Ki Jun Yu

List of Publications by Year
in descending order

49 papers	10,777 citations	109264 35 h-index	197736 49 g-index
52 all docs	52 docs citations	52 times ranked	12685 citing authors

#	Article	IF	Citations
1	Ultrahigh Sensitive Auâ€Doped Silicon Nanomembrane Based Wearable Sensor Arrays for Continuous Skin Temperature Monitoring with High Precision. Advanced Materials, 2022, 34, e2105865.	11.1	69
2	Ultraâ€Low Cost, Facile Fabrication of Transparent Neural Electrode Array for Electrocorticography with Photoelectric Artifactâ€Free Optogenetics. Advanced Functional Materials, 2022, 32, .	7.8	34
3	Flexible InGaP/GaAs Tandem Solar Cells Encapsulated with Ultrathin Thermally Grown Silicon Dioxide as a Permanent Water Barrier and an Antireflection Coating. ACS Applied Energy Materials, 2022, 5, 227-233.	2.5	6
4	VR-enabled portable brain-computer interfaces via wireless soft bioelectronics. Biosensors and Bioelectronics, 2022, 210, 114333.	5.3	14
5	Transparent neural implantable devices: a comprehensive review of challenges and progress. Npj Flexible Electronics, 2022, 6, .	5.1	25
6	Flexible GaAs Photodetectors with Ultrathin Thermally Grown Silicon Dioxide as a Longâ€Lived Barrier for Chronic Biomedical Implants. Advanced Photonics Research, 2021, 2, 2000051.	1.7	4
7	Ultra-Lightweight, Flexible InGaP/GaAs Tandem Solar Cells with a Dual-Function Encapsulation Layer. ACS Applied Materials & Interfaces, 2021, 13, 13248-13253.	4.0	25
8	Recent developments of emerging inorganic, metal and carbon-based nanomaterials for pressure sensors and their healthcare monitoring applications. Nano Research, 2021, 14, 3096-3111.	5.8	37
9	Emerging Materials and Technologies with Applications in Flexible Neural Implants: A Comprehensive Review of Current Issues with Neural Devices. Advanced Materials, 2021, 33, e2005786.	11.1	51
10	Wireless Soft Scalp Electronics and Virtual Reality System for Motor Imageryâ€Based Brainâ€“Machine Interfaces. Advanced Science, 2021, 8, e2101129.	5.6	31
11	Ultrathin, High Capacitance Capping Layers for Silicon Electronics with Conductive Interconnects in Flexible, Longâ€Lived Bioimplants. Advanced Materials Technologies, 2020, 5, 1900800.	3.0	17
12	Adaptive self-healing electronic epineurium for chronic bidirectional neural interfaces. Nature Communications, 2020, 11, 4195.	5.8	60
13	Soft, wireless periocular wearable electronics for real-time detection of eye vergence in a virtual reality toward mobile eye therapies. Science Advances, 2020, 6, eaay1729.	4.7	98
14	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	5.8	145
15	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.	3.3	66
16	Flexible Water-proof Bio-Integrated Electronics. , 2019, , .		0
17	Electronic and Thermal Properties of Graphene and Recent Advances in Graphene Based Electronics Applications. Nanomaterials, 2019, 9, 374.	1.9	238
18	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	11.6	253

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19	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
20	Biodegradable Monocrystalline Silicon Photovoltaic Microcells as Power Supplies for Transient Biomedical Implants. Advanced Energy Materials, 2018, 8, 1703035.	10.2	98
21	Transferred, Ultrathin Oxide Bilayers as Biofluid Barriers for Flexible Electronic Implants. Advanced Functional Materials, 2018, 28, 1702284.	7.8	49
22	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
23	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
24	Flexible and Stretchable Bio-Integrated Electronics Based on Carbon Nanotube and Graphene. Materials, 2018, 11, 1163.	1.3	54
25	Novel Nano-Materials and Nano-Fabrication Techniques for Flexible Electronic Systems. Micromachines, 2018, 9, 263.	1.4	38
26	On-Demand Drug Release from Gold Nanoturf for a Thermo- and Chemotherapeutic Esophageal Stent. ACS Nano, 2018, 12, 6756-6766.	7.3	34
27	Stretchable Electronics: Inâ€Plane Deformation Mechanics for Highly Stretchable Electronics (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	5
28	Capacitively coupled arrays of multiplexed flexible silicon transistors for long-term cardiac electrophysiology. Nature Biomedical Engineering, 2017, 1, .	11.6	210
29	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	5.8	325
30	Inâ€Plane Deformation Mechanics for Highly Stretchable Electronics. Advanced Materials, 2017, 29, 1604989.	11.1	141
31	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
32	Inorganic semiconducting materials for flexible and stretchable electronics. Npj Flexible Electronics, 2017, 1, .	5.1	144
33	Dissolution of Monocrystalline Silicon Nanomembranes and Their Use as Encapsulation Layers and Electrical Interfaces in Water-Soluble Electronics. ACS Nano, 2017, 11, 12562-12572.	7.3	82
34	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.	4.0	45
35	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
36	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

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37	Multilayer Transfer Printing for Pixelated, Multicolor Quantum Dot Light-Emitting Diodes. ACS Nano, 2016, 10, 4920-4925.	7.3	115
38	Bioresorbable silicon electronics for transient spatiotemporal mapping of electrical activity fromÂthe cerebral cortex. Nature Materials, 2016, 15, 782-791.	13.3	400
39	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
40	Soft Materials in Neuroengineering for Hard Problems in Neuroscience. Neuron, 2015, 86, 175-186.	3.8	251
41	Soft network composite materials with deterministic and bio-inspired designs. Nature Communications, 2015, 6, 6566.	5.8	392
42	Deterministic assembly of releasable single crystal silicon-metal oxide field-effect devices formed from bulk wafers. Applied Physics Letters, 2013, 102, .	1.5	34
43	Ultrathin conformal devices for precise and continuous thermal characterization of humanÂskin. Nature Materials, 2013, 12, 938-944.	13.3	1,002
44	Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells. Advanced Energy Materials, 2013, 3, 1401-1406.	10.2	61
45	Materials and Fabrication Processes for Transient and Bioresorbable Highâ€Performance Electronics. Advanced Functional Materials, 2013, 23, 4087-4093.	7.8	222
46	Light Trapping: Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	10.2	4
47	A Physically Transient Form of Silicon Electronics. Science, 2012, 337, 1640-1644.	6.0	1,085
48	Epidermal Electronics. Science, 2011, 333, 838-843.	6.0	3,944
49	Compact monocrystalline silicon solar modules with high voltage outputs and mechanically flexible designs. Energy and Environmental Science, 2010, 3, 208.	15.6	65