Peter E Konrad

List of Publications by Year in Descending Order

126 papers	3,191 citations	32 h-index	52 g-index
134 ext. papers	3,748 ext. citations	3.1 avg, IF	4.94 L-index

#	Paper	IF	Citations
126	Prediction of viral symptoms using wearable technology and artificial intelligence: A pilot study in healthcare workers. *PLoS ONE*, **2021**, 16, e0257997	3.7	4
125	Early subthalamic nucleus deep brain stimulation in Parkinson's disease reduces long-term medication costs. *Clinical Neurology and Neurosurgery*, **2021**, 210, 106976	2	0
124	Protocolizing the Workup for Idiopathic Normal Pressure Hydrocephalus Improves Outcomes. *Neurology: Clinical Practice*, **2021**, 11, e447-e453	1.7	1
123	Bone Cement Cranioplasty Reduces Cerebrospinal Fluid Leak Rate after Microvascular Decompression: A Single-Institutional Experience. *Journal of Neurological Surgery, Part B: Skull Base* , **2021**, 82, 556-561	1.5	0
122	Author Response: Deep Brain Stimulation in Early-Stage Parkinson Disease: Five-Year Outcomes. *Neurology*, **2021**, 96, 591	6.5	
121	BDNF rs6265 Genotype Influences Outcomes of Pharmacotherapy and Subthalamic Nucleus Deep Brain Stimulation in Early-Stage Parkinson's Disease. *Neuromodulation*, **2021**,	3.1	1
120	Cryptococcal Meningitis Causing Refractory Hemichorea-Hemiballismus Treated With Pallidotomy. *Cureus*, **2021**, 13, e16493	1.2	
119	Role of the Nucleus Basalis as a Key Network Node in Temporal Lobe Epilepsy. *Neurology*, **2021**, 96, e1334-e1346	6.5	3
118	Author Response: Deep Brain Stimulation in Early-Stage Parkinson Disease: Five-Year Outcomes. *Neurology*, **2021**, 96, 592	6.5	
117	Experience From 211 Transcortical Selective Amygdalohippocampectomy Procedures: Relevant Surgical Anatomy and Review of the Literature. *Operative Neurosurgery*, **2021**, 21, 181-188	1.6	
116	Deep brain stimulation in early-stage Parkinson disease: Five-year outcomes. *Neurology*, **2020**, 95, e393-e401	6.5	29
115	Intrathecal Baclofen for Severe Spasticity: Longitudinal Data From the Product Surveillance Registry. *Neuromodulation*, **2020**, 23, 996-1002	3.1	10
114	Structural Correlates of the Sensorimotor Cerebellum in Parkinson's Disease and Essential Tremor. *Movement Disorders*, **2020**, 35, 1181-1188	7	7
113	Finding Optimal Neuromodulation for Chronic Pain: Waves, Bursts, and Beyond. *Neurology India*, **2020**, 68, S218-S223	0.7	2
112	Microvascular Decompression for Trigeminal Neuralgia in Patients with Multiple Sclerosis: Predictors of Treatment Success. *World Neurosurgery*, **2020**, 136, e165-e170	2.1	9
111	Stereoelectroencephalography and the Role of the Nurse. *Journal of Neuroscience Nursing*, **2020**, 52, 103-105	1.5	0
110	Examining the Need to Standardize Implanted Stimulator Connectors: NANS Survey Results. *Neuromodulation*, **2020**,	3.1	0

