organoids as a novel tool in modelling infectious diseases. Seminars in Cell and Developmental Biology, 2023, 144, 87-96. | 2.3 | 2 |
| 3068 | Immunocompetent brain organoidsâ€"microglia enter the stage. Progress in Biomedical Engineering, 2022, 4, 042002. | 2.8 | 3 |
| 3069 | Diseased, differentiated and difficult: Strategies for improved engineering of in vitro neurological systems. Frontiers in Cellular Neuroscience, 0, 16, . | 1.8 | 2 |
| 3070 | A kinase-independent function of cyclin-dependent kinase 6 promotes outer radial glia expansion and neocortical folding. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 4 |
| 3071 | Circular RNA Involvement in Aging and Longevity. Current Genomics, 2022, 23, 318-325. | 0.7 | 2 |
| 3072 | Lung Organoids as Model to Study SARS-CoV-2 Infection. Cells, 2022, 11, 2758. | 1.8 | 8 |
| 3073 | Cerebral Organoids as an Experimental Platform for Human Neurogenomics. Cells, 2022, 11, 2803. | 1.8 | 14 |
| 3074 | Vesicular Glutamate Release from Feeder-FreehiPSC-Derived Neurons. International Journal of Molecular Sciences, 2022, 23, 10545. | 1.8 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3076 | Humanâ€specific  <scp>ARHGAP11B</scp>  ensures humanâ€like basal progenitor levels in hominid cerebral organoids. EMBO Reports, 2022, 23, . | 2.0 | 15 |
| 3077 | Optogenetic control of apical constriction induces synthetic morphogenesis in mammalian tissues. Nature Communications, 2022, 13, . | 5.8 | 19 |
| 3078 | Induced pluripotent stem cell-derived brain organoids as potential human model system for chemotherapy induced CNS toxicity. Frontiers in Molecular Biosciences, 0, 9, . | 1.6 | 5 |
| 3079 | Sevoflurane promotes premature differentiation of dopaminergic neurons in hiPSC-derived midbrain organoids. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 2 |
| 3080 | Starting signal: Aberrant kinase activation as a trigger for SARS-CoV-2 induced axonal damage. Frontiers in Virology, 0, 2, . | 0.7 | 1 |
| 3081 | Development of Experimental Three-Dimensional Tumor Models to Study Glioblastoma Cancer Stem Cells and Tumor Microenvironment. Methods in Molecular Biology, 2023, , 117-127. | 0.4 | 2 |
| 3082 | Building in vitro models of the brain to understand the role ofAPOEin Alzheimerâ€™s disease. Life Science Alliance, 2022, 5, e202201542. | 1.3 | 2 |
| 3084 | Profiling Cell Type-Specific Gene Regulatory Regions in Human Cortical Organoids. Neuromethods, 2023, , 17-41. | 0.2 | 2 |
| 3085 | Modelling metabolic diseases and drug response using stem cells and organoids. Nature Reviews Endocrinology, 2022, 18, 744-759. | 4.3 | 30 |
| 3087 | Myocardial infarction from a tissue engineering and regenerative medicine point of view: A comprehensive review on models and treatments. Biophysics Reviews, 2022, 3, . | 1.0 | 5 |
| 3088 | How mechanisms of stem cell polarity shape the human cerebral cortex. Nature Reviews Neuroscience, 2022, 23, 711-724. | 4.9 | 16 |
| 3089 | The Brain Organoid Technology: Diversity of Protocols and Challenges. , 0, , . | | 0 |
| 3090 | Brain Organoids as a Model to Study Zika Virus and SARS-CoV-2 Infections. Neuromethods, 2023, , 173-190. | 0.2 | 1 |
| 3092 | Liver organoids: an in vitro 3D model for liver cancer study. Cell and Bioscience, 2022, 12, . | 2.1 | 13 |
| 3093 | Advantages of CRISPR-Cas9 combined organoid model in the study of congenital nervous system malformations. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 3 |
| 3094 | Modeling human telencephalic development and autism-associated SHANK3 deficiency using organoids generated from single neural rosettes. Nature Communications, 2022, 13, . | 5.8 | 30 |
| 3095 | Retinal organoids from human-induced pluripotent stem cells: From studying retinal dystrophies to early diagnosis of Alzheimerâ€™s and Parkinsonâ€™s disease. Seminars in Cell and Developmental Biology, 2023, 144, 77-86. | 2.3 | 7 |
| 3096 | Inferring and perturbing cell fate regulomes in human brain organoids. Nature, 2023, 621, 365-372. | 13.7 | 71 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3097 | Secretomics Alterations and Astrocyte Dysfunction in Human iPSC of Leukoencephalopathy with Vanishing White Matter. Neurochemical Research, 2022, 47, 3747-3760. | 1.6 | 2 |
| 3098 | Long-term morphological and functional dynamics of human stem cell-derived neuronal networks on high-density micro-electrode arrays. Frontiers in Neuroscience, 0, 16, . | 1.4 | 9 |
| 3099 | Creating artificial signaling gradients to spatially pattern engineered tissues. Current Opinion in Biotechnology, 2022, 78, 102810. | 3.3 | 2 |
| 3100 | Cerebral Organoids in Developmental Neuroscience. , 2022, , 551-567. | | 0 |
| 3101 | Current Status of Research with Brain Organoids. , 2022, , 253-260. | | 0 |
| 3102 | Spontaneous Cell Cluster Formation in Human iPSC-Derived Neuronal Spheroid Networks Influences Network Activity. ENeuro, 2022, 9, ENEURO.0143-22.2022. | 0.9 | 1 |
| 3103 | Microfluidic organoids-on-a-chip: The future of human models. Seminars in Cell and Developmental Biology, 2023, 144, 41-54. | 2.3 | 24 |
| 3104 | Approaches to benchmark and characterize in vitro human model systems. Development (Cambridge), 2022, 149, . | 1.2 | 5 |
| 3105 | Brain Regional Identity and Cell Type Specificity Landscape of Human Cortical Organoid Models. International Journal of Molecular Sciences, 2022, 23, 13159. | 1.8 | 2 |
| 3106 | Human Brain Organoids-on-Chip: Advances, Challenges, and Perspectives for Preclinical Applications. Pharmaceutics, 2022, 14, 2301. | 2.0 | 14 |
| 3107 | Human cerebral organoids â€" a new tool for clinical neurology research. Nature Reviews Neurology, 2022, 18, 661-680. | 4.9 | 49 |
| 3108 | Approaches to investigating metabolism in human neurodevelopment using organoids: insights from intestinal and cancer studies. Development (Cambridge), 2022, 149, . | 1.2 | 1 |
| 3109 | The Power of Gene Technologies: 1001 Ways to Create a Cell Model. Cells, 2022, 11, 3235. | 1.8 | 3 |
| 3110 | The pivotal application of patient-derived organoid biobanks for personalized treatment of gastrointestinal cancers. Biomarker Research, 2022, 10, . | 2.8 | 5 |
| 3111 | Patient-Derived Organoids for In Vivo Validation of In Vitro Data. Methods in Molecular Biology, 2023, , 111-126. | 0.4 | 2 |
