

Wilson Z Ray

List of Publications by Year in descending order

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Version: 2024-02-01

116
papers

5,670
citations

109321

35
h-index

82547

72
g-index

121
all docs

121
docs citations

121
times ranked

7482
citing authors

#	ARTICLE	IF	CITATIONS
1	338 Diffusion Basis Spectrum Imaging (DBSI) Prognosticates Outcomes for Cervical Spondylotic Myelopathy after Surgery. <i>Journal of Clinical and Translational Science</i> , 2022, 6, 62-62.	0.6	0
2	Analysis of combined clinical and diffusion basis spectrum imaging metrics to predict the outcome of chronic cervical spondylotic myelopathy following cervical decompression surgery. <i>Journal of Neurosurgery: Spine</i> , 2022, 37, 588-598.	1.7	2
3	Soft, bioresorbable coolers for reversible conduction block of peripheral nerves. <i>Science</i> , 2022, 377, 109-115.	12.6	62
4	Multi-modal biomarkers of low back pain: A machine learning approach. <i>NeuroImage: Clinical</i> , 2021, 29, 102530.	2.7	30
5	Variability in Surgeon Approaches to Emotional Recovery and Expectation Setting After Adult Traumatic Brachial Plexus Injury. <i>Journal of Hand Surgery Global Online</i> , 2021, 3, 30-35.	0.8	9
6	A qualitative study of life satisfaction after surgery for adult traumatic brachial plexus injury. <i>Bone & Joint Open</i> , 2021, 2, 9-15.	2.6	10
7	High-Frequency Alternating Current Block Using Macro-Sieve Electrodes: A Pilot Study. <i>Cureus</i> , 2021, 13, e13728.	0.5	2
8	Administrative Data Are Unreliable for Ranking Hospital Performance Based on Serious Complications After Spine Fusion. <i>Spine</i> , 2021, 46, 1181-1190.	2.0	2
9	Human cells and networks of pain: Transforming pain target identification and therapeutic development. <i>Neuron</i> , 2021, 109, 1426-1429.	8.1	47
10	Decompression of Lumbar Central Spinal Canal Stenosis Following Minimally Invasive Transforaminal Lumbar Interbody Fusion. <i>Clinical Spine Surgery</i> , 2021, 34, E439-E449.	1.3	4
11	Application of electrical stimulation for peripheral nerve regeneration: Stimulation parameters and future horizons. <i>Interdisciplinary Neurosurgery: Advanced Techniques and Case Management</i> , 2021, 24, 101117.	0.3	27
12	Comparison of cost and complication rates for profiling hospital performance in lumbar fusion for Spondylolisthesis. <i>Spine Journal</i> , 2021, 21, 2026-2034.	1.3	0
13	Functional Disruptions of the Brain in Low Back Pain: A Potential Imaging Biomarker of Functional Disability. <i>Frontiers in Neurology</i> , 2021, 12, 669076.	2.4	11
14	Cervical Total Disc Replacement. <i>Neurosurgery Clinics of North America</i> , 2021, 32, 473-481.	1.7	10
15	Extended tulip cervical reduction screws to restore alignment in traumatic atlantoaxial dislocation after type 3 odontoid fracture: illustrative case. <i>Journal of Neurosurgery Case Lessons</i> , 2021, 2, .	0.3	0
16	Introduction. Awake spinal surgery: where are we now and where are we going. <i>Neurosurgical Focus</i> , 2021, 51, E1.	2.3	2
17	Stretchable, dynamic covalent polymers for soft, long-lived bioresorbable electronic stimulators designed to facilitate neuromuscular regeneration. <i>Nature Communications</i> , 2020, 11, 5990.	12.8	144
18	Bioresorbable Wireless Sensors as Temporary Implants for In Vivo Measurements of Pressure. <i>Advanced Functional Materials</i> , 2020, 30, 2003754.	14.9	53

