Three-Dimensional, Flexible Nanoscale Field-Effect Tra

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Citation Report

#	Article	IF	Citations
1	Longâ€Term Antimicrobial Effect of Silicon Nanowires Decorated with Silver Nanoparticles. Advanced Materials, 2010, 22, 5463-5467.	11.1	241
3	Nanotechnology: Small wonders. Nature, 2010, 467, 18-21.	13.7	45
4	Reading cells from within. Nature Methods, 2010, 7, 780-781.	9.0	1
5	Twinning-induced kinking of Sb-doped ZnO nanowires. Nanotechnology, 2010, 21, 435602.	1.3	12
6	Tuning the Shape and Strain in Micro/Nanowires by a Sideways Physical Deposition Process. Journal of Physical Chemistry C, 2010, 114, 21277-21280.	1.5	9
7	Nanocavity electrode array for recording from electrogenic cells. Lab on A Chip, 2011, 11, 1054.	3.1	42
8	Biofunctionalization of nanoparticles for cytosensing and cell surface carbohydrate assay. Journal of Materials Chemistry, 2011, 21, 18154.	6.7	16
9	Piezotronic Effect on the Output Voltage of P3HT/ZnO Micro/Nanowire Heterojunction Solar Cells. Nano Letters, 2011, 11, 4812-4817.	4.5	135
10	Micro- and Nanotechnologies for Study of Cell Secretion. Analytical Chemistry, 2011, 83, 4393-4406.	3.2	72
11	Al₂O₃/Silicon NanoISFET with Near Ideal Nernstian Response. Nano Letters, 2011, 11, 2334-2341.	4.5	139
13	Tailoring the Vaporâ€“Liquidâ€“Solid Growth toward the Self-Assembly of GaAs Nanowire Junctions. Nano Letters, 2011, 11, 4947-4952.	4.5	20
14	First-Principles Study of Silicon Nanowire Approaching the Bulk Limit. Nano Letters, 2011, 11, 4794-4799.	4.5	40
15	Molecular Structure Influences the Stability of Membrane Penetrating Biointerfaces.. Nano Letters, 2011, 11, 2066-2070.	4.5	28
16	Multicolor graphene nanoribbon/semiconductor nanowire heterojunction light-emitting diodes. Journal of Materials Chemistry, 2011, 21, 11760.	6.7	58
17	Biosensors based on one-dimensional nanostructures. Journal of Materials Chemistry, 2011, 21, 8940.	6.7	70
18	Semiconductor nanowires: A platform for nanoscience and nanotechnology. MRS Bulletin, 2011, 36, 1052-1063.	1.7	187
19	Fabrication of Nanowire Electronics on Nonconventional Substrates by Water-Assisted Transfer Printing Method. Nano Letters, 2011, 11, 3435-3439.	4.5	98
20	Optimization of nanowire DNA sensor sensitivity using self-consistent simulation. Nanotechnology, 2011, 22, 425503.	1.3	28

#	Article	IF	Citations
21	Vertical nanopillars for highly localized fluorescence imaging. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3894-3899.	3.3	100
22	Frictionless Sliding of Single-Stranded DNA in a Carbon Nanotube Pore Observed by Single Molecule Force Spectroscopy. Nano Letters, 2011, 11, 1171-1176.	4.5	46
23	Recent Research on One-Dimensional Silicon-Based Semiconductor Nanomaterials: Synthesis, Structures, Properties and Applications. Critical Reviews in Solid State and Materials Sciences, 2011, 36, 148-173.	6.8	24
24	Tuning Manganese Dopant Spin Interactions in Single GaN Nanowires at Room Temperature. ACS Nano, 2011, 5, 6365-6373.	7.3	28
25	Nanoneedle Transistor-Based Sensors for the Selective Detection of Intracellular Calcium Ions. ACS Nano, 2011, 5, 3888-3895.	7.3	48
26	Toward Local Growth of Individual Nanowires on Three-Dimensional Microstructures by Using a Minimally Invasive Catalyst Templating Method. Nano Letters, 2011, 11, 4213-4217.	4.5	23
27	Prospects for Neuroprosthetics: Flexible Microelectrode Arrays with Polymer Conductors. , 2011, , .		2
28	Nanotechnological strategies for engineering complex tissues. Nature Nanotechnology, 2011, 6, 13-22.	15.6	1,226
29	Five more years of Nature Biotechnology research. Nature Biotechnology, 2011, 29, 221-227.	9.4	7
30	Nanowired three-dimensional cardiac patches. Nature Nanotechnology, 2011, 6, 720-725.	15.6	638
31	Structurally Programmed Capillary Folding of Carbon Nanotube Assemblies. Langmuir, 2011, 27, 6389-6394.	1.6	53
32	Micro/nanofabricated environments for synthetic biology. Current Opinion in Biotechnology, 2011, 22, 516-526.	3.3	15
33	Recent research trends in nanoscale electro-mechanical systems for bio-medical applications. Biomedical Engineering Letters, 2011, 1, 7-10.	2.1	6
34	Heat shock proteins as biomarkers for the rapid detection of brain and spinal cord ischemia: a review and comparison to other methods of detection in thoracic aneurysm repair. Cell Stress and Chaperones, 2011, 16, 119-131.	1.2	65
35	Molybdenum oxide nanowires: synthesis & properties. Materials Today, 2011, 14, 346-353.	8.3	125
36	Bionanoelectronics. Advanced Materials, 2011, 23, 807-820.	11.1	118
37	Threeâ€Dimensional Writing of Conducting Polymer Nanowire Arrays by Meniscusâ€Guided Polymerization. Advanced Materials, 2011, 23, 1968-1970.	11.1	100
38	A General Approach for the Growth of Metal Oxide Nanorod Arrays on Graphene Sheets and Their Applications. Chemistry - A European Journal, 2011, 17, 13912-13917.	1.7	66

#	Article	IF	Citations
39	Silicon nanowire field-effect transistor-based biosensors for biomedical diagnosis and cellular recording investigation. Nano Today, 2011, 6, 131-154.	6.2	568
40	Functional semiconductor nanowires via vapor deposition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 060801.	0.6	18
41	Dopant homogeneity and transport properties of impurity-doped oxide nanowires. Applied Physics Letters, 2011, 98, 053107.	1.5	14
42	Axon Physiology. Physiological Reviews, 2011, 91, 555-602.	13.1	496
43	Microfluidic sensing: state of the art fabrication and detection techniques. Journal of Biomedical Optics, 2011, 16, 080901.	1.4	154
44	Liquid droplet dynamics and complex morphologies in vaporâ€“liquidâ€“solid nanowire growth. Journal of Materials Research, 2011, 26, 2186-2198.	1.2	18
45	Nanomedicine in Cardiovascular Diseases: Emerging Diagnostic and Therapeutic Potential. Journal of Nanotechnology in Engineering and Medicine, 2011, 2, .	0.8	3
46	Design, synthesis, and characterization of novel nanowire structures for photovoltaics and intracellular probes. Pure and Applied Chemistry, 2011, 83, 2153-2169.	0.9	41
47	Overview of Micro- and Nano-Technology Tools for Stem Cell Applications: Micropatterned and Microelectronic Devices. Sensors, 2012, 12, 15947-15982.	2.1	21
48	Taper-free and kinked germanium nanowires grown on silicon via purging and the two-temperature process. Nanotechnology, 2012, 23, 115603.	1.3	13
49	Nanowires precisely grown on the ends of microwire electrodes permit the recording of intracellular action potentials within deeper neural structures. Nanomedicine, 2012, 7, 847-853.	1.7	18
50	Enhanced photon absorption of single nanowire Î±-Si solar cells modulated by silver core. Optics Express, 2012, 20, 11506.	1.7	26
51	Freestanding nanostructures for three-dimensional superconducting nanodevices. Applied Physics Letters, 2012, 100, .	1.5	18
52	Interfacial electronic effects in functional biolayers integrated into organic field-effect transistors. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6429-6434.	3.3	109
53	Bi-2212 and Y123 highly curved single-crystal-like objects: whiskers, bows and ring-like structures. Superconductor Science and Technology, 2012, 25, 105003.	1.8	12
54	Insight into non-linearly shaped superconducting whiskers via a synchrotron nanoprobe. Superconductor Science and Technology, 2012, 25, 125002.	1.8	10
55	Advanced Modeling and Simulation of Nanowire Field-Effect Sensors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 240-245.	0.4	0
56	Stability and topological transformations of liquid droplets on vapor-liquid-solid nanowires. Journal of Applied Physics, 2012, 111, .	1.1	16

#	Article	IF	Citations
57	Mechano-electrical vibrations of microtubulesâ€"Link to subcellular morphology. BioSystems, 2012, 109, 346-355.	0.9	41
58	Deciphering the single-cell omic: innovative application for translational medicine. Expert Review of Proteomics, 2012, 9, 635-648.	1.3	21
59	Cellular Binding and Internalization of Functionalized Silicon Nanowires. Nano Letters, 2012, 12, 1002-1006.	4.5	37
60	Getting close to the action. Nature Nanotechnology, 2012, 7, 143-145.	15.6	11
61	Intracellular recordings of action potentials by an extracellular nanoscale field-effect transistor. Nature Nanotechnology, 2012, 7, 174-179.	15.6	412
62	Intracellular recording of action potentials by nanopillar electroporation. Nature Nanotechnology, 2012, 7, 185-190.	15.6	509
63	Nanoscale Triboelectric-Effect-Enabled Energy Conversion for Sustainably Powering Portable Electronics. Nano Letters, 2012, 12, 6339-6346.	4.5	1,062
64	Carbon nanomaterials field-effect-transistor-based biosensors. NPG Asia Materials, 2012, 4, e23-e23.	3.8	212
65	Macroporous nanowire nanoelectronic scaffolds for synthetic tissues. Nature Materials, 2012, 11, 986-994.	13.3	561
67	Nanotechnologyâ€Enabled Energy Harvesting for Selfâ€Powered Microâ€Nanosystems. Angewandte Chemie - International Edition, 2012, 51, 11700-11721.	7.2	910
68	Nanostructured biomolecular detectors: pushing performance at the nanoscale. Current Opinion in Chemical Biology, 2012, 16, 415-421.	2.8	33
69	Crack-free controlled wrinkling of a bilayer film with a gradient interface. Soft Matter, 2012, 8, 9603.	1.2	42
70	Open-cell recording of action potentials using active electrode arrays. Lab on A Chip, 2012, 12, 4397.	3.1	29
71	Heterostructures of vertical, aligned and dense SnO2 nanorods on graphene sheets: in situ TEM measured mechanical, electrical and field emission properties. Journal of Materials Chemistry, 2012, 22, 19196.	6.7	29
72	Functional Electrical Stimulation by Nanogenerator with 58 V Output Voltage. Nano Letters, 2012, 12, 3086-3090.	4.5	288
73	Chemically Doped Radial Junction Characteristics in Silicon Nanowires. Nano Letters, 2012, 12, 6133-6138.	4.5	5
74	Nanostraws for Direct Fluidic Intracellular Access. Nano Letters, 2012, 12, 3881-3886.	4.5	201
75	The Smartest Materials: The Future of Nanoelectronics in Medicine. ACS Nano, 2012, 6, 6541-6545.	7.3	82

#	Article	IF	Citations
76	Vertically Aligned GaAs Nanowires on Graphite and Few-Layer Graphene: Generic Model and Epitaxial Growth. Nano Letters, 2012, 12, 4570-4576.	4.5	173
77	Local electrical potential detection of DNA by nanowireâ€“nanopore sensors. Nature Nanotechnology, 2012, 7, 119-125.	15.6	288
78	Single cell analysis at the nanoscale. Chemical Society Reviews, 2012, 41, 2061-2071.	18.7	108
79	Silicon nanowire biosensor and its applications in disease diagnostics: A review. Analytica Chimica Acta, 2012, 749, 1-15.	2.6	234
80	Optical properties of hybrid T3Pyr/SiO2/3C-SiC nanowires. Nanoscale Research Letters, 2012, 7, 680.	3.1	19
81	Electron spins blow hot and cold. Nature Nanotechnology, 2012, 7, 145-147.	15.6	45
82	Chemical Sensing with Nanowires. Annual Review of Analytical Chemistry, 2012, 5, 461-485.	2.8	100
83	Outside Looking In: Nanotube Transistor Intracellular Sensors. Nano Letters, 2012, 12, 3329-3333.	4.5	113
84	True Reference Nanosensor Realized with Silicon Nanowires. Langmuir, 2012, 28, 9899-9905.	1.6	55
85	High-sensitivity nanosensors for biomarker detection. Chemical Society Reviews, 2012, 41, 2641-2655.	18.7	278
86	Materials to Clinical Devices: Technologies for Remotely Triggered Drug Delivery. Clinical Therapeutics, 2012, 34, S25-S35.	1.1	44
87	An overhanging carbon nanotube/parylene coreâ€“shell nanoprobe electrode. Sensors and Actuators A: Physical, 2012, 187, 79-83.	2.0	4
88	Characterizing defects and transport in Si nanowire devices using Kelvin probe force microscopy. Nanotechnology, 2012, 23, 405706.	1.3	10
89	Vertical â€œIIIâ€“Vâ€•V-Shaped Nanomembranes Epitaxially Grown on a Patterned Si[001] Substrate and Their Enhanced Light Scattering. ACS Nano, 2012, 6, 10982-10991.	7.3	41
90	Highly Ordered Large-Scale Neuronal Networks of Individual Cells â€“ Toward Single Cell to 3D Nanowire Intracellular Interfaces. ACS Applied Materials & Interfaces, 2012, 4, 3542-3549.	4.0	51
91	Nanoscale tipped microwire arrays enhance electrical trap and depth injection of nanoparticles. Nanotechnology, 2012, 23, 415301.	1.3	17
92	Single Crystal Kinked ZnO [001] and [110] Nanowires: Synthesis, Characterization, and Growth/Kinking Mechanism. Crystal Growth and Design, 2012, 12, 3153-3157.	1.4	6
93	Synthetically Encoded Ultrashort-Channel Nanowire Transistors for Fast, Pointlike Cellular Signal Detection. Nano Letters, 2012, 12, 2639-2644.	4.5	82

