

Thomas Stieglitz

List of Publications by Year in descending order

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421
papers

14,313
citations

24978

57
h-index

28224

105
g-index

454
all docs

454
docs citations

454
times ranked

10404
citing authors

#	ARTICLE	IF	CITATIONS
1	Restoring Natural Sensory Feedback in Real-Time Bidirectional Hand Prostheses. <i>Science Translational Medicine</i> , 2014, 6, 222ra19.	5.8	805
2	Quantifying submarine groundwater discharge in the coastal zone via multiple methods. <i>Science of the Total Environment</i> , 2006, 367, 498-543.	3.9	791
3	A critical review of interfaces with the peripheral nervous system for the control of neuroprostheses and hybrid bionic systems. <i>Journal of the Peripheral Nervous System</i> , 2005, 10, 229-258.	1.4	723
4	Attentional Stimulus Selection through Selective Synchronization between Monkey Visual Areas. <i>Neuron</i> , 2012, 75, 875-888.	3.8	665
5	Polymers for neural implants. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 18-33.	2.4	406
6	A transverse intrafascicular multichannel electrode (TIME) to interface with the peripheral nerve. <i>Biosensors and Bioelectronics</i> , 2010, 26, 62-69.	5.3	396
7	A MEMS-based flexible multichannel ECoG-electrode array. <i>Journal of Neural Engineering</i> , 2009, 6, 036003.	1.8	354
8	Micromachined, Polyimide-Based Devices for Flexible Neural Interfaces. <i>Biomedical Microdevices</i> , 2000, 2, 283-294.	1.4	297
9	Biomimetic Intra-neural Sensory Feedback Enhances Sensation Naturalness, Tactile Sensitivity, and Manual Dexterity in a Bidirectional Prosthesis. <i>Neuron</i> , 2018, 100, 37-45.e7.	3.8	265
10	A closed-loop hand prosthesis with simultaneous intra-neural tactile and position feedback. <i>Science Robotics</i> , 2019, 4, .	9.9	198
11	Polyimide cuff electrodes for peripheral nerve stimulation. <i>Journal of Neuroscience Methods</i> , 2000, 98, 105-118.	1.3	194
12	In vitro evaluation of the long-term stability of polyimide as a material for neural implants. <i>Biomaterials</i> , 2010, 31, 3449-3458.	5.7	193
13	Comparative analysis of transverse intrafascicular multichannel, longitudinal intrafascicular and multipolar cuff electrodes for the selective stimulation of nerve fascicles. <i>Journal of Neural Engineering</i> , 2011, 8, 036023.	1.8	183
14	Sensory feedback restoration in leg amputees improves walking speed, metabolic cost and phantom pain. <i>Nature Medicine</i> , 2019, 25, 1356-1363.	15.2	174
15	Long term assessment of axonal regeneration through polyimide regenerative electrodes to interface the peripheral nerve. <i>Biomaterials</i> , 2005, 26, 2021-2031.	5.7	159
16	Submarine Groundwater Discharge: Updates on Its Measurement Techniques, Geophysical Drivers, Magnitudes, and Effects. <i>Frontiers in Environmental Science</i> , 2019, 7, .	1.5	158
17	Actively controlled release of Dexamethasone from neural microelectrodes in a chronic in vivo study. <i>Biomaterials</i> , 2017, 129, 176-187.	5.7	154
18	Characterization of parylene C as an encapsulation material for implanted neural prostheses. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010, 93B, 266-274.	1.6	149

