

Seung S Lee

List of Publications by Year in descending order

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68
papers

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citations

126907

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docs citations

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times ranked

3304
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface-Plasmon-Enhanced Near-Field Radiative Heat Transfer between Planar Surfaces with a Thin-Film Plasmonic Coupler. <i>Physical Review Applied</i> , 2020, 14, .	3.8	18
2	Near-Field Electroluminescent Refrigeration System Consisting of Two Graphene Schottky Diodes. <i>Journal of Heat Transfer</i> , 2020, 142, .	2.1	3
3	Optimization of a near-field thermophotovoltaic system operating at low temperature and large vacuum gap. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 210, 35-43.	2.3	38
4	Effects of multilayered graphene on the performance of near-field thermophotovoltaic system at longer vacuum gap distances. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 197, 84-94.	2.3	25
5	Ball driven type MEMS SAD for artillery fuse. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 015032.	2.6	14
6	Hyperbolic metamaterial-based near-field thermophotovoltaic system for hundreds of nanometer vacuum gap. <i>Optics Express</i> , 2016, 24, A635.	3.4	65
7	Near-field thermal radiation between doped silicon plates at nanoscale gaps. <i>Physical Review B</i> , 2015, 91, .	3.2	81
8	Graphene-assisted Si-InSb thermophotovoltaic system for low temperature applications. <i>Optics Express</i> , 2015, 23, A240.	3.4	70
9	A nanoradio utilizing the mechanical resonance of a vertically aligned nanopillar array. <i>Nanoscale</i> , 2014, 6, 2087.	5.6	3
10	Flexible Superhydrophobic Polymeric Surfaces with Micro-Nano hybrid Structures Using Black Silicon. <i>Macromolecular Materials and Engineering</i> , 2013, 298, 311-317.	3.6	12
11	Vertically aligned carbon nanopillars with size and spacing control for a transparent field emission display. <i>Nanotechnology</i> , 2013, 24, 025301.	2.6	7
12	Near-field thermal radiation between graphene-covered doped silicon plates. <i>Optics Express</i> , 2013, 21, 22173.	3.4	81
13	Flower-Like CuO Nanostructures for Enhanced Boiling. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2012, 16, 145-153.	2.6	60
14	Mass-producible superhydrophobic surfaces. <i>Chemical Communications</i> , 2011, 47, 12005.	4.1	17
15	Field Emission of ITO-Coated Vertically Aligned Nanowire Array. <i>Nanoscale Research Letters</i> , 2010, 5, 1128-1131.	5.7	4
16	Development of a miniature tunable stiffness display using MR fluids for haptic application. <i>Sensors and Actuators A: Physical</i> , 2010, 163, 180-190.	4.1	53
17	In vitro characterization of the invasiveness of polymer microneedle against skin. <i>International Journal of Pharmaceutics</i> , 2010, 397, 201-205.	5.2	36
18	High frequency carbon nanomechanical resonators embedded with carbon nanotube stiffening layers. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	4

#	ARTICLE	IF	CITATIONS
19	Nanoantenna using mechanical resonance. , 2010, , .		0
20	Patternable pyrolyzed carbon microspeak. , 2010, , .		0
21	Effect of applying modes of the polymer microneedle-roller on the permeation of ascorbic acid in rats. Journal of Drug Targeting, 2010, 18, 15-20.	4.4	30
22	Effect of microneedle on the pharmacokinetics of ketoprofen from its transdermal formulations. Drug Delivery, 2009, 16, 52-56.	5.7	34
23	Usefulness verification of biocompatible microneedle patch for transdermal drug delivery. , 2009, , .		1
24	Mass producible and biocompatible microneedle patch and functional verification of its usefulness for transdermal drug delivery. Biomedical Microdevices, 2009, 11, 1195-1203.	2.8	64
25	A Study on Field Emission Characteristics of Planar Graphene Layers Obtained from a Highly Oriented Pyrolyzed Graphite Block. Nanoscale Research Letters, 2009, 4, 1218-1221.	5.7	55
26	Improvement in antigen-delivery using fabrication of a grooves-embedded microneedle array. Sensors and Actuators B: Chemical, 2009, 137, 274-280.	7.8	60
27	Braille dot display module with a PDMS membrane driven by a thermopneumatic actuator. Sensors and Actuators A: Physical, 2009, 154, 238-246.	4.1	58
28	An electrochemical impedance biosensor with aptamer-modified pyrolyzed carbon electrode for label-free protein detection. Sensors and Actuators B: Chemical, 2008, 129, 372-379.	7.8	133
29	Rotation effect in split and recombination micromixing. Sensors and Actuators B: Chemical, 2008, 129, 364-371.	7.8	44
30	Piezoelectric microphone built on circular diaphragm. Sensors and Actuators A: Physical, 2008, 144, 367-373.	4.1	68
31	Application of Huygens-Fresnel diffraction principle for high aspect ratio SU-8 micro-/nanotip array. Optics Letters, 2008, 33, 40.	3.3	42
32	Influence of the delivery systems using a microneedle array on the permeation of a hydrophilic molecule, calcein. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 69, 1040-1045.	4.3	109
33	The fabrication of carbon nanostructures using electron beam resist pyrolysis and nanomachining processes for biosensing applications. Nanotechnology, 2008, 19, 215302.	2.6	9
34	Fabrication and characterization of freestanding 3D carbon microstructures using multi-exposures and resist pyrolysis. Journal of Micromechanics and Microengineering, 2008, 18, 035012.	2.6	41
35	Fabrication of high-aspect-ratio nano structures using a nano x-ray shadow mask. Journal of Micromechanics and Microengineering, 2008, 18, 015006.	2.6	13
36	Braille code display device with a PDMS membrane and thermopneumatic actuator. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	7