109	Effects of surgical targeting in laser interstitial thermal therapy for mesial temporal lobe epilepsy: A multicenter study of 234 patients. *Epilepsia*, **2019**, 60, 1171-1183	6.4	65
108	Deep Brain Stimulation for Treatment of Tremor. *Neurosurgery Clinics of North America*, **2019**, 30, 147-159	1.4	3
107	Towards Machine Learning Prediction of Deep Brain Stimulation (DBS) Intra-operative Efficacy Maps. *Proceedings of SPIE*, **2019**, 10949,	1.7	8
106	Validation of an automatic algorithm to identify NeuroPace depth leads in CT images **2019**,		1
105	An Integrated Multi-physics Finite Element Modeling Framework for Deep Brain Stimulation: Preliminary Study on Impact of Brain Shift on Neuronal Pathways. *Lecture Notes in Computer Science*, **2019**, 682-690	0.9	4
104	White matter differences between essential tremor and Parkinson disease. *Neurology*, **2019**, 92, e30-e39	6.5	21
103	Novel Technique for Insertion of Cervical Spinal Cord Stimulator Percutaneous Leads: Technical Note and Institutional Experience. *World Neurosurgery*, **2018**, 119, 118-122	2.1	3
102	Big Data and Deep Brain Stimulation **2018**, 137-145		
101	Ultrasound-guided spinal stereotactic system for intraspinal implants. *Journal of Neurosurgery: Spine*, **2018**, 29, 292-305	2.8	11
100	Stereotactic EEG via multiple single-path omnidirectional trajectories within a single platform: institutional experience with a novel technique. *Journal of Neurosurgery*, **2018**, 129, 1173-1181	3.2	15
99	Confined Thalamic Deep Brain Stimulation in Refractory Essential Tremor. *Stereotactic and Functional Neurosurgery*, **2018**, 96, 296-304	1.6	5
98	Relating structural and functional brainstem connectivity to disease measures in epilepsy. *Neurology*, **2018**, 91, e67-e77	6.5	34
97	Effects of deep brain stimulation on rest tremor progression in early stage Parkinson disease. *Neurology*, **2018**, 91, e463-e471	6.5	38
96	Functional connectivity disturbances of the ascending reticular activating system in temporal lobe epilepsy. *Journal of Neurology, Neurosurgery and Psychiatry*, **2017**, 88, 925-932	5.5	42
95	Thalamic deep brain stimulation as rescue therapy for tremor following bilateral radiosurgery. *Parkinsonism and Related Disorders*, **2017**, 36, 100-102	3.6	1
94	Subthalamic Nucleus Deep Brain Stimulation Alters Prefrontal Correlates of Emotion Induction. *Neuromodulation*, **2017**, 20, 233-237	3.1	7
93	The Effects of Dexmedetomidine on Microelectrode Recordings of the Subthalamic Nucleus during Deep Brain Stimulation Surgery: A Retrospective Analysis. *Stereotactic and Functional Neurosurgery*, **2017**, 95, 40-48	1.6	12
92	Regional and global connectivity disturbances in focal epilepsy, related neurocognitive sequelae, and potential mechanistic underpinnings. *Epilepsia*, **2016**, 57, 1546-1557	6.4	106

91	Variations in Thalamic Anatomy Affect Targeting in Deep Brain Stimulation for Epilepsy. *Stereotactic and Functional Neurosurgery*, **2016**, 94, 387-396	1.6	21
90	Neurovascular Compression at the Root Entry Zone Correlates with Trigeminal Neuralgia and Early Microvascular Decompression Outcome. *World Neurosurgery*, **2016**, 95, 208-213	2.1	14
89	Best Practices for Intrathecal Baclofen Therapy: Troubleshooting. *Neuromodulation*, **2016**, 19, 632-41	3.1	52
88	Temporal lobe origin is common in patients who have undergone epilepsy surgery for hypermotor seizures. *Epilepsy and Behavior*, **2016**, 64, 57-61	3.2	8
87	Intrathecal Drug Delivery Systems (IDDS): The Implantable Systems Performance Registry (ISPR). *Neuromodulation*, **2016**, 19, 848-856	3.1	19
86	Spinal Cord Stimulation (SCS)-The Implantable Systems Performance Registry (ISPR). *Neuromodulation*, **2016**, 19, 857-863	3.1	3
85	Subthalamic Nucleus Deep Brain Stimulation May Reduce Medication Costs in Early Stage Parkinson's Disease. *Journal of Parkinson's Disease*, **2016**, 6, 125-31	5.3	19
84	Deep brain stimulation of the subthalamic nucleus alters frontal activity during spatial working memory maintenance of patients with Parkinson's disease. *Neurocase*, **2016**, 22, 369-78	0.8	7
83	CranialCloud: a cloud-based architecture to support trans-institutional collaborative efforts in neurodegenerative disorders. *International Journal of Computer Assisted Radiology and Surgery*, **2015**, 10, 815-23	3.9	19
82	Infrared neural stimulation of human spinal nerve roots in vivo. *Neurophotonics*, **2015**, 2, 015007	3.9	22
81	Deep brain stimulation may reduce the relative risk of clinically important worsening in early stage Parkinson's disease. *Parkinsonism and Related Disorders*, **2015**, 21, 1177-83	3.6	36
80	Fully automated targeting using nonrigid image registration matches accuracy and exceeds precision of best manual approaches to subthalamic deep brain stimulation targeting in Parkinson disease. *Neurosurgery*, **2015**, 76, 756-65	3.2	21
79	Deep brain stimulation in early stage Parkinson's disease. *Parkinsonism and Related Disorders*, **2015**, 21, 347-8	3.6	8
78	The optimal pallidal target in deep brain stimulation for dystonia: a study using a functional atlas based on nonlinear image registration. *Stereotactic and Functional Neurosurgery*, **2015**, 93, 17-24	1.6	13
77	Neuropsychological effects of deep brain stimulation in subjects with early stage Parkinson's disease in a randomized clinical trial. *Journal of Parkinson's Disease*, **2015**, 5, 151-63	5.3	17
76	Clinical testing of an alternate method of inserting bone-implanted fiducial markers. *International Journal of Computer Assisted Radiology and Surgery*, **2014**, 9, 913-20	3.9	9
75	Dorsal root entry zone lesion, midline myelotomy and anterolateral cordotomy. *Neurosurgery Clinics of North America*, **2014**, 25, 699-722	4	18
74	Multisurgeon, multisite validation of a trajectory planning algorithm for deep brain stimulation procedures. *IEEE Transactions on Biomedical Engineering*, **2014**, 61, 2479-87	5	18

