Joonwon Kim

List of Publications by Year
in descending order

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76	1,828	304743	289244
papers	citations	22 h-index	40 g-index

78	78	78	2195
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydroprinting Technology to Transfer Ultrathin, Transparent, and Doubleâ€Sided Conductive Nanomembranes for Multiscale 3D Conformal Electronics. Small Methods, 2022, 6, 2100869.	8.6	3
2	Cytocompatible asymmetrical coating for Janus carrier synthesis through capillary wetting and ascending. Journal of Colloid and Interface Science, 2022, 623, 54-62.	9.4	5
3	Omniâ€Liquid Droplet and Bubble Manipulation Platform Using Functional Organogel Blocks. Advanced Materials Interfaces, 2022, 9, .	3.7	2
4	Textile-type triboelectric nanogenerator using Teflon wrapping wires as wearable power source. Micro and Nano Systems Letters, 2022, 10, .	3.7	5
5	Embolization of Vascular Malformations via In Situ Photocrosslinking of Mechanically Reinforced Alginate Microfibers using an Opticalâ€Fiberâ€Integrated Microfluidic Device. Advanced Materials, 2021, 33, e2006759.	21.0	25
6	Hydrogel Microfibers: Embolization of Vascular Malformations via In Situ Photocrosslinking of Mechanically Reinforced Alginate Microfibers using an Opticalâ€Fiberâ€Integrated Microfluidic Device (Adv. Mater. 14/2021). Advanced Materials, 2021, 33, 2170111.	21.0	2
7	Enhancement of Steel Sandwich Sheet Adhesion Using Mechanical Interlocking Structures Formed by Electrochemical Etching. Langmuir, 2021, 37, 6702-6710.	3.5	5
8	Rapid and Accurate Manufacture of 3D Vascular Replicas with Smooth Inner Surfaces Using Waxâ€Coated Molds. Advanced Materials Technologies, 2021, 6, 2100220.	5.8	2
9	Double Side Electromagnetic Interferenceâ€Shielded Bendingâ€Insensitive Capacitiveâ€Type Flexible Touch Sensor with Linear Response over a Wide Detection Range. Advanced Materials Technologies, 2021, 6, 2100358.	5.8	20
10	A single snapshot multiplex immunoassay platform utilizing dense test lines based on engineered beads. Biosensors and Bioelectronics, 2021, 190, 113388.	10.1	16
11	Highâ€Resolution and Facile Patterning of Silver Nanowire Electrodes by Solventâ€Free Photolithographic Technique Using UVâ€Curable Pressure Sensitive Adhesive Film. Small Methods, 2021, 5, e2101049.	8.6	6
12	Analysis of liquid-type proof mass under oscillating conditions. Micro and Nano Systems Letters, 2020, 8, .	3.7	2
13	3D Vascular Replicas Composed of Elastomerâ€“Hydrogel Skin Multilayers for Simulation of Endovascular Intervention. Advanced Functional Materials, 2020, 30, 2003395.	14.9	19
14	3D Vascular Replicas: 3D Vascular Replicas Composed of Elastomerâ€“Hydrogel Skin Multilayers for Simulation of Endovascular Intervention (Adv. Funct. Mater. 51/2020). Advanced Functional Materials, 2020, 30, 2070341.	14.9	0
15	Effect of a Microstructured Dielectric Layer on a Bending-Insensitive Capacitive-Type Touch Sensor with Shielding. ACS Applied Electronic Materials, 2020, 2, 846-854.	4.3	10
16	Capacitiveâ€Type Twoâ€Axis Accelerometer with Liquidâ€Type Proof Mass. Advanced Electronic Materials, 2020, 6, 1901265.	5.1	7
17	Structural dimensions depending on light intensity in a 3D printing method that utilizes in situ light as a guide. Micro and Nano Systems Letters, 2020, 8, .	3.7	2
18	Continuous Single-Phase Flow-Assisted Isolation for Parallel Observation of Reactions Between Deterministically Paired Particles. Journal of Microelectromechanical Systems, 2019, 28, 882-889.	2.5	6

