John A Rogers

List of Publications by Year
in descending order

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Version: 2024-02-01

631 papers	90,634 citations	231 145 h-index	364 282 g-index
690 all docs	690 docs citations	690 times ranked	51135 citing authors

#	Article	IF	Citations
1	Materials and Mechanics for Stretchable Electronics. Science, 2010, 327, 1603-1607.	6.0	4,135
2	Epidermal Electronics. Science, 2011, 333, 838-843.	6.0	3,944
3	Nanostructured Plasmonic Sensors. Chemical Reviews, 2008, 108, 494-521.	23.0	2,245
4	A Stretchable Form of Single-Crystal Silicon for High-Performance Electronics on Rubber Substrates. Science, 2006, 311, 208-212.	6.0	1,531
5	Dissolvable films of silk fibroin for ultrathin conformal bio-integrated electronics. Nature Materials, 2010, 9, 511-517.	13.3	1,501
6	Stretchable and Foldable Silicon Integrated Circuits. Science, 2008, 320, 507-511.	6.0	1,474
7	Transfer printing by kinetic control of adhesion to an elastomeric stamp. Nature Materials, 2006, 5, 33-38.	13.3	1,348
8	High-resolution electrohydrodynamic jetÂprinting. Nature Materials, 2007, 6, 782-789.	13.3	1,231
9	Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems. Nature Communications, 2013, 4, 1543.	5.8	1,169
10	A Physically Transient Form of Silicon Electronics. Science, 2012, 337, 1640-1644.	6.0	1,085
11	Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes. Science, 2009, 323, 1590-1593.	6.0	1,072
12	Injectable, Cellular-Scale Optoelectronics with Applications for Wireless Optogenetics. Science, 2013, 340, 211-216.	6.0	1,010
13	Ultrathin conformal devices for precise and continuous thermal characterization of humanÂskin. Nature Materials, 2013, 12, 938-944.	13.3	1,002
14	High performance piezoelectric devices based on aligned arrays of nanofibers of poly(vinylidenefluoride-co-trifluoroethylene). Nature Communications, 2013, 4, 1633.	5.8	1,001
15	Soft Microfluidic Assemblies of Sensors, Circuits, and Radios for the Skin. Science, 2014, 344, 70-74.	6.0	982
16	Flexible, foldable, actively multiplexed, high-density electrode array for mapping brain activity in vivo. Nature Neuroscience, 2011, 14, 1599-1605.	7.1	981
17	A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. Science Translational Medicine, 2016, 8, 366ra165.	5.8	933
18	Bio-Integrated Wearable Systems: A Comprehensive Review. Chemical Reviews, 2019, 119, 5461-5533.	23.0	822

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19	Fractal design concepts for stretchable electronics. Nature Communications, 2014, 5, 3266.	5.8	821
20	Controlled buckling of semiconductor nanoribbons for stretchable electronics. Nature Nanotechnology, 2006, 1, 201-207.	15.6	817
21	Bioresorbable silicon electronic sensors for the brain. Nature, 2016, 530, 71-76.	13.7	778
22	Conformable amplified lead zirconate titanate sensors with enhanced piezoelectric response for cutaneous pressure monitoring. Nature Communications, 2014, 5, 4496.	5.8	757
23	Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. Science, 2015, 347, 154-159.	6.0	745
24	Conformal piezoelectric energy harvesting and storage from motions of the heart, lung, and diaphragm. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1927-1932.	3.3	720
25	Multifunctional Epidermal Electronics Printed Directly Onto the Skin. Advanced Materials, 2013, 25, 2773-2778.	11.1	714
26	Highly Sensitive Skinâ€Mountable Strain Gauges Based Entirely on Elastomers. Advanced Functional Materials, 2012, 22, 4044-4050.	7.8	709
27	Materials for multifunctional balloon catheters with capabilities in cardiac electrophysiological mapping and ablation therapy. Nature Materials, 2011, 10, 316-323.	13.3	670
28	Soft, stretchable, fully implantable miniaturized optoelectronic systems for wireless optogenetics. Nature Biotechnology, 2015, 33, 1280-1286.	9.4	658
29	Materials and Optimized Designs for Humanâ€Machine Interfaces Via Epidermal Electronics. Advanced Materials, 2013, 25, 6839-6846.	11.1	649
30	Heterogeneous Three-Dimensional Electronics by Use of Printed Semiconductor Nanomaterials. Science, 2006, 314, 1754-1757.	6.0	632
31	Flexible and Stretchable Electronics for Biointegrated Devices. Annual Review of Biomedical Engineering, 2012, 14, 113-128.	5.7	631
32	Materials and noncoplanar mesh designs for integrated circuits with linear elastic responses to extreme mechanical deformations. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18675-18680.	3.3	625
33	Synthesis, assembly and applications of semiconductor nanomembranes. Nature, 2011, 477, 45-53.	13.7	615
34	Skin-integrated wireless haptic interfaces for virtual and augmented reality. Nature, 2019, 575, 473-479.	13.7	610
35	Stretchable Electronics: Materials Strategies and Devices. Advanced Materials, 2008, 20, 4887-4892.	11.1	565
36	Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine andÂrobotics. Nature Materials, 2010, 9, 929-937.	13.3	557

