

Joon-Shik Park

List of Publications by Year in descending order

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Version: 2024-02-01

63
papers

3,303
citations

279798

23
h-index

144013

57
g-index

63
all docs

63
docs citations

63
times ranked

5202
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering light absorption in semiconductor nanowire devices. <i>Nature Materials</i> , 2009, 8, 643-647.	27.5	802
2	Determination of trace metals by anodic stripping voltammetry using a bismuth-modified carbon nanotube electrode. <i>Talanta</i> , 2008, 76, 301-308.	5.5	307
3	Resonant Germanium Nanoantenna Photodetectors. <i>Nano Letters</i> , 2010, 10, 1229-1233.	9.1	277
4	Design of selective gas sensors using electrospun Pd-doped SnO ₂ hollow nanofibers. <i>Sensors and Actuators B: Chemical</i> , 2010, 150, 191-199.	7.8	227
5	Reduced graphene oxide field-effect transistor for label-free femtomolar protein detection. <i>Biosensors and Bioelectronics</i> , 2013, 41, 621-626.	10.1	195
6	An electrochemical sensor based on the reduction of screen-printed bismuth oxide for the determination of trace lead and cadmium. <i>Sensors and Actuators B: Chemical</i> , 2008, 135, 309-316.	7.8	162
7	Organic electrochemical transistor based immunosensor for prostate specific antigen (PSA) detection using gold nanoparticles for signal amplification. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2477-2482.	10.1	147
8	Deep dry etching of borosilicate glass using SF ₆ and SF ₆ /Ar inductively coupled plasmas. <i>Microelectronic Engineering</i> , 2005, 82, 119-128.	2.4	126
9	Pt-doped SnO ₂ thin film based micro gas sensors with high selectivity to toluene and HCHO. <i>Sensors and Actuators B: Chemical</i> , 2017, 248, 1011-1016.	7.8	93
10	Determination of trace amounts of lead and cadmium using a bismuth/glassy carbon composite electrode. <i>Talanta</i> , 2009, 77, 1432-1436.	5.5	81
11	Low power micro-gas sensors using mixed SnO ₂ nanoparticles and MWCNTs to detect NO ₂ , NH ₃ , and xylene gases for ubiquitous sensor network applications. <i>Sensors and Actuators B: Chemical</i> , 2010, 150, 65-72.	7.8	78
12	Electrical Graphene Aptasensor for Ultra-sensitive Detection of Anthrax Toxin with Amplified Signal Transduction. <i>Small</i> , 2013, 9, 3352-3360.	10.0	63
13	Flower-shaped ZnO nanomaterials for low-temperature operations in NO _x gas sensors. <i>Ceramics International</i> , 2020, 46, 5706-5714.	4.8	55
14	Direct fabrication of twisted nanofibers by electrospinning. <i>Applied Physics Letters</i> , 2007, 90, .	3.3	46
15	Sensitive naked-eye detection of gaseous ammonia based on dye-impregnated nanoporous polyacrylonitrile mats. <i>Sensors and Actuators B: Chemical</i> , 2016, 230, 250-259.	7.8	43
16	Monolayer Co ₃ O ₄ Inverse Opals as Multifunctional Sensors for Volatile Organic Compounds. <i>Chemistry - A European Journal</i> , 2016, 22, 7102-7107.	3.3	42
17	An effective passive microfluidic mixer utilizing chaotic advection. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 172-181.	7.8	40
18	Improved formaldehyde gas sensing properties of well-controlled Au nanoparticle-decorated In ₂ O ₃ nanofibers integrated on low power MEMS platform. <i>Journal of Materials Science and Technology</i> , 2020, 38, 56-63.	10.7	38