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19	Wirelessly controlled, bioresorbable drug delivery device with active valves that exploit electrochemically triggered crevice corrosion. <i>Science Advances</i> , 2020, 6, eabb1093.	10.3	87
20	Social Support and Coping Strategies in Patients with Traumatic Brachial Plexus Injury. <i>HSS Journal</i> , 2020, 16, 468-474.	1.7	2
21	Advances in Techniques and Technology in Minimally Invasive Lumbar Interbody Spinal Fusion. <i>JBJS Reviews</i> , 2020, 8, e0171-e0171.	2.0	9
22	Transfacet Minimally Invasive Transforaminal Lumbar Interbody Fusion With an Expandable Interbody Device—Part I: 2-Dimensional Operative Video and Technical Report. <i>Operative Neurosurgery</i> , 2020, 19, E473-E479.	0.8	3
23	Transfacet Minimally Invasive Transforaminal Lumbar Interbody Fusion With an Expandable Interbody Device—Part II: Consecutive Case Series. <i>Operative Neurosurgery</i> , 2020, 19, 518-529.	0.8	8
24	Bioresorbable, Wireless, Passive Sensors as Temporary Implants for Monitoring Regional Body Temperature. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000942.	7.6	87
25	Materials, Mechanics Designs, and Bioresorbable Multisensor Platforms for Pressure Monitoring in the Intracranial Space. <i>Advanced Functional Materials</i> , 2020, 30, 1910718.	14.9	53
26	Incidence of Surgically Treated Brachial Plexus Injury in Privately Insured Adults Under 65 Years of Age in the USA. <i>HSS Journal</i> , 2020, 16, 339-343.	1.7	9
27	Direct Cost of Surgically Treated Adult Traumatic Brachial Plexus Injuries. <i>Journal of Hand Surgery Global Online</i> , 2020, 2, 77-79.	0.8	14
28	Project management for developing a spine "enhanced recovery after surgery" program in a large university-affiliated hospital. <i>Journal of Neurosurgical Sciences</i> , 2020, 64, 206-212.	0.6	2
29	Frequency and Risk Factors for Prolonged Opioid Prescriptions After Surgery for Brachial Plexus Injury. <i>Journal of Hand Surgery</i> , 2019, 44, 662-668.e1.	1.6	14
30	Bioresorbable optical sensor systems for monitoring of intracranial pressure and temperature. <i>Science Advances</i> , 2019, 5, eaaw1899.	10.3	146
31	Nerve transfer as a novel treatment for West Nile virus-associated acute flaccid paralysis. <i>Journal of the Neurological Sciences</i> , 2019, 407, 116502.	0.6	1
32	Novel Nerve Transfers for Motor and Sensory Restoration in High Cervical Spinal Cord Injury. <i>World Neurosurgery</i> , 2019, 128, 611-615.e1.	1.3	10
33	Indirect Cost of Traumatic Brachial Plexus Injuries in the United States. <i>Journal of Bone and Joint Surgery - Series A</i> , 2019, 101, e80.	3.0	36
34	Validation of the Disabilities of the Arm, Shoulder, and Hand in Patients Undergoing Cervical Spine Surgery. <i>Spine</i> , 2019, 44, 1676-1684.	2.0	3
35	Noninvasive Quantification of Axonal Loss in the Presence of Tissue Swelling in Traumatic Spinal Cord Injury Mice. <i>Journal of Neurotrauma</i> , 2019, 36, 2308-2315.	3.4	19
36	Bioresorbable pressure sensors protected with thermally grown silicon dioxide for the monitoring of chronic diseases and healing processes. <i>Nature Biomedical Engineering</i> , 2019, 3, 37-46.	22.5	185