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19	An Active Approach for Charge Balancing in Functional Electrical Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 162-170.	2.7	143
20	Long-Term Stable Adhesion for Conducting Polymers in Biomedical Applications: IrOx and Nanostructured Platinum Solve the Chronic Challenge. ACS Applied Materials & Interfaces, 2017, 9, 189-197.	4.0	143
21	Blood pressure control with selective vagal nerve stimulation and minimal side effects. Journal of Neural Engineering, 2014, 11, 036011.	1.8	142
22	Tutorial: guidelines for standardized performance tests for electrodes intended for neural interfaces and bioelectronics. Nature Protocols, 2020, 15, 3557-3578.	5.5	142
23	Six-Month Assessment of a Hand Prosthesis with Intraneural Tactile Feedback. Annals of Neurology, 2019, 85, 137-154.	2.8	140
24	Enhancing functional abilities and cognitive integration of the lower limb prosthesis. Science Translational Medicine, 2019, 11, .	5.8	133
25	Implantable biomedical microsystems for neural prostheses. IEEE Engineering in Medicine and Biology Magazine, 2005, 24, 58-65.	1.1	130
26	Nanostructured platinum grass enables superior impedance reduction for neural microelectrodes. Biomaterials, 2015, 67, 346-353.	5.7	130
27	High density interconnects and flexible hybrid assemblies for active biomedical implants. IEEE Transactions on Advanced Packaging, 2001, 24, 366-374.	1.7	127
28	How to record high-frequency oscillations in epilepsy: A practical guideline. Epilepsia, 2017, 58, 1305-1315.	2.6	127
29	A flexible, light-weight multichannel sieve electrode with integrated cables for interfacing regenerating peripheral nerves. Sensors and Actuators A: Physical, 1997, 60, 240-243.	2.0	118
30	Passive irrigation and functional morphology of crustacean burrows in a tropical mangrove swamp. Hydrobiologia, 2000, 421, 69-76.	1.0	112
31	Thin films and microelectrode arrays for neuroprosthetics. MRS Bulletin, 2012, 37, 590-598.	1.7	112
32	Submarine groundwater discharge into the near-shore zone of the Great Barrier Reef, Australia. Marine Pollution Bulletin, 2005, 51, 51-59.	2.3	106
33	The influence of environmental parameters on the performance and detection range of acoustic receivers. Methods in Ecology and Evolution, 2016, 7, 825-835.	2.2	106
34	The effects of annealing on mechanical, chemical, and physical properties and structural stability of Parylene C. Biomedical Microdevices, 2013, 15, 727-735.	1.4	104
35	Toward higher-performance bionic limbs for wider clinical use. Nature Biomedical Engineering, 2023, 7, 473-485.	11.6	104
36	Multisensory bionic limb to achieve prosthesis embodiment and reduce distorted phantom limb perceptions. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 833-836.	0.9	101

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37	An implantable neuroprosthesis for standing and walking in paraplegia: 5-year patient follow-up. <i>Journal of Neural Engineering</i> , 2006, 3, 268-275.	1.8	99
38	First long term in vivo study on subdurally implanted Micro-ECoG electrodes, manufactured with a novel laser technology. <i>Biomedical Microdevices</i> , 2011, 13, 59-68.	1.4	96
39	A polymer-based neural microimplant for optogenetic applications: design and first in vivo study. <i>Lab on A Chip</i> , 2013, 13, 579.	3.1	94
40	Cortical Activation Via an Implanted Wireless Retinal Prosthesis. , 2005, 46, 1780.		93
41	Biocompatibility of Chronically Implanted Transverse Intrafascicular Multichannel Electrode (TIME) in the Rat Sciatic Nerve. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 2324-2332.	2.5	87
42	Comparison of linear frequency and amplitude modulation for intraneural sensory feedback in bidirectional hand prostheses. <i>Scientific Reports</i> , 2018, 8, 16666.	1.6	85
43	Submarine groundwater discharge from tropical islands: a review. <i>Grundwasser</i> , 2015, 20, 53-67.	1.4	81
44	Should patients with brain implants undergo MRI?. <i>Journal of Neural Engineering</i> , 2018, 15, 041002.	1.8	78
45	Flexible biomedical microdevices with double-sided electrode arrangements for neural applications. <i>Sensors and Actuators A: Physical</i> , 2001, 90, 203-211.	2.0	75
46	Characterization and optimization of microelectrode arrays for in vivo nerve signal recording and stimulation1Paper presented at WPB '96, Bangkok, May 1996.1. <i>Biosensors and Bioelectronics</i> , 1997, 12, 883-892.	5.3	74
47	Isotope tracing of submarine groundwater discharge offshore Ubatuba, Brazil: results of the IAEAâ€“UNESCO SGD project. <i>Journal of Environmental Radioactivity</i> , 2008, 99, 1596-1610.	0.9	70
48	Encapsulation of organic field effect transistors for flexible biomedical microimplants. <i>Sensors and Actuators A: Physical</i> , 2005, 120, 101-109.	2.0	69
49	Multichannel thin-film electrode for intramuscular electromyographic recordings. <i>Journal of Applied Physiology</i> , 2008, 104, 821-827.	1.2	69
50	Dry Season Salinity Changes in Arid Estuaries Fringed by Mangroves and Saltflats. <i>Estuarine, Coastal and Shelf Science</i> , 2002, 54, 1039-1049.	0.9	68
51	Manufacturing, assembling and packaging of miniaturized neural implants. <i>Microsystem Technologies</i> , 2010, 16, 723-734.	1.2	68
52	Development of Saline Ground Water through Transpiration of Sea Water. <i>Ground Water</i> , 2007, 45, 703-710.	0.7	67
53	Intraneural sensory feedback restores grip force control and motor coordination while using a prosthetic hand. <i>Journal of Neural Engineering</i> , 2019, 16, 026034.	1.8	66
54	Stimulation Selectivity of the â€œThin-Film Longitudinal Intrafascicular Electrodeâ€“(tFLIFE) and the â€œTransverse Intrafascicular Multi-Channel Electrodeâ€“(TIME) in the Large Nerve Animal Model. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2014, 22, 400-410.	2.7	65