#	Article	IF	Citations
94	Kinked pâ€“n Junction Nanowire Probes for High Spatial Resolution Sensing and Intracellular Recording. Nano Letters, 2012, 12, 1711-1716.	4.5	119
95	Inorganic semiconductor nanomaterials for flexible and stretchable bio-integrated electronics. NPG Asia Materials, 2012, 4, e15-e15.	3.8	134
96	Native-oxide-based selective area growth of InP nanowires via metalâ€“organic molecular beam epitaxy mediated by surface diffusion. Nanotechnology, 2012, 23, 245603.	1.3	10
97	Controlling Silicon Nanowire Growth Direction via Surface Chemistry. Nano Letters, 2012, 12, 2865-2870.	4.5	60
98	Toward on-chip, in-cell recordings from cultured cardiomyocytes by arrays of gold mushroom-shaped microelectrodes. Frontiers in Neuroengineering, 2012, 5, 21.	4.8	69
99	Electrical Probing of Submicroliter Liquid Using Graphene Strip Transistors Built on a Nanopipette. Small, 2012, 8, 43-46.	5.2	38
100	Vertical nanowire electrode arrays as a scalable platform for intracellular interfacing to neuronal circuits. Nature Nanotechnology, 2012, 7, 180-184.	15.6	532
101	An ultrasensitive universal detector based on neutralizer displacement. Nature Chemistry, 2012, 4, 642-648.	6.6	180
102	A flexible and highly sensitive strain-gauge sensor using reversible interlocking of nanofibres. Nature Materials, 2012, 11, 795-801.	13.3	1,453
103	Recent advances in large-scale assembly of semiconducting inorganic nanowires and nanofibers for electronics, sensors and photovoltaics. Chemical Society Reviews, 2012, 41, 4560.	18.7	282
104	Biomaterialsâ€Based Electronics: Polymers and Interfaces for Biology and Medicine. Advanced Healthcare Materials, 2012, 1, 248-266.	3.9	156
106	An Electron Paramagnetic Resonance Spectroscopic Investigation on the Growth Mechanism of NaYF‹sub›4‹/sub›:Gd Nanocrystals. Angewandte Chemie - International Edition, 2012, 51, 6506-6510.	7.2	47
107	Nanowire Transistorâ€Based Ultrasensitive Virus Detection with Reversible Surface Functionalization. Chemistry - an Asian Journal, 2012, 7, 2073-2079.	1.7	35
108	Flexible and Stretchable Electronics for Biointegrated Devices. Annual Review of Biomedical Engineering, 2012, 14, 113-128.	5.7	631
109	Chemical Control of Semiconductor Nanowire Kinking and Superstructure. Nano Letters, 2012, 12, 3363-3368.	4.5	63
110	Nanoprobes for inÂvitro diagnostics of cancer and infectious diseases. Biomaterials, 2012, 33, 189-206.	5.7	128
111	Monitoring extracellular K+ flux with a valinomycin-coated silicon nanowire field-effect transistor. Biosensors and Bioelectronics, 2012, 31, 137-143.	5.3	35
112	Vertically aligned carbon nanofiber as nano-neuron interface for monitoring neural function. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 419-423.	1.7	22

#	Article	IF	Citations
113	Realization of Unidirectional Planar GaAs Nanowires on GaAs (110) Substrates. IEEE Electron Device Letters, 2012, 33, 522-524.	2.2	31
114	Mechanical-Agitation-Assisted Growth of Large-Scale and Uniform ZnO Nanorod Arrays within 3D Multichannel Monolithic Substrates. Crystal Growth and Design, 2013, 13, 3657-3664.	1.4	27
115	User-interactive electronic skin for instantaneous pressure visualization. Nature Materials, 2013, 12, 899-904.	13.3	1,044
116	Nanoelectronics-biology frontier: From nanoscopic probes for action potential recording in live cells to three-dimensional cyborg tissues. Nano Today, 2013, 8, 351-373.	6.2	116
117	Reversible Switching of InP Nanowire Growth Direction by Catalyst Engineering. Nano Letters, 2013, 13, 3802-3806.	4.5	107
118	Silicon Nanowires for Biosensing, Energy Storage, and Conversion. Advanced Materials, 2013, 25, 5177-5195.	11.1	158
119	Silicon chips detect intracellular pressure changes in living cells. Nature Nanotechnology, 2013, 8, 517-521.	15.6	68
120	Biosensor technology: recent advances in threat agent detection and medicine. Chemical Society Reviews, 2013, 42, 8733.	18.7	375
121	Tension-induced neurite growth in microfluidic channels. Lab on A Chip, 2013, 13, 3735.	3.1	21
122	Nanoelectronics Meets Biology: From New Nanoscale Devices for Liveâ€Cell Recording to 3D Innervated Tissues. Chemistry - an Asian Journal, 2013, 8, 2304-2314.	1.7	25
123	Platinized carbon nanoelectrodes as potentiometric and amperometric SECM probes. Journal of Solid State Electrochemistry, 2013, 17, 2971-2977.	1.2	37
124	Nanodevices for Cellular Interfaces and Electrophysiological Recording. Advanced Materials, 2013, 25, 3881-3887.	11.1	20
125	Organic Electrochemical Transistor Array for Recording Transepithelial Ion Transport of Human Airway Epithelial Cells. Advanced Materials, 2013, 25, 6575-6580.	11.1	59
126	Rice husks as a sustainable source of nanostructured silicon for high performance Li-ion battery anodes. Scientific Reports, 2013, 3, 1919.	1.6	409
127	Tissue engineering on the nanoscale: lessons from the heart. Current Opinion in Biotechnology, 2013, 24, 664-671.	3.3	83
128	Tuning the Bacterial Detection Sensitivity of Nanostructured Microelectrodes. Analytical Chemistry, 2013, 85, 7333-7338.	3.2	56
129	Motion Charged Battery as Sustainable Flexible-Power-Unit. ACS Nano, 2013, 7, 11263-11271.	7.3	139
130	Injectable, Cellular-Scale Optoelectronics with Applications for Wireless Optogenetics. Science, 2013, 340, 211-216.	6.0	1,010

#	Article	IF	Citations
131	High yield formation of lipid bilayer shells around silicon nanowires in aqueous solution. Nanotechnology, 2013, 24, 355601.	1.3	6
132	Multi-scale modeling of edge effect on band gap offset in polygonal cross-section Silicon nanowires. Computational Materials Science, 2013, 79, 262-275.	1.4	8
133	Drugâ€Delivery Systems for Tunable and Localized Drug Release. Israel Journal of Chemistry, 2013, 53, 728-736.	1.0	5
134	MnO Nanoparticle@Mesoporous Carbon Composites Grown on Conducting Substrates Featuring High-performance Lithium-ion Battery, Supercapacitor and Sensor. Scientific Reports, 2013, 3, 2693.	1.6	117
135	Growth of n-type 3C-SiC nanoneedles on carbon fabric: toward extremely flexible field emission devices. Journal of Materials Chemistry C, 2013, 1, 6479.	2.7	50
136	Coulomb blockade in vertical, bandgap engineered silicon nanopillars. Applied Physics Letters, 2013, 102, .	1.5	5
137	Thermodynamic-enabled synthesis of Bi/Bi14Te6 axial heterostructure nanowires. Journal of Materials Chemistry A, 2013, 1, 2395.	5.2	9
138	Anisotropic surface strain in single crystalline cobalt nanowires and its impact on the diameter-dependent Young's modulus. Nanoscale, 2013, 5, 11643.	2.8	15
139	Identification of an Intrinsic Source of Doping Inhomogeneity in Vaporâ€“Liquidâ€“Solid-Grown Nanowires. Nano Letters, 2013, 13, 199-206.	4.5	54
140	High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. Energy and Environmental Science, 2013, 6, 494.	15.6	108
141	Strategies To Control Morphology in Hybrid Group IIIâ€“V/Group IV Heterostructure Nanowires. Nano Letters, 2013, 13, 903-908.	4.5	63
142	Cell adhesion promotion strategies for signal transduction enhancement in microelectrode array in vitro electrophysiology: An introductory overview and critical discussion. Current Opinion in Colloid and Interface Science, 2013, 18, 481-492.	3.4	79
143	A one-level FETI method for the driftâ€“diffusion-Poisson system with discontinuities at an interface. Journal of Computational Physics, 2013, 243, 74-86.	1.9	11
144	Synthetic Nanoelectronic Probes for Biological Cells and Tissues. Annual Review of Analytical Chemistry, 2013, 6, 31-51.	2.8	82
145	Nanotechnology meets electrophysiology. Current Opinion in Biotechnology, 2013, 24, 654-663.	3.3	11
146	Nanowire-Based Electrode for Acute In Vivo Neural Recordings in the Brain. PLoS ONE, 2013, 8, e56673.	1.1	73
148	Multi-electrode array technologies for neuroscience and cardiology. Nature Nanotechnology, 2013, 8, 83-94.	15.6	812
149	A single mesoporous ZnO/Chitosan hybrid nanostructure for a novel free nanoprobe type biosensor. Biosensors and Bioelectronics, 2013, 43, 226-230.	5.3	45

#	Article	IF	Citations
150	Semiconductor nanowires: a platform for exploring limits and concepts for nano-enabled solar cells. Energy and Environmental Science, 2013, 6, 719.	15.6	189
151	Biomolecular recognition with a sensitivity-enhanced nanowire transistor biosensor. Biosensors and Bioelectronics, 2013, 45, 252-259.	5.3	86
153	Single ZnO nanotetrapod-based sensors for monitoring localized UV irradiation. Nanoscale, 2013, 5, 5981.	2.8	19
154	Therapeutic Translation of iPSCs for Treating Neurological Disease. Cell Stem Cell, 2013, 12, 678-688.	5.2	84
155	Nanowire Heterostructures. Annual Review of Materials Research, 2013, 43, 451-479.	4.3	140
156	Label-Free Detection of Carbohydrateâ€“Protein Interactions Using Nanoscale Field-Effect Transistor Biosensors. Analytical Chemistry, 2013, 85, 4392-4397.	3.2	50
157	Investigation of the electrical stability of Si-nanowire biologically sensitive field-effect transistors with embedded Ag/AgCl pseudo reference electrode. RSC Advances, 2013, 3, 7963.	1.7	19
158	Nano-opto-electronics for biomedicine. Science Bulletin, 2013, 58, 2521-2529.	1.7	5
159	Volatile general anesthetic sensing with organic field-effect transistors integrating phospholipid membranes. Biosensors and Bioelectronics, 2013, 40, 303-307.	5.3	17
160	Electrical characteristics of silicon nanowire transistors fabricated by scanning probe and electron beam lithographies. Nanotechnology, 2013, 24, 315205.	1.3	15
161	Nanotechnology for cancer screening and diagnosis. , 2013, , 137-164.		12
162	Unveiling Stable Group IV Alloy Nanowires via a Comprehensive Search and Their Electronic Band Characteristics. Nano Letters, 2013, 13, 4951-4956.	4.5	21
163	Electrotriggered, Spatioselective, Quantitative Gene Delivery into a Single Cell Nucleus by Au Nanowire Nanoinjector. Nano Letters, 2013, 13, 2431-2435.	4.5	35
164	Mechanical Model of Vertical Nanowire Cell Penetration. Nano Letters, 2013, 13, 6002-6008.	4.5	161
165	Metal-Coated Silicon Nanowire Plasmonic Waveguides. Applied Physics Express, 2013, 6, 042502.	1.1	7
166	Facet-Selective Growth on Nanowires Yields Multi-Component Nanostructures and Photonic Devices. Journal of the American Chemical Society, 2013, 135, 18354-18357.	6.6	44
167	Micro/nano-scale materials and structures for constructing neuronal networks and addressing neurons. Journal of Materials Chemistry C, 2013, 1, 7652.	2.7	12
168	Nanowire nanoelectronics: Building interfaces with tissue and cells at the natural scale of biology. Pure and Applied Chemistry, 2013, 85, 883-901.	0.9	24