| 3112 | Deterministic programming of human pluripotent stem cells into microglia facilitates studying their role in health and disease. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 11 |
| 3113 | Enhanced metanephric specification to functional proximal tubule enables toxicity screening and infectious disease modelling in kidney organoids. Nature Communications, 2022, 13, . | 5.8 | 27 |
| 3114 | Silk scaffolding drives self-assembly of functional and mature human brain organoids. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3115 | Stem Cell Models for Context-Specific Modeling in Psychiatric Disorders. Biological Psychiatry, 2023, 93, 642-650. | 0.7 | 9 |
| 3116 | Organoid research on human early development and beyond. Medical Review, 2022, 2, 512-523. | 0.3 | 0 |
| 3117 | Human Brain Banking as a Convergence Platform of Neuroscience and Neuropsychiatric Research. , 2022, 1, . | | 1 |
| 3118 | Reimagining Cancer: Moving from the Cellular to the Tissue Level. Cancer Research, 2023, 83, 173-180. | 0.4 | 1 |
| 3119 | Bioengineering Human Pluripotent Stem Cell-Derived Retinal Organoids and Optic Vesicle-Containing Brain Organoids for Ocular Diseases. Cells, 2022, 11, 3429. | 1.8 | 5 |
| 3120 | DOX-loaded hydroxyapatite nanoclusters for colorectal cancer (CRC) chemotherapy: Evaluation based on the cancer cells and organoids. SLAS Technology, 2023, 28, 22-31. | 1.0 | 3 |
| 3121 | Efficient Gene Expression in Human Stem Cell Derived-Cortical Organoids Using Adeno Associated Virus. Cells, 2022, 11, 3194. | 1.8 | 4 |
| 3122 | Cellular Models of Alpha-Synuclein Aggregation: What Have We Learned and Implications for Future Study. Biomedicines, 2022, 10, 2649. | 1.4 | 4 |
| 3123 | Dynamic 3D Combinatorial Generation of hPSCâ€Derived Neuromesodermal Organoids With Diverse Regional and Cellular Identities. Current Protocols, 2022, 2, . | 1.3 | 6 |
| 3124 | Research models of neurodevelopmental disorders: The right model in the right place. Frontiers in Neuroscience, 0, 16, . | 1.4 | 1 |
| 3125 | Opinion: Bridging gaps and doubts in glioblastoma cell-of-origin. Frontiers in Oncology, 0, 12, . | 1.3 | 0 |
| 3127 | AJOB-Neuroscience Top Abstract Award Winners from the 2021 International Neuroethics Society Annual Meeting. AJOB Neuroscience, 2022, 13, 287-306. | 0.6 | 0 |
| 3128 | Single-cell and single-nuclei RNA sequencing as powerful tools to decipher cellular heterogeneity and dysregulation in neurodegenerative diseases. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 15 |
| 3129 | Single-cell transcriptional and functional analysis of dopaminergic neurons in organoid-like cultures derived from human fetal midbrain. Development (Cambridge), 2022, 149, . | 1.2 | 8 |
| 3130 | Adult human kidney organoids originate from CD24+ cells and represent an advanced model for adult polycystic kidney disease. Nature Genetics, 2022, 54, 1690-1701. | 9.4 | 20 |
| 3131 | Role of in vitro two-dimensional (2D) and three-dimensional (3D) cell culture systems for ADME-Tox screening in drug discovery and development: a comprehensive review. ADMET and DMPK, 0, , . | 1.1 | 0 |
| 3132 | Learning About Blast Injuries from Brain Organoids: A New Frontier. Journal of Neurotrauma, 2022, 39, 1453-1454. | 1.7 | 0 |
| 3133 | The industrial genomic revolution: A new era in neuroimmunology. Neuron, 2022, 110, 3429-3443. | 3.8 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3134 | Advanced inÂvitro models: Microglia in action. Neuron, 2022, 110, 3444-3457. | 3.8 | 8 |
| 3135 | Organoids for Modeling (Colorectal) Cancer in a Dish. Cancers, 2022, 14, 5416. | 1.7 | 4 |
| 3137 | Recent advancements and future requirements in vascularization of cortical organoids. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 5 |
| 3138 | Tools for studying human microglia: In vitro and in vivo strategies. Brain, Behavior, and Immunity, 2023, 107, 369-382. | 2.0 | 7 |
| 3139 | Potential of astrocytes in targeting therapy for Alzheimerâ€™s disease. International Immunopharmacology, 2022, 113, 109368. | 1.7 | 2 |
| 3140 | Human embryonic stem cell-derived cerebral organoids for treatment of mild traumatic brain injury in a mouse model. Biochemical and Biophysical Research Communications, 2022, 635, 169-178. | 1.0 | 4 |
| 3141 | Rethinking the cilia hypothesis of hydrocephalus. Neurobiology of Disease, 2022, 175, 105913. | 2.1 | 12 |
| 3142 | Generation of cell-type-specific proteomes of neurodevelopment from human cerebral organoids. STAR Protocols, 2022, 3, 101774. | 0.5 | 0 |
| 3143 | Probing the electrophysiological properties of patient-derived neurons across neurodevelopmental disorders. , 2023, , 229-242. | | 0 |
| 3144 | A benchtop brain injury model using resected donor tissue from patients with Chiari malformation. Neural Regeneration Research, 2023, 18, 1057. | 1.6 | 1 |
| 3145 | Brain organoids. , 2023, , 121-151. | | 2 |
| 3146 | Human models as new tools for drug development and precision medicine. , 2023, , 155-171. | | 0 |
| 3147 | iPSC culture. , 2023, , 3-24. | | 0 |
| 3148 | Gene editing hPSCs for modeling neurological disorders. , 2023, , 289-311. | | 0 |
| 3149 | iPSC-derived models of autism. , 2023, , 201-227. | | 0 |
| 3150 | A microfluidic impedance platform for real-time, in vitro characterization of endothelial cells undergoing fluid shear stress. Lab on A Chip, 2022, 22, 4705-4716. | 3.1 | 2 |
| 3151 | One-rosette technique grows well-organized organoids. Spectrum, 0, , . | 0.0 | 0 |
| 3152 | Genetics of Cortical Development. , 2022, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3153 | Neuron(s)-on-a-Chip: A Review of the Design and Use of Microfluidic Systems for Neural Tissue Culture. IEEE Reviews in Biomedical Engineering, 2024, 17, 243-263. | 13.1 | 2 |
| 3154 | Somatic mosaicism in STAG2-associated cohesinopathies: Expansion of the genotypic and phenotypic spectrum. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 2 |
| 3156 | Biomaterials and bioengineering to guide tissue morphogenesis in epithelial organoids. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 4 |
| 3157 | Organoids-on-a-chip. Scientia Sinica Vitae, 2022, , . | 0.1 | 1 |
| 3158 | The HUSH complex controls brain architecture and protocadherin fidelity. Science Advances, 2022, 8, . | 4.7 | 7 |
| 3160 | A 3D-induced pluripotent stem cell-derived human neural culture model to study certain molecular and biochemical aspects of Alzheimerâ€™s disease. In Vitro Models, 2022, 1, 447-462. | 1.0 | 1 |
