

Joon-wan Kim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1088041/publications.pdf>

Version: 2024-02-01

36
papers

736
citations

623734

14
h-index

526287

27
g-index

37
all docs

37
docs citations

37
times ranked

653
citing authors

#	ARTICLE	IF	CITATIONS
1	Elastic Inflatable Actuators for Soft Robotic Applications. <i>Advanced Materials</i> , 2017, 29, 1604977.	21.0	300
2	Tube-type micropump by using electro-conjugated fluid (ECF). <i>Sensors and Actuators A: Physical</i> , 2012, 174, 155-161.	4.1	39
3	A bio-inspired 3D-printed hybrid finger with integrated ECF (electro-conjugate fluid) micropumps. <i>Sensors and Actuators A: Physical</i> , 2017, 257, 47-57.	4.1	31
4	A flexible electro-rheological microvalve (FERV) based on SU-8 cantilever structures and its application to microactuators. <i>Sensors and Actuators A: Physical</i> , 2009, 156, 366-372.	4.1	28
5	An MEMS-based multiple electro-rheological bending actuator system with an alternating pressure source. <i>Sensors and Actuators A: Physical</i> , 2016, 245, 68-75.	4.1	24
6	ECF (electro-conjugate fluid) finger with bidirectional motion and its application to a flexible hand. <i>Smart Materials and Structures</i> , 2019, 28, 025032.	3.5	24
7	Developing O/O (oil-in-oil) droplet generators on a chip by using ECF (electro-conjugate fluid) micropumps. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126669.	7.8	23
8	A study on an AC electroosmotic micropump using a square pole “ Slit electrode array. <i>Sensors and Actuators A: Physical</i> , 2017, 265, 152-160.	4.1	22
9	Triangular Prism and Slit Electrode Pair for ECF Jetting Fabricated by Thick Micromold and Electroforming as Micro Hydraulic Pressure Source for Soft Microrobots. <i>International Journal of Automation Technology</i> , 2016, 10, 470-478.	1.0	22
10	Soft fiber-reinforced bending finger with three chambers actuated by ECF (electro-conjugate fluid) pumps. <i>Sensors and Actuators A: Physical</i> , 2020, 310, 112034.	4.1	21
11	Active sorting of droplets by using an ECF (Electro-conjugate Fluid) micropump. <i>Sensors and Actuators A: Physical</i> , 2020, 303, 111702.	4.1	19
12	A micro vertically-allocated SU-8 check valve and its characteristics. <i>Microsystem Technologies</i> , 2019, 25, 245-255.	2.0	18
13	Fast packaging by a partially-crosslinked SU-8 adhesive tape for microfluidic sensors and actuators. <i>Sensors and Actuators A: Physical</i> , 2019, 289, 77-86.	4.1	16
14	A study on a soft microgripper using MEMS-based divided electrode type flexible electro-rheological valves. <i>Mechatronics</i> , 2015, 29, 103-109.	3.3	15
15	An intelligent microactuator robust against disturbance using electro-rheological fluid. <i>Sensors and Actuators A: Physical</i> , 2012, 175, 101-107.	4.1	13
16	Comprehending electro-conjugate fluid (ECF) jets by using the Onsager effect. <i>Sensors and Actuators A: Physical</i> , 2019, 295, 266-273.	4.1	11
17	Development of MEMS-fabricated bidirectional ECF (electro-conjugate fluid) micropumps. <i>Sensors and Actuators A: Physical</i> , 2019, 295, 317-323.	4.1	10
18	A droplet-generator-on-a-chip actuated by ECF (electro-conjugate fluid) micropumps. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	10

#	ARTICLE	IF	CITATIONS
19	Micro ECF (electro-conjugate fluid) hydraulic power sources based on the modular design of TPSEs (triangular prism and slit electrode pairs). <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 627-639.	3.0	10
20	A Novel Hybrid Removal Technology for High-Aspect-Ratio SU-8 Micromolds in ECF (Electro-Conjugate) Tj ETQq0 0 0 rgBT /Overlock 10 T 818-826.	2.5	9
21	A study on a hybrid structure flexible electro-rheological microvalve for soft microactuators. <i>Microsystem Technologies</i> , 2020, 26, 309-321.	2.0	9
22	Study on the fabrication of a SU-8 cantilever vertically-allocated in a closed fluidic microchannel. <i>Microsystem Technologies</i> , 2018, 24, 2473-2483.	2.0	8
23	Releasing large-area SU-8 structures without using any sacrificial layers. <i>Microelectronic Engineering</i> , 2019, 212, 53-60.	2.4	7
24	Soft actuator with switchable stiffness using a micropump-activated jamming system. <i>Sensors and Actuators A: Physical</i> , 2022, 338, 113449.	4.1	7
25	Concept of a Focus-Tunable ECF Microlens and Fabrication of a Large Model Prototype. <i>International Journal of Automation Technology</i> , 2012, 6, 476-481.	1.0	6
26	A novel bending microactuator with integrated flexible electro-rheological microvalves using an alternating pressure source for multi-actuator systems. <i>Microsystem Technologies</i> , 2020, 26, 1507-1519.	2.0	5
27	An ER Microactuator with Built-in Pump and Valve. <i>International Journal of Automation Technology</i> , 2012, 6, 468-475.	1.0	4
28	Effective and efficient removing method of micromolds in UV-LIGA using CO2 laser ablation followed by O2/CF4 plasma finishing for high-aspect-ratio metallic microstructures. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 110, 3391-3405.	3.0	3
29	Configurations of triangular prism and slit electrode pairs to enhance the performance of electro-conjugate fluid micropumps. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 025007.	2.6	3
30	Multilayer Fabrication of Micromolding and Electroforming with the Planarization of Grinding for High-Aspect-Ratio Microelectrodes in Electro-conjugate Fluid (ECF) Micropumps. <i>International Journal of Precision Engineering and Manufacturing</i> , 2020, 21, 927-936.	2.2	3
31	A multi-DOF soft microactuator integrated with flexible electro-rheological microvalves using an alternating pressure source. <i>Smart Materials and Structures</i> , 2021, 30, 085006.	3.5	3
32	Active microvalve driven by electro-conjugate fluid jet flow with a hydraulic power source on a chip. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 105013.	2.6	3
33	Fabrication, Experiment, and Simulation of a Flexible Microvalve-Integrated Microarm for Microgrippers Using Electrorheological Fluid. <i>Journal of Robotics and Mechatronics</i> , 2020, 32, 333-343.	1.0	3
34	A Microfabricated Pistonless Syringe Pump Driven by Electro-Conjugate Fluid with Leakless On/Off Microvalves. <i>Small</i> , 2022, 18, e2106221.	10.0	3
35	Alleviation of the adhesive protrusion problem at the bonding interface of free-standing microstructures. <i>Journal of Mechanical Science and Technology</i> , 2019, 33, 749-757.	1.5	2
36	Droplet Sorter using a Cantilever Actuated by Electro-Conjugate Fluid Micropumps. , 2019, . .		2