Gunchul Shin

List of Publications by Citations

24 papers	3,266 citations	20 h-index	26 g-index
26 ext. papers	3,823 ext. citations	13.6 avg, IF	4.43 L-index

#	Paper	IF	Citations
24	Injectable, cellular-scale optoelectronics with applications for wireless optogenetics. *Science*, **2013**, 340, 211-6	33.3	832
23	Soft, stretchable, fully implantable miniaturized optoelectronic systems for wireless optogenetics. *Nature Biotechnology*, **2015**, 33, 1280-1286	44.5	510
22	Wireless Optofluidic Systems for Programmable In Vivo Pharmacology and Optogenetics. *Cell*, **2015**, 162, 662-74	56.2	326
21	Flexible Near-Field Wireless Optoelectronics as Subdermal Implants for Broad Applications in Optogenetics. *Neuron*, **2017**, 93, 509-521.e3	13.9	225
20	Distinct Subpopulations of Nucleus Accumbens Dynorphin Neurons Drive Aversion and Reward. *Neuron*, **2015**, 87, 1063-77	13.9	197
19	Soft materials in neuroengineering for hard problems in neuroscience. *Neuron*, **2015**, 86, 175-86	13.9	195
18	Curvilinear electronics formed using silicon membrane circuits and elastomeric transfer elements. *Small*, **2009**, 5, 2703-9	11	186
17	Fabrication and application of flexible, multimodal light-emitting devices for wireless optogenetics. *Nature Protocols*, **2013**, 8, 2413-2428	18.8	142
16	Micromechanics and advanced designs for curved photodetector arrays in hemispherical electronic-eye cameras. *Small*, **2010**, 6, 851-6	11	84
15	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
14	Fully implantable, battery-free wireless optoelectronic devices for spinal optogenetics. *Pain*, **2017**, 158, 2108-2116	8	76
13	Optodynamic simulation of β-adrenergic receptor signalling. *Nature Communications*, **2015**, 6, 8480	17.4	66
12	Stretchable field-effect-transistor array of suspended SnO2 nanowires. *Small*, **2011**, 7, 1181-5	11	64
11	Ultraminiaturized photovoltaic and radio frequency powered optoelectronic systems for wireless optogenetics. *Journal of Neural Engineering*, **2015**, 12, 056002-56002	5	47
10	Paraboloid electronic eye cameras using deformable arrays of photodetectors in hexagonal mesh layouts. *Applied Physics Letters*, **2010**, 96, 021110	3.4	47
9	Preparation and implementation of optofluidic neural probes for in vivo wireless pharmacology and optogenetics. *Nature Protocols*, **2017**, 12, 219-237	18.8	44
8	White-Light Emitting Diode Array of p+-Si/Aligned n-SnO2 Nanowires Heterojunctions. *Advanced Functional Materials*, **2011**, 21, 119-124	15.6	37

List of Publications

7	Ultrathin Injectable Sensors of Temperature, Thermal Conductivity, and Heat Capacity for Cardiac Ablation Monitoring. *Advanced Healthcare Materials*, **2016**, 5, 373-81	10.1	36
6	Temperature- and size-dependent characteristics in ultrathin inorganic light-emitting diodes assembled by transfer printing. *Applied Physics Letters*, **2014**, 104, 051901	3.4	30
5	SnO2 nanowire logic devices on deformable nonplanar substrates. *ACS Nano*, **2011**, 5, 10009-16	16.7	28
4	Soft, Wirelessly Powered Humidity Sensor Based on SnO Nanowires for Wireless/Wearable Sensor Application. *Materials*, **2020**, 13,	3.5	4
3	Studies of Parylene/Silicone-Coated Soft Bio-Implantable Optoelectronic Device. *Coatings*, **2020**, 10, 404	2.9	3
2	Biodegradable Optical Fiber in a Soft Optoelectronic Device for Wireless Optogenetic Applications. *Coatings*, **2020**, 10, 1153	2.9	3
1	Ultrathin Injectable Sensors: Ultrathin Injectable Sensors of Temperature, Thermal Conductivity, and Heat Capacity for Cardiac Ablation Monitoring (Adv. Healthcare Mater. 3/2016). *Advanced Healthcare Materials*, **2016**, 5, 394-394	10.1	