| 3161 | Emerging biomaterials and technologies to control stem cell fate and patterning in engineered 3D tissues and organoids. Biointerphases, 2022, 17, 060801. | 0.6 | 1 |
| 3162 | MAX: a simple, affordable, and rapid tissue clearing reagent for 3D imaging of wide variety of biological specimens. Scientific Reports, 2022, 12, . | 1.6 | 0 |
| 3163 | Impact of alcohol exposure on neural development and network formation in human cortical organoids. Molecular Psychiatry, 2023, 28, 1571-1584. | 4.1 | 10 |
| 3164 | Immersion bioprinting of hyaluronan and collagen bioink-supported 3D patient-derived brain tumor organoids. Biomedical Materials (Bristol), 2023, 18, 015014. | 1.7 | 12 |
| 3165 | Brain Organoids to Evaluate Cellular Therapies. Animals, 2022, 12, 3150. | 1.0 | 2 |
| 3166 | Modeling Alzheimerâ€™s Disease Using Human Brain Organoids. Methods in Molecular Biology, 2023, , 135-158. | 0.4 | 5 |
| 3167 | Human striatal organoids derived from pluripotent stem cells recapitulate striatal development and compartments. PLoS Biology, 2022, 20, e3001868. | 2.6 | 8 |
| 3168 | Human-Induced Pluripotent Stem Cell (hiPSC)-Derived Neurons and Glia for the Elucidation of Pathogenic Mechanisms in Alzheimerâ€™s Disease. Methods in Molecular Biology, 2023, , 105-133. | 0.4 | 3 |
| 3169 | Recent Advances in Electrophysiological Recording Platforms for Brain and Heart Organoids. Advanced NanoBiomed Research, 2022, 2, . | 1.7 | 9 |
| 3170 | Modeling congenital brain malformations with brain organoids: a narrative review. Translational Pediatrics, 2023, 12, 68-78. | 0.5 | 1 |
| 3171 | Low Doses of Bisphenol A Disrupt Neuronal Differentiation of Human Neuronal Stem/Progenitor Cells. Acta Histochemica Et Cytochemica, 2022, 55, 193-202. | 0.8 | 1 |
| 3172 | In vitro functional models for human liver diseases and drug screening: beyond animal testing. Biomaterials Science, 2023, 11, 2988-3015. | 2.6 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3173 | Future regenerative medicine developments and their therapeutic applications. Biomedicine and Pharmacotherapy, 2023, 158, 114131. | 2.5 | 10 |
| 3174 | Orthogonally crosslinked alginate conjugate thermogels with potential for cell encapsulation. Carbohydrate Polymers, 2023, 302, 120308. | 5.1 | 5 |
| 3175 | Transplanted brain organoids become mature and intelligent. , 2023, 1, 48-51. | | 1 |
| 3176 | A review of protocols for brain organoids and applications for disease modeling. STAR Protocols, 2023, 4, 101860. | 0.5 | 14 |
| 3177 | Function-oriented design: A novel strategy for advanced biomedical materials. Journal of Materials Science and Technology, 2023, 145, 197-209. | 5.6 | 0 |
| 3178 | Intestinal and optic-cup organoids as tools for unveiling mechanics of self-organizing morphogenesis. Biophysics and Physicobiology, 2022, 19, n/a. | 0.5 | 1 |
| 3179 | Brain organoids: Establishment and application. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 4 |
| 3180 | Valproic acid exposure decreases neurogenic potential of outer radial glia in human brain organoids. Frontiers in Molecular Neuroscience, 0, 15, . | 1.4 | 6 |
| 3181 | Modeling RTT Syndrome by iPSC-Derived Neurons from Male and Female Patients with Heterogeneously Severe Hot-Spot MECP2 Variants. International Journal of Molecular Sciences, 2022, 23, 14491. | 1.8 | 5 |
| 3182 | Synergistic activation of RARÎ² and RARÎ³ nuclear receptors restores cell specialization during stem cell differentiation by hijacking RARÎ±-controlled programs. Life Science Alliance, 2023, 6, e202201627. | 1.3 | 1 |
| 3183 | Topologically-protected interior for three-dimensional confluent cellular collectives. Physical Review Research, 2022, 4, . | 1.3 | 3 |
| 3184 | BACE2: A Promising Neuroprotective Candidate for Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2023, 94, S159-S171. | 1.2 | 2 |
| 3185 | A minimal-complexity light-sheet microscope maps network activity in 3D neuronal systems. Scientific Reports, 2022, 12, . | 1.6 | 0 |
| 3186 | Mispatterning and interneuron deficit in Tourette Syndrome basal ganglia organoids. Molecular Psychiatry, 2022, 27, 5007-5019. | 4.1 | 2 |
| 3188 | Pax6 mutant cerebral organoids partially recapitulate phenotypes of Pax6 mutant mouse strains. PLoS ONE, 2022, 17, e0278147. | 1.1 | 0 |
| 3189 | 3D organ-on-a-chip: The convergence of microphysiological systems and organoids. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 16 |
| 3190 | Organoids of the male reproductive system: Challenges, opportunities, and their potential use in fertility research. WIREs Mechanisms of Disease, 2023, 15, . | 1.5 | 4 |
| 3191 | Modular automated microfluidic cell culture platform reduces glycolytic stress in cerebral cortex organoids. Scientific Reports, 2022, 12, . | 1.6 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3192 | Brain organoids for addressing COVID-19 challenge. Frontiers in Neuroscience, 0, 16, . | 1.4 | 0 |
| 3193 | Generation of neural organoids for spinal-cord regeneration via the direct reprogramming of human astrocytes. Nature Biomedical Engineering, 2023, 7, 253-269. | 11.6 | 16 |
| 3194 | Advances in Organoid Culture Research. Global Medical Genetics, 2022, 09, 268-276. | 0.4 | 0 |
| 3196 | Effects of Sevoflurane Exposure on Fetal Brain Development Using Cerebral Organoids. Journal of Molecular Neuroscience, 2022, 72, 2440-2450. | 1.1 | 4 |
| 3197 | Veteran-derived cerebral organoids display multifaceted pathological defects in studies on Gulf War Illness. Frontiers in Cellular Neuroscience, 0, 16, . | 1.8 | 3 |
| 3198 | Targeting cancer-specific metabolic pathways for developing novel cancer therapeutics. Frontiers in Immunology, 0, 13, . | 2.2 | 12 |
| 3199 | Essential tremor: A three-dimensional neurosphere inÂvitro model to assess the neurotoxicity of harmane. Journal of Traditional Chinese Medical Sciences, 2022, , . | 0.1 | 0 |
| 3200 | Zika virus noncoding RNA cooperates with the viral protein NS5 to inhibit STAT1 phosphorylation and facilitate viral pathogenesis. Science Advances, 2022, 8, . | 4.7 | 15 |
| 3201 | What Have Organoids and Assembloids Taught Us About the Pathophysiology of Neuropsychiatric Disorders?. Biological Psychiatry, 2023, 93, 632-641. | 0.7 | 9 |