#	Article	IF	Citations
169	Design and Synthesis of Diverse Functional Kinked Nanowire Structures for Nanoelectronic Bioprobes. Nano Letters, 2013, 13, 746-751.	4.5	94
170	Control and understanding of kink formation in InAsâ€“InP heterostructure nanowires. Nanotechnology, 2013, 24, 345601.	1.3	14
171	Thermally Induced Shape Modification of Free-standing Nanostructures for Advanced Functionalities. Scientific Reports, 2013, 3, 2429.	1.6	10
172	Low-Current Focused Ion Beam Milling for Freestanding Nanomaterial Characterization. Lecture Notes in Nanoscale Science and Technology, 2013, , 45-62.	0.4	0
173	Thermal analysis of injectable, cellular-scale optoelectronics with pulsed power. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130142.	1.0	20
175	Multifunctional three-dimensional macroporous nanoelectronic networks for smart materials. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6694-6699.	3.3	85
176	Recent advances in flexible sensors for wearable and implantable devices. Journal of Applied Polymer Science, 2013, 130, 1429-1441.	1.3	382
177	Surface depletion effects in semiconducting nanowires having a non-uniform radial doping profile. Journal of Applied Physics, 2013, 114, 124310.	1.1	13
178	Ion-beam-induced bending of freestanding amorphous nanowires: The importance of the substrate material and charging. Applied Physics Letters, 2013, 102, .	1.5	22
179	Advanced Technologies for Engineering Tissue Mimetics. Israel Journal of Chemistry, 2013, 53, 630-636.	1.0	0
180	Single cell in-vivo carbon nanotube device with multimodal sensing potential. AIP Advances, 2013, 3, 032122.	0.6	0
181	Three-dimensional nanostructures by focused ion beam techniques: Fabrication and characterization. Journal of Materials Research, 2013, 28, 3063-3078.	1.2	9
182	Predictive simulations and optimization of nanowire field-effect PSA sensors including screening. Nanotechnology, 2013, 24, 225503.	1.3	27
183	Nanowire Photonics and Their Applications. , 2013, , 65-102.		1
184	Revealing Interfaceâ€Assisted Chargeâ€Transfer Mechanisms by Using Silicon Nanowires as Local Probes. Angewandte Chemie - International Edition, 2013, 52, 3369-3373.	7.2	9
185	Silicon nanowires â€“ a versatile technology platform. Physica Status Solidi - Rapid Research Letters, 2013, 7, 793-799.	1.2	61
187	A highly pH-sensitive nanowire field-effect transistor based on silicon on insulator. Beilstein Journal of Nanotechnology, 2013, 4, 330-335.	1.5	14
188	Promoting Cell Proliferation Using Water Dispersible Germanium Nanowires. PLoS ONE, 2014, 9, e108006.	1.1	11

#	Article	IF	Citations
192	Functional semiconducting silicon nanowires for cellular binding and internalization. , 2014, , 89-103.		0
193	Exploring arrays of vertical one-dimensional nanostructures for cellular investigations. Nanotechnology, 2014, 25, 362001.	1.3	68
194	Overview of semiconducting silicon nanowires for biomedical applications. , 2014, , 3-7.		9
195	Self-assembled nanowire array capacitors: capacitance and interface state profile. Nanotechnology, 2014, 25, 135201.	1.3	8
196	Silicon nanowire-transistor biosensor for study of molecule-molecule interactions. Reviews in Analytical Chemistry, 2014, 33, .	1.5	36
197	One-dimensional nanoprobes for single-cell studies. Nanomedicine, 2014, 9, 153-168.	1.7	15
198	Indium arsenide nanowire field-effect transistors for pH and biological sensing. Applied Physics Letters, 2014, 104, .	1.5	22
199	Nanowire Biosensors. RSC Smart Materials, 2014, , 167-199.	0.1	0
200	Semiconductor Nanowire Growth and Integration. RSC Smart Materials, 2014, , 1-53.	0.1	14
201	Designed Three-Dimensional Freestanding Single-Crystal Carbon Architectures. ACS Nano, 2014, 8, 11657-11665.	7.3	12
202	Transport properties of pristine and alloyed free standing ultrathin nanowires of noble metals. Journal of Alloys and Compounds, 2014, 615, 194-203.	2.8	13
203	Sub-10-nm intracellular bioelectronic probes from nanowireâ€“nanotube heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1259-1264.	3.3	59
204	Synthetic nanowire/nanotube-based solid substrates for controlled cell growth. Nano Convergence, 2014, 1, .	6.3	10
205	Neural cell pinning on surfaces by semiconducting silicon nanowire arrays. , 2014, , 192-213.		0
206	Focused Ion Beam Technology as a Fabrication and Inspection Tool in Neuron Interfacing. , 2014, , 183-205.		0
207	A Review of Organic and Inorganic Biomaterials for Neural Interfaces. Advanced Materials, 2014, 26, 1846-1885.	11.1	456
208	Free-standing kinked nanowire transistor probes for targeted intracellular recording in three dimensions. Nature Nanotechnology, 2014, 9, 142-147.	15.6	230
209	Ladder-like metal oxide nanowires: Synthesis, electrical transport, and enhanced light absorption properties. Nano Research, 2014, 7, 272-283.	5.8	6

#	Article	IF	Citations
210	Vertical nanowire probes for intracellular signaling of living cells. Nanoscale Research Letters, 2014, 9, 56.	3.1	20
211	Advances in nanowire transistors for biological analysis and cellular investigation. Analyst, The, 2014, 139, 1589.	1.7	52
212	Nanotechnology and Neuroscience: Nano-electronic, Photonic and Mechanical Neuronal Interfacing. , 2014, , .		10
213	Vortices on the move. Nature Nanotechnology, 2014, 9, 96-97.	15.6	4
214	Introducing heterojunction barriers into single kinked nanowires for the probe-free detection of proteins and intracellular recording. Nanoscale, 2014, 6, 4052-4057.	2.8	17
215	Long Term Stability of Nanowire Nanoelectronics in Physiological Environments. Nano Letters, 2014, 14, 1614-1619.	4.5	126
216	Silicon nanowires as field-effect transducers for biosensor development: A review. Analytica Chimica Acta, 2014, 825, 1-25.	2.6	109
217	Scalable Synthesis of Interconnected Porous Silicon/Carbon Composites by the Rochow Reaction as Highâ€Performance Anodes of Lithium Ion Batteries. Angewandte Chemie - International Edition, 2014, 53, 5165-5169.	7.2	175
218	Optogenetic Brain Interfaces. IEEE Reviews in Biomedical Engineering, 2014, 7, 3-30.	13.1	76
219	25th Anniversary Article: Semiconductor Nanowires â€“ Synthesis, Characterization, and Applications. Advanced Materials, 2014, 26, 2137-2184.	11.1	759
220	Neural Computation, Neural Devices, and Neural Prosthesis. , 2014, , .		7
221	Coreâ€“Shell In₂O₃/ZnO Nanoarray Nanogenerator as a Self-Powered Active Gas Sensor with High H₂S Sensitivity and Selectivity at Room Temperature. Journal of Physical Chemistry C, 2014, 118, 9209-9216.	1.5	120
222	Compartmental Genomics in Living Cells Revealed by Single-Cell Nanobiopsy. ACS Nano, 2014, 8, 546-553.	7.3	144
223	Recent advances in the growth of germanium nanowires: synthesis, growth dynamics and morphology control. Journal of Materials Chemistry C, 2014, 2, 14-33.	2.7	53
224	Geometric dependence of metal-coated silicon nanowire plasmonic waveguides. Journal of Optics (United Kingdom), 2014, 16, 025001.	1.0	3
225	Room for manoeuvre. Nature Nanotechnology, 2014, 9, 94-96.	15.6	11
226	An ultra-sensitive resistive pressure sensor based on hollow-sphere microstructure induced elasticity in conducting polymer film. Nature Communications, 2014, 5, 3002.	5.8	1,225
227	Triboelectric nanogenerator using nano-Ag ink as electrode material. Nano Energy, 2014, 3, 95-101.	8.2	43

#	Article	IF	Citations
228	Penetration of Cell Membranes and Synthetic Lipid Bilayers by Nanoprobes. Biophysical Journal, 2014, 107, 2091-2100.	0.2	47
229	3D Printed Quantum Dot Light-Emitting Diodes. Nano Letters, 2014, 14, 7017-7023.	4.5	371
230	Interplay between Defect Propagation and Surface Hydrogen in Silicon Nanowire Kinking Superstructures. ACS Nano, 2014, 8, 3829-3835.	7.3	27
231	Quantification of nanowire penetration into living cells. Nature Communications, 2014, 5, 3613.	5.8	129
232	Selective functionalization and loading of biomolecules in crystalline silicon nanotube field-effect-transistors. Nanoscale, 2014, 6, 7847-7852.	2.8	7
233	Fluid and Highly Curved Model Membranes on Vertical Nanowire Arrays. Nano Letters, 2014, 14, 4286-4292.	4.5	32
234	Flexible bio-interfaced nanoelectronics. Journal of Materials Chemistry C, 2014, 2, 1178.	2.7	7
235	Interfacing cells with nanostructured electrochemical sensors for enhanced biomedical sensing. , 2014, , 80-100.		0
236	Nanoparticle Facilitated Extracellular Electron Transfer in Microbial Fuel Cells. Nano Letters, 2014, 14, 6737-6742.	4.5	157
237	Iridium oxide nanotube electrodes for sensitive and prolonged intracellular measurement of action potentials. Nature Communications, 2014, 5, 3206.	5.8	197
238	Solar-Driven Photoelectrochemical Probing of Nanodot/Nanowire/Cell Interface. Nano Letters, 2014, 14, 2702-2708.	4.5	132
240	Low Voltage Operating Field Effect Transistors with Composite In₂O₃â€“ZnOâ€“ZnGa₂O₄ Nanofiber Network as Active Channel Layer. ACS Nano, 2014, 8, 2318-2327.	7.3	44
241	Liquid gated three dimensional graphene network transistor. Carbon, 2014, 79, 572-577.	5.4	17
242	All-silicon solid films with highly efficient and tunable full-color photoluminescence. Scripta Materialia, 2014, 76, 17-20.	2.6	5
243	Electrochemical Nanoprobes for Single-Cell Analysis. ACS Nano, 2014, 8, 875-884.	7.3	195
244	Study of the electrical properties of individual (Ga,Mn)As nanowires. Semiconductors, 2014, 48, 344-349.	0.2	2
245	Assembly and Densification of Nanowire Arrays via Shrinkage. Nano Letters, 2014, 14, 3304-3308.	4.5	19
247	Multiplexed Free-Standing Nanowire Transistor Bioprobe for Intracellular Recording: A General Fabrication Strategy. Nano Letters, 2014, 14, 3602-3607.	4.5	18

#	Article	IF	Citations
248	Semiconductor nanowire solar cells: synthetic advances and tunable properties. Pure and Applied Chemistry, 2014, 86, 13-26.	0.9	11
249	Point Decoration of Silicon Nanowires: An Approach Toward Singleâ€Molecule Electrical Detection. Angewandte Chemie - International Edition, 2014, 53, 5038-5043.	7.2	32
250	Nanostructures: a platform for brain repair and augmentation. Frontiers in Systems Neuroscience, 2014, 8, 91.	1.2	92
252	First-Principles Study on Crystal Phase Superlattice Nanowires Heterostructures. Journal of Physics: Conference Series, 2014, 537, 012002.	0.3	0
253	Materials Integration by Nanointaglio. Advanced Materials Interfaces, 2014, 1, 1300127.	1.9	12
254	Shapeâ€Controlled, Selfâ€Wrapped Carbon Nanotube 3D Electronics. Advanced Science, 2015, 2, 1500103.	5.6	32
255	Voyage inside the cell: Microsystems and nanoengineering for intracellular measurement and manipulation. Microsystems and Nanoengineering, 2015, 1, .	3.4	66
256	A feasibility study of multi-site,intracellular recordings from mammalian neurons by extracellular gold mushroom-shaped microelectrodes. Scientific Reports, 2015, 5, 14100.	1.6	55
257	Graphene oxide/carbon nanoparticle thin film based IR detector: Surface properties and device characterization. AIP Advances, 2015, 5, .	0.6	30
259	Quantitative Measurement of Transmitters in Individual Vesicles in the Cytoplasm of Single Cells with Nanotip Electrodes. Angewandte Chemie - International Edition, 2015, 54, 11978-11982.	7.2	264
260	Interfacing Inorganic Nanowire Arrays and Living Cells for Cellular Function Analysis. Small, 2015, 11, 5600-5610.	5.2	50
262	Growth of Singleâ€Layered Twoâ€Dimensional Mesoporous Polymer/Carbon Films by Selfâ€Assembly of Monomicelles at the Interfaces of Various Substrates. Angewandte Chemie - International Edition, 2015, 54, 8425-8429.	7.2	45
263	Tunable Polarity in a IIIâ€“V Nanowire by Droplet Wetting and Surface Energy Engineering. Advanced Materials, 2015, 27, 6096-6103.	11.1	69
264	Cell-array biosensors. , 0, , 137-154.		0
265	Disorder-free localization around the conduction band edge of crossing and kinked silicon nanowires. Journal of Applied Physics, 2015, 117, 064308.	1.1	5
266	Calibration on force upon the surface of single ZnO nanowire applied by AFM tip with different scanning angles. RSC Advances, 2015, 5, 47309-47313.	1.7	1
267	Syringe-injectable electronics. Nature Nanotechnology, 2015, 10, 629-636.	15.6	543
268	Mechanics of curvilinear electronics and optoelectronics. Current Opinion in Solid State and Materials Science, 2015, 19, 171-189.	5.6	36

