

CITATION REPORT

List of articles citing

Glial responses to implanted electrodes in the brain

DOI: 10.1038/s41551-017-0154-1

Nature Biomedical Engineering, 2017, 1, 862-877.

Source: <https://exaly.com/paper-pdf/67420430/citation-report.pdf>

Version: 2024-04-20

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
320	Tissue-like Neural Probes for Understanding and Modulating the Brain. 2018 , 57, 3995-4004		24
319	Multi-scale, multi-modal analysis uncovers complex relationship at the brain tissue-implant neural interface: new emphasis on the biological interface. 2018 , 15, 033001		58
318	Micro-Reflector Integrated Multichannel π ED Optogenetic Neurostimulator With Enhanced Intensity. 2018 , 4,		11
317	Pt-grown carbon nanofibers for enzymatic glutamate biosensors and assessment of their biocompatibility.. 2018 , 8, 35802-35812		10
316	Design Choices for Next-Generation Neurotechnology Can Impact Motion Artifact in Electrophysiological and Fast-Scan Cyclic Voltammetry Measurements. 2018 , 9,		13
315	Inorganic semiconductor biointerfaces. 2018 , 3, 473-490		100
314	Understanding the Effects of Both CD14-Mediated Innate Immunity and Device/Tissue Mechanical Mismatch in the Neuroinflammatory Response to Intracortical Microelectrodes. 2018 , 12, 772		5
313	Genetic Modulation at the Neural Microelectrode Interface: Methods and Applications. 2018 , 9,		9
312	A Programmed Anti-Inflammatory Nanoscaffold (PAIN) as a 3D Tool to Understand the Brain Injury Response. 2018 , 30, e1805209		21
311	A guide towards long-term functional electrodes interfacing neuronal tissue. 2018 , 15, 061001		22
310	In Vivo Rat Spinal Cord and Striated Muscle Monitoring Using the Current Interruption Method and Bioimpedance Measurements. 2018 , 165, G3099-G3103		5
309	The History and Horizons of Microscale Neural Interfaces. 2018 , 9,		12
308	Development and Characterization of PEDOT:PSS/Alginate Soft Microelectrodes for Application in Neuroprosthetics. 2018 , 12, 648		31
307	Ultracompliant Hydrogel-Based Neural Interfaces Fabricated by Aqueous-Phase Microtransfer Printing. 2018 , 28, 1801059		25
306	The development of neural stimulators: a review of preclinical safety and efficacy studies. 2018 , 15, 041004		36
305	Melatonin improves quality and longevity of chronic neural recording. 2018 , 180, 225-239		34
304	Biomimetic graphene for enhanced interaction with the external membrane of astrocytes. 2018 , 6, 5335-5342	11	

303	In vivo imaging of neuronal calcium during electrode implantation: Spatial and temporal mapping of damage and recovery. 2018 , 174, 79-94	44
302	The role of oligodendrocytes and their progenitors on neural interface technology: A novel perspective on tissue regeneration and repair. 2018 , 183, 200-217	15
301	Insights From Dynamic Neuro-Immune Imaging on Murine Immune Responses to CNS Damage. 2019 , 13, 737	4
300	A 3D Printed Device for Low Cost Neural Stimulation in Mice. 2019 , 13, 784	5
299	Monolayer Graphene Coating of Intracortical Probes for Long-Lasting Neural Activity Monitoring. 2019 , 8, e1801331	16
298	Tissue Response to Neural Implants: The Use of Model Systems Toward New Design Solutions of Implantable Microelectrodes. 2019 , 13, 689	45
297	Cyborg Organoids: Implantation of Nanoelectronics via Organogenesis for Tissue-Wide Electrophysiology. 2019 , 19, 5781-5789	67
296	Nanoenabled Direct Contact Interfacing of Syringe-Injectable Mesh Electronics. 2019 , 19, 5818-5826	19
295	Revealing Spatial and Temporal Patterns of Cell Death, Glial Proliferation, and Blood-Brain Barrier Dysfunction Around Implanted Intracortical Neural Interfaces. 2019 , 13, 493	26
294	An atlas of nano-enabled neural interfaces. 2019 , 14, 645-657	80
293	Neural engineering: the process, applications, and its role in the future of medicine. 2019 , 16, 063002	7
292	Implantable and Flexible Electronics for In vivo Brain Activity Recordings. 2019 , 47, 1549-1558	6
291	Electrochemical Sensors for Neurochemicals: Recent Update. 2019 , 4, 3102-3118	56
290	ECoG Recordings Through a Thinned Skull. 2019 , 13, 1017	6
289	Pipette-integrated microelectrodes. <i>Nature Biomedical Engineering</i> , 2019 , 3, 682-683	19
288	Hydrogel bioelectronics. 2019 , 48, 1642-1667	742
287	Neuroethical considerations of high-density electrode arrays. <i>Nature Biomedical Engineering</i> , 2019 , 3, 586-589	19 4
286	Steerable Microinvasive Probes for Localized Drug Delivery to Deep Tissue. 2019 , 15, e1901459	7