| 3202 | Proteomic signatures of schizophrenia-sourced iPSC-derived neural cells and brain organoids are similar to patients' postmortem brains. Cell and Bioscience, 2022, 12, . | 2.1 | 5 |
| 3203 | Defined Alginate Hydrogels Support Spinal Cord Organoid Derivation, Maturation, and Modeling of Spinal Cord Diseases. Advanced Healthcare Materials, 2023, 12, . | 3.9 | 10 |
| 3204 | Robust generation of human-chambered cardiac organoids from pluripotent stem cells for improved modelling of cardiovascular diseases. Stem Cell Research and Therapy, 2022, 13, . | 2.4 | 7 |
| 3205 | Advances in Tumor Organoids for the Evaluation of Drugs: A Bibliographic Review. Pharmaceutics, 2022, 14, 2709. | 2.0 | 4 |
| 3206 | Microglia-containing human brain organoids for the study of brain development and pathology. Molecular Psychiatry, 2023, 28, 96-107. | 4.1 | 30 |
| 3208 | Integrated brain on a chip and automated organâ€onâ€chips systems. , 2023, 1, . | | 4 |
| 3209 | Engineered hydrogels for mechanobiology. Nature Reviews Methods Primers, 2022, 2, . | 11.8 | 37 |
| 3210 | Nanoparticles-mediated CRISPR-Cas9 gene therapy in inherited retinal diseases: applications, challenges, and emerging opportunities. Journal of Nanobiotechnology, 2022, 20, . | 4.2 | 10 |
| 3211 | RINGs, DUBs and Abnormal Brain Growthâ€"Histone H2A Ubiquitination in Brain Development and Disease. Epigenomes, 2022, 6, 42. | 0.8 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3212 | Bioengineering Liver Organoids for Diseases Modelling and Transplantation. Bioengineering, 2022, 9, 796. | 1.6 | 3 |
| 3213 | Generation of dorsoventral human spinal cord organoids via functionalizing composite scaffold for drug testing. IScience, 2023, 26, 105898. | 1.9 | 4 |
| 3214 | Recent Development of Brain Organoids for Biomedical Application. Macromolecular Bioscience, 2023, 23, . | 2.1 | 2 |
| 3215 | A Comprehensive Update of Cerebral Organoids between Applications and Challenges. Oxidative Medicine and Cellular Longevity, 2022, 2022, 1-10. | 1.9 | 2 |
| 3216 | Incorporating a greater diversity of cell types, including microglia, in brain organoid cultures improves clinical translation. Journal of Neurochemistry, 0, , . | 2.1 | 3 |
| 3217 | Gastric stem cell research and gastric organoids. Organoid, 0, 2, e27. | 0.0 | 0 |
| 3219 | Message in a Scaffold: Natural Biomaterials for Three-Dimensional (3D) Bioprinting of Human Brain Organoids. Biomolecules, 2023, 13, 25. | 1.8 | 6 |
| 3220 | Brain organoid-on-a-chip: A next-generation human brain avatar for recapitulating human brain physiology and pathology. Biomicrofluidics, 2022, 16, . | 1.2 | 8 |
| 3221 | Recent Advances in Brain Organoid Technology for Human Brain Research. ACS Applied Materials & Interfaces, 2023, 15, 200-219. | 4.0 | 6 |
| 3222 | What connects splicing of transfer RNA precursor molecules with pontocerebellar hypoplasia?. BioEssays, 2023, 45, . | 1.2 | 1 |
| 3223 | Modelling Alzheimer's disease using human brain organoids: current progress and challenges. Expert Reviews in Molecular Medicine, 2023, 25, . | 1.6 | 3 |
| 3225 | Downregulation of PMP22 ameliorates myelin defects in iPSC-derived human organoid cultures of CMT1A. Brain, 2023, 146, 2885-2896. | 3.7 | 6 |
| 3226 | Human Maternal-Fetal Interface Cellular Models to Assess Antiviral Drug Toxicity during Pregnancy. Reproductive Medicine, 2022, 3, 303-319. | 0.3 | 0 |
| 3227 | Current advancements of modelling schizophrenia using patient-derived induced pluripotent stem cells. Acta Neuropathologica Communications, 2022, 10, . | 2.4 | 5 |
| 3228 | Alginateâ€Laminin Hydrogel Supports Longâ€Term Neuronal Activity in 3D Human Induced Pluripotent Stem Cellâ€Derived Neuronal Networks. Advanced Materials Interfaces, 2023, 10, . | 1.9 | 6 |
| 3229 | Neurotropism as a Mechanism of the Damaging Action of Coronavirus. Biology Bulletin Reviews, 2022, 12, 667-678. | 0.3 | 1 |
| 3231 | Cost-Effective Mechanical Aggregation of Cardiac Progenitors and Encapsulation in Matrigel Support Self-Organization in a Dynamic Culture Environment. International Journal of Molecular Sciences, 2022, 23, 15785. | 1.8 | 1 |
| 3232 | Three-Dimensional Cell Culture Systems in Pediatric and Adult Brain Tumor Precision Medicine. Cancers, 2022, 14, 5972. | 1.7 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3234 | Interdisciplinary approaches to brain organoid biology. Folia Pharmacologica Japonica, 2023, 158, 64-70. | 0.1 | 0 |
| 3235 | The Impact of the Cellular Environment and Aging on Modeling Alzheimer's Disease in 3D Cell Culture Models. Advanced Science, 2023, 10, . | 5.6 | 9 |
| 3236 | A Robust Pipeline for the Multiâ€Stage Accelerated Differentiation of Functional 3D Cortical Organoids from Human Pluripotent Stem Cells. Current Protocols, 2023, 3, . | 1.3 | 2 |
| 3237 | Advancing organoid design through co-emergence, assembly, and bioengineering. Trends in Biotechnology, 2023, 41, 923-938. | 4.9 | 8 |
| 3238 | Generating Human Pluripotent Stem Cell-Derived Neural AssemBloidsâ„¢ to Model Interneuron Migration and Immune Cell Interactions. Neuromethods, 2023, , 307-324. | 0.2 | 0 |
| 3240 | Generation of Mini-Brains From hiPSCs. Neuromethods, 2023, , 291-306. | 0.2 | 0 |
| 3241 | Analysis of AÎ²-induced neurotoxicity and microglial responses in simple two- and three-dimensional human iPSC-derived cortical culture systems. Tissue and Cell, 2023, 81, 102023. | 1.0 | 2 |
| 3242 | Alzheimer's disease and synapse Loss: What can we learn from induced pluripotent stem Cells?. Journal of Advanced Research, 2023, 54, 105-118. | 4.4 | 5 |
| 3244 | Deepening the understanding of CNVs on chromosome 15q11â€“13 by using hiPSCs: An overview. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 1 |
| 3245 | Mimicking the Biological Sense of Taste In Vitro Using a Taste Organoidsâ€onâ€aâ€Chip System. Advanced Science, 2023, 10, . | 5.6 | 8 |
| 3246 | Organoid factory: The recent role of the human induced pluripotent stem cells (hiPSCs) in precision medicine. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 8 |
| 3247 | Mechanics of morphogenesis in neural development: In vivo, in vitro, and in silico. Brain Multiphysics, 2023, 4, 100062. | 0.8 | 0 |
| 3248 | In Vitro 3D Modeling of Neurodegenerative Diseases. Bioengineering, 2023, 10, 93. | 1.6 | 5 |
