Enming Song

List of Publications by Year
in descending order

31 papers	2,097 citations	331670 21 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	2710 citing authors

#	Article	IF	Citations
1	Materials for flexible bioelectronic systems as chronic neural interfaces. Nature Materials, 2020, 19, 590-603.	27.5	277
2	Capacitively coupled arrays of multiplexed flexible silicon transistors for long-term cardiac electrophysiology. Nature Biomedical Engineering, 2017, 1, .	22.5	210
3	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.	7.1	175
4	Catheter-integrated soft multilayer electronic arrays for multiplexed sensing and actuation during cardiac surgery. Nature Biomedical Engineering, 2020, 4, 997-1009.	22.5	175
5	Emerging Modalities and Implantable Technologies for Neuromodulation. Cell, 2020, 181, 115-135.	28.9	152
6	Recent Advances in Materials, Devices, and Systems for Neural Interfaces. Advanced Materials, 2018, 30, e1800534.	21.0	148
7	Long-Lived, Transferred Crystalline Silicon Carbide Nanomembranes for Implantable Flexible Electronics. ACS Nano, 2019, 13, 11572-11581.	14.6	101
8	Materials and processing approaches for foundry-compatible transient electronics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5522-E5529.	7.1	93
9	Dissolution of Monocrystalline Silicon Nanomembranes and Their Use as Encapsulation Layers and Electrical Interfaces in Water-Soluble Electronics. ACS Nano, 2017, 11, 12562-12572.	14.6	82
10	Flexible electronic/optoelectronic microsystems with scalable designs for chronic biointegration. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15398-15406.	7.1	66
11	Miniaturized electromechanical devices for the characterization of the biomechanics of deep tissue. Nature Biomedical Engineering, 2021, 5, 759-771.	22.5	65
12	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.	5.1	61
13	Ultrathin Trilayer Assemblies as Long-Lived Barriers against Water and Ion Penetration in Flexible Bioelectronic Systems. ACS Nano, 2018, 12, 10317-10326.	14.6	57
14	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.	7.1	50
15	Transferred, Ultrathin Oxide Bilayers as Biofluid Barriers for Flexible Electronic Implants. Advanced Functional Materials, 2018, 28, 1702284.	14.9	49
16	Kinetics and Chemistry of Hydrolysis of Ultrathin, Thermally Grown Layers of Silicon Oxide as Biofluid Barriers in Flexible Electronic Systems. ACS Applied Materials & Interfaces, 2017, 9, 42633-42638.	8.0	45
17	Implantable Electronic Medicine Enabled by Bioresorbable Microneedles for Wireless Electrotherapy and Drug Delivery. Nano Letters, 2022, 22, 5944-5953.	9.1	36
18	Bendable Photodetector on Fibers Wrapped with Flexible Ultrathin Single Crystalline Silicon Nanomembranes. ACS Applied Materials & Interfaces, 2017, 9, 12171-12175.	8.0	34

#	Article	IF	Citations
19	Highâ€Temperatureâ€Triggered Thermally Degradable Electronics Based on Flexible Silicon Nanomembranes. Advanced Functional Materials, 2018, 28, 1801448.	14.9	34
20	Stretchable Sweatâ€Activated Battery in Skinâ€Integrated Electronics for Continuous Wireless Sweat Monitoring. Advanced Science, 2022, 9, e2104635.	11.2	29
21	Barrier materials for flexible bioelectronic implants with chronic stabilityâ€"Current approaches and future directions. APL Materials, 2019, 7, 050902.	5.1	27
22	Silicon nanomembrane phototransistor flipped with multifunctional sensors toward smart digital dust. Science Advances, 2020, 6, eaaz6511.	10.3	24
23	Transient, Implantable, Ultrathin Biofuel Cells Enabled by Laser-Induced Graphene and Gold Nanoparticles Composite. Nano Letters, 2022, 22, 3447-3456.	9.1	19
24	Flexible Transient Phototransistors by Use of Waferâ€Compatible Transferred Silicon Nanomembranes. Small, 2018, 14, e1802985.	10.0	17
25	Ultrathin, High Capacitance Capping Layers for Silicon Electronics with Conductive Interconnects in Flexible, Longâ€Lived Bioimplants. Advanced Materials Technologies, 2020, 5, 1900800.	5.8	17
26	Stability of MOSFET-Based Electronic Components in Wearable and Implantable Systems. IEEE Transactions on Electron Devices, 2017, 64, 3443-3451.	3.0	16
27	Schottky contact on ultra-thin silicon nanomembranes under light illumination. Nanotechnology, 2014, 25, 485201.	2.6	12
28	Thicknessâ€Dependent Electronic Transport in Ultrathin, Single Crystalline Silicon Nanomembranes. Advanced Electronic Materials, 2019, 5, 1900232.	5.1	10
29	Bioresorbable Multilayer Photonic Cavities as Temporary Implants for Tether-Free Measurements of Regional Tissue Temperatures. BME Frontiers, 2021, 2021, .	4.5	7
30	Recent advances in microsystem approaches for mechanical characterization of soft biological tissues. Microsystems and Nanoengineering, 2022, 8, .	7.0	6
31	Transient Electronics: Highâ€Temperatureâ€Triggered Thermally Degradable Electronics Based on Flexible Silicon Nanomembranes (Adv. Funct. Mater. 45/2018). Advanced Functional Materials, 2018, 28, 1870323.	14.9	3