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19	Patternable particle microarray utilizing controllable particle delivery. Micro and Nano Systems Letters, 2019, 7, .	3.7	1
20	A New Dip Coating Method Using Supporting Liquid for Forming Uniformly Thick Layers on Serpentine 3D Substrates. Advanced Materials Interfaces, 2019, 6, 1901485.	3.7	15
21	3D Printing of Freestanding Overhanging Structures Utilizing an In Situ Light Guide. Advanced Materials Technologies, 2019, 4, 1900118.	5.8	12
22	Oscillatory flow-assisted efficient target enrichment with small volumes of sample by using a particle-based microarray device. Biosensors and Bioelectronics, 2019, 131, 280-286.	10.1	10
23	Development of an active reflector using a liquid metal droplet and application of endoscope to increase viewing angle. , 2019, , .		0
24	Chamber/Capsuleâ€Integrated Selfâ€Healing Coating on Glass for Preventing Crack Propagation. Macromolecular Materials and Engineering, 2018, 303, 1800041.	3.6	6
25	Finger-triggered portable PDMS suction cup for equipment-free microfluidic pumping. Micro and Nano Systems Letters, 2018, 6, .	3.7	21
26	Durable, scalable, and tunable omniphobicity on stainless steel mesh for separation of low surface tension liquid mixtures. Surface and Coatings Technology, 2018, 344, 394-401.	4.8	9
27	Microfluidic-based cell handling devices for biochemical applications. Journal of Micromechanics and Microengineering, 2018, 28, 123001.	2.6	13
28	Single-phase isolation of paired hetero particles within a microfluidic device for multiplex analysis without cross-contamination. , 2018, , .		1
29	Simple manufacturing approach for 3D overhanging structure of hydrogel with in-situ light-guiding mechanism. , 2018, , .		2
30	Robust capacitive touch sensor using liquid metal droplets with large dynamic range. Sensors and Actuators A: Physical, 2017, 259, 105-111.	4.1	22
31	Deterministic bead-in-droplet ejection utilizing an integrated plug-in bead dispenser for single beadâ€“based applications. Scientific Reports, 2017, 7, 46260.	3.3	10
32	Highâ€Density Microfluidic Particleâ€Clusterâ€Array Device for Parallel and Dynamic Study of Interaction between Engineered Particles. Advanced Materials, 2017, 29, 1701351.	21.0	13
33	Simple and robust resistive dual-axis accelerometer using a liquid metal droplet. Micro and Nano Systems Letters, 2017, 5, .	3.7	8
34	Drop-on-demand inkjet-based cell printing with 30-Î¼m nozzle diameter for cell-level accuracy. Biomicrofluidics, 2016, 10, 064110.	2.4	53
35	On-demand, parallel droplet merging method with non-contact droplet pairing in droplet-based microfluidics. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	115
36	Capillary waves in a sharp-edged slit driven by vertical vibration. Experimental Thermal and Fluid Science, 2016, 71, 52-56.	2.7	1

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37	Plug-in nanoliter pneumatic liquid dispenser with nozzle design flexibility. Biomicrofluidics, 2015, 9, 064102.	2.4	11
38	Three-dimensional digital microfluidic manipulation of droplets in oil medium. Scientific Reports, 2015, 5, 10685.	3.3	50
39	Development and analysis of a capacitive touch sensor using a liquid metal droplet. Journal of Micromechanics and Microengineering, 2015, 25, 095015.	2.6	10
40	Electrochemically etched porous stainless steel for enhanced oil retention. Surface and Coatings Technology, 2015, 264, 127-131.	4.8	31
41	A droplet-based fluorescence polarization immunoassay (dFPIA) platform for rapid and quantitative analysis of biomarkers. Biosensors and Bioelectronics, 2015, 67, 497-502.	10.1	22
42	Simple Approach to Superhydrophobic Nanostructured Al for Practical Antifrosting Application Based on Enhanced Self-propelled Jumping Droplets. ACS Applied Materials & Interfaces, 2015, 7, 7206-7213.	8.0	104
43	Arrayed-type touch sensor using micro liquid metal droplets with large dynamic range and high sensitivity. Sensors and Actuators A: Physical, 2015, 235, 151-157.	4.1	26
44	A Pneumatic Drop-on-Demand Printing System With an Extended Printable Liquid Range. Journal of Microelectromechanical Systems, 2015, 24, 768-770.	2.5	18
45	Integration of a microfluidic chip with a size-based cell bandpass filter for reliable isolation of single cells. Lab on A Chip, 2015, 15, 4128-4132.	6.0	34
46	Design optimization of duct-type AUVs using CFD analysis. Intelligent Service Robotics, 2015, 8, 233-245.	2.6	11
47	Drop splashing on a rough surface: How surface morphology affects splashing threshold. Applied Physics Letters, 2014, 104, .	3.3	55
48	A microfluidic-based dynamic microarray system with single-layer pneumatic valves for immobilization and selective retrieval of single microbeads. Microfluidics and Nanofluidics, 2014, 16, 623-633.	2.2	35
49	Effective three-dimensional superhydrophobic aerogel-coated channel for high efficiency water-droplet transport. Applied Physics Letters, 2014, 104, .	3.3	13
50	A micromachined differential resonant accelerometer based on robust structural design. Microelectronic Engineering, 2014, 129, 5-11.	2.4	20
51	Effects of drop viscosity on oscillation dynamics induced by AC electrowetting. Sensors and Actuators B: Chemical, 2014, 190, 48-54.	7.8	26
52	Integrated pneumatic micro-pumps for high-throughput droplet-based microfluidics. RSC Advances, 2014, 4, 20341-20345.	3.6	17
53	Effective three-dimensional superhydrophobic channel coating using organically modified silica aerogel. , 2013, , .		0
54	Pneumatic RF MEMS switch using a liquid metal droplet. Journal of Micromechanics and Microengineering, 2013, 23, 055006.	2.6	9