285	Recording Quality of Mechanically Decoupled Floating Versus Skull-Fixed Silicon-Based Neural Probes. 2019 , 13, 464	6
284	Novel electrode technologies for neural recordings. 2019 , 20, 330-345	225
283	Electrodeposited platinum-iridium coating improves in vivo recording performance of chronically implanted microelectrode arrays. 2019 , 205, 120-132	27
282	Direct Neural Interface. 2019 , 139-174	
281	Nongenetic optical neuromodulation with silicon-based materials. 2019 , 14, 1339-1376	35
280	Optimizing the Yield of Multi-Unit Activity by Including the Entire Spiking Activity. 2019 , 13, 83	8
279	Bioinspired neuron-like electronics. 2019 , 18, 510-517	156
278	Foreign body responses in central nervous system mimic natural wound responses and alter biomaterial functions. 2019 ,	
277	Sono-optogenetics facilitated by a circulation-delivered rechargeable light source for minimally invasive optogenetics. 2019 ,	56
276	Selective Regulation of Neurons, Glial Cells, and Neural Stem/Precursor Cells by Poly(allylguanidine)-Coated Surfaces. 2019 , 11, 48381-48392	4
275	The Regional Specific Alterations in BBB Permeability are Relevant to the Differential Responses of 67-kDa LR Expression in Endothelial Cells and Astrocytes Following Status Epilepticus. 2019 , 20,	6
274	Intracortical Neural Stimulation With Untethered, Ultrasmall Carbon Fiber Electrodes Mediated by the Photoelectric Effect. 2019 , 66, 2402-2412	13
273	Calcium activation of cortical neurons by continuous electrical stimulation: Frequency dependence, temporal fidelity, and activation density. 2019 , 97, 620-638	31
272	Soft and elastic hydrogel-based microelectronics for localized low-voltage neuromodulation. <i>Nature Biomedical Engineering</i> , 2019 , 3, 58-68	19 284
271	Neuroinflammation, oxidative stress, and blood-brain barrier (BBB) disruption in acute Utah electrode array implants and the effect of deferoxamine as an iron chelator on acute foreign body response. 2019 , 188, 144-159	29
270	Inkjet-Printed Neural Electrodes with Mechanically Gradient Structure.. 2019 , 2, 20-26	8
269	DRG microstimulation evokes postural responses in awake, standing felines. 2019 , 17, 016014	4
268	When Bio Meets Technology: Biohybrid Neural Interfaces. 2020 , 32, e1903182	38

267	Differential expression of genes involved in the acute innate immune response to intracortical microelectrodes. 2020 , 102, 205-219	7
266	Chitosan-Based, Biocompatible, Solution Processable Films for In Vivo Localization of Neural Interface Devices. 2020 , 5, 1900663	7
265	System for recording from multiple flexible polyimide neural probes in freely behaving animals. 2020 , 17, 016046	7
264	Nanoelectronics for Minimally Invasive Cellular Recordings. 2020 , 30, 1906210	9
263	Platform for micro-invasive membrane-free biochemical sampling of brain interstitial fluid. 2020 , 6,	5
262	Immunohistological and Ultrastructural Study of the Inflammatory Response to Perforated Polyimide Cortical Implants: Mechanisms Underlying Deterioration of Electrophysiological Recording Quality. 2020 , 14, 926	7
261	Tutorial: guidelines for standardized performance tests for electrodes intended for neural interfaces and bioelectronics. 2020 , 15, 3557-3578	46
260	Ultraflexible Neural Electrodes for Long-Lasting Intracortical Recording. 2020 , 23, 101387	18
259	Organic Bioelectronics: Using Highly Conjugated Polymers to Interface with Biomolecules, Cells, and Tissues in the Human Body. 2020 , 5, 2000384	19
258	Bioinspired Materials for Bioelectronic Neural Interfaces. 2020 , 3, 1087-1113	20
257	Recent advances in bioelectronics chemistry. 2020 , 49, 7978-8035	30
256	Advanced Electrical and Optical Microsystems for Biointerfacing. 2020 , 2, 2000091	9
255	Recent advances in neurotechnologies with broad potential for neuroscience research. 2020 , 23, 1522-1536	42
254	Classifying Intracortical Brain-Machine Interface Signal Disruptions Based on System Performance and Applicable Compensatory Strategies: A Review. 2020 , 14, 558987	3
253	Hydrogels for 3D Neural Tissue Models: Understanding Cell-Material Interactions at a Molecular Level. 2020 , 8, 601704	7
252	Recent advances in neural interfaces-Materials chemistry to clinical translation. 2020 , 45, 655-668	13
251	Seeing the sound. 2020 , 369, 638	12
250	Printable microscale interfaces for long-term peripheral nerve mapping and precision control. 2020 , 11, 4191	9

