Suneil K Kalia

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8164534/publications.pdf

Version: 2024-02-01

135 papers	5,390 citations	109321 35 h-index	98798 67 g-index
143 all docs	143 docs citations	143 times ranked	6849 citing authors

#	Article	IF	Citations
1	Hypersensitivity of DJ-1-deficient mice to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyrindine (MPTP) and oxidative stress. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5215-5220.	7.1	639
2	NMDA receptors in clinical neurology: excitatory times ahead. Lancet Neurology, The, 2008, 7, 742-755.	10.2	363
3	Unbiased screen for interactors of leucine-rich repeat kinase 2 supports a common pathway for sporadic and familial Parkinson disease. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2626-2631.	7.1	342
4	Î±â€Synuclein oligomers and clinical implications for Parkinson disease. Annals of Neurology, 2013, 73, 155-169.	5.3	255
5	BAG5 Inhibits Parkin and Enhances Dopaminergic Neuron Degeneration. Neuron, 2004, 44, 931-945.	8.1	199
6	Low-intensity ultrasound neuromodulation: An overview of mechanisms and emerging human applications. Brain Stimulation, 2018, 11, 1209-1217.	1.6	193
7	Diseaseâ€modifying strategies for Parkinson's disease. Movement Disorders, 2015, 30, 1442-1450.	3.9	188
8	Outcomes from stereotactic surgery for essential tremor. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 474-482.	1.9	141
9	Predicting optimal deep brain stimulation parameters for Parkinsonâ€™s disease using functional MRI and machine learning. Nature Communications, 2021, 12, 3043.	12.8	130
10	Ubiquitinylation of Î±-Synuclein by Carboxyl Terminus Hsp70-Interacting Protein (CHIP) Is Regulated by Bcl-2-Associated Athanogene 5 (BAG5). PLoS ONE, 2011, 6, e14695.	2.5	119
11	Systematic review of hardware-related complications of Deep Brain Stimulation: Do new indications pose an increased risk?. Brain Stimulation, 2017, 10, 967-976.	1.6	118
12	Deep brain stimulation for ParkinsonÊ¼s disease and other movement disorders. Current Opinion in Neurology, 2013, 26, 374-380.	3.6	96
13	Physiological mechanisms of thalamic ventral intermediate nucleus stimulation for tremor suppression. Brain, 2018, 141, 2142-2155.	7.6	96
14	Neuronal inhibition and synaptic plasticity of basal ganglia neurons in Parkinson's disease. Brain, 2018, 141, 177-190.	7.6	91
15	Canadian guideline for Parkinson disease. Cmaj, 2019, 191, E989-E1004.	2.0	90
16	Stop-related subthalamic beta activity indexes global motor suppression in Parkinson's disease. Movement Disorders, 2016, 31, 1846-1853.	3.9	81
17	Deep brain stimulation for Parkinsonâ€™s disease: meta-analysis of results of randomized trials at varying lengths of follow-up. Journal of Neurosurgery, 2018, 128, 1199-1213.	1.6	81
18	Î±-Synuclein and Lewy pathology in Parkinson's disease. Current Opinion in Neurology, 2015, 28, 375-381.	3.6	79