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55	A biohybrid system to interface peripheral nerves after traumatic lesions: design of a high channel sieve electrode. <i>Biosensors and Bioelectronics</i> , 2002, 17, 685-696.	5.3	63
56	Immunohistochemical characterization of axonal sprouting and reactive tissue changes after long-term implantation of a polyimide sieve electrode to the transected adult rat sciatic nerve. <i>Biomaterials</i> , 2001, 22, 2333-2343.	5.7	62
57	Isotopic, geophysical and biogeochemical investigation of submarine groundwater discharge: IAEA-UNESCO intercomparison exercise at Mauritius Island. <i>Journal of Environmental Radioactivity</i> , 2012, 104, 24-45.	0.9	62
58	Brain-computer interfaces: an overview of the hardware to record neural signals from the cortex. <i>Progress in Brain Research</i> , 2009, 175, 297-315.	0.9	60
59	Paradigms for restoration of somatosensory feedback via stimulation of the peripheral nervous system. <i>Clinical Neurophysiology</i> , 2018, 129, 851-862.	0.7	60
60	Conformable polyimide-based μ ECoGs: Bringing the electrodes closer to the signal source. <i>Biomaterials</i> , 2020, 255, 120178.	5.7	58
61	Flexible BIOMEMS with electrode arrangements on front and back side as key component in neural prostheses and biohybrid systems. <i>Sensors and Actuators B: Chemical</i> , 2002, 83, 8-14.	4.0	57
62	On the use of Parylene C polymer as substrate for peripheral nerve electrodes. <i>Scientific Reports</i> , 2018, 8, 5965.	1.6	57
63	Morphologic and functional evaluation of peripheral nerve fibers regenerated through polyimide sieve electrodes over long-term implantation. <i>Journal of Biomedical Materials Research Part B</i> , 2002, 60, 517-528.	3.0	52
64	Let There Be Light-Optoprobes for Neural Implants. <i>Proceedings of the IEEE</i> , 2017, 105, 101-138.	16.4	51
65	Characterization of multi-channel intraneural stimulation in transradial amputees. <i>Scientific Reports</i> , 2019, 9, 19258.	1.6	51
66	Radium isotopes as submarine groundwater discharge (SGD) tracers: Review and recommendations. <i>Earth-Science Reviews</i> , 2021, 220, 103681.	4.0	51
67	"Microflex" A New Assembling Technique for Interconnects. <i>Journal of Intelligent Material Systems and Structures</i> , 2000, 11, 417-425.	1.4	50
68	An Optically Powered Single-Channel Stimulation Implant as Test System for Chronic Biocompatibility and Biostability of Miniaturized Retinal Vision Prostheses. <i>IEEE Transactions on Biomedical Engineering</i> , 2007, 54, 983-992.	2.5	48
69	Development of a micromachined epiretinal vision prosthesis. <i>Journal of Neural Engineering</i> , 2009, 6, 065005.	1.8	45
70	On the Stability of Poly(ethyleneoxythiophene) as Coating Material for Active Neural Implants. <i>Artificial Organs</i> , 2011, 35, 245-248.	1.0	44
71	Closed-loop interaction with the cerebral cortex: a review of wireless implant technology. <i>Brain-Computer Interfaces</i> , 2017, 4, 146-154.	0.9	44
72	Stimulation and recording from regenerated peripheral nerves through polyimide sieve electrodes. <i>Journal of the Peripheral Nervous System</i> , 1998, 3, 91-101.	1.4	44

