

# David F Meaney

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2851954/publications.pdf>

Version: 2024-02-01

140  
papers

12,671  
citations

25034

57  
h-index

25787

108  
g-index

144  
all docs

144  
docs citations

144  
times ranked

11164  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exogenous $\hat{1}\pm$ -Synuclein Fibrils Induce Lewy Body Pathology Leading to Synaptic Dysfunction and Neuron Death. <i>Neuron</i> , 2011, 72, 57-71.	8.1	1,249
2	Matrices with Compliance Comparable to that of Brain Tissue Select Neuronal over Glial Growth in Mixed Cortical Cultures. <i>Biophysical Journal</i> , 2006, 90, 3012-3018.	0.5	659
3	Tissue-Level Thresholds for Axonal Damage in an Experimental Model of Central Nervous System White Matter Injury. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 615-622.	1.3	478
4	Diffuse Axonal Injury in Head Trauma. <i>Journal of Head Trauma Rehabilitation</i> , 2003, 18, 307-316.	1.7	438
5	A Model of Parasagittal Controlled Cortical Impact in the Mouse: Cognitive and Histopathologic Effects. <i>Journal of Neurotrauma</i> , 1995, 12, 169-178.	3.4	401
6	Traumatic Axonal Injury Induces Calcium Influx Modulated by Tetrodotoxin-Sensitive Sodium Channels. <i>Journal of Neuroscience</i> , 2001, 21, 1923-1930.	3.6	381
7	Biomechanics of Concussion. <i>Clinics in Sports Medicine</i> , 2011, 30, 19-31.	1.8	283
8	Temporal Window of Vulnerability to Repetitive Experimental Concussive Brain Injury. <i>Neurosurgery</i> , 2005, 56, 364-374.	1.1	274
9	High Tolerance and Delayed Elastic Response of Cultured Axons to Dynamic Stretch Injury. <i>Journal of Neuroscience</i> , 1999, 19, 4263-4269.	3.6	261
10	Axonal Damage in Traumatic Brain Injury. <i>Neuroscientist</i> , 2000, 6, 483-495.	3.5	260
11	Extreme Stretch Growth of Integrated Axons. <i>Journal of Neuroscience</i> , 2004, 24, 7978-7983.	3.6	249
12	Enhanced Astrocytic $\text{Ca}^{2+}$ Signals Contribute to Neuronal Excitotoxicity after Status Epilepticus. <i>Journal of Neuroscience</i> , 2007, 27, 10674-10684.	3.6	248
13	Long-Term Accumulation of Amyloid- $\hat{1}^2$ , $\hat{1}^2$ -Secretase, Presenilin-1, and Caspase-3 in Damaged Axons Following Brain Trauma. <i>American Journal of Pathology</i> , 2004, 165, 357-371.	3.8	245
14	Accumulation of Amyloid $\hat{1}^2$ and Tau and the Formation of Neurofilament Inclusions Following Diffuse Brain Injury in the Pig. <i>Journal of Neuropathology and Experimental Neurology</i> , 1999, 58, 982-992.	1.7	236
15	Biomechanical Analysis of Experimental Diffuse Axonal Injury. <i>Journal of Neurotrauma</i> , 1995, 12, 689-694.	3.4	223
16	Mild Traumatic Brain Injury and Diffuse Axonal Injury in Swine. <i>Journal of Neurotrauma</i> , 2011, 28, 1747-1755.	3.4	219
17	mGluR5 stimulates gliotransmission in the nucleus accumbens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1995-2000.	7.1	210
18	Traumatic Axonal Injury Induces Proteolytic Cleavage of the Voltage-Gated Sodium Channels Modulated by Tetrodotoxin and Protease Inhibitors. <i>Journal of Neuroscience</i> , 2004, 24, 4605-4613.	3.6	201

