H Isaac Chen

List of Publications by Year
in descending order

45 papers	1,824 citations	361413 20 h-index	289244 40 g-index
48 all docs	48 docs citations	48 times ranked	2592 citing authors

#	Article	IF	Citations
1	A Patient-Derived Glioblastoma Organoid Model and Biobank Recapitulates Inter- and Intra-tumoral Heterogeneity. Cell, 2020, 180, 188-204.e22.	28.9	529
2	Detection of Cerebral Compromise With Multimodality Monitoring in Patients With Subarachnoid Hemorrhage. Neurosurgery, 2011, 69, 53-63.	1.1	122
3	Applications of Human Brain Organoids to Clinical Problems. Developmental Dynamics, 2019, 248, 53-64.	1.8	88
4	Neural Substrate Expansion for the Restoration of Brain Function. Frontiers in Systems Neuroscience, 2016, 10, 1.	2.5	85
5	MXene-infused bioelectronic interfaces for multiscale electrophysiology and stimulation. Science Translational Medicine, 2021, 13, eabf8629.	12.4	68
6	Restoring nervous system structure and function using tissue engineered living scaffolds. Neural Regeneration Research, 2015, 10, 679.	3.0	64
7	Transplantation of Human Brain Organoids: Revisiting the Science and Ethics of Brain Chimeras. Cell Stem Cell, 2019, 25, 462-472.	11.1	62
8	Development of and psychometric testing for the Brief Pain Inventory–Facial in patients with facial pain syndromes. Journal of Neurosurgery, 2010, 113, 516-523.	1.6	58
9	Rebuilding Brain Circuitry with Living Micro-Tissue Engineered Neural Networks. Tissue Engineering - Part A, 2015, 21, 2744-2756.	3.1	58
10	The Evolution of Neuroprosthetic Interfaces. Critical Reviews in Biomedical Engineering, 2016, 44, 123-152.	0.9	56
11	Innervation: the missing link for biofabricated tissues and organs. Npj Regenerative Medicine, 2020, 5, 11.	5.2	56
12	Transorbital endoscopic amygdalohippocampectomy: a feasibility investigation. Journal of Neurosurgery, 2014, 120, 1428-1436.	1.6	55
13	Tissue engineered nigrostriatal pathway for treatment of Parkinson's disease. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1702-1716.	2.7	48
14	Emerging regenerative medicine and tissue engineering strategies for Parkinson's disease. Npj Parkinson's Disease, 2020, 6, 4.	5.3	44
15	Development of optically controlled "living electrodes" with long-projecting axon tracts for a synaptic brain-machine interface. Science Advances, 2021, 7, .	10.3	40
16	Bundled Three-Dimensional Human Axon Tracts Derived from Brain Organoids. IScience, 2019, 21, 57-67.	4.1	37
17	Engineered Axonal Tracts as "Living Electrodes" for Synaptic-Based Modulation of Neural Circuitry. Advanced Functional Materials, 2018, 28, 1701183.	14.9	36
18	Lateral Transorbital Endoscopic Access to the Hippocampus, Amygdala, and Entorhinal Cortex: Initial Clinical Experience. Orl, 2015, 77, 321-332.	1.1	32