#	Article	IF	Citations
269	Silicon Nanowires: Fabrication and Applications. Nanoscience and Technology, 2015, , 1-25.	1.5	12
270	Silicon Nanowire Field-Effect Transistorsâ€"A Versatile Class of Potentiometric Nanobiosensors. IEEE Access, 2015, 3, 287-302.	2.6	117
271	Transformable liquid-metal nanomedicine. Nature Communications, 2015, 6, 10066.	5.8	466
272	Gold-coated graphene field-effect transistors for quantitative analysis of proteinâ€"antibody interactions. 2D Materials, 2015, 2, 044008.	2.0	32
273	Optical Determination of Silicon Nanowire Diameters for Intracellular Applications. Journal of Physical Chemistry C, 2015, 119, 29105-29115.	1.5	8
274	Nanoscience and the nano-bioelectronics frontier. Nano Research, 2015, 8, 1-22.	5.8	93
275	The concept and realization of nanostructure fabrication using free-standing metallic wires with rapid thermal annealing. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-7.	2.0	1
276	General Strategy for Biodetection in High Ionic Strength Solutions Using Transistor-Based Nanoelectronic Sensors. Nano Letters, 2015, 15, 2143-2148.	4.5	215
277	Nanoscale Label-free Bioprobes to Detect Intracellular Proteins in Single Living Cells. Scientific Reports, 2014, 4, 6179.	1.6	20
278	Sub-3 nm Co₃O₄ Nanofilms with Enhanced Supercapacitor Properties. ACS Nano, 2015, 9, 1730-1739.	7.3	248
279	Flexible fiber energy storage and integrated devices: recent progress and perspectives. Materials Today, 2015, 18, 265-272.	8.3	146
280	Silver Nanoparticles in Comparison with Ionic Liquid and rGO as Gate Dopant for Paperâ€"Pencil-Based Flexible Field-Effect Transistors. Journal of Electronic Materials, 2015, 44, 6-12.	1.0	15
281	Flexible organic field-effect transistors on biodegradable cellulose paper with efficient reusable ion gel dielectrics. RSC Advances, 2015, 5, 14567-14574.	1.7	49
282	Revealing the importance of surface morphology of nanomaterials to biological responses: Adsorption of the villin headpiece onto graphene and phosphorene. Carbon, 2015, 94, 895-902.	5.4	65
283	Interactions between semiconductor nanowires and living cells. Journal of Physics Condensed Matter, 2015, 27, 233103.	0.7	56
284	Molecular Origin of Valence Band Anisotropy in Single Î²-Ga₂O₃ Nanowires Investigated by Polarized X-ray Absorption Imaging. Journal of Physical Chemistry C, 2015, 119, 17450-17457.	1.5	11
285	Non-Faradaic Electrical Impedimetric Investigation of the Interfacial Effects of Neuronal Cell Growth and Differentiation on Silicon Nanowire Transistors. ACS Applied Materials & Interfaces, 2015, 7, 9866-9878.	4.0	20
286	Synthesis, Properties, and Biological Application of Perfect Crystal Gold Nanowires: A Review. Journal of Materials Science and Technology, 2015, 31, 573-580.	5.6	32

#	Article	IF	Citations
287	A detailed study of kinking in indium-catalyzed silicon nanowires. CrystEngComm, 2015, 17, 6286-6296.	1.3	21
288	Uncovering Cortical Modularity by Nanotechnology. , 2015, , 339-366.		0
289	Recent Advances on the Modular Organization of the Cortex. , 2015, , .		3
290	Photoelectrochemical biosensors: New insights into promising photoelectrodes and signal amplification strategies. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2015, 24, 43-63.	5.6	226
291	Single-band upconversion nanoprobes for multiplexed simultaneous in situ molecular mapping of cancer biomarkers. Nature Communications, 2015, 6, 6938.	5.8	269
292	Soft Materials in Neuroengineering for Hard Problems in Neuroscience. Neuron, 2015, 86, 175-186.	3.8	251
293	Electrical interfacing of nanowire devices with cells and tissues. , 2015, , 521-542.		0
294	Nanotechnology and neurophysiology. Current Opinion in Neurobiology, 2015, 32, 132-140.	2.0	62
295	Real-Time Analysis of Cellular Response to Small-Molecule Drugs within a Microfluidic Dielectrophoresis Device. Analytical Chemistry, 2015, 87, 5914-5920.	3.2	15
296	Nanobiosensors and Nanobioanalyses. , 2015, , .		10
297	Beyond the Patch Clamp: Nanotechnologies for Intracellular Recording. Neuron, 2015, 86, 21-24.	3.8	51
298	Biodegradable Elastomers and Silicon Nanomembranes/Nanoribbons for Stretchable, Transient Electronics, and Biosensors. Nano Letters, 2015, 15, 2801-2808.	4.5	281
299	AFM investigation of nanomechanical properties of ZnO nanowires. RSC Advances, 2015, 5, 33445-33449.	1.7	6
300	Seamless lamination of a concaveâ€“convex architecture with single-layer graphene. Nanoscale, 2015, 7, 18138-18146.	2.8	1
301	Tightly wrapped semiconductor-axon microtubes for probing hybrid networks: Modeling the capacitive coupling strength. Applied Physics Letters, 2015, 106, .	1.5	1
302	Applications of zero-valent silicon nanostructures in biomedicine. Nanomedicine, 2015, 10, 2553-2571.	1.7	26
303	Fabrication of nanowire electronics on nonconventional substrates by water-assisted transfer printing method. Proceedings of SPIE, 2015, , .	0.8	0
304	Biosensors for Cell Analysis. Annual Review of Biomedical Engineering, 2015, 17, 165-190.	5.7	29

#	Article	IF	Citations
305	Free-Standing Kinked Silicon Nanowires for Probing Inter- and Intracellular Force Dynamics. Nano Letters, 2015, 15, 5492-5498.	4.5	43
306	Performance assessments of vertically aligned carbon nanotubes multi-electrode arrays using Cath.a-differentiated (CAD) cells. Nanotechnology, 2015, 26, 335701.	1.3	4
307	Surface nanostructures for fluorescence probing of supported lipid bilayers on reflective substrates. Nanoscale, 2015, 7, 18020-18024.	2.8	2
308	Rigid and Flexible Organic Electrochemical Transistor Arrays for Monitoring Action Potentials from Electrogenic Cells. Advanced Healthcare Materials, 2015, 4, 528-533.	3.9	80
309	One-dimensional nanostructures based bio-detection. Biosensors and Bioelectronics, 2015, 63, 432-443.	5.3	43
310	Brillouin microspectroscopy of nanostructured biomaterials: photonics assisted tailoring mechanical properties. Proceedings of SPIE, 2016, , .	0.8	0
311	Triggering interface potential barrier: A controllable tuning mechanism for electrochemical detection. Biosensors and Bioelectronics, 2016, 85, 869-875.	5.3	22
312	Progress in Silicon Nanowireâ€Based Fieldâ€Effect Transistor Biosensors for Labelâ€Free Detection of DNA. Chinese Journal of Chemistry, 2016, 34, 308-316.	2.6	14
313	Nanoscale-Tipped High-Aspect-Ratio Vertical Microneedle Electrodes for Intracellular Recordings. Small, 2016, 12, 2846-2853.	5.2	21
314	Ultraâ€thin resin embedding method for scanning electron microscopy of individual cells on high and low aspect ratio 3D nanostructures. Journal of Microscopy, 2016, 263, 78-86.	0.8	38
315	Current-driven nanowire formation on surfaces of crystalline conducting substrates. Applied Physics Letters, 2016, 108, 193109.	1.5	15
316	Piezoelectric and Triboelectric Dual Effects in Mechanical-Energy Harvesting Using BaTiO₃/Polydimethylsiloxane Composite Film. ACS Applied Materials & Interfaces, 2016, 8, 34335-34341.	4.0	194
317	Electrochemical communication with the inside of cells using micro-patterned vertical carbon nanofibre electrodes. Scientific Reports, 2016, 6, 37672.	1.6	19
318	Molecular Structure and Dynamics of Water on Pristine and Strained Phosphorene: Wetting and Diffusion at Nanoscale. Scientific Reports, 2016, 6, 38327.	1.6	30
319	Cellular uptake and dynamics of unlabeled freestanding silicon nanowires. Science Advances, 2016, 2, e1601039.	4.7	84
320	Micro/Nano Biosensors for Living Cell and Molecule Analysis. , 2016, , 19-44.		0
321	Positively charged supported lipid bilayer formation on gold surfaces for neuronal cell culture. Biointerphases, 2016, 11, 021003.	0.6	14
322	Stretchable Bioelectronics for Medical Devices and Systems. Microsystems and Nanosystems, 2016, , .	0.1	90

#	Article	IF	Citations
323	In Vitro Neural Recording by Microelectrode Arrays. Microsystems and Nanosystems, 2016, , 275-291.	0.1	5
324	Human Interactive Triboelectric Nanogenerator as a Self-Powered Smart Seat. ACS Applied Materials & Interfaces, 2016, 8, 9692-9699.	4.0	61
325	Bioresorbable silicon electronics for transient spatiotemporal mapping of electrical activity fromÂthe cerebral cortex. Nature Materials, 2016, 15, 782-791.	13.3	400
326	Coating nanofiber scaffolds with beta cell membrane to promote cell proliferation and function. Nanoscale, 2016, 8, 10364-10370.	2.8	63
327	The Past, Present, and the Future ofÂNanotechnology. , 2016, , 515-525.		1
328	Reliable fabrication of sub-10 nm silicon nanowires by optical lithography. Nanotechnology, 2016, 27, 425302.	1.3	5
329	Energy Harvesters for Wearable and Stretchable Electronics: From Flexibility to Stretchability. Advanced Materials, 2016, 28, 9881-9919.	11.1	407
330	New insights into the electrochemical detection application of pâ€“p junction foam: the effects of the interfacial potential barrier. Analyst, The, 2016, 141, 6515-6520.	1.7	4
331	In situ observation and thermal alloying induced shape manipulation of FIB-grown Pt composite nanowires. Materials Letters, 2016, 179, 78-81.	1.3	0
332	Nanowire Interfaces to Cells and Tissue. Nanoscience and Technology, 2016, , 277-306.	1.5	0
334	Structure-Controlled Synthesis. Nanoscience and Technology, 2016, , 39-67.	1.5	0
336	Direct real-time detection of single proteins using silicon nanowire-based electrical circuits. Nanoscale, 2016, 8, 16172-16176.	2.8	40
338	A high-resolution strain-gauge nanolaser. Nature Communications, 2016, 7, 11569.	5.8	60
339	Multisite electrophysiological recordings by self-assembled loose-patch-like junctions between cultured hippocampal neurons and mushroom-shaped microelectrodes. Scientific Reports, 2016, 6, 27110.	1.6	66
340	Controlling nanowire growth through electric field-induced deformation of the catalyst droplet. Nature Communications, 2016, 7, 12271.	5.8	49
341	Ultrathin, transferred layers of thermally grown silicon dioxide as biofluid barriers for biointegrated flexible electronic systems. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11682-11687.	3.3	175
342	Inorganic Nanomaterial-Based Transistors with Application as Sensors. , 2016, , 83-102.		0
343	Non-Faradaic Electrochemical Detection of Exocytosis from Mast and Chromaffin Cells Using Floating-Gate MOS Transistors. Scientific Reports, 2016, 5, 18477.	1.6	6

#	Article	IF	Citations
344	Micro/nanoscale needle technology for brain. , 2016, , .		0
345	Direct Tracking of Amyloid and Tau Dynamics in Neuroblastoma Cells Using Nanoplasmonic Fiber Tip Probes. Nano Letters, 2016, 16, 3989-3994.	4.5	20
346	Remarkable Magnetic Properties of Co-doped ZnO Nanorods Array at Room Temperature Originated from Vertical Growth on Zn Foil. Rare Metal Materials and Engineering, 2016, 45, 46-50.	0.8	3
347	Encoding Active Device Elements at Nanowire Tips. Nano Letters, 2016, 16, 4713-4719.	4.5	11
348	Spearhead Nanometric Field-Effect Transistor Sensors for Single-Cell Analysis. ACS Nano, 2016, 10, 3214-3221.	7.3	95
349	Shape-Controlled Deterministic Assembly of Nanowires. Nano Letters, 2016, 16, 2644-2650.	4.5	57
350	Metal Seed Loss Throughout the Nanowire Growth: Bulk Trapping and Surface Mass Transport. Journal of Physical Chemistry C, 2016, 120, 2932-2940.	1.5	5
351	Engineered hybrid cardiac patches with multifunctional electronics for online monitoringÂand regulation of tissue function. Nature Materials, 2016, 15, 679-685.	13.3	363
352	Manipulating Polycrystalline Silicon Nanowire FET Characteristics by Light Illumination. Journal of Physical Chemistry C, 2016, 120, 5783-5789.	1.5	1
353	Nanowire-Based Sensors for Biological and Medical Applications. IEEE Transactions on Nanobioscience, 2016, 15, 186-199.	2.2	60
354	Enhancing Performance of Triboelectric Nanogenerator by Filling High Dielectric Nanoparticles into Sponge PDMS Film. ACS Applied Materials & Interfaces, 2016, 8, 736-744.	4.0	474
355	Nano-Bioelectronics. Chemical Reviews, 2016, 116, 215-257.	23.0	530
356	Spontaneous Internalization of Cell Penetrating Peptide-Modified Nanowires into Primary Neurons. Nano Letters, 2016, 16, 1509-1513.	4.5	86
357	Nanoscale bio-platforms for living cell interrogation: current status and future perspectives. Nanoscale, 2016, 8, 3181-3206.	2.8	40
358	Nanotechnology and regenerative therapeutics in plastic surgery: The next frontier. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2016, 69, 1-13.	0.5	21
359	Advanced optoelectronic nanodevices and nanomaterials for sensing inside single living cell. Optics Communications, 2017, 395, 3-15.	1.0	12
360	Ab initio study of hydrogenic effective mass impurities in Si nanowires. Journal of Physics Condensed Matter, 2017, 29, 095303.	0.7	1
361	Nondestructive nanostraw intracellular sampling for longitudinal cell monitoring. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1866-E1874.	3.3	124