#	ARTICLE	IF	CITATIONS
19	Characterization of Diffuse Axonal Pathology and Selective Hippocampal Damage following Inertial Brain Trauma in the Pig. <i>Journal of Neuropathology and Experimental Neurology</i> , 1997, 56, 822-834.	1.7	182
20	<i>In Vitro</i> Central Nervous System Models of Mechanically Induced Trauma: A Review. <i>Journal of Neurotrauma</i> , 1998, 15, 911-928.	3.4	182
21	The Mechanics of Traumatic Brain Injury: A Review of What We Know and What We Need to Know for Reducing Its Societal Burden. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 021008.	1.3	179
22	Immediate coma following inertial brain injury dependent on axonal damage in the brainstem. <i>Journal of Neurosurgery</i> , 2000, 93, 315-322.	1.6	177
23	Traumatic Axonal Injury Results in Biphasic Calpain Activation and Retrograde Transport Impairment in Mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003, 23, 34-42.	4.3	148
24	Automated quantification of neuronal networks and single-cell calcium dynamics using calcium imaging. <i>Journal of Neuroscience Methods</i> , 2015, 243, 26-38.	2.5	145
25	Animal models of traumatic brain injury. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2015, 127, 115-128.	1.8	127
26	<i>In-Vitro</i> Approaches for Studying Blast-Induced Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2009, 26, 861-876.	3.4	119
27	Mechanical disruption of the blood-brain barrier following experimental concussion. <i>Acta Neuropathologica</i> , 2018, 135, 711-726.	7.7	116
28	Mechanisms and Consequences of Neuronal Stretch Injury <i>In Vitro</i> Differ with the Model of Trauma. <i>Journal of Neurotrauma</i> , 2006, 23, 193-204.	3.4	113
29	A New Strategy to Produce Sustained Growth of Central Nervous System Axons: Continuous Mechanical Tension. <i>Tissue Engineering</i> , 2001, 7, 131-139.	4.6	109
30	Distribution of Forebrain Diffuse Axonal Injury Following Inertial Closed Head Injury in Miniature Swine. <i>Experimental Neurology</i> , 1994, 126, 291-298.	4.1	103
31	Effect of Acute Calcium Influx after Mechanical Stretch Injury <i>In Vitro</i> on the Viability of Hippocampal Neurons. <i>Journal of Neurotrauma</i> , 2004, 21, 61-72.	3.4	102
32	Tissue tears in the white matter after lateral fluid percussion brain injury in the rat: relevance to human brain injury. <i>Acta Neuropathologica</i> , 2000, 99, 117-124.	7.7	101
33	Evolution of Neurofilament Subtype Accumulation in Axons Following Diffuse Brain Injury in the Pig. <i>Journal of Neuropathology and Experimental Neurology</i> , 1999, 58, 588-596.	1.7	99
34	Dynamic Stretch Correlates to Both Morphological Abnormalities and Electrophysiological Impairment in a Model of Traumatic Axonal Injury. <i>Journal of Neurotrauma</i> , 2001, 18, 499-511.	3.4	95
35	Calcium-Permeable AMPA Receptors Appear in Cortical Neurons after Traumatic Mechanical Injury and Contribute to Neuronal Fate. <i>Journal of Neurotrauma</i> , 2008, 25, 1207-1216.	3.4	93
36	An open-source toolbox for automated phenotyping of mice in behavioral tasks. <i>Frontiers in Behavioral Neuroscience</i> , 2014, 8, 349.	2.0	92