249	Functional Conductive Hydrogels for Bioelectronics. 2020 , 2, 1287-1301	68
248	Foreign body responses in mouse central nervous system mimic natural wound responses and alter biomaterial functions. 2020 , 11, 6203	17
247	Zwitterionic Polymer Coating Suppresses Microglial Encapsulation to Neural Implants In Vitro and In Vivo. 2020 , 4, e1900287	8
246	A primary neural cell culture model to study neuron, astrocyte, and microglia interactions in neuroinflammation. 2020 , 17, 155	37
245	Electrochemical and biological characterization of thin-film platinum-iridium alloy electrode coatings: a chronic in vivo study. 2020 , 17, 036012	14
244	Multimaterial and multifunctional neural interfaces: from surface-type and implantable electrodes to fiber-based devices. 2020 , 8, 6624-6666	20
243	Antifibrotic strategies for medical devices. 2020 , 167, 109-120	14
242	Changes in Physiological and Pathological Behaviours Produced by Deep Microelectrode Implantation Surgery in Rats: A Temporal Analysis. 2020 , 2020, 4385706	
241	High-density electrophysiological recordings in macaque using a chronically implanted 128-channel passive silicon probe. 2020 , 17, 026036	3
240	Focused Ion Beam Lithography to Etch Nano-architectures into Microelectrodes. 2020 ,	4
239	Novel diamond shuttle to deliver flexible neural probe with reduced tissue compression. 2020 , 6, 37	8
238	Biomimetic nonbiofouling polypyrrole electrodes grafted with zwitterionic polymer using gamma rays. 2020 , 8, 7225-7232	6
237	Injectable Biomedical Devices for Sensing and Stimulating Internal Body Organs. 2020 , 32, e1907478	23
236	Correlating Surface Plasmon Resonance Microscopy of Living and Fixated Cells with Electron Microscopy Allows for Investigation of Potential Preparation Artifacts. 2020 , 7, 1901991	2
235	A Glial-Silicon Nanowire Electrode Junction Enabling Differentiation and Noninvasive Recording of Slow Oscillations from Primary Astrocytes. 2020 , 4, e1900264	13
234	3D electronic and photonic structures as active biological interfaces. 2020 , 2, 527-552	12
233	In vivo imaging of calcium and glutamate responses to intracortical microstimulation reveals distinct temporal responses of the neuropil and somatic compartments in layer II/III neurons. 2020 , 234, 119767	14
232	The neural tissue around SU-8 implants: A quantitative in vivo biocompatibility study. 2020 , 112, 110870	17

231	Inhibition of Long-Term Variability in Decoding Forelimb Trajectory Using Evolutionary Neural Networks With Error-Correction Learning. 2020 , 14, 22	0
230	Mitigating the Effects of Electrode Biofouling-Induced Impedance for Improved Long-Term Electrochemical Measurements In Vivo. 2020 , 92, 6334-6340	18
229	Biocompatibility studies of macroscopic fibers made from carbon nanotubes: Implications for carbon nanotube macrostructures in biomedical applications. 2021 , 173, 462-476	13
228	Structural and functional properties of astrocytes on PCL based electrospun fibres. 2021 , 118, 111363	9
227	How is flexible electronics advancing neuroscience research?. 2021 , 268, 120559	13
226	From Lithographically Patternable to Genetically Patternable Electronic Materials for Miniaturized, Scalable, and Soft Implantable Bioelectronics to Interface with Nervous and Cardiac Systems. 2021 , 3, 101-118	12
225	Hydrogel facilitated bioelectronic integration. 2021 , 9, 23-37	7
224	Soft Electronics Based on Stretchable and Conductive Nanocomposites for Biomedical Applications. 2021 , 10, e2001397	15
223	Dealing with the Foreign-Body Response to Implanted Biomaterials: Strategies and Applications of New Materials. 2021 , 31, 2007226	31
222	Glial Interfaces: Advanced Materials and Devices to Uncover the Role of Astroglial Cells in Brain Function and Dysfunction. 2021 , 10, e2001268	7
221	Implantable Fiber Biosensors Based on Carbon Nanotubes. 2021 , 2, 138-146	11
220	Functionalized Elastomers for Intrinsically Soft and Biointegrated Electronics. 2021 , 10, e2002105	13
219	Interpenetrating PAA-PEDOT conductive hydrogels for flexible skin sensors. 2021 , 9, 11794-11800	7
218	Long-term In Vivo Monitoring of Chemicals with Fiber Sensors. 2021 , 3, 47-58	14
217	Polyaniline nano-needles into electrospun bio active fibres support astrocyte response.. 2021 , 11, 11347-11355	5
216	Graphene active sensor arrays for long-term and wireless mapping of wide frequency band epicortical brain activity. 2021 , 12, 211	14
215	Graphene glial-interfaces: challenges and perspectives. 2021 , 13, 4390-4407	3
214	Therapeutic potential of neuromodulation for demyelinating diseases. 2021 , 16, 214-217	1