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73	Design, in vitro and in vivo assessment of a multi-channel sieve electrode with integrated multiplexer. <i>Journal of Neural Engineering</i> , 2006, 3, 114-124.	1.8	43
74	A voltage-controlled current source with regulated electrode bias-voltage for safe neural stimulation. <i>Journal of Neuroscience Methods</i> , 2008, 171, 248-252.	1.3	43
75	Microprobe Array with Low Impedance Electrodes and Highly Flexible Polyimide Cables for Acute Neural Recording. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007, 2007, 175-8.	0.5	42
76	In vivo monitoring of glial scar proliferation on chronically implanted neural electrodes by fiber optical coherence tomography. <i>Frontiers in Neuroengineering</i> , 2014, 7, 34.	4.8	42
77	Flexible organic field effect transistors for biomedical microimplants using polyimide and parylene C as substrate and insulator layers. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 1555-1561.	1.5	40
78	Stratigraphic controls on fluid and solute fluxes across the sediment-water interface of an estuary. <i>Limnology and Oceanography</i> , 2014, 59, 997-1010.	1.6	40
79	Decoding of grasping tasks from intraneural recordings in trans-radial amputee. <i>Journal of Neural Engineering</i> , 2020, 17, 026034.	1.8	39
80	"Microflex" - A New Assembling Technique for Interconnects. <i>Journal of Intelligent Material Systems and Structures</i> , 2000, 11, 417-425.	1.4	39
81	Optimal integration of intraneural somatosensory feedback with visual information: a single-case study. <i>Scientific Reports</i> , 2019, 9, 7916.	1.6	38
82	Stability of flexible thin-film metallization stimulation electrodes: analysis of explants after first-in-human study and improvement of in vivo performance. <i>Journal of Neural Engineering</i> , 2020, 17, 046006.	1.8	38
83	Improved polyimide thin-film electrodes for neural implants. , 2012, 2012, 5134-7.		37
84	Trapping of mangrove propagules due to density-driven secondary circulation in the Normanby River estuary, NE Australia. <i>Marine Ecology - Progress Series</i> , 2001, 211, 131-142.	0.9	36
85	Spatial variability of submarine groundwater discharge, Ubatuba, Brazil. <i>Estuarine, Coastal and Shelf Science</i> , 2008, 76, 493-500.	0.9	35
86	Phantom somatosensory evoked potentials following selective intraneural electrical stimulation in two amputees. <i>Clinical Neurophysiology</i> , 2018, 129, 1117-1120.	0.7	35
87	A comparison between water circulation and terrestrially-driven dissolved silica fluxes to the Mediterranean Sea traced using radium isotopes. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 238, 496-515.	1.6	35
88	Combining airborne thermal infrared images and radium isotopes to study submarine groundwater discharge along the French Mediterranean coastline. <i>Journal of Hydrology: Regional Studies</i> , 2017, 13, 72-90.	1.0	34
89	Mapping of sheep sensory cortex with a novel microelectrocorticography grid. <i>Journal of Comparative Neurology</i> , 2014, 522, 3590-3608.	0.9	33
90	Comparative study on the insertion behavior of cerebral microprobes. , 2007, 2007, 4711-4.		32