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55	Dynamics of water droplet on a heated nanotubes surface. Applied Physics Letters, 2013, 102, .	3.3	49
56	Investigation of Pool Boiling Critical Heat Flux Enhancement on a Modified Surface Through the Dynamic Wetting of Water Droplets. Journal of Heat Transfer, 2012, 134, .	2.1	16
57	Hydrodynamic trap-and-release of single particles using dual-function elastomeric valves: design, fabrication, and characterization. Microfluidics and Nanofluidics, 2012, 13, 835-844.	2.2	29
58	Wicking and Spreading of Water Droplets on Nanotubes. Langmuir, 2012, 28, 2614-2619.	3.5	46
59	Micro/nanostructure evolution of zircaloy surface using anodization technique: Application to nuclear fuel cladding modification. Applied Surface Science, 2012, 258, 8724-8731.	6.1	28
60	Drop Impact Characteristics and Structure Effects of Hydrophobic Surfaces with Micro- and/or Nanoscaled Structures. Langmuir, 2012, 28, 11250-11257.	3.5	87
61	The effect of capillary wicking action of micro/nano structures on pool boiling critical heat flux. International Journal of Heat and Mass Transfer, 2012, 55, 89-92.	4.8	104
62	Development of a dual-axis micromachined convective accelerometer with an effective heater geometry. Microelectronic Engineering, 2011, 88, 276-281.	2.4	17
63	Development and characterization of a novel configurable MEMS inertial switch using a microscale liquid-metal droplet in a microstructured channel. Sensors and Actuators A: Physical, 2011, 166, 234-240.	4.1	45
64	Effects of nano-fluid and surfaces with nano structure on the increase of CHF. Experimental Thermal and Fluid Science, 2010, 34, 487-495.	2.7	150
65	Development of a MEMS digital accelerometer (MDA) using a microscale liquid metal droplet in a microstructured photosensitive glass channel. Sensors and Actuators A: Physical, 2010, 159, 51-57.	4.1	27
66	Pool boiling CHF enhancement by micro/nanoscale modification of zircaloy-4 surface. Nuclear Engineering and Design, 2010, 240, 3350-3360.	1.7	164
67	Evaporation characteristics of a hydrophilic surface with micro-scale and/or nano-scale structures fabricated by sandblasting and aluminum anodization. Journal of Micromechanics and Microengineering, 2010, 20, 045008.	2.6	19
68	Wettability of dual-scaled surfaces fabricated by the combination of a conventional silicon wet-etching and a ZnO solution method. Journal of Micromechanics and Microengineering, 2009, 19, 095002.	2.6	18
69	A digital accelerometer using a microscale liquid-metal droplet in photosensitive glass channel. , 2009, , .		0
70	A Novel Configurable MEMS Inertial Switch using Microscale Liquid-Metal Droplet. , 2009, , .		13
71	A superhydrophobic dual-scale engineered lotus leaf. Journal of Micromechanics and Microengineering, 2008, 18, 015019.	2.6	36
72	Development of a complete dual-axis micromachined convective accelerometer with high sensitivity. , 2008, , .		10

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73	A novel thermal sensor to monitor the gas-liquid phase interface in microfluidic channels. , 2008, , .		0
74	Prediction of contact angle on a microline patterned surface. Surface Science, 2006, 600, L301-L304.	1.9	21
75	Using ewod (electrowetting-on-dielectric) actuation in a micro conveyor system. , 0, , .		0
76	EWOD (Electrowetting-on-Dielectric) Actuated Optical Micromirror. , 0, , .		5