213	Polystyrene Nanopillars with Inbuilt Carbon Nanotubes Enable Synaptic Modulation and Stimulation in Interfaced Neuronal Networks. 2021 , 8, 2002121	3
212	Wireless and battery-free technologies for neuroengineering. <i>Nature Biomedical Engineering</i> , 2021 , 19, 26	26
211	Inflammatory Foreign Body Response Induced by Neuro-Implants in Rat Cortices Depleted of Resident Microglia by a CSF1R Inhibitor and Its Implications. 2021 , 15, 646914	4
210	Defining Surgical Terminology and Risk for Brain Computer Interface Technologies. 2021 , 15, 599549	10
209	Brain-Computer Interfaces in Neurorecovery and Neurorehabilitation. 2021 , 41, 206-216	4
208	Spatiotemporal patterns of gene expression around implanted silicon electrode arrays. 2021 , 18,	0
207	Neurologin-1-Modified Electrodes for Specific Coupling with a Presynaptic Neuronal Membrane. 2021 , 13, 21944-21953	0
206	Foreign Body Reaction to Implanted Biomaterials and Its Impact in Nerve Neuroprosthetics. 2021 , 9, 622524	25
205	Three-micrometer-diameter needle electrode with an amplifier for extracellular in vivo recordings. 2021 , 118,	2
204	Recent advances in electronic devices for monitoring and modulation of brain. 2021 , 14, 3070-3095	2
203	Graph theoretical design of biomimetic aramid nanofiber composites as insulation coatings for implantable bioelectronics. 2021 , 46, 576-587	4
202	Visual cortical prosthesis: an electrical perspective. 2021 , 45, 394-407	1
201	Conjugated Polymer for Implantable Electronics toward Clinical Application. 2021 , 10, e2001916	11
200	Nanotransducers for Wireless Neuromodulation. 2021 , 4, 1484-1510	3
199	Electrode Materials for Chronic Electrical Microstimulation. 2021 , 10, e2100119	10
198	Electronic Drugs: Spatial and Temporal Medical Treatment of Human Diseases. 2021 , 33, e2005930	6
197	Emerging Materials and Technologies with Applications in Flexible Neural Implants: A Comprehensive Review of Current Issues with Neural Devices. 2021 , 33, e2005786	18
196	Intracortical probe arrays with silicon backbone and microelectrodes on thin polyimide wings enable long-term stable recordings in vivo.	

195	Nanoscale surface topography reduces focal adhesions and cell stiffness by enhancing integrin endocytosis.	
194	Biocompatible and Nanoenabled Technologies for Biological Modulation. 2100216	1
193	Ultrasound mediated cellular deflection results in cellular depolarization.	
192	A Lubricated Nonimmunogenic Neural Probe for Acute Insertion Trauma Minimization and Long-Term Signal Recording. 2021, 8, e2100231	7
191	A theoretical framework for the site-specific and frequency-dependent neuronal effects of deep brain stimulation. 2021, 14, 807-821	2
190	Neuropathological effects of chronically implanted, intracortical microelectrodes in a tetraplegic patient. 2021, 18,	4
189	Fabrication of Soft Tissue Scaffold-Mimicked Microelectrode Arrays Using Enzyme-Mediated Transfer Printing. 2021, 12,	1
188	Versatile Surface Electrodes for Combined Electrophysiology and Two-Photon Imaging of the Mouse Central Nervous System. 2021, 15, 720675	1
187	Long-term intracortical microelectrode array performance in a human: a 5 year retrospective analysis. 2021, 18,	4
186	Advanced Metallic and Polymeric Coatings for Neural Interfacing: Structures, Properties and Tissue Responses. 2021, 13,	4
185	Explant analysis of Utah electrode arrays implanted in human cortex for brain-computer-interfaces.	0
184	Nanoscale Surface Topography Reduces Focal Adhesions and Cell Stiffness by Enhancing Integrin Endocytosis. 2021, 21, 8518-8526	4
183	Neuromechanobiology: An Expanding Field Driven by the Force of Greater Focus. 2021, 10, e2100102	2
182	Electrochemical methods for neural interface electrodes. 2021, 18,	3
181	The Role of Electrode-Site Placement in the Long-Term Stability of Intracortical Microstimulation. 2021, 15, 712578	0
180	The software defined implantable modular platform (STELLA) for preclinical deep brain stimulation research in rodents. 2021, 18,	0
179	Induced Dipoles and Possible Modulation of Wireless Effects in Implanted Electrodes. Effects of Implanting Insulated Electrodes on an Animal Test to Screen Antidepressant Activity. 2021, 10,	1
178	Anti-fouling peptide functionalization of ultraflexible neural probes for long-term neural activity recordings in the brain. 2021, 192, 113477	2

