

# Yoomin Ahn

## List of Publications by Year in descending order

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54  
papers

1,424  
citations

304743

22  
h-index

330143

37  
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54  
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54  
docs citations

54  
times ranked

1515  
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-laminar Microfluidic Microbial Fuel Cell Integrated with Electrophoretically Deposited Carbon Nanotube Flow-Over Electrode. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1839-1846.	6.7	7
2	Planar co-laminar flow microbial fuel cell with flow-through porous electrodes. <i>International Journal of Energy Research</i> , 2021, 45, 14071-14079.	4.5	2
3	Paper-based mediatorless enzymatic microfluidic biofuel cells. <i>Biosensors and Bioelectronics</i> , 2021, 190, 113391.	10.1	15
4	Microfabricated paper-based vanadium co-laminar flow fuel cell. <i>Journal of Power Sources</i> , 2020, 451, 227801.	7.8	19
5	Upscaling of microfluidic fuel cell using planar single stacks. <i>International Journal of Energy Research</i> , 2019, 43, 5027-5037.	4.5	11
6	Analysis and monitoring of mode transitions during afm nanomachining of IZO-Coated pyrex glass. <i>Machining Science and Technology</i> , 2019, 23, 39-56.	2.5	1
7	Design, Fabrication, and Testing of a Microfluidic Device for Thermotaxis and Chemotaxis Assays of Sperm. <i>SLAS Technology</i> , 2018, 23, 507-515.	1.9	40
8	Parylene C-coated PDMS-based microfluidic microbial fuel cells with low oxygen permeability. <i>Journal of Power Sources</i> , 2018, 398, 209-214.	7.8	28
9	Microfluidic biochips for simple impedimetric detection of thrombin based on label-free DNA aptamers. <i>Biochip Journal</i> , 2017, 11, 109-115.	4.9	17
10	A laminar flow-based single stack of flow-over planar microfluidic fuel cells. <i>Journal of Power Sources</i> , 2017, 351, 67-73.	7.8	30
11	Classification and prediction of burr formation in micro drilling of ductile metals. <i>International Journal of Production Research</i> , 2017, 55, 4833-4846.	7.5	11
12	Influence of electrode groove geometry on the passive control of the depletion layer in microfluidic fuel cells. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 127001.	2.6	14
13	Microfabricated, continuous-flow, microbial three-electrode cell for potential toxicity detection. <i>Biochip Journal</i> , 2015, 9, 27-34.	4.9	26
14	Microfluidic multiplex biochip based on a point-of-care electrochemical detection system for matrix metalloproteinases. <i>Journal of Electroanalytical Chemistry</i> , 2015, 756, 118-123.	3.8	16
15	Laminar flow-based micro fuel cell utilizing grooved electrode surface. <i>Journal of Power Sources</i> , 2014, 267, 731-738.	7.8	33
16	Development of microbiochip for detection of metalloproteinase 7 using fluorescence resonance energy transfer. <i>Biochip Journal</i> , 2013, 7, 164-172.	4.9	7
17	Disposable on-chip microfluidic system for buccal cell lysis, DNA purification, and polymerase chain reaction. <i>Electrophoresis</i> , 2013, 34, 2531-2537.	2.4	4
18	Development of Electrochemical Microbiochip for the Biological Diagnosis of <i>Neisseria gonorrhoeae</i> . <i>Analytical Sciences</i> , 2013, 29, 1203-1208.	1.6	3