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37	Cost-Effectiveness Analysis of Combined Dual Motor Nerve Transfers versus Alternative Surgical and Nonsurgical Management Strategies to Restore Shoulder Function Following Upper Brachial Plexus Injury. <i>Neurosurgery</i> , 2019, 84, 362-377.	1.1	12
38	Therapeutic electrical stimulation of injured peripheral nerve tissue using implantable thin-film wireless nerve stimulators. <i>Journal of Neurosurgery</i> , 2019, 130, 486-495.	1.6	20
39	Use of a Synthetic Dura Substitute in the Skull Base Reconstruction following Transsphenoidal Hypophysectomy. , 2019, 80, .		0
40	Electrical Stimulation and Bone Healing: A Review of Current Technology and Clinical Applications. <i>IEEE Reviews in Biomedical Engineering</i> , 2018, 11, 217-232.	18.0	64
41	Prevalence, management, and outcome of problem residents among neurosurgical training programs in the United States. <i>Journal of Neurosurgery</i> , 2018, 130, 322-326.	1.6	18
42	The natural history of complete spinal cord injury: a pooled analysis of 1162 patients and a meta-analysis of modern data. <i>Journal of Neurosurgery: Spine</i> , 2018, 28, 436-443.	1.7	39
43	CVD-grown monolayer MoS ₂ in bioabsorbable electronics and biosensors. <i>Nature Communications</i> , 2018, 9, 1690.	12.8	155
44	Spinal Cord Injury Disrupts Resting-State Networks in the Human Brain. <i>Journal of Neurotrauma</i> , 2018, 35, 864-873.	3.4	51
45	Fractional anisotropy to quantify cervical spondylotic myelopathy severity. <i>Journal of Neurosurgical Sciences</i> , 2018, 62, 406-412.	0.6	14
46	Wireless bioresorbable electronic system enables sustained nonpharmacological neuroregenerative therapy. <i>Nature Medicine</i> , 2018, 24, 1830-1836.	30.7	331
47	Comparative analysis of a fully-synthetic nanofabricated dura substitute and bovine collagen dura substitute in a large animal model of dural repair. <i>Interdisciplinary Neurosurgery: Advanced Techniques and Case Management</i> , 2018, 13, 145-150.	0.3	13
48	Novel nanofabricated dura substitute effectively repairs dural defects independent of defect size in a canine duraplasty model. <i>Interdisciplinary Neurosurgery: Advanced Techniques and Case Management</i> , 2018, 14, 150-155.	0.3	1
49	Readmission after spinal cord injury: analysis of an institutional cohort of 795 patients. <i>Journal of Neurosurgical Sciences</i> , 2018, 62, 265-270.	0.6	12
50	Population-based approaches to treatment and readmission after spinal cord injury. <i>Journal of Neurosurgical Sciences</i> , 2018, 62, 107-115.	0.6	3
51	An update on addressing important peripheral nerve problems: challenges and potential solutions. <i>Acta Neurochirurgica</i> , 2017, 159, 1765-1773.	1.7	18
52	Preoperative Fiducial Marker Placement in the Thoracic Spine. <i>Spine</i> , 2017, 42, E624-E628.	2.0	15
53	Editorial: Autologous Schwann cells. <i>Neurosurgical Focus</i> , 2017, 42, E3.	2.3	0
54	New Clinical-Pathological Classification of Intraspinal Injury Following Traumatic Acute Complete Thoracic Spinal Cord Injury. <i>Neurosurgery</i> , 2017, 64, 105-109.	1.1	21

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55	In Reply: Cubital Tunnel Syndrome: Incidence and Demographics in a National Administrative Database. <i>Neurosurgery</i> , 2017, 81, E63-E63.	1.1	1
56	Cubital Tunnel Syndrome: Incidence and Demographics in a National Administrative Database. <i>Neurosurgery</i> , 2017, 80, 417-420.	1.1	78
57	Diffusion Assessment of Cortical Changes, Induced by Traumatic Spinal Cord Injury. <i>Brain Sciences</i> , 2017, 7, 21.	2.3	28
58	Interfacing peripheral nerve with macro-sieve electrodes following spinal cord injury. <i>Neural Regeneration Research</i> , 2017, 12, 906.	3.0	7
59	Magnetic Resonance Imaging Biomarker of Axon Loss Reflects Cervical Spondylotic Myelopathy Severity. <i>Spine</i> , 2016, 41, 751-756.	2.0	32
60	Serial assessment of functional recovery following nerve injury using implantable thin-film wireless nerve stimulators. <i>Muscle and Nerve</i> , 2016, 54, 1114-1119.	2.2	14
61	Thoracoscopic Vertebrectomy for Thoracolumbar Junction Fractures and Tumors. <i>Clinical Spine Surgery</i> , 2016, 29, E344-E350.	1.3	8
62	Intervertebral Micro Access Surgery for Transforaminal Lumbar Interbody Fusion. <i>Operative Neurosurgery</i> , 2016, 12, 203-213.	0.8	1
63	Bioresorbable silicon electronic sensors for the brain. <i>Nature</i> , 2016, 530, 71-76.	27.8	778
64	Motor Nerve Transfers. <i>Neurosurgery</i> , 2016, 78, 1-26.	1.1	76
65	Simpson Grade I-III Resection of Spinal Atypical (World Health Organization Grade II) Meningiomas is Associated With Symptom Resolution and Low Recurrence. <i>Neurosurgery</i> , 2015, 76, 739-746.	1.1	36
66	Vitamin D Levels and 1-Year Fusion Outcomes in Elective Spine Surgery. <i>Spine</i> , 2015, 40, 1536-1541.	2.0	65
67	An Update on Civilian Spinal Gunshot Wounds. <i>Spine</i> , 2015, 40, 450-461.	2.0	31
68	Risks and outcomes of spinal deformity surgery in Chiari malformation, Type 1, with syringomyelia versus adolescent idiopathic scoliosis. <i>Spine Journal</i> , 2015, 15, 2002-2008.	1.3	34
69	Prevalence of Vitamin D Deficiency in Patients Undergoing Elective Spine Surgery: A Cross-Sectional Analysis. <i>World Neurosurgery</i> , 2015, 83, 1114-1119.	1.3	40
70	Wireless Optofluidic Systems for Programmable In Vivo Pharmacology and Optogenetics. <i>Cell</i> , 2015, 162, 662-674.	28.9	417
71	Transfer of the Brachialis to the Anterior Interosseous Nerve as a Treatment Strategy for Cervical Spinal Cord Injury: Technical Note. <i>Global Spine Journal</i> , 2015, 5, 110-117.	2.3	22
72	Increased Spasticity From a Fracture in the Baclofen Catheter Caused by Charcot Spine: Case Report. <i>Archives of Physical Medicine and Rehabilitation</i> , 2015, 96, 697-701.	0.9	3