73	Emotion recognition in early Parkinson's disease patients undergoing deep brain stimulation or dopaminergic therapy: a comparison to healthy participants. *Frontiers in Aging Neuroscience*, **2014**, 6, 349	5.3	20
72	Methods for Surgical Targeting of the STN in Early-Stage Parkinson's Disease. *Frontiers in Neurology*, **2014**, 5, 25	4.1	13
71	The factors involved in deep brain stimulation infection: a large case series. *Stereotactic and Functional Neurosurgery*, **2014**, 92, 227-33	1.6	35
70	Subthalamic nucleus deep brain stimulation in early stage Parkinson's disease. *Parkinsonism and Related Disorders*, **2014**, 20, 731-7	3.6	90
69	Surgical targets for dystonic tremor: considerations between the globus pallidus and ventral intermediate thalamic nucleus. *Parkinsonism and Related Disorders*, **2013**, 19, 684-6	3.6	53
68	Treating post-traumatic tremor with deep brain stimulation: report of five cases. *Parkinsonism and Related Disorders*, **2013**, 19, 1100-5	3.6	20
67	Effect of data normalization on the creation of neuro-probabilistic atlases. *Stereotactic and Functional Neurosurgery*, **2013**, 91, 148-52	1.6	12
66	Experience with 25 years of dorsal root entry zone lesioning at a single institution. *Surgical Neurology International*, **2013**, 4, 64	1	24
65	CranialVault and its CRAVE tools: a clinical computer assistance system for deep brain stimulation (DBS) therapy. *Medical Image Analysis*, **2012**, 16, 744-53	15.4	71
64	Changes in neuronal firing rate in the subthalamic nucleus with Parkinson's disease. *Movement Disorders*, **2012**, 27, 455-456	7	2
63	Deep brain stimulation in early stage Parkinson's disease: operative experience from a prospective randomised clinical trial. *Journal of Neurology, Neurosurgery and Psychiatry*, **2012**, 83, 164-70	5.5	43
62	A surgeon specific automatic path planning algorithm for deep brain stimulation **2012**,		10
61	Pilot study assessing the feasibility of applying bilateral subthalamic nucleus deep brain stimulation in very early stage Parkinson's disease: study design and rationale. *Journal of Parkinson's Disease*, **2012**, 2, 215-23	5.3	14
60	Decreased Rate of CSF Leakage Associated with Complete Reconstruction of Suboccipital Cranial Defects. *Journal of Neurological Surgery, Part B: Skull Base*, **2012**, 73, 281-6	1.5	16
59	Suppression of thalamocortical oscillations following traumatic brain injury in rats. *Journal of Neurosurgery*, **2012**, 117, 316-23	3.2	6
58	Ventricular width and complicated recovery following deep brain stimulation surgery. *Stereotactic and Functional Neurosurgery*, **2012**, 90, 167-72	1.6	7
57	Potential subjects' responses to an ethics questionnaire in a phase I study of deep brain stimulation in early Parkinson's disease. *Journal of Clinical Ethics*, **2012**, 23, 207-16	0.6	12
56	Microvascular decompression: salient surgical principles and technical nuances. *Journal of Visualized Experiments*, **2011**, e2590	1.6	6