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37	Stretchable, Curvilinear Electronics Based on Inorganic Materials. Advanced Materials, 2010, 22, 2108-2124.	11.1	525
38	GaAs photovoltaics and optoelectronics using releasable multilayer epitaxial assemblies. Nature, 2010, 465, 329-333.	13.7	524
39	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. Science, 2019, 363, .	6.0	521
40	Battery-free, skin-interfaced microfluidic/electronic systems for simultaneous electrochemical, colorimetric, and volumetric analysis of sweat. Science Advances, 2019, 5, eaav3294.	4.7	497
41	3D multifunctional integumentary membranes for spatiotemporal cardiac measurements and stimulation across the entire epicardium. Nature Communications, 2014, 5, 3329.	5.8	485
42	Printing, folding and assembly methods for forming 3D mesostructures in advanced materials. Nature Reviews Materials, 2017, 2, .	23.3	463
43	Solution Casting and Transfer Printing Single-Walled Carbon Nanotube Films. Nano Letters, 2004, 4, 1643-1647.	4.5	447
44	Mechanisms, Capabilities, and Applications of Highâ€Resolution Electrohydrodynamic Jet Printing. Small, 2015, 11, 4237-4266.	5.2	437
45	A mechanically driven form of Kirigami as a route to 3D mesostructures in micro/nanomembranes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11757-11764.	3.3	429
46	Wireless Optofluidic Systems for Programmable InÂVivo Pharmacology and Optogenetics. Cell, 2015, 162, 662-674.	13.5	417
47	Bioresorbable silicon electronics for transient spatiotemporal mapping of electrical activity fromÂthe cerebral cortex. Nature Materials, 2016, 15, 782-791.	13.3	400
48	Polymer Imprint Lithography with Molecular-Scale Resolution. Nano Letters, 2004, 4, 2467-2471.	4.5	398
49	Soft network composite materials with deterministic and bio-inspired designs. Nature Communications, 2015, 6, 6566.	5.8	392
50	Recent progress in flexible and stretchable piezoelectric devices for mechanical energy harvesting, sensing and actuation. Extreme Mechanics Letters, 2016, 9, 269-281.	2.0	388
51	Conformal piezoelectric systems for clinical and experimental characterization of soft tissue biomechanics. Nature Materials, 2015, 14, 728-736.	13.3	387
52	Dissolvable Metals for Transient Electronics. Advanced Functional Materials, 2014, 24, 645-658.	7.8	379
53	Highâ€Performance Biodegradable/Transient Electronics on Biodegradable Polymers. Advanced Materials, 2014, 26, 3905-3911.	11.1	359
54	A wireless closed-loop system for optogenetic peripheral neuromodulation. Nature, 2019, 565, 361-365.	13.7	358