#	Article	IF	Citations
19	Deep brain stimulation for pediatric dystonia: a metaâ€analysis with individual participant data. Developmental Medicine and Child Neurology, 2019, 61, 49-56.	2.1	75
20	A systematic review of deep brain stimulation for the treatment of drug-resistant epilepsy in childhood. Journal of Neurosurgery: Pediatrics, 2019, 23, 274-284.	1.3	70
21	Probabilistic Mapping of Deep Brain Stimulation: Insights from 15â€‰Years of Therapy. Annals of Neurology, 2021, 89, 426-443.	5.3	68
22	Rapid Modulation of Protein Expression in the Rat Hippocampus Following Deep Brain Stimulation of the Fornix. Brain Stimulation, 2015, 8, 1058-1064.	1.6	66
23	Early-onset impairment of the ubiquitin-proteasome system in dopaminergic neurons caused by Î±-synuclein. Acta Neuropathologica Communications, 2020, 8, 17.	5.2	65
24	Deep brain stimulation targets in epilepsy: Systematic review and metaâ€analysis of anterior and centromedian thalamic nuclei and hippocampus. Epilepsia, 2022, 63, 513-524.	5.1	54
25	Pallidal deep brain stimulation modulates cortical excitability and plasticity. Annals of Neurology, 2018, 83, 352-362.	5.3	51
26	Functional MRI Safety and Artifacts during Deep Brain Stimulation: Experience in 102 Patients. Radiology, 2019, 293, 174-183.	7.3	51
27	Bilateral Focused Ultrasound Thalamotomy for Essential Tremor (<scp>BESTâ€FUS</scp> Phase 2 Trial). Movement Disorders, 2021, 36, 2653-2662.	3.9	51
28	Neurons detect cognitive boundaries to structure episodic memories in humans. Nature Neuroscience, 2022, 25, 358-368.	14.8	51
29	Deep brain stimulation: potential for neuroprotection. Annals of Clinical and Translational Neurology, 2019, 6, 174-185.	3.7	50
30	Direct detection of alpha synuclein oligomers in vivo. Acta Neuropathologica Communications, 2013, 1, 6.	5.2	49
31	Chronic deep brain stimulation in an Alzheimer's disease mouse model enhances memory and reduces pathological hallmarks. Brain Stimulation, 2018, 11, 435-444.	1.6	49
32	LRRK2 and Î±-Synuclein: Distinct or Synergistic Players in Parkinsonâ€™s Disease?. Frontiers in Neuroscience, 2020, 14, 577.	2.8	49
33	Deep brain stimulation for Gilles de la Tourette syndrome in children and youth: a meta-analysis with individual participant data. Journal of Neurosurgery: Pediatrics, 2019, 23, 236-246.	1.3	46
34	On the (Nonâ€)equivalency of monopolar and bipolar settings for deep brain stimulation fMRI studies of Parkinson's disease patients. Journal of Magnetic Resonance Imaging, 2019, 49, 1736-1749.	3.4	40
35	Deep Brain Stimulation in Rare Inherited Dystonias. Brain Stimulation, 2016, 9, 905-910.	1.6	39
36	Deep brain stimulation for childhood dystonia: current evidence and emerging practice. Expert Review of Neurotherapeutics, 2018, 18, 773-784.	2.8	37

#	Article	IF	Citations
37	Surgical treatment of dystonia. Expert Review of Neurotherapeutics, 2018, 18, 477-492.	2.8	36
38	The effect of dexmedetomidine on the firing properties of <scp>STN</scp> neurons in Parkinson's disease. European Journal of Neuroscience, 2015, 42, 2070-2077.	2.6	35
39	Chaperone-Based Therapies for Disease Modification in Parkinsonâ€™s Disease. Parkinson's Disease, 2017, 2017, 1-11.	1.1	32
40	Bcl-2-associated athanogene 5 (BAG5) regulates Parkin-dependent mitophagy and cell death. Cell Death and Disease, 2019, 10, 907.	6.3	32
41	3-Tesla MRI in patients with fully implanted deep brain stimulation devices: a preliminary study in 10 patients. Journal of Neurosurgery, 2017, 127, 892-898.	1.6	30
42	Implantable Pulse Generators for Deep Brain Stimulation: Challenges, Complications, and Strategies for Practicality and Longevity. Frontiers in Human Neuroscience, 2021, 15, 708481.	2.0	30
43	Bilateral pallidal stimulation for Wilson's disease. Movement Disorders, 2013, 28, 1292-1295.	3.9	29
44	Deep-Brain Stimulation for Essential Tremor and Other Tremor Syndromes: A Narrative Review of Current Targets and Clinical Outcomes. Brain Sciences, 2020, 10, 925.	2.3	29
45	Deep brain stimulation for pantothenate kinaseâ€associated neurodegeneration: A metaâ€analysis. Movement Disorders, 2019, 34, 264-273.	3.9	27
46	Deep Brain Stimulation Target Selection for Parkinsonâ€™s Disease. Canadian Journal of Neurological Sciences, 2017, 44, 3-8.	0.5	26
47	Modulation of inhibitory plasticity in basal ganglia output nuclei of patients with Parkinson's disease. Neurobiology of Disease, 2019, 124, 46-56.	4.4	26
48	Parkinsonism due to A53E Î±â€synuclein gene mutation: Clinical, genetic, epigenetic, and biochemical features. Movement Disorders, 2018, 33, 1950-1955.	3.9	25
49	A theoretical framework for the site-specific and frequency-dependent neuronal effects of deep brain stimulation. Brain Stimulation, 2021, 14, 807-821.	1.6	24
50	Eventâ€related deep brain stimulation of the subthalamic nucleus affects conflict processing. Annals of Neurology, 2018, 84, 515-526.	5.3	23
51	What Have We Learned About Movement Disorders from Functional Neurosurgery?. Annual Review of Neuroscience, 2017, 40, 453-477.	10.7	21
52	Local Field Potential-Based Programming: AÂProof-of-Concept Pilot Study. Neuromodulation, 2022, 25, 271-275.	0.8	21
53	The eIF2Î± kinase HRI triggers the autophagic clearance of cytosolic protein aggregates. Journal of Biological Chemistry, 2021, 296, 100050.	3.4	21
54	Sequence of electrode implantation and outcome of deep brain stimulation for Parkinson's disease. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, 859-863.	1.9	20

