# Kyung-In Jang

## List of Publications by Year in Descending Order



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| 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 | Outdoor-Useable, Wireless/Battery-Free Patch-Type Tissue Oximeter with Radiative Cooling. *Advanced Science*, **2021**, 8, 2004885 | 13.6 | 21 |
| 54 | Stretchable and suturable fibre sensors for wireless monitoring of connective tissue strain. *Nature Electronics*, **2021**, 4, 291-301 | 28.4 | 30 |
| 53 | Instant, multiscale dry transfer printing by atomic diffusion control at heterogeneous interfaces. *Science Advances*, **2021**, 7, | 14.3 | 4 |
| 52 | Continuous monitoring of deep-tissue haemodynamics with stretchable ultrasonic phased arrays. *Nature Biomedical Engineering*, **2021**, 5, 749-758 | 19 | 23 |
| 51 | 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 |
| 50 | Closed-Loop Neuromodulation for Parkinson Disease: Current State and Future Directions. *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, **2020**, 1-1 | 2.3 | 0 |
| 49 | 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 | |
| 48 | Rapidly-customizable, scalable 3D-printed wireless optogenetic probes for versatile applications in neuroscience. *Advanced Functional Materials*, **2020**, 30, 2004285 | 15.6 | 5 |
| 47 | 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 | |
| 46 | 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 |
| 45 | 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 |
| 44 | Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. *Science*, **2019**, 363, | 33.3 | 316 |
| 43 | Wireless optofluidic brain probes for chronic neuropharmacology and photostimulation. *Nature Biomedical Engineering*, **2019**, 3, 655-669 | 19 | 50 |
| 42 | Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. *ACS Nano*, **2018**, 12, 4164-4171 | 16.7 | 23 |
| 41 | Thin Metallic Heat Sink for Interfacial Thermal Management in Biointegrated Optoelectronic Devices. *Advanced Materials Technologies*, **2018**, 3, 1800159 | 6.8 | 17 |
| 40 | Miniaturized, Battery-Free Optofluidic Systems with Potential for Wireless Pharmacology and Optogenetics. *Small*, **2018**, 14, 1702479 | 11 | 66 |
| 39 | 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 |

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| 38 | Electronic Stuctures: Mechanically Guided Post-Assembly of 3D Electronic Systems (Adv. Funct. Mater. 48/2018). *Advanced Functional Materials*, **2018**, 28, 1870344 | 15.6 | 1 |
| 37 | Mechanically Guided Post-Assembly of 3D Electronic Systems. *Advanced Functional Materials*, **2018**, 28, 1803149 | 15.6 | 26 |
| 36 | Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. *Advanced Functional Materials*, **2017**, 9, 1605476 | 15.6 | 51 |
| 35 | Dry Transient Electronic Systems by Use of Materials that Sublime. *Advanced Functional Materials*, **2017**, 27, 1606008 | 15.6 | 27 |
| 34 | Self-assembled three dimensional network designs for soft electronics. *Nature Communications*, **2017**, 8, 15894 | 17.4 | 238 |
| 33 | Ultra-thin films with highly absorbent porous media fine-tunable for coloration and enhanced color purity. *Nanoscale*, **2017**, 9, 2986-2991 | 7.7 | 30 |
| 32 | Oximetry: Miniaturized Battery-Free Wireless Systems for Wearable Pulse Oximetry (Adv. Funct. Mater. 1/2017). *Advanced Functional Materials*, **2017**, 27, | 15.6 | 3 |
| 31 | Preparation and implementation of optofluidic neural probes for in vivo wireless pharmacology and optogenetics. *Nature Protocols*, **2017**, 12, 219-237 | 18.8 | 44 |
| 30 | Miniaturized Battery-Free Wireless Systems for Wearable Pulse Oximetry. *Advanced Functional Materials*, **2017**, 27, 1604373 | 15.6 | 182 |
| 29 | A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. *Science Translational Medicine*, **2016**, 8, 366ra165 | 17.5 | 665 |
| 28 | Epidermal mechano-acoustic sensing electronics for cardiovascular diagnostics and human-machine interfaces. *Science Advances*, **2016**, 2, e1601185 | 14.3 | 220 |
| 27 | 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 | |
| 26 | Epidermal radio frequency electronics for wireless power transfer. *Microsystems and Nanoengineering*, **2016**, 2, 16052 | 7.7 | 55 |
| 25 | Battery-free, stretchable optoelectronic systems for wireless optical characterization of the skin. *Science Advances*, **2016**, 2, e1600418 | 14.3 | 266 |
| 24 | Design of Strain-Limiting Substrate Materials for Stretchable and Flexible Electronics. *Advanced Functional Materials*, **2016**, 26, 5345-5351 | 15.6 | 75 |
| 23 | Epidermal electronics for electromyography: An application to swallowing therapy. *Medical Engineering and Physics*, **2016**, 38, 807-12 | 2.4 | 31 |
| 22 | 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 |
| 21 | 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 |

