

Charles P Unsworth

List of Publications by Year in descending order

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Version: 2024-02-01

24
papers

247
citations

1040056

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996975

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25
docs citations

25
times ranked

238
citing authors

#	ARTICLE	IF	CITATIONS
1	Patterning and detailed study of human hNT astrocytes on parylene-C/silicon dioxide substrates to the single cell level. <i>Biomaterials</i> , 2011, 32, 6541-6550.	11.4	42
2	Robust Wavelet Stabilized "Footprints of Uncertainty"™ for Fuzzy System Classifiers to Automatically Detect Sharp Waves in the EEG after Hypoxia Ischemia. <i>International Journal of Neural Systems</i> , 2017, 27, 1650051.	5.2	30
3	EEG sharp waves are a biomarker of striatal neuronal survival after hypoxia-ischemia in preterm fetal sheep. <i>Scientific Reports</i> , 2018, 8, 16312.	3.3	26
4	Isolating single primary rat hippocampal neurons & astrocytes on ultra-thin patterned parylene-C/silicon dioxide substrates. <i>Biomaterials</i> , 2011, 32, 2566-2574.	11.4	25
5	Applications of advanced signal processing and machine learning in the neonatal hypoxic-ischemic electroencephalogram. <i>Neural Regeneration Research</i> , 2020, 15, 222.	3.0	18
6	Enrichment of differentiated hNT neurons and subsequent analysis using flow-cytometry and xCELLigence sensing. <i>Journal of Neuroscience Methods</i> , 2014, 227, 47-56.	2.5	15
7	Latent Phase Detection of Hypoxic-Ischemic Spike Transients in the EEG of Preterm Fetal Sheep Using Reverse Biorthogonal Wavelets & Fuzzy Classifier. <i>International Journal of Neural Systems</i> , 2019, 29, 1950013.	5.2	15
8	Route, speed and mode of oak postglacial colonisation across the British Isles: Integrating molecular ecology, palaeoecology and modelling approaches. <i>Botanical Journal of Scotland</i> , 2005, 57, 59-81.	0.3	12
9	Advanced Deep Learning Spectroscopy of Scalogram Infused CNN Classifiers for Robust Identification of Post-Hypoxic Epileptiform EEG Spikes. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000198.	6.1	11
10	Electroencephalography studies of hypoxic ischemia in fetal and neonatal animal models. <i>Neural Regeneration Research</i> , 2020, 15, 828.	3.0	9
11	Latent Phase Identification of High-Frequency Micro-Scale Gamma Spike Transients in the Hypoxic Ischemic EEG of Preterm Fetal Sheep Using Spectral Analysis and Fuzzy Classifiers. <i>Sensors</i> , 2020, 20, 1424.	3.8	8
12	Comparison of Leading Biosensor Technologies to Detect Changes in Human Endothelial Barrier Properties in Response to Pro-Inflammatory TNF α and IL1 β in Real-Time. <i>Biosensors</i> , 2021, 11, 159.	4.7	6
13	Redundancy of Independent Component Analysis in Four Common Types of Childhood Epileptic Seizure. <i>Journal of Clinical Neurophysiology</i> , 2006, 23, 245-253.	1.7	5
14	A Cell Derived Active Contour (CDAC) Method for Robust Tracking in Low Frame Rate, Low Contrast Phase Microscopy - an Example: The Human hNT Astrocyte. <i>PLoS ONE</i> , 2013, 8, e82883.	2.5	5
15	Contour interpolated radial basis functions with spline boundary correction for fast 3D reconstruction of the human articular cartilage from MR images. <i>Medical Physics</i> , 2016, 43, 1187-1199.	3.0	4
16	Evaluation of parylene derivatives for use as biomaterials for human astrocyte cell patterning. <i>PLoS ONE</i> , 2019, 14, e0218850.	2.5	4
17	Activating a 2 μ m ² Network of hNT Astrocytes with UV Laser Stimulation. , 2019, , .		3
18	Single Cell Grid Networks of Human Astrocytes On Chip. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
19	Superior galvanostatic electrochemical deposition of platinum nanograss provides high performance planar microelectrodes for in vitro neural recording. Journal of Neural Engineering, 2021, 18, 0460d8.	3.5	3
20	First human hNT astrocytes patterned to single cell resolution on parylene-C/Silicon dioxide substrates. , 2011, 2011, 3605-8.		1
21	Improved cell tracking via automated removal of particulates. , 2014, , .		1
22	Geometric micro-shapes facilitate trackless connections between human astrocytes. Journal of Neural Engineering, 2021, 18, 036020.	3.5	1
23	Clustering and synchronous firing of coupled Rulkov maps with STDP for modeling epilepsy. , 2014, , .		0
24	Rotation-invariant cell shape representation and modeling with level sets and graphical models. , 2014, , .		0