177	Learning from the brain's architecture: bioinspired strategies towards implantable neural interfaces. 2021 , 72, 8-12	0
176	Polymeric Tissue Adhesives. 2021 , 121, 11336-11384	71
175	Next-Generation Diamond Electrodes for Neurochemical Sensing: Challenges and Opportunities. 2021 , 12,	6
174	Bioinspired Prosthetic Interfaces. 2020 , 5, 1900856	21
173	Micro- and nanotechnology for neural electrode-tissue interfaces. 2020 , 170, 112645	17
172	The effects of direct brain stimulation in humans depend on frequency, amplitude, and white-matter proximity. 2020 , 13, 1183-1195	21
171	Gels, jets, mosquitoes, and magnets: a review of implantation strategies for soft neural probes. 2020 , 17, 041002	5
170	Glial cell responses on tetrapod-shaped graphene oxide and reduced graphene oxide 3D scaffolds in brain in vitro and ex vivo models of indirect contact. 2020 , 16, 015008	3
169	Enhanced wall shear stress prevents obstruction by astrocytes in ventricular catheters. 2020 , 17, 20190884	3
168	Accurate localization of linear probe electrodes across multiple brains.	8
167	Ceramic Packaging in Neural Implants.	1
166	Through-scalp deep-brain stimulation in tether-free, naturally-behaving mice with widefield NIR-II illumination.	1
165	Graph Theoretical Design of Biomimetic Aramid Nanofiber Nanocomposites as Insulation Coatings for Implantable Bioelectronics.	0
164	Calcium activation of cortical neurons by continuous electrical stimulation: Frequency-dependence, temporal fidelity and activation density.	3
163	Novel diamond shuttle to deliver flexible bioelectronics with reduced tissue compression.	1
162	NeuroRoots, a bio-inspired, seamless Brain Machine Interface device for long-term recording.	5
161	Alterations in Ion Channel Expression Surrounding Implanted Microelectrode Arrays in the Brain.	8
160	Cyborg Organoids: Implantation of Nanoelectronics via Organogenesis for Tissue-Wide Electrophysiology.	2

159	jULIEs: extracellular probes for recordings and stimulation in the structurally and functionally intact mouse brain.	2
158	Mechanics Strategies for Implantation of Flexible Neural Probes. 2021 , 88,	8
157	Longitudinal multimodal assessment of neurodegeneration and vascular remodeling correlated with signal degradation in chronic cortical silicon microelectrodes. 2020 , 7, 015004	2
156	Optimizing the neuron-electrode interface for chronic bioelectronic interfacing. 2020 , 49, E7	4
155	Resveratrol Delivery from Implanted Cyclodextrin Polymers Provides Sustained Antioxidant Effect on Implanted Neural Probes. 2020 , 21,	5
154	Graphene and graphene-related materials as brain electrodes. 2021 , 9, 9485-9496	0
153	Nanotechnology Enables Novel Modalities for Neuromodulation. 2021 , e2103208	2
152	Ultrastructural analysis of neuroimplant-parenchyma interfaces uncover remarkable neuroregeneration along-with barriers that limit the implant electrophysiological functions.	
151	Neural tissue-microelectrode interaction: Brain micromotion, electrical impedance, and flexible microelectrode insertion. 2022 , 365, 109388	2
150	3D microelectrode cluster and stimulation paradigm yield powerful analgesia without noticeable adverse effects. 2021 , 7, eabj2847	1
149	Accurate Localization of Linear Probe Electrode Arrays across Multiple Brains. 2021 , 8,	2
148	Profound alterations in brain tissue linked to hypoxic episode after device implantation. 2021 , 278, 121143	0
147	EECoG Recordings Through a Thinned Skull.	
146	Printable microscale interfaces for long-term peripheral nerve mapping and precision control.	0
145	Correlating surface plasmon resonance microscopy of living and fixated cells with electron microscopy allows for investigation of potential preparation artifacts.	
144	A Tissue-Like Soft All-Hydrogel Battery. 2021 , e2105120	9
143	The Effect of Physical Exercise on Cognitive Impairment in Neurodegenerative Disease: From Pathophysiology to Clinical and Rehabilitative Aspects. 2021 , 22,	3
142	A theoretical framework for the site-specific and frequency-dependent neuronal effects of deep brain stimulation.	0

141	Distributed Neural Interfaces: Challenges and Trends in Scaling Implantable Technology. 2021 , 1-37	
140	Dissecting Biological and Synthetic Soft-Hard Interfaces for Tissue-Like Systems. 2021 ,	5
139	Ultrasound Mediated Cellular Deflection Results in Cellular Depolarization. 2021 , e2101950	3
138	Photolithographic Fabrication of Mechanically Adaptive Devices.	1
137	Implantable brain machine interfaces: first-in-human studies, technology challenges and trends. 2021 , 72, 102-111	11
136	Intracortical probe arrays with silicon backbone and microelectrodes on thin polyimide wings enable long-term stable recordings. 2021 , 18,	
135	Investigation of the Feasibility of Ventricular Delivery of Resveratrol to the Microelectrode Tissue Interface.. 2021 , 12,	
134	Longevity and reliability of chronic unit recordings using the Utah, intracortical multi-electrode arrays. 2021 ,	0
133	Recent Progress in Materials Chemistry to Advance Flexible Bioelectronics in Medicine. 2021 , e2106787	5
132	Ultrastructural Analysis of Neuroimplant-Parenchyma Interfaces Uncover Remarkable Neuroregeneration Along-With Barriers That Limit the Implant Electrophysiological Functions. 2021 , 15, 764448	1
131	A Microclip Peripheral Nerve Interface (µPNI) for Bioelectronic Interfacing with Small Nerves. 2021 , e2102945	2
130	Challenges and opportunities of advanced gliomodulation technologies for excitation-inhibition balance of brain networks. 2021 , 72, 112-120	0
129	Flexible optoelectric neural interfaces. 2021 , 72, 121-130	1
128	Electroresponsive Hydrogels for Therapeutic Applications in the Brain. 2021 , e2100355	3
127	Electrochemical microelectrode degradation monitoring: in situ investigation of platinum corrosion at neutral pH.. 2022 ,	0
126	A Spatial Transcriptomics Study of the Brain-Electrode Interface in Rat Motor Cortex.	0
125	The Safety of Micro-Implants for the Brain.. 2021 , 15, 796203	0
124	Strategies for interface issues and challenges of neural electrodes.. 2022 ,	4