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73	Comparison of structural allograft and traditional autograft technique in occipitocervical fusion: radiological and clinical outcomes from a single institution. <i>Journal of Neurosurgery: Spine</i> , 2015, 23, 144-152.	1.7	16
74	Onyx is associated with poor venous penetration in the treatment of spinal dural arteriovenous fistulas. <i>Journal of NeuroInterventional Surgery</i> , 2014, 6, 536-540.	3.3	28
75	Schwann cells seeded in acellular nerve grafts improve functional recovery. <i>Muscle and Nerve</i> , 2014, 49, 267-276.	2.2	64
76	Clinical outcomes of unstable thoracolumbar junction burst fractures: combined posterior short-segment correction followed by thoracoscopic corpectomy and fusion. <i>Acta Neurochirurgica</i> , 2013, 155, 1179-1186.	1.7	15
77	Surgery for Idiopathic Scoliosis in Adolescents versus Young Adults: A Matched Cohort Analysis. <i>Spine Journal</i> , 2013, 13, S35-S36.	1.3	0
78	Stereotactic navigation with the O-arm for placement of S-2 alar iliac screws in pelvic lumbar fixation. <i>Journal of Neurosurgery: Spine</i> , 2013, 18, 490-495.	1.7	54
79	Subarachnoid Hemorrhage from a Thoracic Radicular Artery Pseudoaneurysm after Methamphetamine and Synthetic Cannabinoid Abuse: Case Report. <i>Global Spine Journal</i> , 2013, 3, 119-123.	2.3	10
80	Developing an Anterior Cervical Discectomy and Fusion Simulator for Neurosurgical Resident Training. <i>Neurosurgery</i> , 2013, 73, S100-S106.	1.1	57
81	Transient Obstructive Hydrocephalus due to Intraventricular Hemorrhage: A Case Report and Review		