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19	Neural Stem Cells as Biological Minipumps: A Faster Route to Cell Therapy for the CNS?. Current Stem Cell Research and Therapy, 2007, 2, 13-22.	1.3	24
20	Endoscopic Microvascular Decompression: A Stepwise Operative Technique. Orl, 2012, 74, 293-298.	1.1	21
21	Challenges and demand for modeling disorders of consciousness following traumatic brain injury. Neuroscience and Biobehavioral Reviews, 2019, 98, 336-346.	6.1	21
22	A Porcine Model of Peripheral Nerve Injury Enabling Ultra-Long Regenerative Distances: Surgical Approach, Recovery Kinetics, and Clinical Relevance. Neurosurgery, 2020, 87, 833-846.	1.1	21
23	Harnessing Plasticity for the Treatment of Neurosurgical Disorders: An Overview. World Neurosurgery, 2014, 82, 648-659.	1.3	17
24	Tissue Engineering and Biomaterial Strategies to Elicit Endogenous Neuronal Replacement in the Brain. Frontiers in Neurology, 2020, 11, 344.	2.4	17
25	Electrophysiological Signature Reveals Laminar Structure of the Porcine Hippocampus. ENeuro, 2018, 5, ENEURO.0102-18.2018.	1.9	17
26	Engineering advanced neural tissue constructs to mitigate acute cerebral inflammation after brain transplantation in rats. Biomaterials, 2019, 192, 510-522.	11.4	15
27	Modeling traumatic brain injury with human brain organoids. Current Opinion in Biomedical Engineering, 2020, 14, 52-58.	3.4	15
28	Restoring lost nigrostriatal fibers in Parkinson's disease based on clinically-inspired design criteria. Brain Research Bulletin, 2021, 175, 168-185.	3.0	14
29	Multichannel activity propagation across an engineered axon network. Journal of Neural Engineering, 2017, 14, 026016.	3.5	13
30	The Risk Assessment and Prediction Tool (RAPT) for Discharge Planning in a Posterior Lumbar Fusion Population. Neurosurgery, 2020, 86, E140-E146.	1.1	13
31	Complications Predicting Perioperative Mortality in Patients Undergoing Elective Craniotomy: A Population-Based Study. World Neurosurgery, 2018, 118, e195-e205.	1.3	10
32	Liver disease is an independent predictor of poor 30-day outcomes following surgery for degenerative disease of the cervical spine. Spine Journal, 2019, 19, 448-460.	1.3	10
33	Functional Cortical Axon Tracts Generated from Human Stem Cell-Derived Neurons. Tissue Engineering - Part A, 2019, 25, 736-745.	3.1	10
34	The Effect of Underlying Liver Disease on Perioperative Outcomes Following Craniotomy for Tumor: An American College of Surgeons National Quality Improvement Program Analysis. World Neurosurgery, 2018, 115, e85-e96.	1.3	9
35	Patterns of opioid use in patients with trigeminal neuralgia undergoing neurosurgery. Journal of Neurosurgery, 2019, 131, 1805-1811.	1.6	7
36	A Primer on Human Brain Organoids for the Neurosurgeon. Neurosurgery, 2020, 87, 620-629.	1.1	7

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37	Engineered microtissue as an anatomicallyÂinspired model of Parkinson's disease. Current Opinion in Biomedical Engineering, 2020, 14, 75-83.	3.4	5
38	Implications of anesthetic approach, spinal versus general, for the treatment of spinal disc herniation. Journal of Neurosurgery: Spine, 2019, 30, 78-82.	1.7	4
39	Undiagnosed Obstructive Sleep Apnea as Predictor of 90-Day Readmission for Brain Tumor Patients. World Neurosurgery, 2020, 134, e979-e984.	1.3	2
40	Optically-Controlled 'Living Electrodes' with Long-Projecting Axon Tracts for a Synaptic Brain-Machine Interface. SSRN Electronic Journal, 0, , .	0.4	2
41	Undiagnosed obstructive sleep apnea as a predictor of 30-day readmission for brain tumor patients. Journal of Neurosurgery, 2020, 133, 624-629.	1.6	2
42	Predicting short-term outcomes following supratentorial tumor surgery. Clinical Neurology and Neurosurgery, 2020, 196, 106016.	1.4	1
43	Instituting an intrathecal baclofen pump program at an academic institution. PM and R, 2021, , .	1.6	1
44	Three-dimensional Human Axon Tracts Derived From Cerebral Organoids. SSRN Electronic Journal, 0, , .	0.4	1
45	Matched Analysis of the Risk Assessment and Prediction Tool for Discharge Planning Following Single-Level Posterior Lumbar Fusion. World Neurosurgery, 2022, , .	1.3	0