123	A review on magnetic and spintronic neurostimulation: challenges and prospects.. 2022,	1
122	Topological supramolecular network enabled highly conductive and stretchable organic bioelectronics.	1
121	Shedding light on neurons: optical approaches for neuromodulation.	0
120	An bioelectronic nose for possible quantitative evaluation of odor masking using M/T cell spatial response patterns. 2021,	1
119	Engineering strategies towards overcoming bleeding and glial scar formation around neural probes.. 2022, 387, 461	2
118	A Pneumatic-Based Mechanism for Inserting a Flexible Microprobe Into the Brain. 2022, 89,	0
117	Biology-guided engineering of bioelectrical interfaces.. 2021,	2
116	jULIEs: nanostructured polytrodes for low traumatic extracellular recordings and stimulation in the mammalian brain.. 2022,	0
115	Neuroflex: Intraneural and Extraneural Flexible Sensor Architectures for Neural Probing. 2022, 1-29	
114	Neurotechnology and International Security: Predicting Commercial and Military Adoption of Brain-Computer Interface (BCI) in the US and China. 1-57	0
113	Biomaterial and Therapeutic Approaches for the Manipulation of Macrophage Phenotype in Peripheral and Central Nerve Repair.. 2021, 13,	2
112	Electroconductive and injectable hydrogels based on gelatin and PEDOT:PSS for a minimally invasive approach in nervous tissue regeneration.. 2022,	1
111	Poly(3,4-ethylenedioxythiophene)-Based Neural Interfaces for Recording and Stimulation: Fundamental Aspects and In Vivo Applications.. 2022, e2104701	4
110	Spinal cord bioelectronic interfaces: opportunities in neural recording and clinical challenges.. 2022,	
109	Topological supramolecular network enabled high-conductivity, stretchable organic bioelectronics.. 2022, 375, 1411-1417	29
108	Prevention of the foreign body response to implantable medical devices by inflammasome inhibition.. 2022, 119, e2115857119	1
107	Tether-free photothermal deep-brain stimulation in freely behaving mice via wide-field illumination in the near-infrared-II window.. <i>Nature Biomedical Engineering,</i> 2022,	19 8
106	Intrinsically stretchable electronics with ultrahigh deformability to monitor dynamically moving organs.. 2022, 8, eabl5511	17

105	Remote Sensing System for Motor Nerve Impulse.. 2022 , 22,	
104	Flexible Multichannel Neural Probe Developed by Electropolymerization for Localized Stimulation and Sensing. 2200143	1
103	The Cortical Evoked Potential Corresponds with Deep Brain Stimulation Efficacy in Rats.. 2022 ,	0
102	Current Implantable Devices in Human Neurological Surgery. 2022 , 277-298	
101	Wearable Bioelectronics for Chronic Wound Management. 2111022	19
100	Understanding the Mechanobiology of Gliosis May Be the Key to Unlocking Sustained Chronic Performance of Bioelectronic Neural Interfaces. 2022 , 2, 2100098	0
99	Transparent and Conformal Microcoil Arrays for Spatially Selective Neuronal Activation.	
98	Explant Analysis of Utah Electrode Arrays Implanted in Human Cortex for Brain-Computer-Interfaces.. 2021 , 9, 759711	0
97	Fabrication of High-Density Out-of-Plane Microneedle Arrays with Various Heights and Diverse Cross-Sectional Shapes. 2021 , 14, 24	3
96	Engineering Tissues of the Central Nervous System: Interfacing Conductive Biomaterials with Neural Stem/Progenitor Cells. 2021 , e2101577	1
95	Microglial Response After Chronic Implantation of Epidural Spinal Cord Electrode. 2022 , 2245-2250	1
94	Data_Sheet_1.PDF. 2020 ,	
93	Data_Sheet_1.docx. 2020 ,	
92	Video_1.MP4. 2020 ,	
91	Data_Sheet_1.pdf. 2020 ,	
90	Table_1.DOCX. 2019 ,	
89	Image_1.jpg. 2019 ,	
88	Image_2.jpg. 2019 ,	