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19	Dielectric and Electromechanical Properties of Pb(Zr,Ti)O ₃ Thin Films for Piezo-Microelectromechanical System Devices. Japanese Journal of Applied Physics, 2003, 42, 5952-5955.	1.5	36
20	Chemical warfare agent sensor using MEMS structure and thick film fabrication method. Sensors and Actuators B: Chemical, 2005, 108, 177-183.	7.8	34
21	Hydrothermal synthesis of mesoporous ZnO microspheres as NO _x gas sensor materials – Calcination effects on microstructure and sensing performance. Ceramics International, 2020, 46, 19354-19364.	4.8	33
22	Fabrication and property analysis of a MEMS micro-gripper for robotic micro-manipulation. Robotics and Computer-Integrated Manufacturing, 2012, 28, 50-56.	9.9	29
23	Acoustic and electromechanical properties of 1-3 PZT composites for ultrasonic transducer arrays fabricated by sacrificial micro PMMA mold. Sensors and Actuators A: Physical, 2003, 108, 206-211.	4.1	23
24	Flexible piezoresistive pulse sensor using biomimetic PDMS mold replicated negatively from shark skin and PEDOT:PSS thin film. Sensors and Actuators A: Physical, 2019, 286, 107-114.	4.1	23
25	Design, fabrication and characterization of an integrated micro ammonia analysis system (IMAAS) with microreactor and in-plane type optical detector based on the Berthelot reaction. Sensors and Actuators B: Chemical, 2006, 117, 516-522.	7.8	22
26	Temperature control of micro heater using Pt thin film temperature sensor embedded in micro gas sensor. Micro and Nano Systems Letters, 2017, 5, .	3.7	22
27	Fabrication and Sensing Behavior of Piezoelectric Microcantilever for Nanobalance. Japanese Journal of Applied Physics, 2003, 42, 6139-6142.	1.5	20
28	Gas Sensor Application of Piezoelectric Cantilever Nanobalance; Electrical Signal Read-Out. Ferroelectrics, 2005, 328, 59-65.	0.6	19
29	A precision robot system with modular actuators and MEMS micro gripper for micro system assembly. Journal of Mechanical Science and Technology, 2008, 22, 70-76.	1.5	19
30	Fabrication and properties of PZT micro cantilevers using isotropic silicon dry etching process by XeF ₂ gas for release process. Sensors and Actuators A: Physical, 2005, 117, 1-7.	4.1	17
31	Effects of temperatures on microstructures and bonding strengths of Si-Si bonding using bisbenzocyclobutene. Sensors and Actuators A: Physical, 2003, 108, 201-205.	4.1	15
32	Fabrication and characteristics of out-of-plane piezoelectric micro grippers using MEMS processes. Thin Solid Films, 2007, 515, 4901-4904.	1.8	15
33	Methane and hydrogen sensing properties of catalytic combustion type single-chip micro gas sensors with two different Pt film thicknesses for heaters. Micro and Nano Systems Letters, 2018, 6, .	3.7	15
34	Novel Co(OH)F/Zn(OH)F heterostructures for acetone gas sensor applications: Materials synthesis, characterization, and sensor performance evaluation. Sensors and Actuators B: Chemical, 2022, 356, 131377.	7.8	15
35	Separations of spherical and disc-shaped polystyrene particles and blood components (red blood cells) through microfluidic channels (t-PFF-v). Sensors and Actuators B: Chemical, 2017, 249, 131-141.	7.8	12
36	Fabrication and characterization of a Cu seed layer on a 60-nm trench-patterned SiO ₂ substrate by a self-assembled-monolayer (SAM) process. Applied Surface Science, 2009, 255, 6082-6086.	6.1	10

