Tiago G Fernandes

List of Publications by Year
in descending order

57 papers	1,633 citations	304602 22 h-index	302012 39 g-index
61 all docs	61 docs citations	61 times ranked	2279 citing authors

#	Article	IF	Citations
1	High-throughput cellular microarray platforms: applications in drug discovery, toxicology and stem cell research. Trends in Biotechnology, 2009, 27, 342-349.	4.9	255
2	Stem cell cultivation in bioreactors. Biotechnology Advances, 2011, 29, 815-829.	6.0	183
3	Mouse embryonic stem cell expansion in a microcarrier-based stirred culture system. Journal of Biotechnology, 2007, 132, 227-236.	1.9	145
4	Threeâ€dimensional cell culture microarray for highâ€throughput studies of stem cell fate. Biotechnology and Bioengineering, 2010, 106, 106-118.	1.7	92
5	Transcriptomic analysis of 3D Cardiac Differentiation of Human Induced Pluripotent Stem Cells Reveals Faster Cardiomyocyte Maturation Compared to 2D Culture. Scientific Reports, 2019, 9, 9229.	1.6	77
6	On-Chip, Cell-Based Microarray Immunofluorescence Assay for High-Throughput Analysis of Target Proteins. Analytical Chemistry, 2008, 80, 6633-6639.	3.2	72
7	Defined Essential 8â„¢ Medium and Vitronectin Efficiently Support Scalable Xeno-Free Expansion of Human Induced Pluripotent Stem Cells in Stirred Microcarrier Culture Systems. PLoS ONE, 2016, 11, e0151264.	1.1	57
8	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
9	Modeling Rett Syndrome With Human Patient-Specific Forebrain Organoids. Frontiers in Cell and Developmental Biology, 2020, 8, 610427.	1.8	49
10	Towards Multi-Organoid Systems for Drug Screening Applications. Bioengineering, 2018, 5, 49.	1.6	45
11	Different stages of pluripotency determine distinct patterns of proliferation, metabolism, and lineage commitment of embryonic stem cells under hypoxia. Stem Cell Research, 2010, 5, 76-89.	0.3	42
12	Maturation of Human Pluripotent Stem Cell-Derived Cerebellar Neurons in the Absence of Co-culture. Frontiers in Bioengineering and Biotechnology, 2020, 8, 70.	2.0	39
13	Scalable culture of human induced pluripotent cells on microcarriers under xenoâ€free conditions using singleâ€use verticalâ€wheelâ„¢ bioreactors. Journal of Chemical Technology and Biotechnology, 2018, 93, 3597-3606.	1.6	36
14	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
15	Biophysical study of human induced Pluripotent Stem Cell-Derived cardiomyocyte structural maturation during long-term culture. Biochemical and Biophysical Research Communications, 2018, 499, 611-617.	1.0	35
16	Stem cell bioprocessing for regenerative medicine. Journal of Chemical Technology and Biotechnology, 2014, 89, 34-47.	1.6	30
17	Neural commitment of human pluripotent stem cells under defined conditions recapitulates neural development and generates patientâ€specific neural cells. Biotechnology Journal, 2015, 10, 1578-1588.	1.8	28
18	Angelman syndrome: a journey through the brain. FEBS Journal, 2020, 287, 2154-2175.	2.2	27