87	Image_3.jpg. 2019,	
86	Data_Sheet_1.docx. 2018,	
85	Table_1.DOCX. 2019,	
84	Melatonin Decreases Acute Inflammatory Response to Neural Probe Insertion.	
83	Nanoscale Geometry determines Mechanical Biocompatibility of Vertically Aligned Nanofibers.. 2022,	0
82	A High-Performance Electrode Based on van der Waals Heterostructure for Neural Recording.. 2022,	1
81	Scalable Three-Dimensional Recording Electrodes for Probing Biological Tissues.. 2022,	0
80	Nano-enabled systems for neural tissue regenerative applications. 2022, 623-648	
79	The Long-Term Stability of Intracortical Microstimulation and the Foreign Body Response Are Layer Dependent. 16,	0
78	Stimulation-induced changes at the electrode-tissue interface and their influence on deep brain stimulation.	
77	On-Demand Chemomagnetic Modulation of Striatal Neurons Facilitated by Hybrid Magnetic Nanoparticles. 2204732	0
76	Advances in visual prostheses: engineering and biological challenges.	2
75	Managing Intractable Symptoms of Parkinson's Disease: A Nonsurgical Approach Employing Infralow Frequency Neuromodulation. 16,	0
74	In vivo spatiotemporal dynamics of astrocyte reactivity following neural electrode implantation.	
73	Technical Considerations for In Vivo Electrophysiology. 2022, 275-285	
72	Melatonin Decreases Acute Inflammatory Response to Neural Probe Insertion. 2022, 11, 1628	1
71	Neuronal Maturation-dependent Nano-Neuro Interaction and Modulation.	
70	Microelectrode implants, inflammatory response and long-lasting effects on NADPH diaphorase neurons in the rat frontal cortex.	

69	Supramolecular Adhesive Materials with Antimicrobial Activity for Emerging Biomedical Applications. 2022 , 14, 1616	1
68	Atomic Force Microscope Characterization of the Bending Stiffness and Surface Topography of Silicon and Polymeric Electrodes. 2022 ,	0
67	In situ stability monitoring of platinum thin-film electrodes for neural interfaces in the presence of proteins. 2022 ,	0
66	Utah Array Characterization and Histological Analysis of a Multi-Year Implant in Non-Human Primate Motor and Sensory Cortices.	0
65	The effects of electrical stimulation on glial cell behaviour. 2022 , 4,	0
64	Effects of central nervous system electrical stimulation on non-neuronal cells. 16,	0
63	Stable, long-term single-neuronal recording from the rat spinal cord with flexible carbon nanotube fiber electrodes. 2022 , 19, 056024	0
62	Conformable neural interface based on off-stoichiometry thiol-ene-epoxy thermosets.	0
61	Bioresorbable thin-film silicon diodes for the optoelectronic excitation and inhibition of neural activities.	2
60	Structural and functional changes of pyramidal neurons at the site of an implanted microelectrode array in rat primary motor cortex.	0
59	Mechanically Tissue-Like and Highly Conductive Au Nanoparticles Embedded Elastomeric Fiber Electrodes of Brain-Machine Interfaces for Chronic In Vivo Brain Neural Recording. 2205145	2
58	Facile Fabrication of Injectable Alginate and Poly (3,4-ethylenedioxythiophene) Based Soft Electrodes Towards the Goal of Neuro-regenerative Applications. 2201164	0
57	Brainy Biomaterials: Latest Advances in Smart Biomaterials to Develop the Next Generation of Neural Interfaces. 2022 , 100420	0
56	Palette of Rechargeable Mechanoluminescent Fluids Produced by a Biomineral-Inspired Suppressed Dissolution Approach.	0
55	Foldable three dimensional neural electrode arrays for simultaneous brain interfacing of cortical surface and intracortical multilayers. 2022 , 6,	0
54	Hydrogel interfaces for merging humans and machines.	11
53	Comparison of fractal and grid electrodes for studying the effects of spatial confinement on dissociated retinal neuronal and glial behavior. 2022 , 12,	0
52	Ultrathin Hydrogel Films Toward Breathable Skin-Integrated Electronics. 2206793	1

