Kyung-In Jang

List of Publications by Citations

55 papers	6,012 citations	30 h-index	62 g-index
62 ext. papers	7,118 ext. citations	15 avg, IF	4.96 L-index

#	Paper	IF	Citations
55	A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. *Science Translational Medicine*, **2016**, 8, 366ra165	17.5	665
54	Materials science. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. *Science*, **2015**, 347, 154-9	33.3	587
53	Soft, stretchable, fully implantable miniaturized optoelectronic systems for wireless optogenetics. *Nature Biotechnology*, **2015**, 33, 1280-1286	44.5	510
52	3D multifunctional integumentary membranes for spatiotemporal cardiac measurements and stimulation across the entire epicardium. *Nature Communications*, **2014**, 5, 3329	17.4	384
51	Wireless Optofluidic Systems for Programmable In Vivo Pharmacology and Optogenetics. *Cell*, **2015**, 162, 662-74	56.2	326
50	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. *Science*, **2019**, 363,	33.3	316
49	Soft network composite materials with deterministic and bio-inspired designs. *Nature Communications*, **2015**, 6, 6566	17.4	289
48	Battery-free, stretchable optoelectronic systems for wireless optical characterization of the skin. *Science Advances*, **2016**, 2, e1600418	14.3	266
47	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. *Nature Communications*, **2014**, 5, 4779	17.4	245
46	Self-assembled three dimensional network designs for soft electronics. *Nature Communications*, **2017**, 8, 15894	17.4	238
45	Epidermal mechano-acoustic sensing electronics for cardiovascular diagnostics and human-machine interfaces. *Science Advances*, **2016**, 2, e1601185	14.3	220
44	Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. *Nature Communications*, **2014**, 5, 4938	17.4	185
43	Miniaturized Battery-Free Wireless Systems for Wearable Pulse Oximetry. *Advanced Functional Materials*, **2017**, 27, 1604373	15.6	182
42	Multifunctional skin-like electronics for quantitative, clinical monitoring of cutaneous wound healing. *Advanced Healthcare Materials*, **2014**, 3, 1597-607	10.1	175
41	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	5	155
40	Miniaturized Flexible Electronic Systems with Wireless Power and Near-Field Communication Capabilities. *Advanced Functional Materials*, **2015**, 25, 4761-4767	15.6	114
39	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, 6131-6	11.5	108

38	Soft Core/Shell Packages for Stretchable Electronics. *Advanced Functional Materials*, **2015**, 25, 3698-3704	15.6	98
37	Stretchable multichannel antennas in soft wireless optoelectronic implants for optogenetics. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E8169-E8177	11.5	84
36	Design of Strain-Limiting Substrate Materials for Stretchable and Flexible Electronics. *Advanced Functional Materials*, **2016**, 26, 5345-5351	15.6	75
35	Miniaturized, Battery-Free Optofluidic Systems with Potential for Wireless Pharmacology and Optogenetics. *Small*, **2018**, 14, 1702479	11	66
34	Biological lipid membranes for on-demand, wireless drug delivery from thin, bioresorbable electronic implants. *NPG Asia Materials*, **2015**, 7,	10.3	61
33	Epidermal radio frequency electronics for wireless power transfer. *Microsystems and Nanoengineering*, **2016**, 2, 16052	7.7	55
32	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. *Advanced Functional Materials*, **2017**, 9, 1605476	15.6	51
31	Wireless optofluidic brain probes for chronic neuropharmacology and photostimulation. *Nature Biomedical Engineering*, **2019**, 3, 655-669	19	50
30	The equivalent medium of cellular substrate under large stretching, with applications to stretchable electronics. *Journal of the Mechanics and Physics of Solids*, **2018**, 120, 199-207	5	45
29	Preparation and implementation of optofluidic neural probes for in vivo wireless pharmacology and optogenetics. *Nature Protocols*, **2017**, 12, 219-237	18.8	44
28	Ferromagnetic, folded electrode composite as a soft interface to the skin for long-term electrophysiological recording. *Advanced Functional Materials*, **2016**, 26, 7281-7290	15.6	40
27	Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. *Advanced Functional Materials*, **2015**, 25, 1338-1343	15.6	34
26	Epidermal electronics for electromyography: An application to swallowing therapy. *Medical Engineering and Physics*, **2016**, 38, 807-12	2.4	31
25	Ultra-thin films with highly absorbent porous media fine-tunable for coloration and enhanced color purity. *Nanoscale*, **2017**, 9, 2986-2991	7.7	30
24	Stretchable and suturable fibre sensors for wireless monitoring of connective tissue strain. *Nature Electronics*, **2021**, 4, 291-301	28.4	30
23	Dry Transient Electronic Systems by Use of Materials that Sublime. *Advanced Functional Materials*, **2017**, 27, 1606008	15.6	27
22	Mechanically Guided Post-Assembly of 3D Electronic Systems. *Advanced Functional Materials*, **2018**, 28, 1803149	15.6	26
21	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. *ACS Nano*, **2018**, 12, 4164-4171	16.7	23