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19	Long-term expansion of human induced pluripotent stem cells in a microcarrier-based dynamic system. Journal of Chemical Technology and Biotechnology, 2017, 92, 492-503.	1.6	26
20	Scalable Generation of Mature Cerebellar Organoids from Human Pluripotent Stem Cells and Characterization by Immunostaining. Journal of Visualized Experiments, 2020, , .	0.2	26
21	Design Principles for Pluripotent Stem Cell-Derived Organoid Engineering. Stem Cells International, 2019, 2019, 1-17.	1.2	25
22	Kinetic and metabolic analysis of mouse embryonic stem cell expansion under serum-free conditions. Biotechnology Letters, 2010, 32, 171-179.	1.1	24
23	Scalable Expansion of Human-Induced Pluripotent Stem Cells in Xeno-Free Microcarriers. Methods in Molecular Biology, 2014, 1283, 23-29.	0.4	24
24	New Insights into the Mechanisms of Embryonic Stem Cell Self-Renewal under Hypoxia: A Multifactorial Analysis Approach. PLoS ONE, 2012, 7, e38963.	1.1	23
25	Clinicalâ€scale purification of pluripotent stem cell derivatives for cellâ€based therapies. Biotechnology Journal, 2015, 10, 1103-1114.	1.8	23
26	Production of Human Pluripotent Stem Cell-Derived Hepatic Cell Lineages and Liver Organoids: Current Status and Potential Applications. Bioengineering, 2020, 7, 36.	1.6	20
27	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
28	Integrated Platform for Production and Purification of Human Pluripotent Stem Cell-Derived Neural Precursors. Stem Cell Reviews and Reports, 2014, 10, 151-161.	5.6	18
29	Extracellular Vesicles in CNS Developmental Disorders. International Journal of Molecular Sciences, 2020, 21, 9428.	1.8	18
30	Scaling up a chemicallyâ€defined aggregateâ€based suspension culture system for neural commitment of human pluripotent stem cells. Biotechnology Journal, 2016, 11, 1628-1638.	1.8	16
31	A scale out approach towards neural induction of human induced pluripotent stem cells for neurodevelopmental toxicity studies. Toxicology Letters, 2018, 294, 51-60.	0.4	15
32	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
33	Multifactorial Modeling Reveals a Dominant Role of Wnt Signaling in Lineage Commitment of Human Pluripotent Stem Cells. Bioengineering, 2019, 6, 71.	1.6	6
34	Engineering Organoids for in vitro Modeling of Phenylketonuria. Frontiers in Molecular Neuroscience, 2021, 14, 787242.	1.4	6
35	Microscale technologies for stem cell culture. , 2013, , 143-175.		4
36	Purification of Human Induced Pluripotent Stem Cell-Derived Neural Precursors Using Magnetic Activated Cell Sorting. Methods in Molecular Biology, 2014, 1283, 137-145.	0.4	4

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37	Bioreactors for stem cell culture. , 2013, , 69-114.		3
38	Three-Dimensional Cell-Based Microarrays: Printing Pluripotent Stem Cells into 3D Microenvironments. Methods in Molecular Biology, 2018, 1771, 69-81.	0.4	3
39	Natural Multimerization Rules the Performance of Affinity-Based Physical Hydrogels for Stem Cell Encapsulation and Differentiation. Biomacromolecules, 2020, 21, 3081-3091.	2.6	3
40	Affinityâ€Triggered Assemblies Based on a Designed Peptideâ€"Peptide Affinity Pair. Biotechnology Journal, 2019, 14, e1800559.	1.8	2
41	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
42	A Dynamic 3D Aggregate-Based System for the Successful Expansion and Neural Induction of Human Pluripotent Stem Cells. Frontiers in Cellular Neuroscience, 2022, 16, 838217.	1.8	2
43	Effect of hypoxia on proliferation and neural commitment of embryonic stem cells at different stages of pluripotency. , 2011, , .		1
44	Stem cell separation. , 2013, , 115-141.		1
45	Enrichment and Separation Technologies for Stem Cell-Based Therapies. , 2016, , 199-213.		1
46	Advanced microtechnologies for high-throughput screening. , 2020, , 149-175.		1
47	3D Microwell Platform for Cardiomyocyte Differentiation of Human Pluripotent Stem Cells. Methods in Molecular Biology, 2020, , 1.	0.4	1
48	Exploring embryonic stem cell fate using cellular microarrays. , 2011, , .		0
49	Characteristics of stem cells. , 2013, , 1-32.		0
50	Stem cell culture: mimicking the stem cell niche in vitro. , 2013, , 33-68.		0
51	Stem cells and regenerative medicine. , 2013, , 177-206.		0
52	Engineering at the microscale: A step towards singleâ€cell analysis of human pluripotent stem cells. Biotechnology Journal, 2015, 10, 1511-1512.	1.8	0
53	Engineering Cell Systems. Stem Cells International, 2019, 2019, 1-3.	1.2	0
54	Pluripotent stem cell biology and engineering. , 2020, , 1-31.		0

#	Article	IF	Citations
55	Conclusions and closing remarks. , 2020, , 259-261.		0
56	Engineering strategies for regenerative medicine. , 2020, , ix-xii.		0
57	Editorial: Stem Cell Systems Bioengineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 693107.	2.0	0