Frederik Ceyssens

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6884162/publications.pdf

Version: 2024-02-01

45	969	430874	454955
papers	citations	18 h-index	30 g-index

47	47	47	1429
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Digital microfluidics-enabled single-molecule detection by printing and sealing single magnetic beads in femtoliter droplets. Lab on A Chip, 2013, 13, 2047.	6.0	119
2	A versatile electrowetting-based digital microfluidic platform for quantitative homogeneous and heterogeneous bio-assays. Journal of Micromechanics and Microengineering, 2011, 21, 054026.	2.6	110
3	Biofunctionalization of electrowetting-on-dielectric digital microfluidic chips for miniaturized cell-based applications. Lab on A Chip, 2011, 11, 2790.	6.0	73
4	A high aspect ratio SU-8 fabrication technique for hollow microneedles for transdermal drug delivery and blood extraction. Journal of Micromechanics and Microengineering, 2010, 20, 064006.	2.6	70
5	Facile synthesis of Kevlar nanofibrous membranes via regeneration of hydrogen bonds for organic solvent nanofiltration. Journal of Membrane Science, 2019, 573, 612-620.	8.2	63
6	Creating multi-layered structures with freestanding parts in SU-8. Journal of Micromechanics and Microengineering, 2006, 16, S19-S23.	2.6	37
7	Insulation lifetime improvement of polyimide thin film neural implants. Journal of Neural Engineering, 2015, 12, 054001.	3.5	34
8	A highly efficient extraction protocol for magnetic particles on a digital microfluidic chip. Sensors and Actuators B: Chemical, 2014, 196, 282-291.	7.8	32
9	An ionic liquid based strain sensor for large displacement measurement. Biomedical Microdevices, 2017, 19, 1.	2.8	32
10	A PDMS lipseal for hydraulic and pneumatic microactuators. Journal of Micromechanics and Microengineering, 2007, 17, 1232-1237.	2.6	28
11	Actuators: Accomplishments, opportunities and challenges. Sensors and Actuators A: Physical, 2019, 295, 604-611.	4.1	25
12	A chip-based 128-channel potentiostat for high-throughput studies of bioelectrochemical systems: Optimal electrode potentials for anodic biofilms. Biosensors and Bioelectronics, 2021, 174, 112813.	10.1	23
13	Integrating optical waveguides in electrowetting-on-dielectric digital microfluidic chips. Sensors and Actuators B: Chemical, 2013, 181, 166-171.	7.8	22
14	Dextran as a Resorbable Coating Material for Flexible Neural Probes. Micromachines, 2019, 10, 61.	2.9	22
15	Deep etching of glass wafers using sputtered molybdenum masks. Journal of Micromechanics and Microengineering, 2009, 19, 067001.	2.6	20
16	Microsized Piston-Cylinder Pneumatic and Hydraulic Actuators Fabricated by Lithography. Journal of Microelectromechanical Systems, 2009, 18, 1100-1104.	2.5	20
17	Controlling droplet size variability of a digital lab-on-a-chip for improved bio-assay performance. Microfluidics and Nanofluidics, 2011, 11, 25-34.	2.2	20
18	Chronic neural recording with probes of subcellular cross-section using 0.06 mmÂ² dissolving microneedles as insertion device. Sensors and Actuators B: Chemical, 2019, 284, 369-376.	7.8	20