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55	Biaxially Stretchable â€œWavyâ€•Silicon Nanomembranes. Nano Letters, 2007, 7, 1655-1663.	4.5	356
56	Microstructured elastomeric surfaces with reversible adhesion and examples of their use in deterministic assembly by transfer printing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17095-17100.	3.3	356
57	High-Resolution Patterns of Quantum Dots Formed by Electrohydrodynamic Jet Printing for Light-Emitting Diodes. Nano Letters, 2015, 15, 969-973.	4.5	355
58	A Conformal, Bio-Interfaced Class of Silicon Electronics for Mapping Cardiac Electrophysiology. Science Translational Medicine, 2010, 2, 24ra22.	5.8	344
59	Transient, Biocompatible Electronics and Energy Harvesters Based on ZnO. Small, 2013, 9, 3398-3404.	5.2	342
60	Battery-free, stretchable optoelectronic systems for wireless optical characterization of the skin. Science Advances, 2016, 2, e1600418.	4.7	336
61	Wireless bioresorbable electronic system enables sustained nonpharmacological neuroregenerative therapy. Nature Medicine, 2018, 24, 1830-1836.	15.2	331
62	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	5.8	325
63	Flexible Near-Field Wireless Optoelectronics as Subdermal Implants for Broad Applications in Optogenetics. Neuron, 2017, 93, 509-521.e3.	3.8	323
64	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. Nature Electronics, 2019, 2, 26-35.	13.1	322
65	Soft, curved electrode systems capable of integration on the auricle as a persistent brainâ€“computer interface. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3920-3925.	3.3	319
66	Epidermal mechano-acoustic sensing electronics for cardiovascular diagnostics and human-machine interfaces. Science Advances, 2016, 2, e1601185.	4.7	310
67	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. Nature Communications, 2014, 5, 4779.	5.8	309
68	Stretchable, Transparent Graphene Interconnects for Arrays of Microscale Inorganic Light Emitting Diodes on Rubber Substrates. Nano Letters, 2011, 11, 3881-3886.	4.5	307
69	Skin-interfaced systems for sweat collection and analytics. Science Advances, 2018, 4, eaar3921.	4.7	303
70	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. Nature Materials, 2018, 17, 268-276.	13.3	297
71	Stretchable GaAs Photovoltaics with Designs That Enable High Areal Coverage. Advanced Materials, 2011, 23, 986-991.	11.1	285
72	Silk-based resorbable electronic devices for remotely controlled therapy and in vivo infection abatement. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17385-17389.	3.3	281

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73	Biodegradable Elastomers and Silicon Nanomembranes/Nanoribbons for Stretchable, Transient Electronics, and Biosensors. Nano Letters, 2015, 15, 2801-2808.	4.5	281
74	Semiconductor Wires and Ribbons for Highâ€•Performance Flexible Electronics. Angewandte Chemie - International Edition, 2008, 47, 5524-5542.	7.2	279
75	Materials for flexible bioelectronic systems as chronic neural interfaces. Nature Materials, 2020, 19, 590-603.	13.3	277
76	Distinct Subpopulations of Nucleus Accumbens Dynorphin Neurons Drive Aversion and Reward. Neuron, 2015, 87, 1063-1077.	3.8	276
77	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. Advanced Functional Materials, 2014, 24, 2028-2037.	7.8	273
78	Skin-interfaced biosensors for advanced wireless physiological monitoring in neonatal and pediatric intensive-care units. Nature Medicine, 2020, 26, 418-429.	15.2	272
79	Materials and Designs for Wireless Epidermal Sensors of Hydration and Strain. Advanced Functional Materials, 2014, 24, 3846-3854.	7.8	263
80	Materials, Designs, and Operational Characteristics for Fully Biodegradable Primary Batteries. Advanced Materials, 2014, 26, 3879-3884.	11.1	263
81	Wearable Sensors for Biochemical Sweat Analysis. Annual Review of Analytical Chemistry, 2019, 12, 1-22.	2.8	259
82	Origami MEMS and NEMS. MRS Bulletin, 2016, 41, 123-129.	1.7	253
83	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	11.6	253
84	Soft Materials in Neuroengineering for Hard Problems in Neuroscience. Neuron, 2015, 86, 175-186.	3.8	251
85	Buckling in serpentine microstructures and applications in elastomer-supported ultra-stretchable electronics with high areal coverage. Soft Matter, 2013, 9, 8062.	1.2	248
86	Miniaturized Batteryâ€Free Wireless Systems for Wearable Pulse Oximetry. Advanced Functional Materials, 2017, 27, 1604373.	7.8	248
87	Battery-free, wireless sensors for full-body pressure and temperature mapping. Science Translational Medicine, 2018, 10, .	5.8	247
88	An Epidermal Stimulation and Sensing Platform for Sensorimotor Prosthetic Control, Management of Lower Back Exertion, and Electrical Muscle Activation. Advanced Materials, 2016, 28, 4462-4471.	11.1	240
89	Soft, Skin-Integrated Multifunctional Microfluidic Systems for Accurate Colorimetric Analysis of Sweat Biomarkers and Temperature. ACS Sensors, 2019, 4, 379-388.	4.0	239
90	Fabricating Semiconductor Nano/Microwires and Transfer Printing Ordered Arrays of Them onto Plastic Substrates. Nano Letters, 2004, 4, 1953-1959.	4.5	237

