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List of Publications by Year
in descending order

Version: 2024-02-01

54 papers	1,286 citations	430843 18 h-index	361001 35 g-index
54 all docs	54 docs citations	54 times ranked	1777 citing authors

#	Article	IF	Citations
1	Bone Marrow Stem Cells and Polymer Hydrogelsâ€"Two Strategies for Spinal Cord Injury Repair. Cellular and Molecular Neurobiology, 2006, 26, 1111-1127.	3.3	222
2	HPMA-RGD Hydrogels Seeded with Mesenchymal Stem Cells Improve Functional Outcome in Chronic Spinal Cord Injury. Stem Cells and Development, 2010, 19, 1535-1546.	2.1	124
3	Biocompatible hydrogels in spinal cord injury repair. Physiological Research, 2008, 57 Suppl 3, S121-S132.	0.9	100
4	SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores for spinal cord injury repair. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1298-1309.	2.7	66
5	Acute and delayed implantation of positively charged 2-hydroxyethyl methacrylate scaffolds in spinal cord injury in the rat. Journal of Neurosurgery: Spine, 2008, 8, 67-73.	1.7	62
6	Injectable hydroxyphenyl derivative of hyaluronic acid hydrogel modified with RGD as scaffold for spinal cord injury repair. Journal of Biomedical Materials Research - Part A, 2018, 106, 1129-1140.	4.0	59
7	Validity of primary motor area localization with fMRI versus electric cortical stimulation: A comparative study. Acta Neurochirurgica, 2009, 151, 1071-1080.	1.7	55
8	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 6: 3D hydrogels with positive and negative surface charges and polyelectrolyte complexes in spinal cord injury repair. Journal of Materials Science: Materials in Medicine, 2009, 20, 1571-1577.	3.6	53
9	The Use of Diffusion Tensor Images of the Corticospinal Tract in Intrinsic Brain Tumor Surgery. Neurosurgery, 2012, 71, 331-340.	1.1	42
10	Highly superporous cholesterolâ€modified poly(2â€hydroxyethyl methacrylate) scaffolds for spinal cord injury repair. Journal of Biomedical Materials Research - Part A, 2011, 99A, 618-629.	4.0	36
11	Low Concentration of Isoflurane Promotes the Development of Neurogenic Pulmonary Edema in Spinal Cord Injured Rats. Journal of Neurotrauma, 2007, 24, 1487-1501.	3.4	34
12	The Effect of iPS-Derived Neural Progenitors Seeded on Laminin-Coated pHEMA-MOETACl Hydrogel with Dual Porosity in a Rat Model of Chronic Spinal Cord Injury. Cell Transplantation, 2019, 28, 400-412.	2.5	33
13	Modified Methacrylate Hydrogels Improve Tissue Repair after Spinal Cord Injury. International Journal of Molecular Sciences, 2018, 19, 2481.	4.1	28
14	Adjusting the Chemical and Physical Properties of Hydrogels Leads to Improved Stem Cell Survival and Tissue Ingrowth in Spinal Cord Injury Reconstruction: A Comparative Study of Four Methacrylate Hydrogels. Stem Cells and Development, 2013, 22, 2794-2805.	2.1	27
15	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 5: Hydrolytically degradable materials. Journal of Materials Science: Materials in Medicine, 2006, 17, 1357-1364.	3.6	26
16	Dynamics of tissue ingrowth in SIKVAV-modified highly superporous PHEMA scaffolds with oriented pores after bridging a spinal cord transection. Journal of Materials Science: Materials in Medicine, 2018, 29, 89.	3.6	23
17	A new model of severe neurogenic pulmonary edema in spinal cord injured rat. Neuroscience Letters, 2007, 423, 167-171.	2.1	22
18	Computer-Aided Diagnosis Improves Detection of Small Intracranial Aneurysms on MRA in a Clinical Setting. American Journal of Neuroradiology, 2014, 35, 1897-1902.	2.4	22