20	Continuous monitoring of deep-tissue haemodynamics with stretchable ultrasonic phased arrays. *Nature Biomedical Engineering*, **2021**, 5, 749-758	19	23
19	Ultrastretchable Helical Conductive Fibers Using Percolated Ag Nanoparticle Networks Encapsulated by Elastic Polymers with High Durability in Omnidirectional Deformations for Wearable Electronics. *Advanced Functional Materials*, **2020**, 30, 1910026	15.6	22
18	Outdoor-Useable, Wireless/Battery-Free Patch-Type Tissue Oximeter with Radiative Cooling. *Advanced Science*, **2021**, 8, 2004885	13.6	21
17	Wrinkling of a stiff thin film bonded to a pre-strained, compliant substrate with finite thickness. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2016**, 472, 20160339	2.4	20
16	Thin Metallic Heat Sink for Interfacial Thermal Management in Biointegrated Optoelectronic Devices. *Advanced Materials Technologies*, **2018**, 3, 1800159	6.8	17
15	Self-Bondable and Stretchable Conductive Composite Fibers with Spatially Controlled Percolated Ag Nanoparticle Networks: Novel Integration Strategy for Wearable Electronics. *Advanced Functional Materials*, **2020**, 30, 2005447	15.6	15
14	Electrochemical oxidation assisted micromachining of glassy carbon substrate. *International Journal of Precision Engineering and Manufacturing*, **2015**, 16, 419-422	1.7	11
13	Stretchable Electronics: Epidermal Electronics with Advanced Capabilities in Near-Field Communication (Small 8/2015). *Small*, **2015**, 11, 905-905	11	8
12	Ultrasensitive and Stretchable Conductive Fibers Using Percolated Pd Nanoparticle Networks for Multisensing Wearable Electronics: Crack-Based Strain and H Sensors. *ACS Applied Materials & Interfaces*, **2020**, 12, 45243-45253	9.5	8
11	Epidermal Systems: Soft Core/Shell Packages for Stretchable Electronics (Adv. Funct. Mater. 24/2015). *Advanced Functional Materials*, **2015**, 25, 3697-3697	15.6	5
10	Rapidly-customizable, scalable 3D-printed wireless optogenetic probes for versatile applications in neuroscience. *Advanced Functional Materials*, **2020**, 30, 2004285	15.6	5
9	Instant, multiscale dry transfer printing by atomic diffusion control at heterogeneous interfaces. *Science Advances*, **2021**, 7,	14.3	4
8	Oximetry: Miniaturized Battery-Free Wireless Systems for Wearable Pulse Oximetry (Adv. Funct. Mater. 1/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	3
7	Self-Cooling Gallium-Based Transformative Electronics with a Radiative Cooler for Reliable Stiffness Tuning in Outdoor Use. *Advanced Science*,2202549	13.6	3
6	Epidermal Electronics: Miniaturized Flexible Electronic Systems with Wireless Power and Near-Field Communication Capabilities (Adv. Funct. Mater. 30/2015). *Advanced Functional Materials*, **2015**, 25, 4919-4919	15.6	2
5	Electronic Stuctures: Mechanically Guided Post-Assembly of 3D Electronic Systems (Adv. Funct. Mater. 48/2018). *Advanced Functional Materials*, **2018**, 28, 1870344	15.6	1
4	Closed-Loop Neuromodulation for Parkinson's Disease: Current State and Future Directions. *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, **2020**, 1-1	2.3	0
3	Electrodes: Ferromagnetic, Folded Electrode Composite as a Soft Interface to the Skin for Long-Term Electrophysiological Recording (Adv. Funct. Mater. 40/2016). *Advanced Functional Materials*, **2016**, 26, 7280-7280	15.6	

2	Optogenetic Probes: Rapidly Customizable, Scalable 3D-Printed Wireless Optogenetic Probes for Versatile Applications in Neuroscience (Adv. Funct. Mater. 46/2020). *Advanced Functional Materials*, **2020**, 30, 2070305	15.6
1	Cerebral Oximetry: Ultrastretchable Helical Conductive Fibers Using Percolated Ag Nanoparticle Networks Encapsulated by Elastic Polymers with High Durability in Omnidirectional Deformations for Wearable Electronics (Adv. Funct. Mater. 29/2020). *Advanced Functional Materials*, **2020**, 30, 2070198	15.6