#	ARTICLE	IF	CITATIONS
37	A Porcine Model of Traumatic Brain Injury via Head Rotational Acceleration. <i>Methods in Molecular Biology</i> , 2016, 1462, 289-324.	0.9	89
38	Relationship between structural modeling and hyperelastic material behavior: application to CNS white matter. <i>Biomechanics and Modeling in Mechanobiology</i> , 2003, 1, 279-293.	2.8	88
39	Transcriptome transfer produces a predictable cellular phenotype. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 7624-7629.	7.1	86
40	Magnetic Resonance Spectroscopy of Diffuse Brain Trauma in the Pig. <i>Journal of Neurotrauma</i> , 1998, 15, 665-674.	3.4	80
41	Traumatic mechanical injury to the hippocampus in vitro causes regional caspase-3 and calpain activation that is influenced by NMDA receptor subunit composition. <i>Neurobiology of Disease</i> , 2006, 22, 165-176.	4.4	80
42	Calpain Mediates Proteolysis of the Voltage-Gated Sodium Channel $\alpha$ -Subunit. <i>Journal of Neuroscience</i> , 2009, 29, 10350-10356.	3.6	80
43	Magnetization Transfer Imaging of Diffuse Axonal Injury Following Experimental Brain Injury in the Pig: Characterization by Magnetization Transfer Ratio with Histopathologic Correlation. <i>Journal of Computer Assisted Tomography</i> , 1996, 20, 540-546.	0.9	80
44	Traumatic injury induces differential expression of cell death genes in organotypic brain slice cultures determined by complementary DNA array hybridization. <i>Neuroscience</i> , 2000, 96, 131-139.	2.3	77
45	Development of transplantable nervous tissue constructs comprised of stretch-grown axons. <i>Journal of Neuroscience Methods</i> , 2006, 153, 95-103.	2.5	77
46	Modification of the Cortical Impact Model To Produce Axonal Injury in the Rat Cerebral Cortex. <i>Journal of Neurotrauma</i> , 1994, 11, 599-612.	3.4	76
47	Antagonism of purinergic signalling improves recovery from traumatic brain injury. <i>Brain</i> , 2013, 136, 65-80.	7.6	73
48	Dexamethasone Potentiates in <i>in vitro</i> Blood-Brain Barrier Recovery after Primary Blast Injury by Glucocorticoid Receptor-Mediated Upregulation of ZO-1 Tight Junction Protein. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 1191-1198.	4.3	73
49	Mechanical Characterization of an In Vitro Device Designed to Quantitatively Injure Living Brain Tissue. <i>Annals of Biomedical Engineering</i> , 1998, 26, 381-390.	2.5	70
50	Biomechanical Aspects of a Fluid Percussion Model of Brain Injury. <i>Journal of Neurotrauma</i> , 1992, 9, 311-322.	3.4	69
51	High-Field Proton Magnetic Resonance Spectroscopy of a Swine Model for Axonal Injury. <i>Journal of Neurochemistry</i> , 2002, 70, 2038-2044.	3.9	69
52	Cytoplasmic BK $Ca^{2+}$ channel intron-containing mRNAs contribute to the intrinsic excitability of hippocampal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 1901-1906.	7.1	69
53	Pre-Clinical Testing of Therapies for Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2018, 35, 2737-2754.	3.4	68
54	Traumatic Axonal Injury Results in Biphasic Calpain Activation and Retrograde Transport Impairment in Mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003, , 34-42.	4.3	67

#	ARTICLE	IF	CITATIONS
55	Finite Element Modeling Approaches for Predicting Injury in an Experimental Model of Severe Diffuse Axonal Injury. , 1998, , .		65
56	A Modified Controlled Cortical Impact Technique to Model Mild Traumatic Brain Injury Mechanics in Mice. <i>Frontiers in Neurology</i> , 2014, 5, 100.	2.4	63
57	New Magnetic Resonance Imaging Techniques for the Evaluation of Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 1995, 12, 573-577.	3.4	62
58	TUNEL-positive staining of surface contusions after fatal head injury in man. <i>Acta Neuropathologica</i> , 2000, 100, 537-545.	7.7	62
59	In Vivo Thresholds for Mechanical Injury to the Blood-Brain Barrier. , 0, , .		61
60	A Multiscale Approach to Blast Neurotrauma Modeling: Part II: Methodology for Inducing Blast Injury to in vitro Models. <i>Frontiers in Neurology</i> , 2012, 3, 23.	2.4	59
61	Experimental Investigation of Cerebral Contusion: Histopathological and Immunohistochemical Evaluation of Dynamic Cortical Deformation. <i>Journal of Neuropathology and Experimental Neurology</i> , 1999, 58, 153-164.	1.7	58
62	N-Methyl-d-aspartate Receptor Mechanosensitivity Is Governed by C Terminus of NR2B Subunit. <i>Journal of Biological Chemistry</i> , 2012, 287, 4348-4359.	3.4	58
63	Modeling of Microstructural Kinematics During Simple Elongation of Central Nervous System Tissue. <i>Journal of Biomechanical Engineering</i> , 2003, 125, 798-804.	1.3	57
64	Numerical Model and Experimental Validation of Microcarrier Motion in a Rotating Bioreactor. <i>Tissue Engineering</i> , 2000, 6, 519-530.	4.6	56
65	Mechanically Induced Reactive Gliosis Causes ATP-Mediated Alterations in Astrocyte Stiffness. <i>Journal of Neurotrauma</i> , 2009, 26, 789-797.	3.4	56
66	Dynamic Mechanical Stretch of Organotypic Brain Slice Cultures Induces Differential Genomic Expression: Relationship to Mechanical Parameters. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 224-230.	1.3	55
67	A Device to Study the Initiation and Propagation of Calcium Transients in Cultured Neurons After Mechanical Stretch. <i>Annals of Biomedical Engineering</i> , 2004, 32, 1546-1559.	2.5	55
68	Diffuse axonal pathology detected with magnetization transfer imaging following brain injury in the pig. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 727-733.	3.0	54
69	Blood-Brain Barrier Dysfunction after Primary Blast Injury<i> in vitro</i>. <i>Journal of Neurotrauma</i> , 2013, 30, 1652-1663.	3.4	54
70	Expression profiling following traumatic brain injury: a review. <i>Neurochemical Research</i> , 2002, 27, 1147-1155.	3.3	53
71	NR2A and NR2B subunits differentially mediate MAP kinase signaling and mitochondrial morphology following excitotoxic insult. <i>Neurochemistry International</i> , 2012, 60, 506-516.	3.8	52
72	Multi-Dimensional Mapping of Brain-Derived Extracellular Vesicle MicroRNA Biomarker for Traumatic Brain Injury Diagnostics. <i>Journal of Neurotrauma</i> , 2020, 37, 2424-2434.	3.4	50