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19	Management of posterior inferior cerebellar artery aneurysms: What factors play the most important role in outcome?. Acta Neurochirurgica, 2017, 159, 549-558.	1.7	19
20	Piezosurgery prevents brain tissue damage: an experimental study on a new rat model. International Journal of Oral and Maxillofacial Surgery, 2011, 40, 840-844.	1.5	18
21	Microsurgery and endovascular treatment of posterior inferior cerebellar artery aneurysms. Neurosurgical Review, 2016, 39, 159-168.	2.4	18
22	Anesthesia type determines risk of cerebral infarction after carotid endarterectomy. Journal of Vascular Surgery, 2019, 70, 138-147.	1.1	16
23	Treating spinal cord injury in rats with a combination of human fetal neural stem cells and hydrogels modified with serotonin. Acta Neurobiologiae Experimentalis, 2013, 73, 102-15.	0.7	16
24	Low degree of anesthesia increases the risk of neurogenic pulmonary edema development. Medical Hypotheses, 2008, 70, 308-313.	1.5	14
25	Coefficient of energy balance, a new parameter for basic investigation of the cerebrospinal fluid. Clinical Chemistry and Laboratory Medicine, 2014, 52, 1009-17.	2.3	14
26	Identification of the large descending tracts using diffusion tensor imaging in Chiari III malformation. Child's Nervous System, 2010, 26, 867-870.	1.1	13
27	Chemical angioplasty with spasmolytics for vasospasm after subarachnoid hemorrhage. Acta Neurochirurgica, 2017, 159, 713-720.	1.7	13
28	Hemodynamic changes in a middle cerebral artery aneurysm at follow-up times before and after its rupture: a case report and a review of the literature. Neurosurgical Review, 2017, 40, 329-338.	2.4	13
29	Intrathecal Midazolam as Supplementary Analgesia for Chronic Lumbar Painâ€”15 Years' Experience. Pain Medicine, 2011, 12, 1309-1315.	1.9	12
30	Distant white-matter diffusion changes caused by tumor growth. Journal of Neuroradiology, 2013, 40, 71-80.	1.1	11
31	The role of nitric oxide in the development of neurogenic pulmonary edema in spinal cord-injured rats: the effect of preventive interventions. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1111-R1117.	1.8	9
32	Morphological and Hemodynamic Changes during Cerebral Aneurysm Growth. Brain Sciences, 2021, 11, 520.	2.3	8
33	Elevated Intracranial Pressure, Low Cerebral Perfusion Pressure, and Impaired Brain Metabolism Correlate with Fatal Outcome After Severe Brain Injury. Journal of Neurological Surgery, Part A: Central European Neurosurgery, 2012, 73, 10-17.	0.8	7
34	The effect of a gadolinium-based contrast agent on diffusion tensor imaging. European Journal of Radiology, 2012, 81, 1877-1882.	2.6	7
35	Anatomy of the supraventricular portion of the pyramidal tract. Acta Neurochirurgica, 2012, 154, 1097-1104.	1.7	5
36	Experimental reconstruction of the injured spinal cord. Advances and Technical Standards in Neurosurgery, 2011, , 65-95.	0.5	5

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37	Carotid-ophthalmic aneurysmsâ€"Our results and treatment strategy. British Journal of Neurosurgery, 2015, 29, 237-242.	0.8	4
38	Computational Fluid Dynamics of a Fatal Ruptured Anterior Communicating Artery Aneurysm. Journal of Neurological Surgery, Part A: Central European Neurosurgery, 2017, 78, 610-616.	0.8	4
39	Can Aspartate Aminotransferase in the Cerebrospinal Fluid Be a Reliable Predictive Parameter?. Brain Sciences, 2020, 10, 698.	2.3	4
40	Elevated Intracranial Pressure, Low Cerebral Perfusion Pressure, and Impaired Brain Metabolism Correlate with Fatal Outcome After Severe Brain Injury. Central European Neurosurgery, 2011, 72, 001-001.	0.7	3
41	Selective internal carotid artery cross-clamping increases the specificity of cerebral oximetry for indication of shunting during carotid endarterectomy. Acta Neurochirurgica, 2021, 163, 1807-1817.	1.7	3
42	Development of the Cerebrospinal Fluid in Early Stage after Hemorrhage in the Central Nervous System. Life, 2021, 11, 300.	2.4	3
43	Bypass Procedure Performed in the Field of a Decompressive Craniectomy in the Case of an MCA Dissecting Aneurysm: Case Report and Review of the Literature. Brain Sciences, 2021, 11, 29.	2.3	3
44	P Com - P1 Aneurysm Formation in a Patient with Bilateral Internal Carotid Occlusion. Central European Neurosurgery, 2011, 72, 001-001.	0.7	2
45	P Comâ€"P1 Aneurysm Formation in a Patient with Bilateral Internal Carotid Occlusion. Journal of Neurological Surgery, Part A: Central European Neurosurgery, 2012, 73, 59-61.	0.8	2
46	Comment on the study â€˜Cerebrospinal fluid lactate: measurement of an adult reference intervalâ€™ by Sally D Slack, Paul Turley, Victoria Allgar and Ian B Holbrook. Annals of Clinical Biochemistry, 2016, 53, 180-181.	1.6	1
47	Delayed Ischemic Neurological Deficit after Uneventful Elective Clipping of Unruptured Intracranial Aneurysms. Brain Sciences, 2020, 10, 495.	2.3	1
48	The Iatrogenic Development of an Anterior Cerebral Artery Pseudoaneurysm during Lamina Terminalis Fenestrationâ€"Genesis, Diagnosis and Therapy: Lessons Learned. Brain Sciences, 2020, 10, 357.	2.3	1
49	Spontaneous Subarachnoid Hemorrhage in a Patient with a Co-Existent Posterior Communicating Artery Aneurysm and Cervical Spine Aneurysm Associated with Ventral Arterio-Venous Fistula. Brain Sciences, 2020, 10, 70.	2.3	1
50	Experimental Treatment of Spinal Cord Injuries. Ceska A Slovenska Neurologie A Neurochirurgie, 2015, 78/111, 377-392.	0.1	1
51	Conservative management of a ruptured Galassi III middle fossa arachnoid cyst. Ceska A Slovenska Neurologie A Neurochirurgie, 2019, 82/115, 695-696.	0.1	1
52	Our article after ten years: Intrathecal midazolam as supplementary analgesia for chronic lumbar pain - 15 years'experience. Anesteziologie A Intenzivni Medicina, 2021, 32, 94-98.	0.1	0
53	Computational fluid dynamics of intracranial aneurysms and its potential contribution in clinical practice from a neurosurgeonâ€™s perspective. Ceska A Slovenska Neurologie A Neurochirurgie, 2018, 81/114, 532-538.	0.1	0
54	Anterior choroidal artery aneurysm. Ceska A Slovenska Neurologie A Neurochirurgie, 2019, 82/115, 350-351.	0.1	0