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19	Separation of Progressive Motile Sperm from Mouse Semen Using On-chip Chemotaxis. <i>Analytical Sciences</i> , 2012, 28, 27-32.	1.6	43
20	An Integrated Microfluidic Device for Rapid Cell Lysis and DNA Purification of Epithelial Cell Samples. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 4250-4253.	0.9	3
21	DNA ligation using a disposable microfluidic device combined with a micromixer and microchannel reactor. <i>Sensors and Actuators B: Chemical</i> , 2011, 157, 735-741.	7.8	22
22	On-Chip Immunoassay Using Surface-Enhanced Raman Scattering of Hollow Gold Nanospheres. <i>Analytical Chemistry</i> , 2010, 82, 5290-5295.	6.5	110
23	Study on Microbiochip for Buccal Cell Lysis and DNA Purification. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2010, 34, 1785-1791.	0.2	0
24	Disposable thermo-pneumatic micropump for bio lab-on-a-chip application. <i>Microelectronic Engineering</i> , 2009, 86, 1337-1339.	2.4	41
25	A novel microfluidic biosensor based on an electrical detection system for alpha-fetoprotein. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1319-1325.	10.1	58
26	Real-time immunoassay with a PDMS-glass hybrid microfilter electro-immunosensing chip using nanogold particles and silver enhancement. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 327-333.	7.8	23
27	Micromachined Si cantilever arrays for parallel AFM operation. <i>Journal of Mechanical Science and Technology</i> , 2008, 22, 308-311.	1.5	11
28	Microchip-based multiplex electro-immunosensing system for the detection of cancer biomarkers. <i>Electrophoresis</i> , 2008, 29, 3466-3476.	2.4	62
29	Separation-Type Multiplex Polymerase Chain Reaction Chip for Detecting Male Infertility. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 5231-5235.	1.5	6
30	Development of a PDMS-Glass Hybrid Microchannel Mixer Composed of Micropillars and Micronozzles. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2008, 2, 445-454.	0.5	5
31	A Study About Biochip Combined with Micro Mixer and Reactor for DNA Ligation. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2008, 32, 624-632.	0.2	1
32	Development of Detachable PDMS/Glass PCR-Chip and It's Application to Detection of Male Infertility. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2008, 32, 371-377.	0.2	0
33	A Study About PDMS-Glass Based Thermopneumatic Micropump Integrated with Check Valve. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2008, 32, 720-727.	0.2	1
34	A Study About Microbiochip for Separation of Motile Sperm by Using Chemotaxis. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2008, 32, 1115-1122.	0.2	1
35	Separation type multiplex PCR chip for detecting male infertility. , 2007, , .		0
36	PDMS-glass serpentine microchannel chip for time domain PCR with bubble suppression in sample injection. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 1810-1817.	2.6	21

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37	P-36 Development of PDMS-glass hybrid microchannel mixer composed of micropillars and micronozzles. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _P-36-1_-_P-36-5_.	0.0	0
38	Mixing Efficiency Evaluation in Y-channel Micromixer Using LIF Confocal Microscope. Transactions of the Korean Society of Mechanical Engineers, B, 2007, 31, 159-166.	0.1	1
39	Voltage pulse frequency and duty ratio effects in an electrochemical discharge microdrilling process of Pyrex glass. International Journal of Machine Tools and Manufacture, 2006, 46, 1064-1067.	13.4	118
40	Simple structured polydimethylsiloxane microvalve actuated by external air pressure. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2006, 220, 1283-1288.	2.1	14
41	Measurement of the mechanical properties of electroplated gold thin films using micromachined beam structures. Sensors and Actuators A: Physical, 2005, 117, 17-27.	4.1	119
42	Si multiprobes integrated with lateral actuators for independent scanning probe applications. Journal of Micromechanics and Microengineering, 2005, 15, 1224-1229.	2.6	16
43	Feasibility of on-chip detection of endotoxin by LAL test. Biotechnology and Bioprocess Engineering, 2004, 9, 132-136.	2.6	4
44	Chemical mechanical polishing by colloidal silica-based slurry for micro-scratch reduction. Wear, 2004, 257, 785-789.	3.1	83
45	Effect of mechanical process parameters on chemical mechanical polishing of Al thin films. Microelectronic Engineering, 2003, 65, 13-23.	2.4	29
46	Lateral Crack in Abrasive Wear of Brittle Materials.. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2003, 46, 140-144.	0.4	26
47	Three-dimensional wafer scale hydrodynamic modeling for chemical mechanical polishing. Thin Solid Films, 2001, 389, 254-260.	1.8	43
48	Hydrodynamic analysis of chemical mechanical polishing process. Tribology International, 2000, 33, 723-730.	5.9	38
49	The basic study about the effect of single point grinding on the bending strength of brittle material. Journal of Mechanical Science and Technology, 1998, 12, 598-605.	0.4	3
50	Sliding microindentation fracture of brittle materials: Role of elastic stress fields. Mechanics of Materials, 1998, 29, 143-152.	3.2	117
51	Polishing and Lapping Temperatures. Journal of Tribology, 1997, 119, 163-170.	1.9	33
52	Surface roughness and material removal rate of lapping process on ceramics. Journal of Mechanical Science and Technology, 1997, 11, 494.	0.4	9
53	Magnetic Damage in Mn-Zn and Ni-Zn Ferrites Induced by Abrasion. Tribology Series, 1994, 27, 117-123.	0.1	0
54	Role of indentation fracture in free abrasive machining of ceramics. Wear, 1993, 162-164, 246-257.	3.1	79