Laura YlÃ¤-Outinen

List of Publications by Year
in descending order

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29 papers	786 citations	567281 15 h-index	526287 27 g-index
29 all docs	29 docs citations	29 times ranked	1056 citing authors

#	Article	IF	Citations
1	Human embryonic stem cell-derived neuronal cells form spontaneously active neuronal networks in vitro. Experimental Neurology, 2009, 218, 109-116.	4.1	113
2	Functional characterization of human pluripotent stem cell-derived cortical networks differentiated on laminin-521 substrate: comparison to rat cortical cultures. Scientific Reports, 2019, 9, 17125.	3.3	77
3	Human cell-based micro electrode array platform for studying neurotoxicity. Frontiers in Neuroengineering, 2010, 3, .	4.8	74
4	Similarly derived and cultured hESC lines show variation in their developmental potential towards neuronal cells in long-term culture. Regenerative Medicine, 2010, 5, 749-762.	1.7	66
5	Burst analysis tool for developing neuronal networks exhibiting highly varying action potential dynamics. Frontiers in Computational Neuroscience, 2012, 6, 38.	2.1	62
6	Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering. Biomedical Materials (Bristol), 2017, 12, 025014.	3.3	61
7	Three-dimensional growth matrix for human embryonic stem cell-derived neuronal cells. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 186-194.	2.7	39
8	Structured PDMS Chambers for Enhanced Human Neuronal Cell Activity on MEA Platforms. Journal of Bionic Engineering, 2012, 9, 1-10.	5.0	29
9	Carbon nanotube micropillars trigger guided growth of complex human neural stem cells networks. Nano Research, 2019, 12, 2894-2899.	10.4	27
10	Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells. Reactive and Functional Polymers, 2018, 124, 29-39.	4.1	25
11	Cell culture chamber with gas supply for prolonged recording of human neuronal cells on microelectrode array. Journal of Neuroscience Methods, 2017, 280, 27-35.	2.5	22
12	Twoâ€photon microfabrication of poly(ethylene glycol) diacrylate and a novel biodegradable photopolymerâ€"comparison of processability for biomedical applications. Polymers for Advanced Technologies, 2012, 23, 992-1001.	3.2	19
13	Ion Beam Assisted E-Beam Deposited TiN Microelectrodesâ€"Applied to Neuronal Cell Culture Medium Evaluation. Frontiers in Neuroscience, 2018, 12, 882.	2.8	18
14	GABA and Gap Junctions in the Development of Synchronized Activity in Human Pluripotent Stem Cell-Derived Neural Networks. Frontiers in Cellular Neuroscience, 2018, 12, 56.	3.7	17
15	Optimised PDMS Tunnel Devices on MEAs Increase the Probability of Detecting Electrical Activity from Human Stem Cell-Derived Neuronal Networks. Frontiers in Neuroscience, 2017, 11, 606.	2.8	16
16	Screening of Hydrogels for Human Pluripotent Stem Cellâ€"Derived Neural Cells: Hyaluronanâ€Polyvinyl Alcoholâ€Collagenâ€Based Interpenetrating Polymer Network Provides an Improved Hydrogel Scaffold. Macromolecular Bioscience, 2019, 19, e1900096.	4.1	16
17	Effects of inflammatory cytokines IFN-Î³, TNF-Î± and IL-6 on the viability and functionality of human pluripotent stem cell-derived neural cells. Journal of Neuroimmunology, 2019, 331, 36-45.	2.3	16
18	Bidirectional cell-matrix interaction dictates neuronal network formation in a brain-mimetic 3D scaffold. Acta Biomaterialia, 2022, 140, 314-323.	8.3	13

#	Article	IF	Citations
19	Atomic layer deposited iridium oxide thin film as microelectrode coating in stem cell applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	11
20	Healthy human CSF promotes glial differentiation of hESC-derived neural cells while retaining spontaneous activity in existing neuronal networks. Biology Open, 2013, 2, 605-612.	1.2	11
21	Joint analysis of extracellular spike waveforms and neuronal network bursts. Journal of Neuroscience Methods, 2016, 259, 143-155.	2.5	10
22	Novel method to produce a layered 3D scaffold for human pluripotent stem cell-derived neuronal cells. Journal of Neuroscience Methods, 2021, 350, 109043.	2.5	10
23	All Titanium Microelectrode Array for Field Potential Measurements from Neurons and Cardiomyocytesâ€"A Feasibility Study. Micromachines, 2011, 2, 394-409.	2.9	7
24	Advances in Human Stem Cell-Derived Neuronal Cell Culturing and Analysis. Advances in Neurobiology, 2019, 22, 299-329.	1.8	7
25	Comparative microelectrode array data of the functional development of hPSC-derived and rat neuronal networks. Scientific Data, 2022, 9, 120.	5.3	7
26	Simulation of developing human neuronal cell networks. BioMedical Engineering OnLine, 2016, 15, 105.	2.7	6
27	Electrospun Poly(L,D-lactide) Scaffolds Support the Growth of Human Embryonic Stem Cell-derived Neuronal Cells~!2009-08-26~!2009-11-30~!2010-02-12~!. The Open Tissue Engineering and Regenerative Medicine Journal, 2010, 3, 1-9.	2.6	6
28	A capillary pH electrode for evaluating long term culturing of neural cell populations. Procedia Engineering, 2010, 5, 544-547.	1.2	1
29	Texture-property relations of bioamine crosslinked gellan gum hydrogels. IFMBE Proceedings, 2018, , 189-192.	0.3	0