#	Article	IF	Citations
362	Capacitively coupled arrays of multiplexed flexible silicon transistors for long-term cardiac electrophysiology. Nature Biomedical Engineering, 2017, 1, .	11.6	210
363	A high-performance transparent graphene/vertically aligned carbon nanotube (VACNT) hybrid electrode for neural interfacing. RSC Advances, 2017, 7, 3273-3281.	1.7	14
364	Fluorescent Nanowire Ring Illumination for Wide-Field Far-Field Subdiffraction Imaging. Physical Review Letters, 2017, 118, 076101.	2.9	62
366	Ground State Depletion Nanoscopy Resolves Semiconductor Nanowire Barcode Segments at Room Temperature. Nano Letters, 2017, 17, 2652-2659.	4.5	20
367	CMOS nanoelectrode array for all-electrical intracellular electrophysiological imaging. Nature Nanotechnology, 2017, 12, 460-466.	15.6	212
368	Scalable electrophysiology in intact small animals with nanoscale suspended electrode arrays. Nature Nanotechnology, 2017, 12, 684-691.	15.6	31
369	Ultrafine Graphene Nanomesh with Large On/Off Ratio for Highâ€Performance Flexible Biosensors. Advanced Functional Materials, 2017, 27, 1604096.	7.8	111
370	Intracellular and Extracellular Recording of Spontaneous Action Potentials in Mammalian Neurons and Cardiac Cells with 3D Plasmonic Nanoelectrodes. Nano Letters, 2017, 17, 3932-3939.	4.5	167
371	Ultrastretchable, transparent triboelectric nanogenerator as electronic skin for biomechanical energy harvesting and tactile sensing. Science Advances, 2017, 3, e1700015.	4.7	920
372	Next-generation probes, particles, and proteins for neural interfacing. Science Advances, 2017, 3, e1601649.	4.7	377
373	Switching of the products by changing the size and shape of catalytic nanoparticles during CVD growth of MoS2 nanotubes. CrystEngComm, 2017, 19, 3915-3920.	1.3	11
374	Non-contact scanning probe technique for electric field measurements based on nanowire field-effect transistor. Ultramicroscopy, 2017, 179, 33-40.	0.8	15
375	Nanoscale silicon for subcellular biointerfaces. Journal of Materials Chemistry B, 2017, 5, 4276-4289.	2.9	24
376	Application of Carbon-Based Nanomaterials as Biosensor. , 2017, , 87-127.		7
378	High Density Individually Addressable Nanowire Arrays Record Intracellular Activity from Primary Rodent and Human Stem Cell Derived Neurons. Nano Letters, 2017, 17, 2757-2764.	4.5	132
380	Versatile Bottom-Up Synthesis of Tethered Bilayer Lipid Membranes on Nanoelectronic Biosensor Devices. ACS Applied Materials & Interfaces, 2017, 9, 14618-14632.	4.0	20
381	Brain-Machine Interfaces: From Basic Science to Neuroprostheses and Neurorehabilitation. Physiological Reviews, 2017, 97, 767-837.	13.1	409
382	Taking Electrons out of Bioelectronics: From Bioprotonic Transistors to Ion Channels. Advanced Science, 2017, 4, 1600527.	5.6	31

#	Article	IF	Citations
383	Targeted intracellular voltage recordings from dendritic spines using quantum-dot-coated nanopipettes. Nature Nanotechnology, 2017, 12, 335-342.	15.6	107
384	Neural recording and modulation technologies. Nature Reviews Materials, 2017, 2, .	23.3	414
385	Snatching the Ligand or Destroying the Structure: Disruption of WW Domain by Phosphorene. Journal of Physical Chemistry C, 2017, 121, 1362-1370.	1.5	14
386	pH-Responsive Hybrid Organic-Inorganic Ruthenium Nanoparticles for Controlled Release of Doxorubicin. Particle and Particle Systems Characterization, 2017, 34, 1700289.	1.2	4
387	Electrical and electrochemical characterization of proton transfer at the interface between chitosan and PdH_x. Journal of Materials Chemistry C, 2017, 5, 11083-11091.	2.7	23
388	Synthesis, Assembly, and Applications of Hybrid Nanostructures for Biosensing. Chemical Reviews, 2017, 117, 12942-13038.	23.0	258
389	Multiscale technologies for treatment of ischemic cardiomyopathy. Nature Nanotechnology, 2017, 12, 845-855.	15.6	104
390	pH Sensing and Low-Frequency Noise Characteristics of Low Temperature (400 Â°C) p-Channel SOI Schottky ISFETs. IEEE Electron Device Letters, 2017, 38, 1146-1149.	2.2	11
391	Refractive index sensing based on semiconductor nanowire lasers. Applied Physics Letters, 2017, 111, .	1.5	8
392	Assessment of Local Heterogeneity in Mechanical Properties of Nanostructured Hydrogel Networks. ACS Nano, 2017, 11, 7690-7696.	7.3	49
393	3D Microstructured Carbon Nanotube Electrodes for Trapping and Recording Electrogenic Cells. Advanced Functional Materials, 2017, 27, 1701083.	7.8	11
394	Flexible polydimethylsiloxane/multi-walled carbon nanotubes membranous metacomposites with negative permittivity. Polymer, 2017, 125, 50-57.	1.8	379
395	Photon-triggered nanowire transistors. Nature Nanotechnology, 2017, 12, 963-968.	15.6	95
396	Cellular interfaces with hydrogen-bonded organic semiconductor hierarchical nanocrystals. Nature Communications, 2017, 8, 91.	5.8	51
397	Enhancement of Light Absorption in Silicon Nanowire Photovoltaic Devices with Dielectric and Metallic Grating Structures. Nano Letters, 2017, 17, 7731-7736.	4.5	17
398	Scalable Fabrication Framework of Implantable Ultrathin and Flexible Probes with Biodegradable Sacrificial Layers. Nano Letters, 2017, 17, 7315-7322.	4.5	12
399	Thin, Transferred Layers of Silicon Dioxide and Silicon Nitride as Water and Ion Barriers for Implantable Flexible Electronic Systems. Advanced Electronic Materials, 2017, 3, 1700077.	2.6	61
400	Manufacturing Cell Therapies Using Engineered Biomaterials. Trends in Biotechnology, 2017, 35, 971-982.	4.9	35

#	Article	IF	Citations
401	A self-adjusting mechanism of schottky junction constructed by zero-bandgap graphene for highly efficient electrochemical biosensing. Electrochimica Acta, 2017, 247, 306-313.	2.6	4
402	Fabrication of the ZnO/NiO pâ€“n junction foam for the enhanced sensing performance. Chinese Chemical Letters, 2017, 28, 670-674.	4.8	9
403	Bioresponsive materials. Nature Reviews Materials, 2017, 2, .	23.3	1,117
404	Advances in nanowire bioelectronics. Reports on Progress in Physics, 2017, 80, 016701.	8.1	99
405	Visible photoelectrochemical sensing platform by in situ generated CdS quantum dots decorated branched-TiO 2 nanorods equipped with Prussian blue electrochromic display. Biosensors and Bioelectronics, 2017, 89, 859-865.	5.3	77
406	Micro/nano-scale needle devices for the brain. , 2017, , .		0
407	Spatially localized wavelength-selective absorption in morphology-modulated semiconductor nanowires. Optics Express, 2017, 25, 22750.	1.7	4
408	Feasibility Study of Extended-Gate-Type Silicon Nanowire Field-Effect Transistors for Neural Recording. Sensors, 2017, 17, 705.	2.1	7
409	Silicon Nanocrystals with pH-Sensitive Tunable Light Emission from Violet to Blue-Green. Sensors, 2017, 17, 2396.	2.1	7
410	Advances in Nanowire Transistorâ€Based Biosensors. Small Methods, 2018, 2, 1700263.	4.6	49
411	Talking to Cells: Semiconductor Nanomaterials at the Cellular Interface. Advanced Biology, 2018, 2, 1700242.	3.0	16
412	Rational Design of Semiconductor Nanostructures for Functional Subcellular Interfaces. Accounts of Chemical Research, 2018, 51, 1014-1022.	7.6	21
413	Fabrication of Multielectrode Arrays for Neurobiology Applications. Methods in Molecular Biology, 2018, 1771, 147-157.	0.4	4
414	Optimizing Nanoelectrode Arrays for Scalable Intracellular Electrophysiology. Accounts of Chemical Research, 2018, 51, 600-608.	7.6	78
415	Stretchable and Tailorable Triboelectric Nanogenerator Constructed by Nanofibrous Membrane for Energy Harvesting and Selfâ€Powered Biomechanical Monitoring. Advanced Materials Technologies, 2018, 3, 1700370.	3.0	47
416	Selective layer-free blood serum ionogram based on ion-specific interactions with a nanotransistor. Nature Materials, 2018, 17, 464-470.	13.3	35
417	Local sensor based on nanowire field effect transistor from inhomogeneously doped silicon on insulator. Journal of Applied Physics, 2018, 123, .	1.1	13
418	Advancing the neurocomputer. Neurocomputing, 2018, 284, 36-51.	3.5	3

#	Article	IF	Citations
419	Mesh Nanoelectronics: Seamless Integration of Electronics with Tissues. Accounts of Chemical Research, 2018, 51, 309-318.	7.6	68
420	Diameter-tailored telecom-band luminescence in InP/InAs heterostructure nanowires grown on InP (111)B substrate with continuously-modulated diameter from microscale to nanoscale. Nanotechnology, 2018, 29, 155202.	1.3	9
421	Hybrid functional microfibers for textile electronics and biosensors. Journal of Semiconductors, 2018, 39, 011009.	2.0	4
422	Label-free multidimensional information acquisition from optogenetically engineered cells using a graphene transistor. Nanoscale, 2018, 10, 2285-2290.	2.8	11
423	Three-dimensional ultraflexible triboelectric nanogenerator made by 3D printing. Nano Energy, 2018, 45, 380-389.	8.2	178
424	Three-Dimensional Macroporous Nanoelectronics Scaffold Innervated Synthetic Tissue. Springer Theses, 2018, , 39-63.	0.0	1
425	Long nanoneedle-electrode devices for extracellular and intracellular recording in vivo. Sensors and Actuators B: Chemical, 2018, 258, 1287-1294.	4.0	15
426	A Micropatterned Multielectrode Shell for 3D Spatiotemporal Recording from Live Cells. Advanced Science, 2018, 5, 1700731.	5.6	34
427	Nongenetic Optical Methods for Measuring and Modulating Neuronal Response. ACS Nano, 2018, 12, 4086-4095.	7.3	35
428	3D bioprinting and decellularized ECM-based biomaterials for in vitroÂCV tissue engineering. Journal of 3D Printing in Medicine, 2018, 2, 69-87.	1.0	22
429	Chemiresistive nanosensors with convex/concave structures. Nano Today, 2018, 20, 84-100.	6.2	63
430	Rational design of silicon structures for optically controlled multiscale biointerfaces. Nature Biomedical Engineering, 2018, 2, 508-521.	11.6	183
431	Tissue-like Neural Probes for Understanding and Modulating the Brain. Biochemistry, 2018, 57, 3995-4004.	1.2	33
432	Multifunctional Fibers as Tools for Neuroscience and Neuroengineering. Accounts of Chemical Research, 2018, 51, 829-838.	7.6	70
433	Transferred, Ultrathin Oxide Bilayers as Biofluid Barriers for Flexible Electronic Implants. Advanced Functional Materials, 2018, 28, 1702284.	7.8	49
434	Density functional theory calculations of biomolecules adsorption on phosphorene for biomedical applications. Applied Surface Science, 2018, 427, 1227-1234.	3.1	32
435	Tissueâ€“electronics interfaces: from implantable devices to engineered tissues. Nature Reviews Materials, 2018, 3, .	23.3	372
436	Electronic and Ionic Materials for Neurointerfaces. Advanced Functional Materials, 2018, 28, 1704335.	7.8	63