| 3249 | Generation of Urine-Derived Induced Pluripotent Stem Cells and Cerebral Organoids for Modeling Down Syndrome. Stem Cell Reviews and Reports, 2023, 19, 1116-1123. | 1.7 | 4 |
| 3250 | Amyloid beta accumulations and enhanced neuronal differentiation in cerebral organoids of Dutch-type cerebral amyloid angiopathy patients. Frontiers in Aging Neuroscience, 0, 14, . | 1.7 | 2 |
| 3251 | Stem Cell Models in Prion Research. , 2023, , 295-312. | | 0 |
| 3252 | Mimicking the neural stem cell niche: An engineerâ€™s view of cell: material interactions. Frontiers in Chemical Engineering, 0, 4, . | 1.3 | 1 |
| 3253 | Defined, Simplified, Scalable, and Clinically Compatible Hydrogel-Based Production of Human Brain Organoids. Organoids, 2023, 2, 20-36. | 1.8 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3254 | Recent methods of droplet microfluidics and their applications in spheroids and organoids. Lab on A Chip, 0, , . | 3.1 | 11 |
| 3255 | 3Rs Principle and Legislative Decrees to Achieve High Standard of Animal Research. Animals, 2023, 13, 277. | 1.0 | 8 |
| 3256 | Ethanol exposure disrupted the formation of radial glial processes and impaired the generation and migration of outer radial glial cells in forebrain organoids derived from human embryonic stem cells. Experimental Neurology, 2023, , 114325. | 2.0 | 2 |
| 3257 | Progress and challenges in directing the differentiation of human iPSCs into spinal motor neurons. Frontiers in Cell and Developmental Biology, 0, 10, . | 1.8 | 5 |
| 3258 | Generation of innervated cochlear organoid recapitulates early development of auditory unit. Stem Cell Reports, 2023, 18, 319-336. | 2.3 | 10 |
| 3259 | Biomaterial-based in vitro 3D modeling of glioblastoma multiforme. , 2023, 1, 177-194. | | 2 |
| 3260 | iPS cell technologies toward overcoming neurological diseases. Folia Pharmacologica Japonica, 2023, 158, 57-63. | 0.1 | 0 |
| 3261 | Pioneering models of pediatric brain tumors. Neoplasia, 2023, 36, 100859. | 2.3 | 2 |
| 3262 | Di-(2-ethylhexyl) phthalate exposure impairs cortical development in hESC-derived cerebral organoids. Science of the Total Environment, 2023, 865, 161251. | 3.9 | 5 |
| 3263 | Modeling neuro-immune interactions using human pluripotent stem cells. Current Opinion in Neurobiology, 2023, 79, 102672. | 2.0 | 4 |
| 3264 | A brain metastasis model for breast cancer using human embryonic stem cell-derived cerebral organoids. Organoid, 0, 2, e25. | 0.0 | 0 |
| 3265 | Metabolic contributions to neuronal deficits caused by genomic disruption of schizophrenia risk gene SETD1A. , 2022, 8, . | | 10 |
| 3267 | Stem cells for organoids. , 2022, 1, . | | 10 |
| 3268 | Progress of 3D Organoid Technology for Preclinical Investigations: Towards Human In Vitro Models. , 0, , 9. | | 1 |
| 3269 | Humanâ€induced pluripotent stem cellâ€derived cerebral organoid of leukoencephalopathy with vanishing white matter. CNS Neuroscience and Therapeutics, 2023, 29, 1049-1066. | 1.9 | 2 |
| 3271 | Towards human organ generation using interspecies blastocyst complementation: Challenges and perspectives for therapy. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 2 |
| 3273 | Arguments Against Using Nonhuman Primates in Research. , 2023, , 559-588. | | 0 |
| 3274 | Microfluidic Culture Platforms in Neuroscience Research. , 2023, , 39-77. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3275 | Mera: A scalable high throughput automated micro-physiological system. SLAS Technology, 2023, , . | 1.0 | 0 |
| 3276 | From 2D to 3D: Development of Monolayer Dopaminergic Neuronal and Midbrain Organoid Cultures for Parkinsonâ€™s Disease Modeling and Regenerative Therapy. International Journal of Molecular Sciences, 2023, 24, 2523. | 1.8 | 5 |
| 3277 | Stem Cellâ€“Based Organoid Models of Neurodevelopmental Disorders. Biological Psychiatry, 2023, 93, 622-631. | 0.7 | 8 |
| 3278 | Experimental Models of In Vitro Bloodâ€“Brain Barrier for CNS Drug Delivery: An Evolutionary Perspective. International Journal of Molecular Sciences, 2023, 24, 2710. | 1.8 | 9 |
| 3279 | Advances in Brain Metastasis Models. Brain Tumor Research and Treatment, 2023, 11, 16. | 0.4 | 0 |
| 3280 | Organoids revealed: morphological analysis of the profound next generation in-vitro model with artificial intelligence. Bio-Design and Manufacturing, 2023, 6, 319-339. | 3.9 | 4 |
| 3281 | Modeling Autism Spectrum Disorders with Induced Pluripotent Stem Cell-Derived Brain Organoids. Biomolecules, 2023, 13, 260. | 1.8 | 4 |
| 3282 | Laser bioprinting of human iPSC-derived neural stem cells and neurons: Effect on cell survival, multipotency, differentiation, and neuronal activity. International Journal of Bioprinting, 2022, 9, 672. | 1.7 | 2 |
| 3283 | ãƒžã‚®ãƒ«å§å¦™å¦±å‘Š. Clinical Neurology, 2023, 63, 163-165. | 0.0 | 0 |
| 3284 | Organoid intelligence (OI): the new frontier in biocomputing and intelligence-in-a-dish. , 2023, 1, . | | 49 |
| 3285 | 3D cancer models: One step closer to in vitro human studies. Frontiers in Immunology, 0, 14, . | 2.2 | 6 |
| 3286 | Pathophysiology and mechanisms of hearing impairment related to neonatal infection diseases. Frontiers in Microbiology, 0, 14, . | 1.5 | 0 |
| 3287 | Human cerebral organoids: the ethical stance of scientists. Stem Cell Research and Therapy, 2023, 14, . | 2.4 | 8 |
| 3288 | Modelling hyperexcitability in human cerebral cortical organoids: Oxygen/glucose deprivation most effective stimulant. Heliyon, 2023, 9, e14999. | 1.4 | 2 |
| 3289 | Alzheimer HastalÄ±ÄŸÄ±â€™nda In Vivo ve In Vitro Modeller. , 2023, 6, 54-77. | | 0 |
| 3290 | In vitro models to study human gut-microbiota interactions: Applications, advances, and limitations. Microbiological Research, 2023, 270, 127336. | 2.5 | 5 |
| 3291 | Aluminum hydroxide exposure induces neurodevelopmental impairment in hESC-derived cerebral organoids. Ecotoxicology and Environmental Safety, 2023, 256, 114863. | 2.9 | 0 |
| 3292 | An overview of in vitro 3D models of the blood-brain barrier as a tool to predict the in vivo permeability of nanomedicines. Advanced Drug Delivery Reviews, 2023, 196, 114816. | 6.6 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3293 | Human iPSC-derived brain organoids: A 3D mini-brain model for studying HIV infection. Experimental Neurology, 2023, 364, 114386. | 2.0 | 2 |
| 3294 | Microglia-containing cerebral organoids derived from induced pluripotent stem cells for the study of neurological diseases. IScience, 2023, 26, 106267. | 1.9 | 13 |