#	Article	IF	Citations
19	Flexible Metal Halide Perovskite Photodetector Arrays via Photolithography and Dry Liftâ€Off Patterning. Advanced Engineering Materials, 2022, 24, 2100930.	3.5	19
20	Fabrication process for tall, sharp, hollow, high aspect ratio polymer microneedles on a platform. Journal of Micromechanics and Microengineering, 2013, 23, 075023.	2.6	16
21	An Ionic Liquid Based Strain Sensor for Large Displacements. Procedia Engineering, 2014, 87, 1123-1126.	1.2	16
22	A low-cost and highly integrated fiber optical pressure sensor system. Sensors and Actuators A: Physical, 2008, 145-146, 81-86.	4.1	15
23	Resorbable scaffold based chronic neural electrode arrays. Biomedical Microdevices, 2013, 15, 481-493.	2.8	14
24	Lippmann waveguide spectrometer with enhanced throughput and bandwidth for space and commercial applications. Optics Express, 2018, 26, 2682.	3.4	14
25	System for recording from multiple flexible polyimide neural probes in freely behaving animals. Journal of Neural Engineering, 2020, 17, 016046.	3.5	13
26	Modelling, characterization and testing of an ortho-planar micro-valve. Journal of Micro-Nano Mechatronics, 2008, 4, 131-143.	1.0	11
27	Minimization of Ionic Transport Resistance in Porous Monoliths for Application in Integrated Solar Water Splitting Devices. Journal of Physical Chemistry C, 2016, 120, 21242-21247.	3.1	11
28	Design of a flow-controlled asymmetric droplet splitter using computational fluid dynamics. Microfluidics and Nanofluidics, 2013, 15, 243-252.	2.2	9
29	An optical absolute pressure sensor for high-temperature applications, fabricated directly on a fiber. Journal of Micromechanics and Microengineering, 2009, 19, 115017.	2.6	8
30	Fabrication of Nanostructured Platinum with Multilevel Porosity for Low Impedance Biomedical Recording and Stimulation Electrodes. Procedia Engineering, 2015, 120, 355-359.	1.2	8
31	Extracellular matrix proteins as temporary coating for thin-film neural implants. Journal of Neural Engineering, 2017, 14, 014001.	3.5	8
32	An EpoClad/EpoCore-based platform for MOEMS fabrication. Journal of Micromechanics and Microengineering, 2013, 23, 125005.	2.6	6
33	Three techniques for the fabrication of high precision, mm-sized metal components based on two-photon lithography, applied for manufacturing horn antennas for THz transceivers. Journal of Micromechanics and Microengineering, 2018, 28, 035008.	2.6	5
34	Anisotropic etching in (3â€‰1â€‰1) Si to fabricate sharp resorbable polymer microneedles carrying neural electrode arrays. Journal of Micromechanics and Microengineering, 2019, 29, 027001.	2.6	5
35	Fabrication and testing of a MEMS platform for characterization of stimuli-sensitive hydrogels. Journal of Micromechanics and Microengineering, 2012, 22, 087001.	2.6	4
36	Out-of-Plane Soft Lithography for Soft Pneumatic Microactuator Arrays. Soft Robotics, 2023, 10, 197-204.	8.0	4

#	Article	IF	Citations
37	Miniature Absolute Optical Pressure Sensor at a Fiber Tip for High Temperature Applications. Procedia Engineering, 2012, 47, 698-701.	1.2	3
38	Patterned dextran ester films as a tailorable cell culture platform. Carbohydrate Polymers, 2021, 252, 117183.	10.2	2
39	A MEMS Resonator as a Power Receiver for Inductively Powered Implantable Sensors. Procedia Engineering, 2015, 120, 570-573.	1.2	1
40	Fission thrust sail as booster for high Î”v fusion based propulsion. Acta Astronautica, 2015, 117, 319-331.	3.2	1
41	A foldable electrode array for 3D recording of deep-seated abnormal brain cavities. Journal of Neural Engineering, 2018, 15, 036029.	3.5	1
42	SU-8 Photoresist. , 2015, , 1-16.		1
43	Pattern transfer over extreme topographies using a SU-8 leveling process. , 2006, , .		0
44	An optical absolute pressure sensor for high-temperature applications, fabricated directly on a fiber. Journal of Micromechanics and Microengineering, 2010, 20, 029801-029801.	2.6	0
45	In-situ Growth of Platinum with Hierarchical Porosity for Low Impedance Biomedical Microelectrode Fabrication. Procedia Engineering, 2016, 168, 1122-1126.	1.2	0