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37	Advanced design and experiment of a small-sized flywheel energy storage system using a high-temperature superconductor bearing. Superconductor Science and Technology, 2007, 20, 634-639.	3.5	11
38	Focal tunable liquid lens integrated with an electromagnetic actuator. Applied Physics Letters, 2007, 90, 121129.	3.3	120
39	A novel fabrication process for out-of-plane microneedle sheets of biocompatible polymer. Journal of Micromechanics and Microengineering, 2007, 17, 1184-1191.	2.6	86
40	Biosensor utilizing resist-derived carbon nanostructures. Applied Physics Letters, 2007, 90, 264103.	3.3	16
41	Shrinkage ratio of PDMS and its alignment method for the wafer level process. Microsystem Technologies, 2007, 14, 205-208.	2.0	122
42	A split and recombination micromixer fabricated in a PDMS three-dimensional structure. Journal of Micromechanics and Microengineering, 2006, 16, 1067-1072.	2.6	116
43	Replications and analysis of microlens array fabricated by a modified LIGA process. Polymer Engineering and Science, 2006, 46, 416-425.	3.1	30
44	Fabrication of a disposable biochip for measuring percent hemoglobin A1c (%HbA1c). Sensors and Actuators A: Physical, 2006, 130-131, 267-272.	4.1	20
45	Micro-channel flow analysis by a fringe element reconstruction method. Journal of Micromechanics and Microengineering, 2006, 16, 571-579.	2.6	1
46	Experiment and analysis for a small-sized flywheel energy storage system with a high-temperature superconductor bearing. Superconductor Science and Technology, 2006, 19, 217-222.	3.5	5
47	A novel method of microneedle array fabrication using inclined deep x-ray exposure. Journal of Physics: Conference Series, 2006, 34, 180-186.	0.4	11
48	PDMS Membrane Microactuator for Focal Tunable Microlens. , 2006, , .		0
49	Advanced Design and Experiment of a Micro Flywheel Energy Storage System With a High Temperature Superconductor Bearing. , 2006, , .		0
50	Fabrication of microneedle array using LIGA and hot embossing process. Microsystem Technologies, 2005, 11, 311-318.	2.0	95
51	A novel fabrication method of a microneedle array using inclined deep x-ray exposure. Journal of Micromechanics and Microengineering, 2005, 15, 903-911.	2.6	80
52	Novel Micro Gas Generator of Carbon Dioxide for Actuation and Gas Source. Transactions of the Korean Society of Mechanical Engineers, A, 2005, 29, 970-975.	0.2	0
53	A micropump operating with chemically produced oxygen gas. Sensors and Actuators A: Physical, 2004, 111, 8-13.	4.1	48
54	3D microfabrication with inclined/rotated UV lithography. Sensors and Actuators A: Physical, 2004, 111, 14-20.	4.1	150

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55	Deep X-ray mask with integrated electro-thermal micro xy-stage for 3D fabrication. Sensors and Actuators A: Physical, 2004, 111, 37-43.	4.1	9
56	A barrier embedded chaotic micromixer. Journal of Micromechanics and Microengineering, 2004, 14, 798-805.	2.6	215
57	Deep X-ray mask with integrated actuator for 3D microfabrication. Sensors and Actuators A: Physical, 2003, 108, 121-127.	4.1	12
58	Physical modeling and analysis of microlens formation fabricated by a modified LIGA process. Journal of Micromechanics and Microengineering, 2003, 13, 523-531.	2.6	13
59	Micro-channel filling flow considering surface tension effect. Journal of Micromechanics and Microengineering, 2002, 12, 236-246.	2.6	100
60	A simple method for microlens fabrication by the modified LIGA process. Journal of Micromechanics and Microengineering, 2002, 12, 334-340.	2.6	79
61	Deep X-Ray Mask With Integrated Actuator for 3D LIGA Process. , 2002, , .		2
62	A tetrahedral three-facet micro mirror with the inclined deep X-ray process. Sensors and Actuators A: Physical, 2001, 93, 157-161.	4.1	15
63	Theoretical and experimental study of MHD (magnetohydrodynamic) micropump. Sensors and Actuators A: Physical, 2000, 80, 84-89.	4.1	405
64	Piezoelectric cantilever voltage-to-frequency converter. Sensors and Actuators A: Physical, 1998, 71, 153-157.	4.1	22
65	Piezoelectric cantilever acoustic transducer. Journal of Micromechanics and Microengineering, 1998, 8, 230-238.	2.6	35
66	Piezoelectric cantilever microphone and microspeaker. Journal of Microelectromechanical Systems, 1996, 5, 238-242.	2.5	104
67	Self-excited piezoelectric cantilever oscillators. Sensors and Actuators A: Physical, 1996, 52, 41-45.	4.1	52
68	Self-excited Piezoelectric Cantilever Oscillators. , 0, , .		1