| 3295 | Linking fluid-axons interactions to the macroscopic fluid transport properties of the brain. Acta Biomaterialia, 2023, 160, 152-163. | 4.1 | 4 |
| 3296 | From cells to organoids: The evolution of blood-brain barrier technology for modelling drug delivery in brain cancer. Advanced Drug Delivery Reviews, 2023, 196, 114777. | 6.6 | 8 |
| 3297 | Biosensor integrated brain-on-a-chip platforms: Progress and prospects in clinical translation. Biosensors and Bioelectronics, 2023, 225, 115100. | 5.3 | 5 |
| 3299 | Single Cerebral Organoid Mass Spectrometry of Cell-Specific Protein and Glycosphingolipid Traits. Analytical Chemistry, 2023, 95, 3160-3167. | 3.2 | 6 |
| 3300 | 3D multicellular systems in disease modelling: From organoids to organ-on-chip. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 5 |
| 3301 | Microfabrication methods for 3D spheroids formation and their application in biomedical engineering. Korean Journal of Chemical Engineering, 2023, 40, 311-324. | 1.2 | 2 |
| 3302 | Large-scale organoid study suggests effects of trisomy 21 on early fetal neurodevelopment are more subtle than variability between isogenic lines and experiments. Frontiers in Neuroscience, 0, 16, . | 1.4 | 3 |
| 3303 | Oocyte Arrested at Metaphase II Stage were Derived from Human Pluripotent Stem Cells in vitro. Stem Cell Reviews and Reports, 0, , . | 1.7 | 0 |
| 3304 | A wholeâ€genome scan for Artemisinin cytotoxicity reveals a novel therapy for human brain tumors. EMBO Molecular Medicine, 2023, 15, . | 3.3 | 4 |
| 3305 | Cerebral organoids in primary progressive multiple sclerosis reveal stem cell and oligodendrocyte differentiation defect. Biology Open, 2023, 12, . | 0.6 | 5 |
| 3306 | Glioblastoma and cerebral organoids: development and analysis of an in vitro model for glioblastoma migration. Molecular Oncology, 2023, 17, 647-663. | 2.1 | 6 |
| 3307 | Spinal cord extracts of amyotrophic lateral sclerosis spread TDP-43 pathology in cerebral organoids. PLoS Genetics, 2023, 19, e1010606. | 1.5 | 15 |
| 3308 | Modeling disrupted synapse formation in wolfram syndrome using hESCs-derived neural cells and cerebral organoids identifies Riluzole as a therapeutic molecule. Molecular Psychiatry, 2023, 28, 1557-1570. | 4.1 | 3 |
| 3309 | Cell reprogramming for oligodendrocytes: A review of protocols and their applications to disease modeling and cellâ€based remyelination therapies. Journal of Neuroscience Research, 2023, 101, 1000-1028. | 1.3 | 4 |
| 3310 | Functional bioengineered models of the central nervous system. , 2023, 1, 252-270. | | 7 |
| 3311 | Human Brain Organoids and Consciousness: Moral Claims and Epistemic Uncertainty. Organoids, 2023, 2, 50-65. | 1.8 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3312 | Transition from Animal-Based to Human Induced Pluripotent Stem Cells (iPSCs)-Based Models of Neurodevelopmental Disorders: Opportunities and Challenges. Cells, 2023, 12, 538. | 1.8 | 1 |
| 3313 | The â€œ3Dsâ€•of Growing Kidney Organoids: Advances in Nephron Development, Disease Modeling, and Drug Screening. Cells, 2023, 12, 549. | 1.8 | 10 |
| 3314 | Galangin Rescues Alzheimerâ€™s Amyloid-Î² Induced Mitophagy and Brain Organoid Growth Impairment. International Journal of Molecular Sciences, 2023, 24, 3398. | 1.8 | 2 |
| 3315 | Induced Pluripotent Stem Cell-Derived Organoids: Their Implication in COVID-19 Modeling. International Journal of Molecular Sciences, 2023, 24, 3459. | 1.8 | 1 |
| 3316 | Modeling brain and neural crest neoplasms with human pluripotent stem cells. Neuro-Oncology, 2023, 25, 1225-1235. | 0.6 | 2 |
| 3317 | Pluripotent Stem Cells in Disease Modeling and Drug Discovery for Myotonic Dystrophy Type 1. Cells, 2023, 12, 571. | 1.8 | 1 |
| 3319 | Opportunities and limitations for studying neuropsychiatric disorders using patient-derived induced pluripotent stem cells. Molecular Psychiatry, 2023, 28, 1430-1439. | 4.1 | 5 |
| 3321 | Spatio-temporal dynamics enhance cellular diversity, neuronal function and further maturation of human cerebral organoids. Communications Biology, 2023, 6, . | 2.0 | 12 |
| 3322 | The generation and properties of human cortical organoids as a disease model for malformations of cortical development. Neural Regeneration Research, 2023, 18, 2119. | 1.6 | 2 |
| 3323 | Developmental mechanisms underlying the evolution of human cortical circuits. Nature Reviews Neuroscience, 2023, 24, 213-232. | 4.9 | 34 |
| 3324 | Human brain organoids to explore SARSâ€CoVâ€2â€induced effects on the central nervous system. Reviews in Medical Virology, 2023, 33, . | 3.9 | 7 |
| 3325 | Lewy Body-like Pathology and Loss of Dopaminergic Neurons in Midbrain Organoids Derived from Familial Parkinsonâ€™s Disease Patient. Cells, 2023, 12, 625. | 1.8 | 6 |
| 3326 | Consciousness in a Rotor? Science and Ethics of Potentially Conscious Human Cerebral Organoids. AJOB Neuroscience, 2023, 14, 178-196. | 0.6 | 25 |
| 3327 | Modeling Human Brain Tumors and the Microenvironment Using Induced Pluripotent Stem Cells. Cancers, 2023, 15, 1253. | 1.7 | 4 |
| 3328 | A human stem cell-derived neuronal model of morphine exposure reflects brain dysregulation in opioid use disorder: Transcriptomic and epigenetic characterization of postmortem-derived iPSC neurons. Frontiers in Psychiatry, 0, 14, . | 1.3 | 2 |
| 3329 | Blood Vessel Organoids for Development and Disease. Circulation Research, 2023, 132, 498-510. | 2.0 | 12 |
| 3330 | Congenital Microcephaly: A Debate on Diagnostic Challenges and Etiological Paradigm of the Shift from Isolated/Non-Syndromic to Syndromic Microcephaly. Cells, 2023, 12, 642. | 1.8 | 4 |
| 3331 | Sporadic Creutzfeldtâ€“Jakob disease infected human cerebral organoids retain the original human brain subtype features following transmission to humanized transgenic mice. Acta Neuropathologica Communications, 2023, 11, . | 2.4 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3332 | Bat pluripotent stem cells reveal unusual entanglement between host and viruses. Cell, 2023, 186, 957-974.e28. | 13.5 | 17 |
| 3333 | Advances in human organoids-on-chips in biomedical research. , 2023, 2, . | | 6 |
| 3334 | 3D models of neurodegeneration: implementation in drug discovery. Trends in Pharmacological Sciences, 2023, 44, 208-221. | 4.0 | 2 |