#	Article	IF	Citations
55	Anesthesia considerations for patients with an implanted deep brain stimulator undergoing surgery: a review and update. Canadian Journal of Anaesthesia, 2017, 64, 308-319.	1.6	20
56	Anatomic Targeting of the Optimal Location for Thalamic Deep Brain Stimulation in Patients with Essential Tremor. World Neurosurgery, 2017, 107, 168-174.	1.3	20
57	Sign-specific stimulation â€˜hotâ€™ and â€˜coldâ€™ spots in Parkinsonâ€™s disease validated with machine learning. Brain Communications, 2021, 3, fcab027.	3.3	20
58	Skull fracture secondary to application of a Mayfield skull clamp in an adult patient: Case report and review of the literature. Clinical Neurology and Neurosurgery, 2012, 114, 776-778.	1.4	19
59	Dystonia as complication of thalamic neurosurgery. Parkinsonism and Related Disorders, 2019, 66, 232-236.	2.2	19
60	Bilateral pallidal stimulation for sargoglycan epsilon negative myoclonus. Parkinsonism and Related Disorders, 2014, 20, 915-918.	2.2	17
61	Subthalamic suppression defines therapeutic threshold of deep brain stimulation in Parkinsonâ€™s disease. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 1105-1108.	1.9	16
62	Injury and strain-dependent dopaminergic neuronal degeneration in the substantia nigra of mice after axotomy or MPTP. Brain Research, 2003, 994, 243-252.	2.2	15
63	Merging DBS with viral vector or stem cell implantation: â€œhybridâ€•stereotactic surgery as an evolution in the surgical treatment of Parkinson's disease. Molecular Therapy - Methods and Clinical Development, 2016, 3, 15051.	4.1	14
64	A literature review of magnetic resonance imaging sequence advancements in visualizing functional neurosurgery targets. Journal of Neurosurgery, 2021, 135, 1445-1458.	1.6	14
65	Emerging diseaseâ€modifying strategies targeting Î±â€synuclein for the treatment of Parkinson's disease. British Journal of Pharmacology, 2018, 175, 3080-3089.	5.4	13
66	Deep Brain Stimulation rescues memory and synaptic activity in a rat model of global ischemia. Journal of Neuroscience, 2019, 39, 1222-18.	3.6	13
67	Patient-adjusted deep-brain stimulation programming is time saving in dystonia patients. Journal of Neurology, 2019, 266, 2423-2429.	3.6	13
68	Methods for detecting toxic Î±-synuclein species as a biomarker for Parkinsonâ€™s disease. Critical Reviews in Clinical Laboratory Sciences, 2020, 57, 291-307.	6.1	13
69	Blood oxygen level-dependent (BOLD) response patterns with thalamic deep brain stimulation in patients with medically refractory epilepsy. Epilepsy and Behavior, 2021, 122, 108153.	1.7	13
70	Small molecule inhibitors of Î±-synuclein oligomers identified by targeting early dopamine-mediated motor impairment in C. elegans. Molecular Neurodegeneration, 2021, 16, 77.	10.8	13
71	Ultraâ€highâ€frequency deep brain stimulation at 10,000 Hz improves motor function. Movement Disorders, 2019, 34, 146-148.	3.9	12
72	Acute low frequency dorsal subthalamic nucleus stimulation improves verbal fluency in Parkinson's disease. Brain Stimulation, 2021, 14, 754-760.	1.6	12