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|---|---|---|---|
| 20 | 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 |
| 19 | 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 |
| 18 | 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 |
| 17 | Stretchable Electronics: Epidermal Electronics with Advanced Capabilities in Near-Field Communication (Small 8/2015). *Small*, **2015**, 11, 905-905 | 11 | 8 |
| 16 | Wireless Optofluidic Systems for Programmable In Vivo Pharmacology and Optogenetics. *Cell*, **2015**, 162, 662-74 | 56.2 | 326 |
| 15 | Soft network composite materials with deterministic and bio-inspired designs. *Nature Communications*, **2015**, 6, 6566 | 17.4 | 289 |
| 14 | Electrochemical oxidation assisted micromachining of glassy carbon substrate. *International Journal of Precision Engineering and Manufacturing*, **2015**, 16, 419-422 | 1.7 | 11 |
| 13 | Biological lipid membranes for on-demand, wireless drug delivery from thin, bioresorbable electronic implants. *NPG Asia Materials*, **2015**, 7, | 10.3 | 61 |
| 12 | Soft, stretchable, fully implantable miniaturized optoelectronic systems for wireless optogenetics. *Nature Biotechnology*, **2015**, 33, 1280-1286 | 44.5 | 510 |
| 11 | Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. *Advanced Functional Materials*, **2015**, 25, 1338-1343 | 15.6 | 34 |
| 10 | Epidermal Systems: Soft Core/Shell Packages for Stretchable Electronics (Adv. Funct. Mater. 24/2015). *Advanced Functional Materials*, **2015**, 25, 3697-3697 | 15.6 | 5 |
| 9 | 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 |
| 8 | Miniaturized Flexible Electronic Systems with Wireless Power and Near-Field Communication Capabilities. *Advanced Functional Materials*, **2015**, 25, 4761-4767 | 15.6 | 114 |
| 7 | Soft Core/Shell Packages for Stretchable Electronics. *Advanced Functional Materials*, **2015**, 25, 3698-3704 | 15.6 | 98 |
| 6 | Materials science. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. *Science*, **2015**, 347, 154-9 | 33.3 | 587 |
| 5 | 3D multifunctional integumentary membranes for spatiotemporal cardiac measurements and stimulation across the entire epicardium. *Nature Communications*, **2014**, 5, 3329 | 17.4 | 384 |
| 4 | Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. *Nature Communications*, **2014**, 5, 4779 | 17.4 | 245 |
| 3 | Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. *Nature Communications*, **2014**, 5, 4938 | 17.4 | 185 |

# List of Publications

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| 2 | Multifunctional skin-like electronics for quantitative, clinical monitoring of cutaneous wound healing. *Advanced Healthcare Materials*, **2014**, 3, 1597-607 | 10.1 | 175 |
| 1 | Self-Cooling Gallium-Based Transformative Electronics with a Radiative Cooler for Reliable Stiffness Tuning in Outdoor Use. *Advanced Science*,2202549 | 13.6 | 3 |