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37	The effects of anthrax lethal factor on the macrophage proteome: Potential activity on nitric oxide synthases. Archives of Biochemistry and Biophysics, 2008, 472, 58-64.	3.0	9
38	Design and Fabrication of Smart Band Module for Measurement of Temperature and GSR (Galvanic Skin) Tj ETQq0 0,0 rgBT /Qverlock 10	1.2	9
39	Characterization of Acetohydroxyacid Synthase I from <i>Escherichia coli</i> K-12 and Identification of Its Inhibitors. Bioscience, Biotechnology and Biochemistry, 2010, 74, 2281-2286.	1.3	8
40	Characterization of Sol-gel Multicoated Thick Pb(Zr _{0.52} , Ti _{0.48})O ₃ Films on Platinized Silicon Substrates for Microdevices Applications. Japanese Journal of Applied Physics, 2003, 42, 7497-7501.	1.5	7
41	Fabrication and Electro-Mechanical Characteristics of Piezoelectric Micro Bending Actuators on Silicon Substrates. Journal of the Ceramic Society of Japan, 2006, 114, 1089-1092.	1.3	7
42	Development of Morphologically engineered Flower-like Hafnium-Doped ZnO with Experimental and DFT Validation for Low-Temperature and Ultrasensitive Detection of NO _x Gas. Industrial & Engineering Chemistry Research, 2022, 61, 5885-5897.	3.7	7
43	DESIGN AND FABRICATION OF THE MICRO-GRIPPER FOR MANIPULATING THE CELL. Integrated Ferroelectrics, 2007, 89, 77-86.	0.7	6
44	Preparation of Pt-, Ni- and Cr-Decorated SnO ₂ Tubular Nanofibers and Their Gas Sensing Properties. Journal of Sensor Science and Technology, 2014, 23, 211-215.	0.2	6
45	Thickness Effects on the Pyroelectric Properties of Chemical-Solution-Derived Pb(Zr _{0.3} , Ti _{0.7})O ₃ Thin Films for the Infra-Red Sensor Devices. Japanese Journal of Applied Physics, 2003, 42, 5956-5959.	1.5	5
46	Conductometric nitrogen dioxide gas sensors based on sol-gel-prepared hafnium-added indium zinc oxide (Hf-IZO). Sensors and Actuators B: Chemical, 2021, 344, 130198.	7.8	5
47	Characteristics of fabricated catalytic combustible micro gas sensor with low power consumption for detecting methane leakage of compressed natural gas bus. Journal of Electroceramics, 2013, 31, 280-285.	2.0	4
48	Highly Sensitive and Selective Ethanol Sensors Using Magnesium doped Indium Oxide Hollow Spheres. Journal of the Korean Ceramic Society, 2017, 54, 303-307.	2.3	4
49	Piezoelectrically Driven Self-Excited Microbridge VOCs Sensor. Ferroelectrics, 2006, 338, 41-47.	0.6	3
50	Nickel Doping on Cobalt Oxide Thin Film Using by Sputtering Process-a Route for Surface Modification for p-type Metal Oxide Gas Sensors. Journal of the Korean Physical Society, 2018, 73, 1867-1872.	0.7	3
51	Toluene Gas Sensing Properties of Pt-Nanoparticle-Decorated Indium Oxide Nanofibers on a Low-Power Consumable Bridge-Type Micro-Platform. Journal of the Korean Physical Society, 2019, 74, 600-606.	0.7	3
52	Selective NO ₂ Sensors Using MoS ₂ -MoO ₂ Composite Yolk-shell Spheres. Journal of Sensor Science and Technology, 2015, 24, 151-154.	0.2	3
53	Trimethylamine Sensing Characteristics of Molybdenum doped ZnO Hollow Nanofibers Prepared by Electrospinning. Journal of Sensor Science and Technology, 2015, 24, 419-422.	0.2	3
54	PIEZOELECTRICALLY DRIVEN MICROTRANSDUCER MASS SENSORS. Integrated Ferroelectrics, 2005, 76, 93-100.	0.7	2

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55	Fabrication and characterization of co-planar type MEMS structures on SiO ₂ /Si ₃ N ₄ membrane for gas sensors with dispensing method guided by micromachined wells. Journal of Electroceramics, 2006, 17, 995-998.	2.0	2
56	Zn(OH)F Nanorods for Highly Sensitive NO ₂ Gas Sensor Applications. Journal of the Korean Physical Society, 2020, 77, 1055-1060.	0.7	2
57	Development of Co(OH) ₂ Nanosheets for Acetone Gas Sensor Applications: Material Characterization and Sensor Performance Evaluation. Crystals, 2020, 10, 968.	2.2	1
58	Properties of 1-3 PZT Composite for Ultrasonic Transducer Array Fabricated by Micro-pressing and Dicing Methods. , 2001, , 998-1001.		1
59	Gas Sensing Characteristics of Sb-doped SnO ₂ Nanofibers. Journal of Sensor Science and Technology, 2011, 20, 1-7.	0.2	1
60	Fabrication and Characteristics of Micro Platform for Micro Gas Sensor with Low Power Consumption. Journal of Sensor Science and Technology, 2011, 20, 317-321.	0.2	1
61	Highly Sensitive Trimethylamine Sensing Characteristics of V-doped NiO Porous Structures. Journal of Sensor Science and Technology, 2016, 25, 218-222.	0.2	0
62	Acetone Sensing Characteristics of ZnO Nanoparticles Prepared from Zeolitic Imidazolate Framework-7. Journal of Sensor Science and Technology, 2017, 26, 204-208.	0.2	0
63	Electrical properties of polyaniline and multi-walled carbon nanotube hybrid fibers. Journal of Nanoscience and Nanotechnology, 2007, 7, 4185-9.	0.9	0