#	Article	IF	Citations
73	Fronto-subthalamic phase synchronization and cross-frequency coupling during conflict processing. NeuroImage, 2021, 238, 118205.	4.2	12
74	Aggressiveness after centromedian nucleus stimulation engages prefrontal thalamocortical circuitry. Brain Stimulation, 2020, 13, 357-359.	1.6	11
75	Novel Electrode Designs for Neurostimulation in Regenerative Medicine: Activation of Stem Cells. Bioelectricity, 2020, 2, 348-361.	1.1	11
76	Nucleus basalis of Meynert neuronal activity in Parkinsonâ€™s disease. Journal of Neurosurgery, 2020, 132, 574-582.	1.6	11
77	Stopping and slowing manual and spoken responses: Similar oscillatory signatures recorded from the subthalamic nucleus. Brain and Language, 2018, 176, 1-10.	1.6	10
78	The Child & Youth CompreHensIve Longitudinal Database for Deep Brain Stimulation (CHILD-DBS). Child's Nervous System, 2021, 37, 607-615.	1.1	10
79	Mapping efficacious deep brain stimulation for pediatric dystonia. Journal of Neurosurgery: Pediatrics, 2021, 27, 346-356.	1.3	10
80	Cost-effectiveness analysis of MR-guided focused ultrasound thalamotomy for tremor-dominant Parkinsonâ€™s disease. Journal of Neurosurgery, 2020, 135, 273-278.	1.6	10
81	<scp>Singleâ€Trajectory Multipleâ€Target</scp> Deep Brain Stimulation for Parkinsonian Mobility and Cognition. Movement Disorders, 2022, 37, 635-640.	3.9	10
82	Importance of Cobalt-60 Dose Rate and Biologically Effective Dose on Local Control for Intracranial Meningiomas Treated With Stereotactic Radiosurgery. Neurosurgery, 2022, 90, 140-147.	1.1	10
83	Identifying the neural network for neuromodulation in epilepsy through connectomics and graphs. Brain Communications, 2022, 4, .	3.3	10
84	C-terminus of Hsp70 Interacting Protein (CHIP) and Neurodegeneration: Lessons from the Bench and Bedside. Current Neuropharmacology, 2021, 19, 1038-1068.	2.9	9
85	Comparison of oncometabolite 2-hydroxyglutarate (2HG) levels in mutant isocitrate dehydrogenase (IDH) versus wild-type (WT) glioma tissues.. Journal of Clinical Oncology, 2016, 34, 2028-2028.	1.6	9
86	A Network-Based Approach to Glioma Surgery: Insights from Functional Neurosurgery. Cancers, 2021, 13, 6127.	3.7	9
87	Successful spinal cord stimulation for severe medicationâ€refractory restless legs syndrome. Movement Disorders, 2019, 34, 585-586.	3.9	8
88	Levodopa Versus Dopamine Agonist after Subthalamic Stimulation in Parkinson's Disease. Movement Disorders, 2021, 36, 672-680.	3.9	8
89	Brain Metastases: A Modern Multidisciplinary Approach. Canadian Journal of Neurological Sciences, 2021, 48, 189-197.	0.5	8
90	Theta Burst Deep Brain Stimulation in Movement Disorders. Movement Disorders Clinical Practice, 2021, 8, 282-285.	1.5	8