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91	Estimation of submarine groundwater discharge from bulk ground electrical conductivity measurements. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	32
92	Use of an Experimentally Derived Leadfield in the Peripheral Nerve Pathway Discrimination Problem. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2011, 19, 147-156.	2.7	32
93	Poly(3,4-ethylenedioxythiophene)-Based Neural Interfaces for Recording and Stimulation: Fundamental Aspects and In Vivo Applications. <i>Advanced Science</i> , 2022, 9, e2104701.	5.6	32
94	Chronically implanted epidural electrodes in Göttinger minipigs allow function tests of epiretinal implants. <i>Graefes Archive for Clinical and Experimental Ophthalmology</i> , 2003, 241, 1013-1019.	1.0	31
95	Hand Control With Invasive Feedback Is Not Impaired by Increased Cognitive Load. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 287.	2.0	31
96	A transverse intrafascicular multichannel electrode (TIME) to treat phantom limb pain — Towards human clinical trials. , 2012, , .		30
97	Hermetic electronic packaging of an implantable brain-machine-interface with transcutaneous optical data communication. , 2012, 2012, 3886-9.		30
98	Dynamic reconfiguration of cortical functional connectivity across brain states. <i>Scientific Reports</i> , 2017, 7, 8797.	1.6	30
99	Morphological Neural Computation Restores Discrimination of Naturalistic Textures in Trans-radial Amputees. <i>Scientific Reports</i> , 2020, 10, 527.	1.6	30
100	Intrafascicular peripheral nerve stimulation produces fine functional hand movements in primates. <i>Science Translational Medicine</i> , 2021, 13, eabg6463.	5.8	30
101	Mapping reef features from multibeam sonar data using multiscale morphometric analysis. <i>Marine Geology</i> , 2009, 264, 209-217.	0.9	29
102	Neuromuscular adaptations and sensorimotor integration following a unilateral transfemoral amputation. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019, 16, 115.	2.4	29
103	Carbon-based neural electrodes: promises and challenges. <i>Journal of Neural Engineering</i> , 2021, 18, 041007.	1.8	29
104	Mapping the fine structure of cortical activity with different micro-ECoG electrode array geometries. <i>Journal of Neural Engineering</i> , 2017, 14, 056004.	1.8	28
105	Return of the cadaver. <i>Medicine (United States)</i> , 2017, 96, e7528.	0.4	28
106	Electrical connectors for neural implants: design, state of the art and future challenges of an underestimated component. <i>Journal of Neural Engineering</i> , 2019, 16, 061002.	1.8	28
107	Considerations on Surface and Structural Biocompatibility as Prerequisite for Long-Term Stability of Neural Prostheses. <i>Journal of Nanoscience and Nanotechnology</i> , 2004, 4, 496-503.	0.9	27
108	Temporal variability of water quality of submarine groundwater discharge in Ubatuba, Brazil. <i>Estuarine, Coastal and Shelf Science</i> , 2008, 76, 484-492.	0.9	27

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109	Fabrication and test of a hermetic miniature implant package with 360 electrical feedthroughs. , 2010, 2010, 1585-8.		27
110	Kinetics of the Water/Air Phase Transition of Radon and Its Implication on Detection of Radon-in-Water Concentrations: Practical Assessment of Different On-Site Radon Extraction Methods. Environmental Science & Technology, 2012, 46, 8945-8951.	4.6	27
111	On the longevity of flexible neural interfaces: Establishing biostability of polyimide-based intracortical implants. Biomaterials, 2022, 281, 121372.	5.7	27
112	Fast and precise positioning of single cells on planar electrode substrates. IEEE Engineering in Medicine and Biology Magazine, 1999, 18, 48-52.	1.1	26
113	A 232-channel retinal vision prosthesis with a miniaturized hermetic package. , 2012, 2012, 2796-9.		26
114	Developing Next-Generation Brain Sensing Technologiesâ€”A Review. IEEE Sensors Journal, 2019, 19, 10163-10175.	2.4	26
115	A Novel Assembly Method for Silicon-Based Neural Devices. IFMBE Proceedings, 2009, , 107-110.	0.2	26
116	Brachyuran crab community structure and associated sediment reworking activities in pioneer and young mangroves of French Guiana, South America. Estuarine, Coastal and Shelf Science, 2016, 182, 60-71.	0.9	25
117	Of Man and Mice: Translational Research in Neurotechnology. Neuron, 2020, 105, 12-15.	3.8	25
118	Selective fascicular stimulation of the rat sciatic nerve with multipolar polyimide cuff electrodes. Restorative Neurology and Neuroscience, 2001, 18, 9-21.	0.4	25
119	Incorporation of Silicon Carbide and Diamondâ€”Like Carbon as Adhesion Promoters Improves In Vitro and In Vivo Stability of Thinâ€”Film Glassy Carbon Electrocardiography Arrays. Advanced Biology, 2018, 2, 1700081.	3.0	24
120	Graphitic Carbon Electrodes on Flexible Substrate for Neural Applications Entirely Fabricated Using Infrared Nanosecond Laser Technology. Scientific Reports, 2018, 8, 14749.	1.6	24
121	An experimental study on passive charge balancing. Advances in Radio Science, 0, 7, 197-200.	0.7	24
122	ELECTRODE MATERIALS FOR RECORDING AND STIMULATION. Series on Bioengineering and Biomedical Engineering, 2004, , 475-516.	0.1	23
123	Microassembly and micropackaging of implantable systems. , 2013, , 108-149.		23
124	Anti-inflammatory polymer electrodes for glial scar treatment: bringing the conceptual idea to future results. Frontiers in Neuroengineering, 2014, 7, 9.	4.8	23
125	Cuff electrodes for very small diameter nerves — Prototyping and first recordings in vivo. , 2014, 2014, 6846-9.		23
126	Glassy Carbon Electrocardiography Electrodes on Ultra-Thin and Finger-Like Polyimide Substrate: Performance Evaluation Based on Different Electrode Diameters. Materials, 2018, 11, 2486.	1.3	23