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91	Capacitive Epidermal Electronics for Electrically Safe, Longâ€Term Electrophysiological Measurements. Advanced Healthcare Materials, 2014, 3, 642-648.	3.9	231
92	Controlled Mechanical Buckling for Origamiâ€Inspired Construction of 3D Microstructures in Advanced Materials. Advanced Functional Materials, 2016, 26, 2629-2639.	7.8	231
93	Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. Nature Communications, 2014, 5, 4938.	5.8	227
94	Multifunctional Skinâ€Like Electronics for Quantitative, Clinical Monitoring of Cutaneous Wound Healing. Advanced Healthcare Materials, 2014, 3, 1597-1607.	3.9	226
95	Epidermal Electronics with Advanced Capabilities in Near-Field Communication. Small, 2015, 11, 906-912.	5.2	224
96	A skin-attachable, stretchable integrated system based on liquid GaInSn for wireless human motion monitoring with multi-site sensing capabilities. NPG Asia Materials, 2017, 9, e443-e443.	3.8	223
97	Mechano-acoustic sensing of physiological processes and body motions via a soft wireless device placed at the suprasternal notch. Nature Biomedical Engineering, 2020, 4, 148-158.	11.6	223
98	Materials and Fabrication Processes for Transient and Bioresorbable Highâ€Performance Electronics. Advanced Functional Materials, 2013, 23, 4087-4093.	7.8	222
99	A nonlinear mechanics model of bio-inspired hierarchical lattice materials consisting of horseshoe microstructures. Journal of the Mechanics and Physics of Solids, 2016, 90, 179-202.	2.3	220
100	A curvy, stretchy future for electronics. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10875-10876.	3.3	213
101	Capacitively coupled arrays of multiplexed flexible silicon transistors for long-term cardiac electrophysiology. Nature Biomedical Engineering, 2017, 1, .	11.6	210
102	Electronic sensor and actuator webs for large-area complex geometry cardiac mapping and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19910-19915.	3.3	209
103	Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat. Advanced Healthcare Materials, 2017, 6, 1601355.	3.9	209
104	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. Science Advances, 2018, 4, eaau5849.	4.7	208
105	Waterproof, electronics-enabled, epidermal microfluidic devices for sweat collection, biomarker analysis, and thermography in aquatic settings. Science Advances, 2019, 5, eaau6356.	4.7	208
106	Double-heterojunction nanorod light-responsive LEDs for display applications. Science, 2017, 355, 616-619.	6.0	207
107	Dissolution Behaviors and Applications of Silicon Oxides and Nitrides in Transient Electronics. Advanced Functional Materials, 2014, 24, 4427-4434.	7.8	206
108	Nanoscale Patterns of Oligonucleotides Formed by Electrohydrodynamic Jet Printing with Applications in Biosensing and Nanomaterials Assembly. Nano Letters, 2008, 8, 4210-4216.	4.5	205