#	ARTICLE	IF	CITATIONS
73	A Multiscale Approach to Blast Neurotrauma Modeling: Part I – Development of Novel Test Devices for in vivo and in vitro Blast Injury Models. <i>Frontiers in Neurology</i> , 2012, 3, 46.	2.4	49
74	Significant Head Accelerations Can Influence Immediate Neurological Impairments in a Murine Model of Blast-Induced Traumatic Brain Injury. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 091004.	1.3	49
75	Time Course and Size of Blood–Brain Barrier Opening in a Mouse Model of Blast-Induced Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2016, 33, 1202-1211.	3.4	49
76	Primum non nocere: a call for balance when reporting on CTE. <i>Lancet Neurology</i> , The, 2019, 18, 231-233.	10.2	48
77	Mechanisms of calpain mediated proteolysis of voltage gated sodium channel $\alpha$ -subunits following <i>in vitro</i> dynamic stretch injury. <i>Journal of Neurochemistry</i> , 2012, 121, 793-805.	3.9	45
78	Isolated Primary Blast Alters Neuronal Function with Minimal Cell Death in Organotypic Hippocampal Slice Cultures. <i>Journal of Neurotrauma</i> , 2014, 31, 1202-1210.	3.4	43
79	Roller Coasters, G Forces, and Brain Trauma: On the Wrong Track?. <i>Journal of Neurotrauma</i> , 2002, 19, 1117-1120.	3.4	42
80	Mitochondrial Injury after Mechanical Stretch of Cortical Neurons <i>in vitro</i> : Biomarkers of Apoptosis and Selective Peroxidation of Anionic Phospholipids. <i>Journal of Neurotrauma</i> , 2012, 29, 776-788.	3.4	39
81	Autaptic Connections Shift Network Excitability and Bursting. <i>Scientific Reports</i> , 2017, 7, 44006.	3.3	39
82	Defining Brain Mechanical Properties: Effects of Region, Direction, and Species. , 0, , .		38
83	Immediate short-duration hypothermia provides long-term protection in an in vivo model of traumatic axonal injury. <i>Experimental Neurology</i> , 2009, 215, 119-127.	4.1	36
84	Dynamic neural and glial responses of a head-specific model for traumatic brain injury in <i>Drosophila</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 17269-17277.	7.1	36
85	1995 William J. Stickel Gold Award. High strain rate tissue deformation. A theory on the mechanical etiology of diabetic foot ulcerations. <i>Journal of the American Podiatric Medical Association</i> , 1995, 85, 519-527.	0.3	36
86	Single-Neuron NMDA Receptor Phenotype Influences Neuronal Rewiring and Reintegration following Traumatic Injury. <i>Journal of Neuroscience</i> , 2014, 34, 4200-4213.	3.6	35
87	Pharmacologically induced calcium oscillations protect neurons from increases in cytosolic calcium after trauma. <i>Journal of Neurochemistry</i> , 2006, 97, 462-474.	3.9	34
88	Immediate in vivo response of the cortex and the blood–brain barrier following dynamic cortical deformation in the rat. <i>Neuroscience Letters</i> , 1999, 259, 5-8.	2.1	32
89	Alterations in Hippocampal Network Activity after <i>In Vitro</i> Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2015, 32, 1011-1019.	3.4	32
90	NMDA receptor mediated phosphorylation of GluR1 subunits contributes to the appearance of calcium-permeable AMPA receptors after mechanical stretch injury. <i>Neurobiology of Disease</i> , 2012, 46, 646-654.	4.4	31

