Kenta Shimba

List of Publications by Year
in descending order

22 papers	117 citations	1684188 5 h-index	1281871 11 g-index
22 all docs	22 docs citations	22 times ranked	188 citing authors

#	Article	IF	Citations
1	Microcasting with agarose gel via degassed polydimethylsiloxane molds for repellency-guided cell patterning. RSC Advances, 2016, 6, 54754-54762.	3.6	36
2	Synchronous firing patterns of induced pluripotent stem cell-derived cortical neurons depend on the network structure consisting of excitatory and inhibitory neurons. Biochemical and Biophysical Research Communications, 2018, 501, 152-157.	2.1	21
3	Functional innervation of human induced pluripotent stem cell-derived cardiomyocytes by co-culture with sympathetic neurons developed using a microtunnel technique. Biochemical and Biophysical Research Communications, 2017, 494, 138-143.	2.1	20
4	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.	4.2	17
5	Recording axonal conduction to evaluate the integration of pluripotent cell-derived neurons into a neuronal network. Biomedical Microdevices, 2015, 17, 94.	2.8	7
6	Modulation of neuronal network activity using magnetic nanoparticle-based astrocytic network integration. Biomaterials Science, 2015, 3, 1228-1235.	5.4	4
7	Co-culture Devices for in vitro Monitoring of Neural Transplantation Processes. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 1983-1989.	0.2	3
8	Connection-strength Estimation of Neuronal Networks by Fitting for Izhikevich Model. IEEJ Transactions on Electronics, Information and Systems, 2012, 132, 1581-1588.	0.2	2
9	Connection†Strength Estimation of Neuronal Networks by Fitting for Izhikevich Model. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2014, 187, 42-50.	0.4	1
10	Cell-cycle-dependent Ca^{2+} transients in human induced pluripotent stem cells revealed by a simultaneous imaging of cell nuclei and intracellular Ca^{2+} level. Integrative Biology (United Kingdom), 2016, 8, 985-990.	1.3	1
11	Initiation and termination of reentry-like activity in rat cardiomyocytes cultured in a microelectrode array. Biochemical and Biophysical Research Communications, 2021, 576, 117-122.	2.1	1
12	Co-culture of Parasympathetic Neurons and Cardiomyocyte. IEEJ Transactions on Electronics, Information and Systems, 2015, 135, 813-818.	0.2	1
13	Neural Transplantation Model Using Integration Co-culture Chamber. IEEJ Transactions on Electronics, Information and Systems, 2012, 132, 1072-1078.	0.2	1
14	Low Delay Connection-strength Estimation of Cultured Neuronal Networks Considering Spike-timing-Dependent Plasticity Rule. IEEJ Transactions on Electronics, Information and Systems, 2019, 139, 596-602.	0.2	1
15	Observing Cell Assemblies From Spike Train Recordings Based on the Biological Basis of Synaptic Connectivity. IEEE Transactions on Biomedical Engineering, 2022, 69, 1524-1532.	4.2	1
16	Microfabricated Device to Record Axonal Conduction under Pharmacological Treatment for Functional Evaluation of Axon Ion Channel. IEEE Transactions on Biomedical Engineering, 2021, 68, 1-1.	4.2	0
17	Neuron Type Sorting Based on Connection-strength Estimation. IEEJ Transactions on Electronics, Information and Systems, 2013, 133, 1806-1813.	0.2	0
18	Serotonergic Modulation of Activity Pattern on Neuronal Network. IEEJ Transactions on Electronics, Information and Systems, 2013, 133, 1814-1819.	0.2	0

#	Article	IF	Citations
19	Improvement in Pattern Separation by Regulating Neurogenesis in Hippocampal Culture. IEEJ Transactions on Electronics, Information and Systems, 2015, 135, 805-812.	0.2	0
20	Migration Guidance of Human iPSC-derived Neurons by a Two-dimensional Patterning. IEEJ Transactions on Electronics, Information and Systems, 2016, 136, 1268-1276.	0.2	0
21	Amyloid Beta Oligomer-induced Changes in Spontaneous Activity of Neuronal Networks. IEEJ Transactions on Electronics, Information and Systems, 2019, 139, 638-639.	0.2	0
22	Exploring a Method for Inter-module Time Delay Training in a Semi-separated Dissociated Neuronal Network. IEEJ Transactions on Electronics, Information and Systems, 2019, 139, 816-817.	0.2	0