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109	Mechanical assembly of complex, 3D mesostructures from releasable multilayers of advanced materials. Science Advances, 2016, 2, e1601014.	4.7	200
110	Deformable, Programmable, and Shapeâ€Memorizing Microâ€Optics. Advanced Functional Materials, 2013, 23, 3299-3306.	7.8	199
111	Adaptive optoelectronic camouflage systems with designs inspired by cephalopod skins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12998-13003.	3.3	197
112	Silicon nanomembranes for fingertip electronics. Nanotechnology, 2012, 23, 344004.	1.3	196
113	Fully Biodegradable Microsupercapacitor for Power Storage in Transient Electronics. Advanced Energy Materials, 2017, 7, 1700157.	10.2	196
114	Assembly of Advanced Materials into 3D Functional Structures by Methods Inspired by Origami and Kirigami: A Review. Advanced Materials Interfaces, 2018, 5, 1800284.	1.9	195
115	Relation between blood pressure and pulse wave velocity for human arteries. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11144-11149.	3.3	193
116	Materials for Bioresorbable Radio Frequency Electronics. Advanced Materials, 2013, 25, 3526-3531.	11.1	189
117	Epidermal devices for noninvasive, precise, and continuous mapping of macrovascular and microvascular blood flow. Science Advances, 2015, 1, e1500701.	4.7	189
118	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. Nature Communications, 2018, 9, 1417.	5.8	189
119	Stretchable Ferroelectric Nanoribbons with Wavy Configurations on Elastomeric Substrates. ACS Nano, 2011, 5, 3326-3332.	7.3	188
120	Highâ€Efficiency, Microscale GaN Lightâ€Emitting Diodes and Their Thermal Properties on Unusual Substrates. Small, 2012, 8, 1643-1649.	5.2	187
121	Bioresorbable pressure sensors protected with thermally grown silicon dioxide for the monitoring of chronic diseases and healing processes. Nature Biomedical Engineering, 2019, 3, 37-46.	11.6	185
122	Mechanics of ultra-stretchable self-similar serpentine interconnects. Acta Materialia, 2013, 61, 7816-7827.	3.8	183
123	Mechanicallyâ€Guided Structural Designs in Stretchable Inorganic Electronics. Advanced Materials, 2020, 32, e1902254.	11.1	183
124	Molecular Scale Buckling Mechanics in Individual Aligned Single-Wall Carbon Nanotubes on Elastomeric Substrates. Nano Letters, 2008, 8, 124-130.	4.5	180
125	Holographic patterning of high-performance on-chip 3D lithium-ion microbatteries. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6573-6578.	3.3	179
126	Fabrication and application of flexible, multimodal light-emitting devices for wireless optogenetics. Nature Protocols, 2013, 8, 2413-2428.	5.5	177