55	High-frequency cortical stimulation augments recovery of thalamocortical oscillations from hypoxia in rat brain slices. *Neuromodulation*, **2011**, 14, 104-10; discussion 110	3.1	1
54	Deep brain stimulation for early-stage Parkinson's disease: an illustrative case. *Neuromodulation*, **2011**, 14, 515-21; discussion 521-2	3.1	7
53	Subthalamic nucleus neuronal firing rate increases with Parkinson's disease progression. *Movement Disorders*, **2011**, 26, 1657-62	7	41
52	Customized, miniature rapid-prototype stereotactic frames for use in deep brain stimulator surgery: initial clinical methodology and experience from 263 patients from 2002 to 2008. *Stereotactic and Functional Neurosurgery*, **2011**, 89, 34-41	1.6	59
51	Imaging optically induced neural activity in the brain. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 3379-81	0.9	3
50	Clinical accuracy of a customized stereotactic platform for deep brain stimulation after accounting for brain shift. *Stereotactic and Functional Neurosurgery*, **2010**, 88, 81-7	1.6	53
49	Infrared Nerve Stimulation: A Novel Therapeutic Laser Modality **2010**, 915-939		2
48	**2010**,		3
47	Combining electrical and optical techniques to develop a novel modality for neural activation **2010**,		1
46	Effect of brain shift on the creation of functional atlases for deep brain stimulation surgery. *International Journal of Computer Assisted Radiology and Surgery*, **2010**, 5, 221-8	3.9	53
45	Infrared Neural Stimulation of Thalamocortical Brain Slices. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 565-572	3.8	26
44	Implantable brain computer interface: challenges to neurotechnology translation. *Neurobiology of Disease*, **2010**, 38, 369-75	7.5	34
43	Spasticity treatment facilitates direct care delivery for adults with profound intellectual disability. *Movement Disorders*, **2010**, 25, 466-73	7	8
42	Alteration of GABAergic neurotransmission by pulsed infrared laser stimulation. *Journal of Neuroscience Methods*, **2010**, 192, 110-4	3	25
41	Early Clinical Evaluation of a Computer Assisted Planning System for Deep Brain Surgeries: 1 Year of Clinical Assistance. *Lecture Notes in Computer Science*, **2010**, 190-199	0.9	1
40	Detecting brain shift during deep brain stimulation surgery using intra-operative data and functional atlases: A preliminary study **2009**,		2
39	Validation of a fully automatic method for the routine selection of the anterior and posterior commissures in magnetic resonance images. *Stereotactic and Functional Neurosurgery*, **2009**, 87, 148-54	1.6	17
38	Confined stimulation using dual thalamic deep brain stimulation leads rescues refractory essential tremor: report of three cases. *Stereotactic and Functional Neurosurgery*, **2009**, 87, 309-13	1.6	27

37	Combined optical and electrical stimulation of neural tissue in vivo. *Journal of Biomedical Optics*, **2009**, 14, 060501	3.5	53
36	A method to correct for brain shift when building electrophysiological atlases for deep brain stimulation (DBS) surgery. *Lecture Notes in Computer Science*, **2009**, 12, 557-64	0.9	3
35	Intersurgeon variability in the selection of anterior and posterior commissures and its potential effects on target localization. *Stereotactic and Functional Neurosurgery*, **2008**, 86, 113-9	1.6	29
34	Is deep brain stimulation neuroprotective if applied early in the course of PD?. *Nature Clinical Practice Neurology*, **2008**, 4, 424-6		34
33	Postmortem analysis following 71 months of deep brain stimulation of the subthalamic nucleus for Parkinson disease. *Journal of Neurosurgery*, **2008**, 109, 325-9	3.2	45
32	A new method for creating electrophysiological maps for DBS surgery and their application to surgical guidance. *Lecture Notes in Computer Science*, **2008**, 11, 670-7	0.9	13
31	Biophysical mechanisms of transient optical stimulation of peripheral nerve. *Biophysical Journal*, **2007**, 93, 2567-80	2.9	291
30	Optically mediated nerve stimulation: Identification of injury thresholds. *Lasers in Surgery and Medicine*, **2007**, 39, 513-26	3.6	87
29	Pulsed laser versus electrical energy for peripheral nerve stimulation. *Journal of Neuroscience Methods*, **2007**, 163, 326-37	3	123
28	Neuromodulation of the cingulum for neuropathic pain after spinal cord injury. Case report. *Journal of Neurosurgery*, **2007**, 107, 169-72	3.2	44
27	Automated selection of anterior and posterior commissures based on a deformable atlas and its evaluation based on manual selections by neurosurgeons **2007**,		2
26	The VU-DBS project: integrated and computer-assisted planning, intra-operative placement, and post-operative programming of deep-brain stimulators **2007**,		2
25	Seizure freedom off antiepileptic drugs after temporal lobe epilepsy surgery. *Seizure: the Journal of the British Epilepsy Association*, **2007**, 16, 95-8	3.2	35
24	Deep brain stimulation for Parkinson's disease: the Vanderbilt University Medical Center experience, 1998-2004. *Tennessee Medicine: Journal of the Tennessee Medical Association*, **2007**, 100, 45-7		7
23	Delayed occurrence of multiple spinal drop metastases from a posterior fossa choroid plexus papilloma. Case report. *Journal of Neurosurgery: Spine*, **2006**, 4, 494-6	2.8	17
22	Neuro-oncological applications of optical spectroscopy. *Technology in Cancer Research and Treatment*, **2006**, 5, 231-8	2.7	21
21	Biophysical mechanisms responsible for pulsed low-level laser excitation of neural tissue **2006**,		6
20	Depression and intelligence in patients with Parkinson's disease and deep-brain stimulation. *Journal of the National Medical Association*, **2006**, 98, 1121-5	2.3	3