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127	Microtechnical Interfaces to Neurons. Topics in Current Chemistry, 1998, , 131-162.	4.0	23
128	Automatic detection of high-frequency-oscillations and their sub-groups co-occurring with interictal-epileptic-spikes. Journal of Neural Engineering, 2020, 17, 016030.	1.8	22
129	Original electronic design to perform epimysial and neural stimulation in paraplegia. Journal of Neural Engineering, 2006, 3, 276-286.	1.8	21
130	Development of Modular Multifunctional Probe Arrays for Cerebral Applications. , 2007, , .		21
131	CMOS-Based High-Density Silicon Microprobe Array for Electronic Depth Control in Neural Recording. , 2009, , .		21
132	Rapid prototyping of flexible intrafascicular electrode arrays by picosecond laser structuring. Journal of Neural Engineering, 2017, 14, 066016.	1.8	21
133	Flexible Bioelectronic Devices Based on Micropatterned Monolithic Carbon Fiber Mats. Advanced Materials Technologies, 2020, 5, 1900713.	3.0	21
134	A small sensor for detecting animal burrows and monitoring burrow water conductivity. Wetlands Ecology and Management, 2000, 8, 1-7.	0.7	20
135	Development of an inductively coupled epiretinal vision prosthesis. , 2004, 2004, 4178-81.		20
136	Biocompatibility evaluation of parylene C and polyimide as substrates for peripheral nerve interfaces. , 2015, , .		20
137	Temporal variability of lagoonâ€“sea water exchange and seawater circulation through a Mediterranean barrier beach. Limnology and Oceanography, 2019, 64, 2059-2080.	1.6	20
138	In vivo intravascular electric impedance spectroscopy using a new catheter with integrated microelectrodes. Basic Research in Cardiology, 2005, 100, 28-34.	2.5	19
139	Development of flexible stimulation devices for a retina implant system. , 1997, , .		18
140	Neural Prostheses in Clinical Applications â€“ Trends from Precision Mechanics towards Biomedical Microsystems in Neurological Rehabilitation / Neuroprothesen in der klinischen Anwendung â€“ Trends von der Feinwerktechnik zu biomedizinischen Mikrosystemen in der neurologischen Rehabilitation. Biomedizinische Technik, 2004, 49, 72-77.	0.9	18
141	Stretchable tracks for laser-machined neural electrode arrays. , 2009, 2009, 1612-5.		18
142	Silicone rubber and thin-film polyimide for hybrid neural interfaces — A MEMS-based adhesion promotion technique. , 2013, , .		18
143	Delaying discharge after the stimulus significantly decreases muscle activation thresholds with small impact on the selectivity: an in vivo study using TIME. Medical and Biological Engineering and Computing, 2015, 53, 371-379.	1.6	18
144	Effect of Cardiac-Cycle-Synchronized Selective Vagal Stimulation on Heart Rate and Blood Pressure in Rats. Advances in Therapy, 2016, 33, 1246-1261.	1.3	18