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127	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
128	Catheter-integrated soft multilayer electronic arrays for multiplexed sensing and actuation during cardiac surgery. Nature Biomedical Engineering, 2020, 4, 997-1009.	11.6	175
129	Inkjet Printing of Regenerated Silk Fibroin: From Printable Forms to Printable Functions. Advanced Materials, 2015, 27, 4273-4279.	11.1	174
130	Triggered Transience of Metastable Poly(phthalaldehyde) for Transient Electronics. Advanced Materials, 2014, 26, 7637-7642.	11.1	173
131	Dissolution Chemistry and Biocompatibility of Single-Crystalline Silicon Nanomembranes and Associated Materials for Transient Electronics. ACS Nano, 2014, 8, 5843-5851.	7.3	171
132	Electronically Programmable, Reversible Shape Change in Twoâ€•and Threeâ€Dimensional Hydrogel Structures. Advanced Materials, 2013, 25, 1541-1546.	11.1	169
133	Wireless optoelectronic photometers for monitoring neuronal dynamics in the deep brain. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1374-E1383.	3.3	167
134	A fluorometric skin-interfaced microfluidic device and smartphone imaging module for <i>in situ</i> quantitative analysis of sweat chemistry. Lab on A Chip, 2018, 18, 2178-2186.	3.1	166
135	Fully implantable and bioresorbable cardiac pacemakers without leads or batteries. Nature Biotechnology, 2021, 39, 1228-1238.	9.4	163
136	Mechanics of Epidermal Electronics. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	161
137	25th Anniversary Article: Materials for Highâ€Performance Biodegradable Semiconductor Devices. Advanced Materials, 2014, 26, 1992-2000.	11.1	161
138	Flexible and Stretchable Antennas for Biointegrated Electronics. Advanced Materials, 2020, 32, e1902767.	11.1	158
139	Automated Atrial Fibrillation Detection using a Hybrid CNN-LSTM Network on Imbalanced ECG Datasets. Biomedical Signal Processing and Control, 2021, 63, 102194.	3.5	158
140	Bendable GaN high electron mobility transistors on plastic substrates. Journal of Applied Physics, 2006, 100, 124507.	1.1	157
141	Highly flexible, wearable, and disposable cardiac biosensors for remote and ambulatory monitoring. Npj Digital Medicine, 2018, 1, 2.	5.7	157
142	Fully implantable optoelectronic systems for battery-free, multimodal operation in neuroscience research. Nature Electronics, 2018, 1, 652-660.	13.1	157
143	Passive sweat collection and colorimetric analysis of biomarkers relevant to kidney disorders using a soft microfluidic system. Lab on A Chip, 2019, 19, 1545-1555.	3.1	157
144	CVD-grown monolayer MoS2 in bioabsorbable electronics and biosensors. Nature Communications, 2018, 9, 1690.	5.8	155

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145	Optimized Structural Designs for Stretchable Silicon Integrated Circuits. Small, 2009, 5, 2841-2847.	5.2	153
146	Thermally Triggered Degradation of Transient Electronic Devices. Advanced Materials, 2015, 27, 3783-3788.	11.1	153
147	Advanced Materials and Devices for Bioresorbable Electronics. Accounts of Chemical Research, 2018, 51, 988-998.	7.6	152
148	Emerging Modalities and Implantable Technologies for Neuromodulation. Cell, 2020, 181, 115-135.	13.5	152
149	Efficiency Enhancement of Organic Solar Cells Using Hydrophobic Antireflective Inverted Mothâ€Eye Nanopatterned PDMS Films. Advanced Energy Materials, 2014, 4, 1301315.	10.2	151
150	Miniaturized Flexible Electronic Systems with Wireless Power and Nearâ€Field Communication Capabilities. Advanced Functional Materials, 2015, 25, 4761-4767.	7.8	148
151	Recent Advances in Materials, Devices, and Systems for Neural Interfaces. Advanced Materials, 2018, 30, e1800534.	11.1	148
152	Dissolution Chemistry and Biocompatibility of Silicon- and Germanium-Based Semiconductors for Transient Electronics. ACS Applied Materials & Interfaces, 2015, 7, 9297-9305.	4.0	147
153	Bioresorbable optical sensor systems for monitoring of intracranial pressure and temperature. Science Advances, 2019, 5, eaaw1899.	4.7	146
154	Wireless, battery-free, fully implantable multimodal and multisite pacemakers for applications in small animal models. Nature Communications, 2019, 10, 5742.	5.8	146
155	Geckoâ€Inspired Controllable Adhesive Structures Applied to Micromanipulation. Advanced Functional Materials, 2012, 22, 1246-1254.	7.8	145
156	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	5.8	145
157	Inorganic semiconducting materials for flexible and stretchable electronics. Npj Flexible Electronics, 2017, 1, .	5.1	144
158	Stretchable, dynamic covalent polymers for soft, long-lived bioresorbable electronic stimulators designed to facilitate neuromuscular regeneration. Nature Communications, 2020, 11, 5990.	5.8	144
159	Mechanics of noncoplanar mesh design for stretchable electronic circuits. Journal of Applied Physics, 2009, 105, .	1.1	143
160	Printing-based assembly of quadruple-junction four-terminal microscale solar cells and their use in high-efficiency modules. Nature Materials, 2014, 13, 593-598.	13.3	143
161	Materials and Fractal Designs for 3D Multifunctional Integumentary Membranes with Capabilities in Cardiac Electrotherapy. Advanced Materials, 2015, 27, 1731-1737.	11.1	141
162	Inâ€Plane Deformation Mechanics for Highly Stretchable Electronics. Advanced Materials, 2017, 29, 1604989.	11.1	141