#	Article	IF	Citations
437	Integration of Three-Dimensional Macroporous Nanoelectronics with Materials. Springer Theses, 2018, , 27-38.	0.0	0
438	Variability Predictions for the Next Technology Generations of n-type SixGe1â^'x Nanowire MOSFETs. Micromachines, 2018, 9, 643.	1.4	7
439	Light-triggered biological modulation with silicon-based materials and devices. Bioelectronics in Medicine, 2018, 1, 175-178.	2.0	0
440	Inorganic semiconductor biointerfaces. Nature Reviews Materials, 2018, 3, 473-490.	23.3	154
441	Si and Ge based metallic core/shell nanowires for nano-electronic device applications. Scientific Reports, 2018, 8, 16885.	1.6	18
442	The Potential for Convergence between Synthetic Biology and Bioelectronics. Cell Systems, 2018, 7, 231-244.	2.9	46
443	Ultrathin Trilayer Assemblies as Long-Lived Barriers against Water and Ion Penetration in Flexible Bioelectronic Systems. ACS Nano, 2018, 12, 10317-10326.	7.3	57
444	Transistor in a tube: A route to three-dimensional bioelectronics. Science Advances, 2018, 4, eaat4253.	4.7	78
445	Ultrafast Mapping of Subcellular Domains via Nanopipette-Based Electroosmotically Modulated Delivery into a Single Living Cell. Analytical Chemistry, 2018, 90, 13744-13750.	3.2	28
446	Electrically nanowired-enzymes for probe modification and sensor fabrication. Biosensors and Bioelectronics, 2018, 121, 223-235.	5.3	31
447	Conductively coupled flexible silicon electronic systems for chronic neural electrophysiology. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9542-E9549.	3.3	50
448	Principles and applications of medical nanotechnology devices. , 2018, , 275-301.		1
449	Nanobiotechnology: 1D nanomaterial building blocks for cellular interfaces and hybrid tissues. Nano Research, 2018, 11, 5372-5399.	5.8	14
450	Origami Biosystems: 3D Assembly Methods for Biomedical Applications. Advanced Biology, 2018, 2, 1800230.	3.0	57
451	CMOS electronics probe inside a cellular network â€" Invited review paper. , 2018, , .		1
452	Recent Advances in Materials, Devices, and Systems for Neural Interfaces. Advanced Materials, 2018, 30, e1800534.	11.1	148
453	A Universal Biomolecular Concentrator To Enhance Biomolecular Surface Binding Based on Acoustic NEMS Resonator. ACS Central Science, 2018, 4, 899-908.	5.3	15
454	Nanowire Photonics. Journal of the Korean Physical Society, 2018, 73, 218-226.	0.3	2

#	Article	IF	Citations
455	Multisite Attenuated Intracellular Recordings by Extracellular Multielectrode Arrays, a Perspective. Frontiers in Neuroscience, 2018, 12, 212.	1.4	32
456	CMOS-Compatible Silicon Nanowire Field-Effect Transistor Biosensor: Technology Development toward Commercialization. Materials, 2018, 11, 785.	1.3	85
457	Recent Advances in Nanowire-Biosystem Interfaces: From Chemical Conversion, Energy Production to Electrophysiology. CheM, 2018, 4, 1538-1559.	5.8	34
458	Nano functional neural interfaces. Nano Research, 2018, 11, 5065-5106.	5.8	23
459	Silicon biointerfaces for all scales. Nature Biomedical Engineering, 2018, 2, 471-472.	11.6	4
460	Kirigami-Inspired Highly Stretchable Nanoscale Devices Using Multidimensional Deformation of Monolayer MoS₂. Chemistry of Materials, 2018, 30, 6063-6070.	3.2	66
461	Scalable breakthrough. Nature Nanotechnology, 2018, 13, 875-876.	15.6	2
462	Optimization of the optical coupling in nanowire-based integrated photonic platforms by FDTD simulation. Beilstein Journal of Nanotechnology, 2018, 9, 2248-2254.	1.5	0
463	High Performance Flexible Organic Electrochemical Transistors for Monitoring Cardiac Action Potential. Advanced Healthcare Materials, 2018, 7, e1800304.	3.9	50
464	Cells Adhering to 3D Vertical Nanostructures: Cell Membrane Reshaping without Stable Internalization. Nano Letters, 2018, 18, 6100-6105.	4.5	73
465	Controlling the Light Absorption in a Photodetector Via Nanowire Waveguide Resonances for Multispectral and Color Imaging. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-12.	1.9	10
466	Synchronized electromechanical integration recording of cardiomyocytes. Biosensors and Bioelectronics, 2018, 117, 354-365.	5.3	38
467	Texturing Silicon Nanowires for Highly Localized Optical Modulation of Cellular Dynamics. Nano Letters, 2018, 18, 4487-4492.	4.5	45
468	Determinants of Soil Bacterial and Fungal Community Composition Toward Carbon-Use Efficiency Across Primary and Secondary Forests in a Costa Rican Conservation Area. Microbial Ecology, 2019, 77, 148-167.	1.4	38
469	Intracellular Recording of Cardiomyocyte Action Potentials with Nanopatterned Volcano-Shaped Microelectrode Arrays. Nano Letters, 2019, 19, 6173-6181.	4.5	74
470	Selective Formation of Porous Pt Nanorods for Highly Electrochemically Efficient Neural Electrode Interfaces. Nano Letters, 2019, 19, 6244-6254.	4.5	51
471	Deterministic Assembly of Three-Dimensional Suspended Nanowire Structures. Nano Letters, 2019, 19, 5647-5652.	4.5	11
472	Sensor-free and Sensor-based Heart-on-a-chip Platform: A Review of Design and Applications. Current Pharmaceutical Design, 2019, 24, 5375-5385.	0.9	11

#	Article	IF	Citations
473	Nano-scale transistors for interfacing with brain: design criteria, progress and prospect. Nanotechnology, 2019, 30, 442001.	1.3	5
474	Nanowire Electronics: From Nanoscale to Macroscale. Chemical Reviews, 2019, 119, 9074-9135.	23.0	210
475	Scalable ultrasmall three-dimensional nanowire transistor probes for intracellular recording. Nature Nanotechnology, 2019, 14, 783-790.	15.6	129
476	An atlas of nano-enabled neural interfaces. Nature Nanotechnology, 2019, 14, 645-657.	15.6	129
477	Si nanowires with porous segments for photon-triggered transistors. Journal Physics D: Applied Physics, 2019, 52, 373001.	1.3	1
478	Living myofibroblastâ€“silicon composites for probing electrical coupling in cardiac systems. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22531-22539.	3.3	31
479	Biomimicry for injectable mesh nanoelectronics. Bioelectronics in Medicine, 2019, 2, 55-58.	2.0	0
480	Highâ€Resolution 3D Printing of Freeform, Transparent Displays in Ambient Air. Advanced Science, 2019, 6, 1901603.	5.6	47
481	Precision electronic medicine in the brain. Nature Biotechnology, 2019, 37, 1007-1012.	9.4	62
482	Intracellular cardiomyocytes potential recording by planar electrode array and fibroblasts co-culturing on multi-modal CMOS chip. Biosensors and Bioelectronics, 2019, 144, 111626.	5.3	27
483	Photon-Triggered Current Generation in Chemically-Synthesized Silicon Nanowires. Nano Letters, 2019, 19, 1269-1274.	4.5	11
484	Influence of composition on the external quantum efficiency of reduced graphene oxide/carbon nanoparticle based photodetector used for human body IR detection. RSC Advances, 2019, 9, 18996-19005.	1.7	6
485	Sensor-Instrumented Scaffold Integrated with Microporous Spongelike Ultrabuoy for Long-Term 3D Mapping of Cellular Behaviors and Functions. ACS Nano, 2019, 13, 7898-7904.	7.3	8
486	Hybrid Silicon Nanowire Devices and Their Functional Diversity. Advanced Science, 2019, 6, 1900522.	5.6	54
487	Barrier materials for flexible bioelectronic implants with chronic stabilityâ€”Current approaches and future directions. APL Materials, 2019, 7, 050902.	2.2	27
488	In Vitro Neuronal Networks. Advances in Neurobiology, 2019, , .	1.3	12
489	Multisite Intracellular Recordings by MEA. Advances in Neurobiology, 2019, 22, 125-153.	1.3	11
490	Soft High-Resolution Neural Interfacing Probes: Materials and Design Approaches. Nano Letters, 2019, 19, 2741-2749.	4.5	59

#	Article	IF	Citations
491	Nanowired Bioelectric Interfaces. Chemical Reviews, 2019, 119, 9136-9152.	23.0	92
492	The Electronic Properties of Silicon Nanowires during Their Dissolution under Simulated Physiological Conditions. Applied Sciences (Switzerland), 2019, 9, 804.	1.3	2
493	Improved in vitro electrophysiology using 3D-structured microelectrode arrays with a micro-mushrooms islets architecture capable of promoting topotaxis. Journal of Neural Engineering, 2019, 16, 036012.	1.8	15
494	Novel electrode technologies for neural recordings. Nature Reviews Neuroscience, 2019, 20, 330-345.	4.9	436
495	Comparative study of catalyst-induced doping and metal incorporation in silicon nanowires. Applied Physics Letters, 2019, 114, 132103.	1.5	6
496	Fly ashes as a sustainable source for nanostructured Si anodes in lithium-ion batteries. SN Applied Sciences, 2019, 1, 1.	1.5	5
497	Fiber Supercapacitors Based on Carbon Nanotube-PANI Composites. , 2019, , .		3
498	Nongenetic optical neuromodulation with silicon-based materials. Nature Protocols, 2019, 14, 1339-1376.	5.5	62
499	Human Brain/Cloud Interface. Frontiers in Neuroscience, 2019, 13, 112.	1.4	47
500	Emerging micro and nanotechnologies in neuroscience: Devices, fabrication methods, and implementation in monitoring of neural activity and drug delivery. Technology, 2019, 07, 57-83.	1.4	5
501	Planar Growth, Integration, and Applications of Semiconducting Nanowires. Advanced Materials, 2020, 32, e1903945.	11.1	42
502	Compositional and structural engineering of inorganic nanowires toward advanced properties and applications. InformaÄnÃ-MateriÅ¡ly, 2019, 1, 496-524.	8.5	18
503	Membrane Poration Mechanisms at the Cellâ€“Nanostructure Interface. Advanced Biology, 2019, 3, e1900148.	3.0	28
504	Endogenous Bioelectrics in Development, Cancer, and Regeneration: Drugs and Bioelectronic Devices as Electroceuticals for Regenerative Medicine. IScience, 2019, 22, 519-533.	1.9	40
505	A ray of light for treating cardiac conduction disorders. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 347-349.	3.3	3
506	3D Nanostructured Multielectrode Arrays: Fabrication, Electrochemical Characterization, and Evaluation of Cellâ€“Electrode Adhesion. Advanced Materials Technologies, 2019, 4, 1800436.	3.0	20
507	Nanowire Electronics. Nanostructure Science and Technology, 2019, , .	0.1	4
508	Flexible Nanopipettes for Minimally Invasive Intracellular Electrophysiology InÂVivo. Cell Reports, 2019, 26, 266-278.e5.	2.9	52

#	Article	IF	Citations
509	Highly Localized SERS Measurements Using Single Silicon Nanowires Decorated with DNA Origami-Based SERS Probe. Nano Letters, 2019, 19, 1061-1066.	4.5	34
510	Ultrathin, Transferred Layers of Metal Silicide as Faradaic Electrical Interfaces and Biofluid Barriers for Flexible Bioelectronic Implants. ACS Nano, 2019, 13, 660-670.	7.3	30
511	Anticipation via canards in excitable systems. Chaos, 2019, 29, 013111.	1.0	10
512	Device Noise Reduction for Silicon Nanowire Field-Effect-Transistor Based Sensors by Using a Schottky Junction Gate. ACS Sensors, 2019, 4, 427-433.	4.0	18
513	Precise Control of Interfacial Charge Transport for Building Functional Optoelectronic Devices. Advanced Materials Technologies, 2019, 4, 1800358.	3.0	1
514	Minimally Invasive & Longâ€lasting Neural Probes from a Materials Perspective. Electroanalysis, 2019, 31, 586-602.	1.5	7
515	Nanoelectronics for Neuroscience. , 2019, , 631-649.		2
516	Strategies to achieve high performance piezoelectric nanogenerators. Nano Energy, 2019, 55, 288-304.	8.2	219
517	Electrochemical behavior of a gold nanoring electrode microfabricated on a silicon micropillar. Sensors and Actuators B: Chemical, 2019, 281, 392-398.	4.0	6
518	Organic Electrochemical Transistor Arrays for In Vitro Electrophysiology Monitoring of 2D and 3D Cardiac Tissues. Advanced Biology, 2019, 3, e1800248.	3.0	35
519	Nanowire Bioelectronics. Nanostructure Science and Technology, 2019, , 337-352.	0.1	0
520	A nanoelectrode array for obtaining intracellular recordings from thousands of connected neurons. Nature Biomedical Engineering, 2020, 4, 232-241.	11.6	171
521	Mechanoluminescent, Air-Dielectric MoS₂ Transistors as Active-Matrix Pressure Sensors for Wide Detection Ranges from Footsteps to Cellular Motions. Nano Letters, 2020, 20, 66-74.	4.5	80
522	Cellular nano-transistor: An electronic-interface between nanoscale semiconductors and biological cells. Materials Today Nano, 2020, 9, 100063.	2.3	9
523	On neural recording using nanoprotrusion electrodes. Journal of Neural Engineering, 2020, 17, 016017.	1.8	11
525	Silicon Nanowires for Intracellular Optical Interrogation with Subcellular Resolution. Nano Letters, 2020, 20, 1226-1232.	4.5	23
526	Opportunities and dilemmas of in vitro nano neural electrodes. RSC Advances, 2020, 10, 187-200.	1.7	14
527	Nano-enabled cellular engineering for bioelectric studies. Nano Research, 2020, 13, 1214-1227.	5.8	11