| 3335 | Neural Stem Cells, Differentiation, and Migration. , 2023, , 39-54. | | 1 |
| 3336 | Genetic manipulation and targeted protein degradation in mammalian systems: practical considerations, tips and tricks for discovery research. FEBS Open Bio, 2023, 13, 1164-1176. | 1.0 | 1 |
| 3337 | 16p11.2 deletion accelerates subpallial maturation and increases variability in human iPSC-derived ventral telencephalic organoids. Development (Cambridge), 2023, 150, . | 1.2 | 1 |
| 3338 | GGC repeat expansion in NOTCH2NLC induces dysfunction in ribosome biogenesis and translation. Brain, 2023, 146, 3373-3391. | 3.7 | 4 |
| 3339 | Organoid models for Chinese herbal medicine studies. , 2023, 2, . | | 1 |
| 3340 | Heart in a dish â€“ choosing the rightin vitromodel. DMM Disease Models and Mechanisms, 2023, 16, . | 1.2 | 4 |
| 3341 | Liver Organoids as an In Vitro Model to Study Primary Liver Cancer. International Journal of Molecular Sciences, 2023, 24, 4529. | 1.8 | 8 |
| 3342 | Histone lysine methyltransferase-related neurodevelopmental disorders: current knowledge and saRNA future therapies. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 0 |
| 3344 | Bioreactors for engineering patient-specific tissue grafts. , 2023, 1, 361-377. | | 6 |
| 3346 | Modeling mitochondrial <scp>DNA</scp> diseases: from base editing to pluripotent stemâ€cellâ€derived organoids. EMBO Reports, 2023, 24, . | 2.0 | 7 |
| 3347 | oFlowSeq: a quantitative approach to identify protein coding mutations affecting cell type enrichment using mosaic CRISPR-Cas9 edited cerebral organoids. Human Genetics, 2023, 142, 1281-1291. | 1.8 | 2 |
| 3348 | Compressive molding of engineered tissues via thermoresponsive hydrogel devices. Lab on A Chip, 2023, 23, 2057-2067. | 3.1 | 2 |
| 3350 | A decade of liver organoids: Advances in disease modeling. Clinical and Molecular Hepatology, 2023, 29, 643-669. | 4.5 | 1 |
| 3351 | Brain organoids: are they for real?. , 2023, 1, . | | 3 |
| 3352 | Towards automatization of organoid analysis: A deep learning approach to localize and quantify organoid images. Computer Methods and Programs in Biomedicine Update, 2023, 3, 100101. | 2.3 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3354 | Middle-out methods for spatiotemporal tissue engineering of organoids. , 2023, 1, 329-345. | | 10 |
| 3355 | Human neural stem cells in developmental neurotoxicology: Current scenario and future prospects. Advances in Neurotoxicology, 2023, , . | 0.7 | 0 |
| 3356 | Polymer film-based microwell array platform for long-term culture and research of human bronchial organoids. Materials Today Bio, 2023, 19, 100603. | 2.6 | 0 |
| 3357 | Human stem cell-based models to study synaptic dysfunction and cognition in schizophrenia: A narrative review. Schizophrenia Research, 2023, , . | 1.1 | 1 |
| 3358 | Tracking early tuberous sclerosis complex diseased organoid development with quantitative oblique back-illumination microscopy. , 2023, , . | | 0 |
| 3359 | Shedding light on latent pathogenesis and pathophysiology of mental disorders: The potential of <scp>iPS</scp> cell technology. Psychiatry and Clinical Neurosciences, 2023, 77, 308-314. | 1.0 | 1 |
| 3360 | Evolution and implications of de novo genes in humans. Nature Ecology and Evolution, 2023, 7, 804-815. | 3.4 | 15 |
| 3361 | Revolutionizing Disease Modeling: The Emergence of Organoids in Cellular Systems. Cells, 2023, 12, 930. | 1.8 | 10 |
| 3362 | Organoids in high-throughput and high-content screenings. Frontiers in Chemical Engineering, 0, 5, . | 1.3 | 1 |
| 3363 | Human cortical spheroids with a high diversity of innately developing brain cell types. Stem Cell Research and Therapy, 2023, 14, . | 2.4 | 2 |
| 3364 | Cerebral Malaria Model Applying Human Brain Organoids. Cells, 2023, 12, 984. | 1.8 | 2 |
| 3365 | Curvature induces active velocity waves in rotating spherical tissues. Nature Communications, 2023, 14, . | 5.8 | 4 |
| 3367 | Application of Human Stem Cells to Model Genetic Sensorineural Hearing Loss and Meniere Disease. Cells, 2023, 12, 988. | 1.8 | 1 |
| 3369 | Recent Advances in Generation of In Vitro Cardiac Organoids. International Journal of Molecular Sciences, 2023, 24, 6244. | 1.8 | 7 |
| 3370 | In Vitro three-dimensional (3D) cell culture tools for spheroid and organoid models. SLAS Discovery, 2023, 28, 119-137. | 1.4 | 12 |
| 3373 | How animal models can be utilized to find new biomarkers for cardiovascular diseases. Clinical Science, 2023, 137, 527-535. | 1.8 | 2 |
| 3375 | Considerations for modelling diffuse high-grade gliomas and developing clinically relevant therapies. Cancer and Metastasis Reviews, 0, , . | 2.7 | 0 |
| 3376 | Regenerative medicine: current research and perspective in pediatric surgery. Pediatric Surgery International, 2023, 39, . | 0.6 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3377 | Promises and challenges of cardiac organoids. Mammalian Genome, 2023, 34, 351-356. | 1.0 | 1 |
| 3378 | A simplified protocol for the generation of cortical brain organoids. Frontiers in Cellular Neuroscience, 0, 17, . | 1.8 | 4 |
| 3379 | Human-Derived Cortical Neurospheroids Coupled to Passive, High-Density and 3D MEAs: A Valid Platform for Functional Tests. Bioengineering, 2023, 10, 449. | 1.6 | 0 |
| 3381 | Understanding neural development and diseases using CRISPR screens in human pluripotent stem cell-derived cultures. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 1 |
| 3382 | Engineering Approaches in Ovarian Cancer Cell Culture. Current Cancer Research, 2023, , 231-253. | 0.2 | 0 |
| 3383 | Glioblastoma Microenvironment and Invasiveness: New Insights and Therapeutic Targets. International Journal of Molecular Sciences, 2023, 24, 7047. | 1.8 | 14 |
| 3384 | Label-free characterization of organoids with quantitative confocal Raman spectral imaging. Cell Reports Methods, 2023, , 100457. | 1.4 | 1 |
| 3385 | Advanced analysis and applications of single-cell transcriptome sequencing. International Journal of Transgender Health, 2023, 16, . | 1.1 | 0 |
| 3387 | Human brain microphysiological systems in the study of neuroinfectious disorders. Experimental Neurology, 2023, 365, 114409. | 2.0 | 2 |
| 3388 | Evaluation of Neurotoxicity With Human Pluripotent Stem Cellâ€“Derived Cerebral Organoids. Current Protocols, 2023, 3, . | 1.3 | 1 |