51	Profiling neurons surrounding subcellular-scale carbon fiber electrode tracts enables modeling recorded signals.	0
50	Biomimetic microstimulation of sensory cortices.	0
49	Flexible and Implantable Polyimide Aptamer-Field-Effect Transistor Biosensors.	2
48	Slippery Epidural ECoG Electrode for High-Performance Neural Recording and Interface. 2022 , 12, 1044	0
47	Bioactive polymer-enabled conformal neural interface and its application strategies.	0
46	Developing Clinical Grade Flexible Implantable Electronics.	0
45	Functional Tough Hydrogels: Design, Processing, and Biomedical Applications.	1
44	Conformable neural interface based on off-stoichiometry thiol-ene-epoxy thermosets. 2022 , 121979	1
43	Utah array characterization and histological analysis of a multi-year implant in non-human primate motor and sensory cortices.	0
42	Structural and functional imaging of brains.	0
41	Restoration of the senses and human communication: Sustainable Development Goals 3 and 9. 1-6	1
40	Significantly reduced inflammatory foreign-body-response to neuroimplants and improved recording performance in young compared to adult rats.	0
39	Biocompatibility Analysis of GelMa Hydrogel and Silastic RTV 9161 Elastomer for Encapsulation of Electronic Devices for Subdermal Implantable Devices. 2023 , 13, 19	0
38	Poly(pro-curcumin) Materials Exhibit Dual Release Rates and Prolonged Antioxidant Activity as Thin Films and Self-Assembled Particles.	2
37	Neural interfacing biomaterials coated with the firmly tethered neuro-specific lipid bilayer. 2023 , 156424	0
36	Emerging Bio-Interfacing Wearable Devices for Signal Monitoring: Overview of the Mechanisms and Diverse Sensor Designs to Target Distinct Physiological Bio-Parameters. 2200049	0
35	Gene Expression Changes in Cultured Reactive Rat Astrocyte Models and Comparison to Device-Associated Effects in the Brain.	0
34	Significantly reduced inflammatory foreign-body-response to neuroimplants and improved recording performance in young compared to adult rats. 2023 ,	0

- 33 Ultrasound-Triggered In Situ Photon Emission for Noninvasive Optogenetics. **2023**, 145, 1097-1107 1
- 32 Commonly Overlooked Factors in Biocompatibility Studies of Neural Implants. 2205095 0
- 31 Robust Neural Interfaces with Photopatternable, Bioadhesive, and Highly Conductive Hydrogels for Stable Chronic Neuromodulation. 0
- 30 Recent Development of Neural Microelectrodes with Dual-Mode Detection. **2023**, 13, 59 0
- 29 Stretchable Surface Electrode Arrays Using an Alginate/PEDOT:PSS-Based Conductive Hydrogel for Conformal Brain Interfacing. **2023**, 15, 84 1
- 28 Zwitterionic Polymer Coated and Aptamer Functionalized Flexible Micro-Electrode Arrays for In Vivo Cocaine Sensing and Electrophysiology. **2023**, 14, 323 0
- 27 Distributed Neural Interfaces: Challenges and Trends in Scaling Implantable Technology. **2023**, 381-417 0
- 26 Engineering Materials for Neurotechnology. 2201412 0
- 25 Neuroflex: Intraneural and Extraneural Flexible Sensor Architectures for Neural Probing. **2023**, 531-559 0
- 24 Wireless in vivo Recording of Cortical Activity by an Ion-Sensitive Field Effect Transistor. 0
- 23 Principles and applications of sono-optogenetics. **2023**, 194, 114711 0
- 22 Developing an electrochemical sensor for the in vivo measurements of dopamine. 0
- 21 Metabolite-induced in vivo fabrication of substrate-free organic bioelectronics. **2023**, 379, 795-802 2
- 20 A Single Electronic Tattoo for Multisensory Integration. 2201566 0
- 19 Layer-dependent stability of intracortical recordings and neuronal cell loss. 17, 0
- 18 Wireless in vivo recording of cortical activity by an ion-sensitive field effect transistor. **2023**, 382, 133549 0
- 17 Neural modulation with photothermally active nanomaterials. **2023**, 1, 193-207 1
- 16 Flexible brain-computer interfaces. **2023**, 6, 109-118 0

- 15 Semiconducting electrodes for neural interfacing: a review. **2023**, 52, 1491-1518 ○
- 14 Biopolymeric Coatings for Local Release of Therapeutics from Biomedical Implants. 2207603 ○
- 13 Poisson-Nernst-Planck framework for modelling ionic strain and temperature sensors. ○
- 12 Insular cortex stimulation alleviates neuropathic pain via ERK phosphorylation in neurons. ○
- 11 Tracking neural activity from the same cells during the entire adult life of mice. **2023**, 26, 696-710 1
- 10 Post-explant profiling of subcellular-scale carbon fiber intracortical electrodes and surrounding neurons enables modeling of recorded electrophysiology. **2023**, 20, 026019 ○
- 9 Dual Behavior Regulation: Tether-Free Deep-Brain Stimulation by Photothermal and Upconversion Hybrid Nanoparticles. ○
- 8 Flexible and smart electronics for single-cell resolved brain-machine interfaces. **2023**, 10, 011314 ○
- 7 Electrodeposited NaYF₄:Yb³⁺, Er³⁺ up-conversion films for flexible neural device construction and near-infrared optogenetics. ○
- 6 Impact of magnetite nanowires orientation on morphology and activity of in vitro hippocampal neural networks. ○
- 5 Biocompatible Material-Based Flexible Biosensors: From Materials Design to Wearable/Implantable Devices and Integrated Sensing Systems. ○
- 4 The emerging science of Glioseption: Contribution of glia in sensing, transduction, circuit integration of interoception. **2023**, 245, 108403 ○
- 3 Frontiers in photonics spotlight. 4, ○
- 2 Nanotransducer-Enabled Deep-Brain Neuromodulation with NIR-II Light. ○
- 1 Translational opportunities and challenges of invasive electrodes for neural interfaces. ○