#	ARTICLE	IF	CITATIONS
91	Mechanoporation is a potential indicator of tissue strain and subsequent degeneration following experimental traumatic brain injury. <i>Clinical Biomechanics</i> , 2019, 64, 2-13.	1.2	31
92	MECHANICALLY INDUCED REACTIVE GLIOSIS CAUSES ATP-MEDIATED ALTERATIONS IN ASTROCYTE STIFFNESS. <i>Journal of Neurotrauma</i> , 2009, 26, 090330061141047.	3.4	30
93	Biomechanical Characterization of the Constitutive Relationship for the Brainstem. , 0, , .		29
94	Primary blast injury causes cognitive impairments and hippocampal circuit alterations. <i>Experimental Neurology</i> , 2016, 283, 16-28.	4.1	29
95	Isolated Primary Blast Inhibits Long-Term Potentiation in Organotypic Hippocampal Slice Cultures. <i>Journal of Neurotrauma</i> , 2016, 33, 652-661.	3.4	29
96	Primary Blast Exposure Increases Hippocampal Vulnerability to Subsequent Exposure: Reducing Long-Term Potentiation. <i>Journal of Neurotrauma</i> , 2016, 33, 1901-1912.	3.4	29
97	Repeated Primary Blast Injury Causes Delayed Recovery, but not Additive Disruption, in an <i>In Vitro</i> Blood-Brain Barrier Model. <i>Journal of Neurotrauma</i> , 2014, 31, 951-960.	3.4	28
98	Primary Blast Injury Depressed Hippocampal Long-Term Potentiation through Disruption of Synaptic Proteins. <i>Journal of Neurotrauma</i> , 2017, 34, 1063-1073.	3.4	28
99	A Quasi-Linear, Viscoelastic, Structural Model of the Plantar Soft Tissue With Frequency-Sensitive Damping Properties. <i>Journal of Biomechanical Engineering</i> , 2004, 126, 831-837.	1.3	26
100	Brain injury-induced proteolysis is reduced in a novel calpastatin-overexpressing transgenic mouse. <i>Journal of Neurochemistry</i> , 2013, 125, 909-920.	3.9	26
101	Ultrasensitive Single Extracellular Vesicle Detection Using High Throughput Droplet Digital Enzyme-Linked Immunosorbent Assay. <i>Nano Letters</i> , 2022, 22, 4315-4324.	9.1	26
102	Clinical Applications of Extracellular Vesicles in the Diagnosis and Treatment of Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2020, 37, 2045-2056.	3.4	25
103	Linking impact to cellular and molecular sequelae of CNS injury: Modeling in vivo complexity with in vitro simplicity. <i>Progress in Brain Research</i> , 2007, 161, 27-39.	1.4	24
104	Hemostatic and neuroprotective effects of human recombinant activated factor VII therapy after traumatic brain injury in pigs. <i>Experimental Neurology</i> , 2008, 210, 645-655.	4.1	24
105	Dynamic Changes in Neural Circuit Topology Following Mild Mechanical Injury In Vitro. <i>Annals of Biomedical Engineering</i> , 2012, 40, 23-36.	2.5	24
106	Beneficial Effects of Early mTORC1 Inhibition after Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2016, 33, 183-193.	3.4	24
107	Predicting Concussion Outcome by Integrating Finite Element Modeling and Network Analysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 309.	4.1	24
108	Computational Investigation of the Changing Patterns of Subtype Specific NMDA Receptor Activation during Physiological Glutamatergic Neurotransmission. <i>PLoS Computational Biology</i> , 2011, 7, e1002106.	3.2	19