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163	Wireless and battery-free technologies for neuroengineering. Nature Biomedical Engineering, 2023, 7, 405-423.	11.6	141
164	Design and application of â€˜J-shapedâ€™ stressâ€“strain behavior in stretchable electronics: a review. Lab on A Chip, 2017, 17, 1689-1704.	3.1	140
165	Soft, thin skin-mounted power management systems and their use in wireless thermography. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6131-6136.	3.3	139
166	Skin sensors are the future of health care. Nature, 2019, 571, 319-321.	13.7	138
167	Wearable sensors for Parkinsonâ€™s disease: which data are worth collecting for training symptom detection models. Npj Digital Medicine, 2018, 1, 64.	5.7	137
168	Active, Programmable Elastomeric Surfaces with Tunable Adhesion for Deterministic Assembly by Transfer Printing. Advanced Functional Materials, 2012, 22, 4476-4484.	7.8	135
169	Biodegradable Thin Metal Foils and Spinâ€On Glass Materials for Transient Electronics. Advanced Functional Materials, 2015, 25, 1789-1797.	7.8	135
170	Materials and Device Designs for an Epidermal UV Colorimetric Dosimeter with Near Field Communication Capabilities. Advanced Functional Materials, 2017, 27, 1604465.	7.8	135
171	Inorganic semiconductor nanomaterials for flexible and stretchable bio-integrated electronics. NPG Asia Materials, 2012, 4, e15-e15.	3.8	134
172	Metal/Polymer Based Stretchable Antenna for Constant Frequency Farâ€Field Communication in Wearable Electronics. Advanced Functional Materials, 2015, 25, 6565-6575.	7.8	134
173	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. ACS Nano, 2019, 13, 10972-10979.	7.3	134
174	An analytical study of two-dimensional buckling of thin films on compliant substrates. Journal of Applied Physics, 2008, 103, .	1.1	133
175	Scaling laws for jet pulsations associated with high-resolution electrohydrodynamic printing. Applied Physics Letters, 2008, 92, .	1.5	133
176	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464.	3.3	129
177	Three-dimensional, multifunctional neural interfaces for cortical spheroids and engineered assembloids. Science Advances, 2021, 7, .	4.7	128
178	Shear-enhanced adhesiveless transfer printing for use in deterministic materials assembly. Applied Physics Letters, 2011, 98, .	1.5	127
179	Heterogeneously Integrated Optoelectronic Devices Enabled by Microâ€Transfer Printing. Advanced Optical Materials, 2015, 3, 1313-1335.	3.6	127
180	Battery-free, fully implantable optofluidic cuff system for wireless optogenetic and pharmacological neuromodulation of peripheral nerves. Science Advances, 2019, 5, eaaw5296.	4.7	127

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181	Structural forms of single crystal semiconductor nanoribbons for high-performance stretchable electronics. Journal of Materials Chemistry, 2007, 17, 832.	6.7	126
182	Epidermal Differential Impedance Sensor for Conformal Skin Hydration Monitoring. Biointerphases, 2012, 7, 52.	0.6	123
183	Continuous on-body sensing for the COVID-19 pandemic: Gaps and opportunities. Science Advances, 2020, 6, .	4.7	120
184	Three-dimensional electronic microfliers inspired by wind-dispersed seeds. Nature, 2021, 597, 503-510.	13.7	120
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