#	Article	IF	Citations
528	Nanoelectronics for Minimally Invasive Cellular Recordings. Advanced Functional Materials, 2020, 30, 1906210.	7.8	13
529	Nanowire probes could drive high-resolution brain-machine interfaces. Nano Today, 2020, 31, 100821.	6.2	18
530	Nanostructured Architectures for Biomolecular Detection inside and outside the Cell. Advanced Functional Materials, 2020, 30, 1907701.	7.8	19
531	Living electronics. Nano Research, 2020, 13, 1205-1213.	5.8	19
532	Bioinspired Materials for InÂVivo Bioelectronic Neural Interfaces. Matter, 2020, 3, 1087-1113.	5.0	43
533	Recent advances in bioelectronics chemistry. Chemical Society Reviews, 2020, 49, 7978-8035.	18.7	54
534	Advanced Electrical and Optical Microsystems for Biointerfacing. Advanced Intelligent Systems, 2020, 2, 2000091.	3.3	16
535	Biosensors for Studies on Adhesion-Mediated Cellular Responses to Their Microenvironment. Frontiers in Bioengineering and Biotechnology, 2020, 8, 597950.	2.0	5
536	Advances in Multidimensional Cardiac Biosensing Technologies: From Electrophysiology to Mechanical Motion and Contractile Force. Small, 2020, 16, e2005828.	5.2	16
537	Understanding the signal amplification in dual-gate FET-based biosensors. Journal of Applied Physics, 2020, 128, .	1.1	17
538	Inkâ€Based Additive Nanomanufacturing of Functional Materials for Humanâ€Integrated Smart Wearables. Advanced Intelligent Systems, 2020, 2, 2000117.	3.3	17
539	Vertical nanowire array-based biosensors: device design strategies and biomedical applications. Journal of Materials Chemistry B, 2020, 8, 7609-7632.	2.9	21
540	Hole and Electron Effective Masses in Single InP Nanowires with a Wurtzite-Zincblende Homojunction. ACS Nano, 2020, 14, 11613-11622.	7.3	8
541	Flexible and Printed Microwave Plasmonic Sensor for Noninvasive Measurement. IEEE Access, 2020, 8, 163238-163243.	2.6	17
542	Intracellular recording of cardiomyocyte action potentials by nanobranched microelectrode array. Biosensors and Bioelectronics, 2020, 169, 112588.	5.3	26
543	Chip-based waveguides for high-sensitivity biosensing and super-resolution imaging. Frontiers of Information Technology and Electronic Engineering, 2020, 21, 1134-1149.	1.5	4
544	Variable Membrane Dielectric Polarization Characteristic in Individual Live Cells. Journal of Physical Chemistry Letters, 2020, 11, 7197-7203.	2.1	7
545	Beyond point of care diagnostics: Low-dimensional nanomaterials for electronic virus sensing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	6

#	Article	IF	Citations
546	Advanced Biological Imaging for Intracellular Micromanipulation: Methods and Applications. Applied Sciences (Switzerland), 2020, 10, 7308.	1.3	6
547	Internalization and Viability Studies of Suspended Nanowire Silicon Chips in HeLa Cells. Nanomaterials, 2020, 10, 893.	1.9	3
548	Fully controllable silicon nanowire fabricated using optical lithography and orientation dependent oxidation. Applied Surface Science, 2020, 523, 146516.	3.1	5
549	Materials for flexible bioelectronic systems as chronic neural interfaces. Nature Materials, 2020, 19, 590-603.	13.3	277
550	Photoâ€“cross-linkable, insulating silk fibroin for bioelectronics with enhanced cell affinity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15482-15489.	3.3	27
551	Flexible hybrid piezo/triboelectric energy harvester with high power density workable at elevated temperatures. Journal of Materials Chemistry A, 2020, 8, 12003-12012.	5.2	42
552	Interface Engineering of Si Hybrid Nanostructures for Chemical and Biological Sensing. Advanced Materials Technologies, 2020, 5, .	3.0	10
553	Sensors in heart-on-a-chip: A review on recent progress. Talanta, 2020, 219, 121269.	2.9	34
554	Microcapacitors for Energy Storage: General Characteristics and Overview of Recent Progress. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900950.	0.8	6
555	Biological Interfaces, Modulation, and Sensing with Inorganic Nanoâ€Bioelectronic Materials. Small Methods, 2020, 4, 1900868.	4.6	13
556	Surface Potential/Charge Sensing Techniques and Applications. Sensors, 2020, 20, 1690.	2.1	19
557	Intracellular Recording of Human Cardiac Action Potentials on Market-Available Multielectrode Array Platforms. Frontiers in Bioengineering and Biotechnology, 2020, 8, 66.	2.0	19
558	From biomimicry to bioelectronics: Smart materials for cardiac tissue engineering. Nano Research, 2020, 13, 1253-1267.	5.8	25
559	Structured silicon for revealing transient and integrated signal transductions in microbial systems. Science Advances, 2020, 6, eaay2760.	4.7	14
560	Stretchable, Transparent, and Thermally Stable Triboelectric Nanogenerators Based on Solventâ€Free Ionâ€Conducting Elastomer Electrodes. Advanced Functional Materials, 2020, 30, 1909252.	7.8	114
561	Bioelectronics for Millimeter-Sized Model Organisms. IScience, 2020, 23, 100917.	1.9	5
562	Highâ€Aspectâ€Ratio Nanostructured Surfaces as Biological Metamaterials. Advanced Materials, 2020, 32, e1903862.	11.1	161
563	Engineering Smart Hybrid Tissues with Built-In Electronics. IScience, 2020, 23, 100833.	1.9	16

#	Article	IF	Citations
564	Plasmonic Metasurface for Spatially Resolved Optical Sensing in Three Dimensions. ACS Nano, 2020, 14, 2345-2353.	7.3	55
565	3D electronic and photonic structures as active biological interfaces. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 527-552.	8.5	17
566	Foldable water-activated reserve battery with diverse voltages. RSC Advances, 2020, 10, 402-410.	1.7	0
567	Nanotechnology for cancer screening and diagnosis: from innovations to clinical applications. , 2020, , 261-289.		3
568	Close-Packed Nanowire-Bacteria Hybrids for Efficient Solar-Driven CO2 Fixation. Joule, 2020, 4, 800-811.	11.7	124
569	Biohybrid Triboelectric Nanogenerator for Label-Free Pharmacological Fingerprinting in Cardiomyocytes. Nano Letters, 2020, 20, 4043-4050.	4.5	17
570	Softâ€“Hard Composites for Bioelectric Interfaces. Trends in Chemistry, 2020, 2, 519-534.	4.4	21
571	Semi-transparent, flexible, and electrically conductive silicon mesh by capillarity-driven welding of vapor-liquid-solid-grown nanowires over large areas. Nano Research, 2020, 13, 1465-1471.	5.8	4
572	Bioinspired bio-voltage memristors. Nature Communications, 2020, 11, 1861.	5.8	144
573	Bioâ€Coreactantâ€Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. Angewandte Chemie - International Edition, 2021, 60, 4907-4914.	7.2	96
574	From Lithographically Patternable to Genetically Patternable Electronic Materials for Miniaturized, Scalable, and Soft Implantable Bioelectronics to Interface with Nervous and Cardiac Systems. ACS Applied Electronic Materials, 2021, 3, 101-118.	2.0	21
575	Tuning Interfacial Energy Barriers in Heterojunctions for Antiâ€Interference Sensing. Advanced Functional Materials, 2021, 31, 2008604.	7.8	14
576	Bioâ€Coreactantâ€Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. Angewandte Chemie, 2021, 133, 4957-4964.	1.6	23
577	Fabrication of the Ni-based composite wires for electrochemical detection of copper(â…¡) ions. Analytica Chimica Acta, 2021, 1143, 45-52.	2.6	28
578	Goldâ€Mushroom Microelectrode Arrays and the Quest for Intracellularâ€Like Recordings: Perspectives and Outlooks. Advanced Materials Technologies, 2021, 6, 2000770.	3.0	12
579	Mechanism of morphology variations in colloidal CuGaS2 nanorods. Nanoscale Advances, 2021, 3, 5322-5331.	2.2	2
580	Cognitive Augmentation Via a Brain/Cloud Interface. Contemporary Clinical Neuroscience, 2021, , 357-386.	0.3	0
581	Conformal Electronics Therapy for Defibrillation. , 2021, , 381-389.		0

#	Article	IF	Citations
582	A protet-based, protonic charge transfer model of energy coupling in oxidative and photosynthetic phosphorylation. Advances in Microbial Physiology, 2021, 78, 1-177.	1.0	11
583	Nanowire-based sensor electronics for chemical and biological applications. Analyst, The, 2021, 146, 6684-6725.	1.7	16
584	Hafnium oxide layer-enhanced single-walled carbon nanotube field-effect transistor-based sensing platform. Analytica Chimica Acta, 2021, 1147, 99-107.	2.6	6
585	Ab Initio Design, Shaping, and Assembly of Free-Standing Silicon Nanoprobes. Nano Letters, 2021, 21, 2773-2779.	4.5	15
586	Intracellular detection and communication of a wireless chip in cell. Scientific Reports, 2021, 11, 5967.	1.6	10
587	Nano-FET-enabled biosensors: Materials perspective and recent advances in North America. Biosensors and Bioelectronics, 2021, 176, 112941.	5.3	28
588	Nanotechnology: new opportunities for the development of patchâ€clamps. Journal of Nanobiotechnology, 2021, 19, 97.	4.2	23
589	In-Cell Nanoelectronics: Opening the Door to Intracellular Electrophysiology. Nano-Micro Letters, 2021, 13, 127.	14.4	21
590	What Is Driving the Growth of Inorganic Glass in Smart Materials and Opto-Electronic Devices?. Materials, 2021, 14, 2926.	1.3	4
591	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. Advanced Healthcare Materials, 2021, 10, e2100646.	3.9	62
592	3D Electrodes for Bioelectronics. Advanced Materials, 2021, 33, e2005805.	11.1	35
593	Nanowire-enabled bioelectronics. Nano Today, 2021, 38, 101135.	6.2	31
594	Biomedical Implants with Chargeâ€Transfer Monitoring and Regulating Abilities. Advanced Science, 2021, 8, e2004393.	5.6	18
595	Nanoâ€and Microscale Optical and Electrical Biointerfaces and Their Relevance to Energy Research. Small, 2021, 17, e2100165.	5.2	7
596	Engineering Microâ€“Nanomaterials for Biomedical Translation. Advanced NanoBiomed Research, 2021, 1, 2100002.	1.7	20
597	Evaluation of pH Measurement Using Electronâ€Beamâ€Induced Current Detection. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100147.	0.8	3
598	Tutorial: using nanoneedles for intracellular delivery. Nature Protocols, 2021, 16, 4539-4563.	5.5	47
599	An organic transistor matrix for multipoint intracellular action potential recording. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15

#	Article	IF	Citations
600	Effect of gold nanoparticles laced anode on the bio-electro-catalytic activity and power generation ability of compost based microbial fuel cell as a coin cell sized device. Biomass and Bioenergy, 2021, 152, 106200.	2.9	11
601	Recording Using Field-Effect Transistors. , 2022, , 75-77.		0
603	Towards Green 3D-Microfabrication of Bio-MEMS Devices Using ADEX Dry Film Photoresists. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 43-57.	2.7	14
605	Biomaterials-based bioengineering strategies for bioelectronic medicine. Materials Science and Engineering Reports, 2021, 146, 100630.	14.8	18
606	Synchronized intracellular and extracellular recording of action potentials by three-dimensional nanoroded electroporation. Biosensors and Bioelectronics, 2021, 192, 113501.	5.3	15
607	Three dimensional bioelectronic interfaces to small-scale biological systems. Current Opinion in Biotechnology, 2021, 72, 1-7.	3.3	12
608	Functional silicon nanowires for cellular binding and internalization. , 2022, , 111-136.		1
609	An overview of semiconducting silicon nanowires for biomedical applications. , 2022, , 1-6.		2
610	Nanoneedle devices for biomedicine. , 2022, , 181-206.		1
611	CMOS-compatible silicon nanowire field-effect transistors: Where nanotechnology pushes the limits in biosensing. , 2022, , 327-362.		1
612	Biocompatibility of semiconducting silicon nanowires. , 2022, , 69-110.		0
613	Mirroring Action Potentials: Labelâ€Free, Accurate, and Noninvasive Electrophysiological Recordings of Humanâ€Derived Cardiomyocytes. Advanced Materials, 2021, 33, e2004234.	11.1	13
614	Circumventing immune rejection and foreign body response to therapeutics of type 1 diabetes. , 2021, , 215-250.		1
615	Homogenization of Boundary Layers in the Boltzmann--Poisson System. Multiscale Modeling and Simulation, 2021, 19, 506-532.	0.6	1
616	Toward nanobioelectronic medicine: Unlocking new applications using nanotechnology. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1693.	3.3	14
617	Flexible Electrode for Implantable Neural Devices. , 2014, , 121-156.		4
618	Active Pixel Sensor Multielectrode Array for High Spatiotemporal Resolution. , 2014, , 207-238.		8
619	3D Geometries: Enabling Optimization Toward the Inherent Limits of Thin-Film Photovoltaics. Springer Series in Materials Science, 2016, , 1-24.	0.4	4