#	Article	IF	Citations
91	Programming Directional Deep Brain Stimulation in Parkinsonâ€™s Disease: A Randomized Prospective Trial Comparing Early versus Delayed Stimulation Steering. Stereotactic and Functional Neurosurgery, 2021, 99, 484-490.	1.5	8
92	Radiation Dose Rate, Biologically Effective Dose, and Tumor Characteristics on Local Control and Toxicity After Radiosurgery for Acoustic Neuromas. World Neurosurgery, 2021, 152, e512-e522.	1.3	8
93	Considerations for Patient and Target Selection in Deep Brain Stimulation Surgery for Parkinsonâ€™s Disease. , 0, , 145-160.		8
94	Neurophysiological responses of globus pallidus internus during the auditory oddball task in Parkinson's disease. Neurobiology of Disease, 2021, 159, 105490.	4.4	7
95	Clinical phenotypes associated with outcomes following deep brain stimulation for childhood dystonia. Journal of Neurosurgery: Pediatrics, 2019, 24, 442-450.	1.3	7
96	A Primer on Magnetic Resonance-Guided Laser Interstitial Thermal Therapy for Medically Refractory Epilepsy. Journal of Korean Neurosurgical Society, 2019, 62, 353-360.	1.2	7
97	Volitional control of individual neurons in the human brain. Brain, 2021, 144, 3651-3663.	7.6	7
98	Patient Perspectives Regarding Ethics of Spinal Column Stimulators in the Surgical Management of Persistent Postoperative Neuropathic Pain. Neuromodulation, 2017, 20, 274-278.	0.8	6
99	Is there a role for MRâ€guided focused ultrasound in Parkinson's disease?. Movement Disorders, 2018, 33, 575-579.	3.9	6
100	BAG5 Promotes Alpha-Synuclein Oligomer Formation and Functionally Interacts With the Autophagy Adaptor Protein p62. Frontiers in Cell and Developmental Biology, 2020, 8, 716.	3.7	6
101	Regulation of Parkin-dependent mitophagy by Bcl-2-associated athanogene (BAG) family members. Neural Regeneration Research, 2021, 16, 684.	3.0	6
102	Surgical targeting of large hypothalamic hamartomas and seizure-freedom following MR-guided laser interstitial thermal therapy. Epilepsy and Behavior, 2021, 116, 107774.	1.7	6
103	Self-adjustment of deep brain stimulation delays optimization in Parkinsonâ€™s disease. Brain Stimulation, 2021, 14, 676-681.	1.6	6
104	Flexible vs. standard subthalamic stimulation in Parkinson disease: A double-blind proof-of-concept cross-over trial. Parkinsonism and Related Disorders, 2021, 89, 93-97.	2.2	6
105	Safety assessment of spine MRI in deep brain stimulation patients. Journal of Neurosurgery: Spine, 2020, 32, 973-983.	1.7	6
106	Thoracic Myelopathy from Coincident Fluorosis and Epidural Lipomatosis. Canadian Journal of Neurological Sciences, 2010, 37, 276-278.	0.5	5
107	Neuromodulation for Pain: A Comprehensive Survey and Systematic Review of Clinical Trials and Connectomic Analysis of Brain Targets. Stereotactic and Functional Neurosurgery, 2022, 100, 14-25.	1.5	5
108	Axial Impairment Following Deep Brain Stimulation in Parkinsonâ€™s Disease: A Surgicogenomic Approach. Journal of Parkinson's Disease, 2022, 12, 117-128.	2.8	5