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145	Integrated optoelectronic microprobes. <i>Current Opinion in Neurobiology</i> , 2018, 50, 72-82.	2.0	18
146	Pulsed electropolymerization of PEDOT enabling controlled branching. <i>Polymer Journal</i> , 2019, 51, 1029-1036.	1.3	18
147	Micromachining of flexible neural implants with low-ohmic wire traces using electroplating. <i>Sensors and Actuators A: Physical</i> , 2002, 96, 105-110.	2.0	17
148	Optical energy transfer for intraocular microsystems studied in rabbits. <i>Graefe's Archive for Clinical and Experimental Ophthalmology</i> , 2004, 242, 661-667.	1.0	17
149	Diffusion-Limited Deposition of Parylene C. <i>Journal of Microelectromechanical Systems</i> , 2011, 20, 239-250.	1.7	17
150	Evaluation of $\text{IrO}_x/\text{CoCoG}$ electrode arrays in the minipig: Experimental procedure and neurosurgical approach. <i>Journal of Neuroscience Methods</i> , 2011, 202, 77-86.	1.3	17
151	Why Neurotechnologies? About the Purposes, Opportunities and Limitations of Neurotechnologies in Clinical Applications. <i>Neuroethics</i> , 2021, 14, 5-16.	1.7	17
152	Recent advances in charge balancing for functional electrical stimulation. , 2009, 2009, 5518-21.		16
153	Polymer-based shaft microelectrodes with optical and fluidic capabilities as a tool for optogenetics. , 2011, 2011, 2969-72.		16
154	Long-term Adhesion Studies of Polyimide to Inorganic and Metallic Layers. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1466, 1.	0.1	16
155	A single channel sleep-spindle detector based on multivariate classification of EEG epochs: MUSSDET. <i>Journal of Neuroscience Methods</i> , 2018, 297, 31-43.	1.3	16
156	Synchrony surfacing: Epicortical recording of correlated action potentials. <i>European Journal of Neuroscience</i> , 2018, 48, 3583-3596.	1.2	16
157	Density-driven Secondary Circulation in a Tropical Mangrove Estuary. <i>Estuarine, Coastal and Shelf Science</i> , 1998, 47, 621-632.	0.9	15
158	Indicators of mangrove zonality: the Normanby river, N.E. Australia. <i>Mangroves and Salt Marshes</i> , 1999, 3, 177-184.	0.6	15
159	Diameter-dependent excitation of peripheral nerve fibers by multipolar electrodes during electrical stimulation. <i>Expert Review of Medical Devices</i> , 2005, 2, 149-152.	1.4	15
160	Biomedical Microdevices for Neural Implants. , 2006, , 71-137.		15
161	Ensuring minimal humidity levels in hermetic implant housings. , 2011, 2011, 2296-9.		15
162	Intrinsic coupling modes reveal the functional architecture of cortico-tectal networks. <i>Science Advances</i> , 2015, 1, e1500229.	4.7	15

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163	Influence of Anatomical Detail and Tissue Conductivity Variations in Simulations of Multi-Contact Nerve Cuff Recordings. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1653-1662.	2.7	15
164	Long-Term Functionality of Transversal Intraneural Electrodes is Improved by Dexamethasone Treatment. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 457-464.	2.7	15
165	Sensitivity to temporal parameters of intraneural tactile sensory feedback. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 110.	2.4	15
166	Highly Porous Platinum Electrodes for Dry Ear-EEG Measurements. Sensors, 2020, 20, 3176.	2.1	15
167	Low-frequency electrical stimulation reduces cortical excitability in the human brain. NeuroImage: Clinical, 2021, 31, 102778.	1.4	15
168	3D-Printed Hermetic Alumina Housings. Materials, 2021, 14, 200.	1.3	15
169	Haemodynamic Responses to Selective Vagal Nerve Stimulation under Enalapril Medication in Rats. PLoS ONE, 2016, 11, e0147045.	1.1	15
170	Interconnection technologies for laser-patterned electrode arrays. , 2008, 2008, 3212-5.		14
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