#	Article	IF	Citations
620	Review Processing, Properties and Applications of Agricultural Solid Waste: Effect of an Open Burning in Environmental Toxicology. Environmental Science and Engineering, 2017, , 161-181.	0.1	5
621	Nanofield. Nanostructure Science and Technology, 2017, , 1-123.	0.1	2
622	Mesh electronics: a new paradigm for tissue-like brain probes. Current Opinion in Neurobiology, 2018, 50, 33-41.	2.0	131
623	Performance improvement of a pentacene organic field-effect transistor through a DNA interlayer. Journal Physics D: Applied Physics, 2014, 47, 205402.	1.3	19
624	Understanding homoepitaxial growth of horizontal kinked GaN nanowires. Nanotechnology, 2021, 32, 095606.	1.3	2
625	Neuronal Recordings with Solid-Conductor Intracellular Nanoelectrodes (SCINEs). PLoS ONE, 2012, 7, e43194.	1.1	35
626	Live Cell Analysis: When Electric Detection Interfaces Microfluidics. Journal of Biochips & Tissue Chips, 2011, 01, .	0.2	4
627	Interfacing Biology with Nanoelectronics. Journal of Biosensors & Bioelectronics, 2012, 03, .	0.4	1
628	Multiscale modeling of fluctuations in stochastic elliptic PDE models of nanosensors. Communications in Mathematical Sciences, 2014, 12, 401-421.	0.5	11
629	Synthesis and Applications of Noble Metal and Metal Silicide and Germanide 1-Dimensional Nanostructures. Bulletin of the Korean Chemical Society, 2012, 33, 2830-2844.	1.0	2
630	Soft materials as biological and artificial membranes. Chemical Society Reviews, 2021, 50, 12679-12701.	18.7	35
631	New Insights toward Casein/Polyvinyl Alcohol Electrospun Nanofibrous Webs as a Piezoelectric-Cum-Triboelectric Energy Harvester. ACS Applied Electronic Materials, 2021, 3, 4348-4361.	2.0	7
632	A comprehensive review of FETâ€based pH sensors: materials, fabrication technologies, and modeling. Electrochemical Science Advances, 2022, 2, 2100147.	1.2	22
634	Nano-hairpin peeks into cells. Nature, 0, , .	13.7	0
635	Electrical Recording from Cardiac Cells and Tissue Using Nanowire Transistors. , 2011, , 141-163.		0
636	Micro- and Nanotechnologies in Integrative Biology. , 2012, , 487-498.		0
637	Nanoscale Field-Effect Transistors for Minimally Invasive, High Spatial Resolution, and Three-Dimensional Action Potential Recording. , 2014, , 13-43.		0
638	Nano-Electro-Mechanical Systems: Processes and Devices. , 2014, , 13-30.		0

#	Article	IF	Citations
639	Device Architecture and Biosensing Applications for Attractive One- and Two-Dimensional Nanostructures. , 2015, , 41-70.		1
640	Hard Template-Directed Synthesis. Nanostructure Science and Technology, 2017, , 415-536.	0.1	2
641	Single Electronics for Biomedical Applications. Advances in Bioinformatics and Biomedical Engineering Book Series, 2017, , 212-227.	0.2	0
643	Silicon nanowires in biomedicine. Series in Materials Science and Engineering, 2017, , 417-430.	0.1	0
646	Single Electronics for Biomedical Applications. , 2018, , 1448-1463.		0
647	Interfacing Biology Systems with Nanoelectronics for Nanodevices. Advanced Structured Materials, 2019, , 701-759.	0.3	2
649	Injectable Nanocomposite Implants Reduce ROS Accumulation and Improve Heart Function after Infarction. Advanced Science, 2021, 8, e2102919.	5.6	30
650	Semiconductor Nanowireâ€Based Cellular and Subcellular Interfaces. Advanced Functional Materials, 2022, 32, 2107997.	7.8	7
651	Dissecting Biological and Synthetic Softâ€“Hard Interfaces for Tissue-Like Systems. Chemical Reviews, 2022, 122, 5233-5276.	23.0	32
652	Probing the electronic properties of the electrified silicon/water interface by combining simulations and experiments. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	2
653	Materials Chemistry of Neural Interface Technologies and Recent Advances in Three-Dimensional Systems. Chemical Reviews, 2022, 122, 5277-5316.	23.0	31
654	Fabrication and Biomedical Applications of Heart-on-a-chip. International Journal of Bioprinting, 2021, 7, 370.	1.7	0
655	Freeâ€Standing Nanofilm Electrode Arrays for Longâ€Term Stable Neural Interfacings. Advanced Materials, 2022, 34, e2107343.	11.1	11
656	Fabrication of a Mesoporous Multimetallic Oxide-based Ion-Sensitive Field Effect Transistor for pH Sensing. ACS Omega, 2021, 6, 32297-32303.	1.6	9
657	Ultrastructural Analysis of Neuroimplant-Parenchyma Interfaces Uncover Remarkable Neuroregeneration Along-With Barriers That Limit the Implant Electrophysiological Functions. Frontiers in Neuroscience, 2021, 15, 764448.	1.4	7
658	Considerations and recent advances in nanoscale interfaces with neuronal and cardiac networks. Applied Physics Reviews, 2021, 8, 041317.	5.5	5
659	Kinking in Semiconductor Nanowires: A Review. Crystal Growth and Design, 2022, 22, 871-892.	1.4	6
660	Nanotechnology for stem cell and tissue engineering. , 2021, , .		1

#	Article	IF	Citations
661	All-Graphene-Contact Electrically Pumped On-Demand Transferrable Nanowire Source. Nano Letters, 2022, 22, 1316-1323.	4.5	5
662	Heart-on-Chip for Combined Cellular Dynamics Measurements and Computational Modeling Towards Clinical Applications. Annals of Biomedical Engineering, 2022, 50, 111-137.	1.3	4
663	Biology-guided engineering of bioelectrical interfaces. Nanoscale Horizons, 2022, 7, 94-111.	4.1	5
664	Assessing the Feasibility of Developing in vivo Neuroprobes for Parallel Intracellular Recording and Stimulation: A Perspective. Frontiers in Neuroscience, 2021, 15, 807797.	1.4	1
665	A dynamic and quantitative biosensing assessment for electroporated membrane evolution of cardiomyocytes. Biosensors and Bioelectronics, 2022, 202, 114016.	5.3	4
667	Review on 3D growth engineering and integration of nanowires for advanced nanoelectronics and sensor applications. Nanotechnology, 2022, 33, 222002.	1.3	4
668	Fabrication and Biomedical Applications of Heart-on-a-chip. International Journal of Bioprinting, 2021, 7, 370.	1.7	31
670	Porous Polyethylene Terephthalate Nanotemplate Electrodes for Sensitive Intracellular Recording of Action Potentials. Nano Letters, 2022, 22, 2479-2489.	4.5	9
671	Electrochemical Cell-based Biosensors for Biomedical Applications. Current Topics in Medicinal Chemistry, 2022, 22, 713-733.	1.0	12
672	Bioelectric Dysregulation in Cancer Initiation, Promotion, and Progression. Frontiers in Oncology, 2022, 12, 846917.	1.3	8
673	Advances in protein analysis in single live cells: Principle, instrumentation and applications. TrAC - Trends in Analytical Chemistry, 2022, 152, 116619.	5.8	6
674	A universal, multimodal cell-based biosensing platform for optimal intracellular action potential recording. Biosensors and Bioelectronics, 2022, 206, 114122.	5.3	6
675	Three-dimensional transistor arrays for intra- and inter-cellular recording. Nature Nanotechnology, 2022, 17, 292-300.	15.6	30
676	Soft Bioelectronics Based on Nanomaterials. Chemical Reviews, 2022, 122, 5068-5143.	23.0	72
677	Graphene nanostructures for inputâ€“output bioelectronics. Biophysics Reviews, 2021, 2, 041304.	1.0	7
678	Precise morphology control of in-plane silicon nanowires via a simple plasma pre-treatment. Applied Surface Science, 2022, 593, 153435.	3.1	4
683	Nanowires in Flexible Sensors: Structure is Becoming a Key in Controlling the Sensing Performance. Advanced Materials Technologies, 2022, 7, .	3.0	6
686	Semi-Implantable Bioelectronics. Nano-Micro Letters, 2022, 14, .	14.4	14

#	Article	IF	Citations
687	Rational design of electrically conductive biomaterials toward excitable tissues regeneration. Progress in Polymer Science, 2022, 131, 101573.	11.8	21
688	Multiscale simulation analysis of passive and active micro/nanoelectrodes for CMOS-based in vitro neural sensing devices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	1.6	3
689	Nanoneedle-Electrode Devices for In Vivo Recording of Extracellular Action Potentials. ACS Nano, 2022, 16, 10692-10700.	7.3	2
690	Biointerface design for vertical nanoprobes. Nature Reviews Materials, 2022, 7, 953-973.	23.3	31
691	Self-Assembled Au Nanoparticle Monolayers on Silicon in Two- and Three-Dimensions for Surface-Enhanced Raman Scattering Sensing. ACS Applied Nano Materials, 2022, 5, 11839-11851.	2.4	10
692	Scalable Nanotrap Matrix Enhanced Electroporation for Intracellular Recording of Action Potential. Nano Letters, 2022, 22, 7467-7476.	4.5	5
693	Transfer printing technologies for soft electronics. Nanoscale, 2022, 14, 16749-16760.	2.8	9
694	Stimuli-responsive polymers for interface engineering toward enhanced electrochemical analysis of neurochemicals. Chemical Communications, 2022, 58, 13171-13187.	2.2	2
695	Engineered Materials for Probing and Perturbing Brain Chemistry. , 2022, , 89-168.		1
696	Single-cell technologies: From research to application. Innovation(China), 2022, 3, 100342.	5.2	13
697	Acupuncture Needleâ€Based Transistor Neuroprobe for In Vivo Monitoring of Neurotransmitter. Small, 2022, 18, .	5.2	8
698	3D conductive material strategies for modulating and monitoring cells. Progress in Materials Science, 2023, 133, 101041.	16.0	3
699	Emerging Trends in Nanomaterials for Photosynthetic Biohybrid Systems. , 2023, 5, 95-115.		21
700	Scalable and Robust Hollow Nanopillar Electrode for Enhanced Intracellular Action Potential Recording. Nano Letters, 2023, 23, 243-251.	4.5	11
701	Bio-hybrid electronic and photonic devices. Experimental Biology and Medicine, 2022, 247, 2128-2141.	1.1	3
702	Nanostripe-Confined Catalyst Formation for Uniform Growth of Ultrathin Silicon Nanowires. Nanomaterials, 2023, 13, 121.	1.9	1
703	Bioâ€Voltage Memristors: From Physical Mechanisms to Neuromorphic Interfaces. Advanced Electronic Materials, 2023, 9, .	2.6	4
704	Recent progress in bio-voltage memristors working with ultralow voltage of biological amplitude. Nanoscale, 2023, 15, 4669-4681.	2.8	2

#	Article	IF	Citations
705	Neuroflex: Intraneural and Extraneural Flexible Sensor Architectures for Neural Probing. , 2023, , 531-559.		0
706	Neural modulation with photothermally active nanomaterials. , 2023, 1, 193-207.		15
707	Flexible and smart electronics for single-cell resolved brainâ€“machine interfaces. Applied Physics Reviews, 2023, 10, .	5.5	1
708	From neuromorphic to neurohybrid: transition from the emulation to the integration of neuronal networks. Neuromorphic Computing and Engineering, 2023, 3, 023002.	2.8	4
709	Introduction to Biosensing. , 2023, , 441-474.		1
710	Direct Observation of Liquidâ€“Solid Twoâ€Phase Seed Particleâ€Assisted Kinking in GaP Nanowire Growth. Small Structures, 2023, 4, .	6.9	2
711	Imageable AuNP-ECM Hydrogel Tissue Implants for Regenerative Medicine. Pharmaceutics, 2023, 15, 1298.	2.0	0
720	Advances in micro-nano biosensing platforms for intracellular electrophysiology. Journal of Zhejiang University: Science A, 0, , .	1.3	0
729	From fundamentals to frontiers: a review of memristor mechanisms, modeling and emerging applications. Journal of Materials Chemistry C, 2024, 12, 1583-1608.	2.7	0
734	The â€œInvisible Domainâ€•From Colloids and Interfaces to Nanosystems. , 2024, , .		0