19	Deformable Physiological Atlas-Based Programming of Deep Brain Stimulators: A Feasibility Study. *Lecture Notes in Computer Science*, **2006**, 144-150	0.9	4
18	Accuracy of customized miniature stereotactic platforms. *Stereotactic and Functional Neurosurgery*, **2005**, 83, 25-31	1.6	63
17	Computer-aided placement of deep brain stimulators: from planning to intraoperative guidance. *IEEE Transactions on Medical Imaging*, **2005**, 24, 1469-78	11.7	77
16	Optical stimulation of neural tissue in vivo. *Optics Letters*, **2005**, 30, 504-6	3	223
15	Application of infrared light for in vivo neural stimulation. *Journal of Biomedical Optics*, **2005**, 10, 064003	3.5	178
14	Computer-aided placement of deep brain stimulators: from planning to intraoperative guidance **2005**, 5744, 345		
13	Automatic selection of DBS target points using multiple electrophysiological atlases. *Lecture Notes in Computer Science*, **2005**, 8, 427-34	0.9	16
12	Deep brain stimulation of the subthalamic nucleus reduces antiparkinsonian medication costs. *Parkinsonism and Related Disorders*, **2004**, 10, 475-9	3.6	32
11	Toward the Creation of an Electrophysiological Atlas for the Pre-operative Planning and Intra-operative Guidance of Deep Brain Stimulators (DBS) Implantation. *Lecture Notes in Computer Science*, **2004**, 729-736	0.9	8
10	Method for placing deep-brain stimulators **2003**,		1
9	Computerized Atlas-Guided Positioning of Deep Brain Stimulators: A Feasibility Study. *Lecture Notes in Computer Science*, **2003**, 142-150	0.9	5
8	No increased herniation of the cerebellar tonsils in a group of patients with orthostatic intolerance. *Clinical Autonomic Research*, **2002**, 12, 472-6	4.3	12
7	Frontal Localization of Absence Seizures Demonstrated by Ictal Positron Emission Tomography. *Epilepsy and Behavior*, **2001**, 2, 54-60	3.2	22
6	Low-dose stereotactic radiosurgery is inadequate for medically intractable mesial temporal lobe epilepsy: a case report. *Seizure: the Journal of the British Epilepsy Association*, **2001**, 10, 442-6	3.2	9
5	Preliminary results of deferoxamine and L1 treatment of spinal cord ischemia. *Journal of Thoracic and Cardiovascular Surgery*, **1995**, 109, 1017-9	1.5	4
4	Magnetic stimulation of the spine to produce lower extremity EMG responses. Significance of coil position and the presence of bone. *Spine*, **1994**, 19, 2812-8	3.3	5
3	Correlation of motor-evoked potential response to ischemic spinal cord damage. *Journal of Thoracic and Cardiovascular Surgery*, **1992**, 104, 262-272	1.5	68
2	Suprathreshold brain stimulation activates non-corticospinal motor evoked potentials in cats. *Brain Research*, **1990**, 522, 14-29	3.7	20

1 Direct noninvasive monitoring of spinal cord motor function during thoracic aortic occlusion. *Journal of Vascular Surgery*, **1989**, 9, 177-8 3.5