#	Article	IF	Citations
109	Lateralized Subthalamic Stimulation for Axial Dysfunction in Parkinson's Disease: A Randomized Trial. Movement Disorders, 2022, , .	3.9	5
110	Advances in DBS Technology and Novel Applications: Focus on Movement Disorders. Current Neurology and Neuroscience Reports, 2022, 22, 577-588.	4.2	5
111	Spinal cord stimulation for gait impairment in spinocerebellar ataxia 7. Journal of Neurology, 2014, 261, 570-574.	3.6	4
112	Status dystonicus induced by deep brain stimulation surgery. Neurological Sciences, 2020, 41, 729-730.	1.9	4
113	Deep Brain Stimulation of the Medial Septal Nucleus Induces Expression of a Virally Delivered Reporter Gene in Dentate Gyrus. Frontiers in Neuroscience, 2020, 14, 463.	2.8	4
114	Airway Management with Leksell Frame in situ with or without Frontal Bar: A Mannequin Study. Canadian Journal of Neurological Sciences, 2022, 49, 579-582.	0.5	4
115	Response: Deep brain stimulation targets in epilepsy: Systematic review and metaâ€analysis of anterior and centromedian thalamic nuclei and hippocampus. Epilepsia, 2022, 63, 1885-1886.	5.1	4
116	Case Studies in Neuroscience: Lack of inhibitory synaptic plasticity in the substantia nigra pars reticulata of a patient with lithium-induced tremor. Journal of Neurophysiology, 2019, 122, 1367-1372.	1.8	3
117	Microelectrode Recording and Radiofrequency Thalamotomy following Focused Ultrasound Thalamotomy. Stereotactic and Functional Neurosurgery, 2021, 99, 34-37.	1.5	3
118	Semi-Quantitative Determination of Dopaminergic Neuron Density in the Substantia Nigra of Rodent Models using Automated Image Analysis. Journal of Visualized Experiments, 2021, , .	0.3	3
119	Magnetically Guided Catheters, Micro- and Nanorobots for Spinal Cord Stimulation. Frontiers in Neurorobotics, 2021, 15, 749024.	2.8	3
120	The Association of Dexmedetomidine with Firing Properties in Pallidal Neurons. Canadian Journal of Neurological Sciences, 2021, 48, 525-533.	0.5	3
121	A Functional Connectome of Parkinson's Disease Patients Prior to Deep Brain Stimulation: A Tool for Disease-Specific Connectivity Analyses. Frontiers in Neuroscience, 0, 16, .	2.8	3
122	To serve and protect? Interventions in the subthalamic nucleus for Parkinson's disease. Experimental Neurology, 2004, 185, 201-203.	4.1	2
123	Neurostimulation in PDâ€"benefit of early surgery revealed. Nature Reviews Neurology, 2013, 9, 244-245.	10.1	2
124	Diffusion tensor imaging and deep brain stimulation. Expert Review of Medical Devices, 2016, 13, 615-617.	2.8	2
125	Multicenter Validation of Individual Preoperative Motor Outcome Prediction for Deep Brain Stimulation in Parkinsonâ€™s Disease. Stereotactic and Functional Neurosurgery, 2022, 100, 121-129.	1.5	2
126	Subdural Collection as Initial Presentation of Granulomatosis With Polyangiitis. JAMA Neurology, 2016, 73, 602.	9.0	1

#	Article	IF	Citations
127	In reply: Parkinsonism-hyperthermia syndrome and deep brain stimulation. Canadian Journal of Anaesthesia, 2017, 64, 677-677.	1.6	1
128	Childhood choreoathetosis secondary to hyper-IgM syndrome (CD40 ligand deficiency). Neurology: Neuroimmunology and NeuroInflammation, 2020, 7, e899.	6.0	1
129	Probabilistic characterisation of deep brain stimulation in patients with tardive syndromes. Journal of Neurology, Neurosurgery and Psychiatry, 2021, 92, 909-911.	1.9	1
130	Advanced Therapies for the Management of Dopamine Dysregulation Syndrome in Parkinson's Disease. Movement Disorders Clinical Practice, 2021, 8, 400-405.	1.5	1
131	Pallidal neuronal activity in multiple system atrophy type P and Parkinson's disease. Parkinsonism and Related Disorders, 2022, 101, 15-17.	2.2	1
132	Neuronal Activity and Synaptic Plasticity in a Reimplanted STN-DBS Patient with Parkinsonâ€™s Disease: Recordings from Two Surgeries. Stereotactic and Functional Neurosurgery, 2020, 98, 206-212.	1.5	0
133	Spinal Longitudinal Epidural Collections in Intracranial Hypotension. Canadian Journal of Neurological Sciences, 2021, , 1-2.	0.5	0
134	Rapid Generation of Human Neuronal Cell Models Enabling Inducible Expression of Proteins-of-interest for Functional Studies. Bio-protocol, 2020, 10, e3615.	0.4	0
135	Correlation between Cranial Nerve Microstructural Characteristics and Vestibular Schwannoma Tumor Volume. American Journal of Neuroradiology, 2021, 42, 1853-1858.	2.4	0