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91	Nerve transfers for the restoration of hand function after spinal cord injury. <i>Journal of Neurosurgery</i> , 2012, 117, 176-185.	1.6	80
92	Medial Pectoral Nerve to Axillary Nerve Neurotization following Traumatic Brachial Plexus Injuries: Indications and Clinical Outcomes. <i>Hand</i> , 2012, 7, 59-65.	1.2	31
93	Nerve Problems in the Lower Extremity. <i>Foot and Ankle Clinics</i> , 2011, 16, 243-254.	1.3	18
94	Clinical Outcomes Following Median to Radial Nerve Transfers. <i>Journal of Hand Surgery</i> , 2011, 36, 201-208.	1.6	114
95	Nerve Transfer to the Triceps After Brachial Plexus Injury: Report of Four Cases. <i>Journal of Hand Surgery</i> , 2011, 36, 398-405.	1.6	38
96	Costimulation blockade inhibits the indirect pathway of allorecognition in nerve allograft rejection. <i>Muscle and Nerve</i> , 2011, 43, 120-126.	2.2	2
97	Acellular nerve allografts in peripheral nerve regeneration: A comparative study. <i>Muscle and Nerve</i> , 2011, 44, 221-234.	2.2	183
98	Double fascicular nerve transfer to the biceps and brachialis muscles after brachial plexus injury: clinical outcomes in a series of 29 cases. <i>Journal of Neurosurgery</i> , 2011, 114, 1520-1528.	1.6	86
99	Two-level motor nerve transfer for the treatment of long thoracic nerve palsy. <i>Journal of Neurosurgery</i> , 2011, 115, 858-864.	1.6	18
100	Effect of cold nerve allograft preservation on antigen presentation and rejection. <i>Journal of Neurosurgery</i> , 2011, 114, 256-262.	1.6	16
101	Combined endovascular embolization and stereotactic radiosurgery in the treatment of large arteriovenous malformations. <i>Journal of Neurosurgery</i> , 2011, 114, 1758-1767.	1.6	94
102	The differential effects of pathway- versus target-derived glial cell line-derived neurotrophic factor on peripheral nerve regeneration. <i>Journal of Neurosurgery</i> , 2010, 113, 102-109.	1.6	20
103	Early Endovascular Coiling of Posterior Communicating Artery Saccular Aneurysm in the Setting of Staphylococcus Bacteremia. <i>Neurosurgery</i> , 2010, 66, E847.	1.1	8
104	Functional Recovery following an End to Side Neurotization of the Accessory Nerve to the Suprascapular Nerve: Case Report. <i>Hand</i> , 2010, 5, 313-317.	1.2	13
105	The role of T helper cell differentiation in promoting nerve allograft survival with costimulation blockade. <i>Journal of Neurosurgery</i> , 2010, 112, 386-393.	1.6	6
106	Management of nerve gaps: Autografts, allografts, nerve transfers, and end-to-side neurotization. <i>Experimental Neurology</i> , 2010, 223, 77-85.	4.1	380
107	Radially Aligned, Electrospun Nanofibers as Dural Substitutes for Wound Closure and Tissue Regeneration Applications. <i>ACS Nano</i> , 2010, 4, 5027-5036.	14.6	268
108	Isolated cerebellar Rosai-Dorfman granuloma mimicking Lhermitte-Duclos disease. <i>Journal of Neurosurgery: Pediatrics</i> , 2009, 4, 118-120.	1.3	13

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109	Incidence of deep venous thrombosis after subarachnoid hemorrhage. <i>Journal of Neurosurgery</i> , 2009, 110, 1010-1014.	1.6	84
110	Clinicopathologic features of recurrent dysembryoplastic neuroepithelial tumor and rare malignant transformation: a report of 5 cases and review of the literature. <i>Journal of Neuro-Oncology</i> , 2009, 94, 283-292.	2.9	79
111	Nerve Allograft Transplantation as it Pertains to Composite Tissue Transplantation. <i>Hand</i> , 2009, 4, 239-244.	1.2	52
112	Transcardial perfusion versus immersion fixation for assessment of peripheral nerve regeneration. <i>Journal of Neuroscience Methods</i> , 2009, 184, 303-309.	2.5	36
113	Near-complete resolution of angiographic cerebral vasospasm after extreme elevation of mean arterial pressure: case report. <i>World Neurosurgery</i> , 2009, 72, 347-353.	1.3	8
114	Anterior cervical arthrodesis using an osteoconductive scaffold: The use of beta-tricalcium phosphate with local bone marrow aspirate in over 100 patients. <i>SAS Journal</i> , 2009, 3, 114-117.	1.3	7
115	Pseudotumor cerebri following tapered corticosteroid treatment in an 8-month-old infant. <i>Journal of Neurosurgery: Pediatrics</i> , 2008, 1, 88-90.	1.3	11
116	Anatomic visualization with ultrasound-assisted intracranial image guidance in neurosurgery: a report of 30 patients. <i>Journal of the American College of Surgeons</i> , 2004, 199, 338-343.	0.5	6