#	ARTICLE	IF	CITATIONS
109	Extracellular vesicles as distinct biomarker reservoirs for mild traumatic brain injury diagnosis. <i>Brain Communications</i> , 2021, 3, fcab151.	3.3	19
110	Cellular biomechanics of central nervous system injury. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2015, 127, 105-114.	1.8	18
111	Methodological Considerations Regarding Single-Cell Gene Expression Profiling for Brain Injury. <i>Neurochemical Research</i> , 2004, 29, 1113-1121.	3.3	17
112	Dynamin and reverse-mode sodium calcium exchanger blockade confers neuroprotection from diffuse axonal injury. <i>Cell Death and Disease</i> , 2019, 10, 727.	6.3	17
113	A Role for Postsynaptic Density 95 and Its Binding Partners in Models of Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2019, 36, 2129-2138.	3.4	16
114	Phosphodiesterase-4 inhibition restored hippocampal long term potentiation after primary blast. <i>Experimental Neurology</i> , 2017, 293, 91-100.	4.1	15
115	Inducing different severities of traumatic brain injury in <i>Drosophila</i> using a piezoelectric actuator. <i>Nature Protocols</i> , 2021, 16, 263-282.	12.0	15
116	Neuronal Degeneration Impairs Rhythms Between Connected Microcircuits. <i>Frontiers in Computational Neuroscience</i> , 2020, 14, 18.	2.1	14
117	Direct Observation of Low Strain, High Rate Deformation of Cultured Brain Tissue During Primary Blast. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1196-1206.	2.5	13
118	Collaborative Neuropathology Network Characterizing Outcomes of TBI (CONNECT-TBI). <i>Acta Neuropathologica Communications</i> , 2021, 9, 32.	5.2	13
119	Detection of astrocytic tau pathology facilitates recognition of chronic traumatic encephalopathy neuropathologic change. <i>Acta Neuropathologica Communications</i> , 2022, 10, 50.	5.2	13
120	Short-Duration Treatment with the Calpain Inhibitor MDL-28170 Does Not Protect Axonal Transport in an <i>In Vivo</i> Model of Traumatic Axonal Injury. <i>Journal of Neurotrauma</i> , 2012, 29, 445-451.	3.4	12
121	Cypin: A novel target for traumatic brain injury. <i>Neurobiology of Disease</i> , 2018, 119, 13-25.	4.4	11
122	Neurodegeneration exposes firing rate dependent effects on oscillation dynamics in computational neural networks. <i>PLoS ONE</i> , 2020, 15, e0234749.	2.5	10
123	NMDA Receptor Alterations After Mild Traumatic Brain Injury Induce Deficits in Memory Acquisition and Recall. <i>Neural Computation</i> , 2021, 33, 67-95.	2.2	9
124	Biomechanical Basis of Traumatic Brain Injury. , 2011, , 3277-3287.		8
125	Plasticity impairment exposes CA3 vulnerability in a hippocampal network model of mild traumatic brain injury. <i>Hippocampus</i> , 2022, 32, 231-250.	1.9	8
126	<i>In Vitro</i> Stretch Injury Induces Time- and Severity-Dependent Alterations of STEP Phosphorylation and Proteolysis in Neurons. <i>Journal of Neurotrauma</i> , 2012, 29, 1982-1998.	3.4	6



#	ARTICLE	IF	CITATIONS
127	Engraftment of nonintegrating neural stem cells differentially perturbs cortical activity in a dose-dependent manner. <i>Molecular Therapy</i> , 2013, 21, 2258-2267.	8.2	6
128	Cytosolic PSD-95 interactor alters functional organization of neural circuits and AMPA receptor signaling independent of PSD-95 binding. <i>Network Neuroscience</i> , 2021, 5, 166-197.	2.6	6
129	A Multibody Model for Predicting Spatial Distribution of Human Brain Deformation Following Impact Loading. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	1.3	6
130	Learning Environments and Evidence-Based Practices in Bioengineering and Biomedical Engineering. <i>Biomedical Engineering Education</i> , 2022, 2, 1-16.	0.7	6
131	Plasma Neurofilament Light and Glial Fibrillary Acidic Protein Levels over Thirty Days in a Porcine Model of Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2022, 39, 935-943.	3.4	5
132	An interdisciplinary computational model for predicting traumatic brain injury: Linking biomechanics and functional neural networks. <i>NeuroImage</i> , 2022, 251, 119002.	4.2	5
133	Thresholds for Mechanical Injury to the in Vivo White Matter. , 0, , .		4
134	Perspectives on the Role of Bioengineering in Neurotrauma Research. <i>Journal of Neurotrauma</i> , 2011, 28, 2201-2202.	3.4	3
135	Regional Neurodegeneration in vitro: The Protective Role of Neural Activity. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 580107.	2.1	2
136	A multilayer network model of neuron-astrocyte populations in vitro reveals mGluR5 inhibition is protective following traumatic injury. <i>Network Neuroscience</i> , 2022, 6, 499-527.	2.6	2
137	Concussion increases CA1 activity during prolonged inactivity in a familiar environment. <i>Experimental Neurology</i> , 2020, 334, 113435.	4.1	1
138	Biomechanics of Brain Injury: Looking to the Future. , 2015, , 247-257.		1
139	Should corticosteroids be used to treat traumatic brain injury?. <i>Nature Clinical Practice Neurology</i> , 2005, 1, 74-75.	2.5	0
140	Cellular Basis for the Nonlinear Constitutive Properties of Brain Tissue. , 2005, , 291-304.		0