| 3389 | The potential of in vitro neuronal networks cultured on micro electrode arrays for biomedical research. Progress in Biomedical Engineering, 2023, 5, 032002. | 2.8 | 4 |
| 3390 | Political and ethical landscape of brain organoid research. , 0, 2, 3. | | 1 |
| 3391 | Inflammatory Response and Exosome Biogenesis of Choroid Plexus Organoids Derived from Human Pluripotent Stem Cells. International Journal of Molecular Sciences, 2023, 24, 7660. | 1.8 | 1 |
| 3392 | Application of new technologies in embryos: From gene editing to synthetic embryos. , 2023, , 853-886. | | 0 |
| 3400 | iPSC-derived three-dimensional brain organoid models and neurotropic viral infections. Journal of NeuroVirology, 2023, 29, 121-134. | 1.0 | 5 |
| 3413 | Stem cells, bioengineering, and 3D scaffolds for neural tissue engineering. , 2023, , 315-341. | | 0 |
| 3415 | Human disease models in drug development. , 2023, 1, 545-559. | | 18 |
| 3423 | In Vitro Tumoroid Model Using Cancer Stem Cells. , 2023, , 233-243. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3426 | Brain organoids modeling of genetic and environmental impact on neurodevelopmental traits. , 2023, , 281-290. | | 0 |
| 3435 | Mouse embryonic stem cell-derived cerebral organoids. , 2023, , 189-200. | | 0 |
| 3445 | A Three-Dimensional Primary Cortical Culture System Compatible with Transgenic Disease Models, Virally Mediated Fluorescence, and Live Microscopy. Methods in Molecular Biology, 2023, , 153-167. | 0.4 | 1 |
| 3446 | Method to Generate Dorsal Forebrain Brain Organoids from Human Pluripotent Stem Cells. Methods in Molecular Biology, 2023, , 169-183. | 0.4 | 1 |
| 3447 | Generation of Cerebral Cortical Neurons from Human Pluripotent Stem Cells in 3D Culture. Methods in Molecular Biology, 2023, , 1-11. | 0.4 | 0 |
| 3448 | Whole Cell Patch Clamp Electrophysiology in Human Neuronal Cells. Methods in Molecular Biology, 2023, , 259-273. | 0.4 | 0 |
| 3451 | iPSCs-Derived Neurons and Brain Organoids from Patients. Handbook of Experimental Pharmacology, 2023, , . | 0.9 | 1 |
| 3459 | Human pluripotent stem cell (hPSC) and organoid models of autism: opportunities and limitations. Translational Psychiatry, 2023, 13, . | 2.4 | 3 |
| 3461 | Label-free three-photon imaging of intact human cerebral organoids for tracking early events in brain development. , 2023, , . | | 0 |
| 3469 | Amyloid Î²-based therapy for Alzheimerâ€™s disease: challenges, successes and future. Signal Transduction and Targeted Therapy, 2023, 8, . | 7.1 | 49 |
| 3477 | Single-Cell and Spatial Analysis of Emergent Organoid Platforms. Methods in Molecular Biology, 2023, , 311-344. | 0.4 | 1 |
| 3482 | Establishment and Maintenance of Human CRC-Derived Organoids for PcG Studies. Methods in Molecular Biology, 2023, , 231-244. | 0.4 | 0 |
| 3499 | Progress and promise of alternative animal and non-animal methods in biomedical research. Archives of Toxicology, 2023, 97, 2329-2342. | 1.9 | 2 |
| 3501 | Human 3D brain organoids: steering the demolecularization of brain and neurological diseases. Cell Death Discovery, 2023, 9, . | 2.0 | 5 |
| 3509 | Engineering prostate cancer in vitro: what does it take?. Oncogene, 2023, 42, 2417-2427. | 2.6 | 3 |
| 3518 | Organ Chips and Visualization of Biological Systems. Advances in Experimental Medicine and Biology, 2023, , 155-183. | 0.8 | 1 |
| 3535 | Genetics of human brain development. Nature Reviews Genetics, 2024, 25, 26-45. | 7.7 | 12 |
| 3537 | Growing organoids and spheroids on a chip. , 2023, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3558 | 3D-Zell- und Organoidkultur. , 2023, , 411-434. | | 0 |
| 3599 | Cerebral and noncerebral organoids. , 2023, , 431-453. | | 0 |
| 3604 | Nanoscale drug delivery and tissue engineering for neurodegenerative diseases. , 2023, , 581-590. | | 1 |
| 3610 | iPSCs and their Role in Amelioration of Neurodegenerative Disorders. , 2023, , 111-137. | | 0 |
| 3615 | Material Intelligence. Natural Computing Series, 2023, , 319-355. | 2.2 | 0 |
| 3619 | Classes of Stem Cells: From Biology to Engineering. Regenerative Engineering and Translational Medicine, 0, , . | 1.6 | 1 |
| 3625 | Applications of Induced Pluripotent Stem Cell-Derived Glia in Brain Disease Research and Treatment. Handbook of Experimental Pharmacology, 2023, , . | 0.9 | 0 |
| 3642 | Stem Cell-Derived Neural Organoids: From the Origin to Next Generation. , 2023, , 1-19. | | 0 |
| 3675 | Two-Dimensional and Three-Dimensional Culture of Human Pluripotent Stem Cells. Biochemistry, 0, , . | 0.8 | 0 |
| 3696 | Editorial: Three-dimensional/3D stem cell culture systems. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 0 |
| 3713 | Microfluidics: a concise review of the history, principles, design, applications, and future outlook. Biomaterials Science, 2024, 12, 218-251. | 2.6 | 2 |
| 3737 | Tumor Ecosystem-Mimicking Bioengineering Methods. , 2023, , 637-653. | | 0 |
| 3763 | Cell behaviors that pattern developing tissues: the case of the vertebrate nervous system. Current Topics in Developmental Biology, 2023, , . | 1.0 | 0 |
| 3767 | Organoide in der Zelltherapie. , 2023, , 183-198. | | 0 |
| 3792 | Brain Development. , 2024, , 84-113. | | 0 |
| 3805 | Eavesdropping on brain organoids. Nature Biotechnology, 0, , . | 9.4 | 0 |
| 3823 | Shaping the Neurovascular Unit Exploiting Human Brain Organoids. Molecular Neurobiology, 0, , . | 1.9 | 0 |
| 3824 | Developmental Origins of the Structural Defects Implicated in ASD: Insights from iPSC and Post-Mortem Studies. , 2023, , 349-374. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 3827 | Innovative explorations: unveiling the potential of organoids for investigating environmental pollutant exposure. Environmental Science and Pollution Research, 2024, 31, 16256-16273. | 2.7 | 0 |
| 3829 | Patient-derived organoids in human cancer: a platform for fundamental research and precision medicine. Molecular Biomedicine, 2024, 5, . | 1.7 | 0 |
| 3850 | Multipoint Selective Stimulation of Neural Spheroid Network with Microelectrode Array. , 2024, , . | | 0 |
| 3862 | Organoid Intelligence: Bridging Artificial Intelligence for Biological Computing and Neurological Insights. Biochemistry, 0, , . | 0.8 | 0 |
| 3864 | Editorial: Stem cell-derived retinal and brain organoid culture for disease modeling. Frontiers in Cellular Neuroscience, 0, 18, . | 1.8 | 0 |