

Jaesung Jang

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

2,179
citations

257450

24
h-index

223800

46
g-index

51
all docs

51
docs citations

51
times ranked

2613
citing authors

#	ARTICLE	IF	CITATIONS
1	Paper-based electrochemical peptide sensor for label-free and rapid detection of airborne Bacillus anthracis simulant spores. <i>Sensors and Actuators B: Chemical</i> , 2022, 355, 131321.	7.8	21
2	Paper-based electrochemical immunosensor for label-free detection of multiple avian influenza virus antigens using flexible screen-printed carbon nanotube-polydimethylsiloxane electrodes. <i>Scientific Reports</i> , 2022, 12, 2311.	3.3	20
3	Efficient measurement of airborne viable viruses using the growth-based virus aerosol concentrator with high flow velocities. <i>Journal of Hazardous Materials</i> , 2022, 434, 128873.	12.4	6
4	Integrated microfluidic platform with electrohydrodynamic focusing and a carbon-nanotube-based field-effect transistor immunosensor for continuous, selective, and label-free quantification of bacteria. <i>Lab on A Chip</i> , 2021, 21, 184-195.	6.0	15
5	Effects of Rotor-Rotor Interaction on the Wake Structure and Thrust Generation of a Quadrotor Unmanned Aerial Vehicle. <i>IEEE Access</i> , 2021, 9, 85995-86016.	4.2	15
6	Physical collection and viability of airborne bacteria collected under electrostatic field with different sampling media and protocols towards rapid detection. <i>Scientific Reports</i> , 2021, 11, 14598.	3.3	4
7	Recent advancements in the measurement of pathogenic airborne viruses. <i>Journal of Hazardous Materials</i> , 2021, 420, 126574.	12.4	42
8	Long-Term Measurement of PM _{2.5} Mass Concentration Using an Electrostatic Particle Concentrator-Based Quartz Crystal Microbalance Integrated With Carbon Dioxide Aerosol Jets for PM Sensing in Remote Areas. <i>IEEE Access</i> , 2021, 9, 90715-90726.	4.2	4
9	Low cost synthesis of reduced graphene oxide using biopolymer for influenza virus sensor. <i>Materials Science and Engineering C</i> , 2020, 108, 110465.	7.3	66
10	Rapid Airborne Influenza Virus Quantification Using an Antibody-Based Electrochemical Paper Sensor and Electrostatic Particle Concentrator. <i>Environmental Science & Technology</i> , 2020, 54, 10700-10712.	10.0	36
11	Label-Free, Highly Sensitive Electrochemical Aptasensors Using Polymer-Modified Reduced Graphene Oxide for Cardiac Biomarker Detection. <i>ACS Omega</i> , 2020, 5, 3924-3931.	3.5	47
12	Subtyping of influenza A H1N1 virus using a label-free electrochemical biosensor based on the DNA aptamer targeting the stem region of HA protein. <i>Analytica Chimica Acta</i> , 2019, 1064, 94-103.	5.4	76
13	Flexible electrical aptasensor using dielectrophoretic assembly of graphene oxide and its subsequent reduction for cardiac biomarker detection. <i>Scientific Reports</i> , 2019, 9, 5970.	3.3	26
14	Two-dimensional computational method for generating planar electrode patterns with enhanced volumetric electric fields and its application to continuous dielectrophoretic bacterial capture. <i>Lab on A Chip</i> , 2019, 19, 1772-1782.	6.0	11
15	Measurement of PM _{2.5} Mass Concentration Using an Electrostatic Particle Concentrator-Based Quartz Crystal Microbalance. <i>IEEE Access</i> , 2019, 7, 170640-170647.	4.2	12
16	Lipid-Hydrogel-Nanostructure Hybrids as Robust Biofilm-Resistant Polymeric Materials. <i>ACS Macro Letters</i> , 2019, 8, 64-69.	4.8	39
17	Vertical flow-based paper immunosensor for rapid electrochemical and colorimetric detection of influenza virus using a different pore size sample pad. <i>Biosensors and Bioelectronics</i> , 2019, 126, 36-43.	10.1	93
18	Inactivation of airborne viruses using vacuum ultraviolet photocatalysis for a flow-through indoor air purifier with short irradiation time. <i>Aerosol Science and Technology</i> , 2018, 52, 557-566.	3.1	52

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19	Rapid and selective concentration of bacteria, viruses, and proteins using alternating current signal superimposition on two coplanar electrodes. <i>Scientific Reports</i> , 2018, 8, 14942.	3.3	21
20	Label-free Detection of Influenza Viruses using a Reduced Graphene Oxide-based Electrochemical Immunosensor Integrated with a Microfluidic Platform. <i>Scientific Reports</i> , 2017, 7, 42771.	3.3	138
21	Development of a paper-based electrochemical immunosensor using an antibody-single walled carbon nanotubes bio-conjugate modified electrode for label-free detection of foodborne pathogens. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 115-123.	7.8	173
22	Cost-Effective and Handmade Paper-Based Immunosensing Device for Electrochemical Detection of Influenza Virus. <i>Sensors</i> , 2017, 17, 2597.	3.8	60
23	Determination of Fluid Density and Viscosity by Analyzing Flexural Wave Propagations on the Vibrating Micro-Cantilever. <i>Sensors</i> , 2017, 17, 2466.	3.8	12
24	Gentle Sampling of Submicrometer Airborne Virus Particles using a Personal Electrostatic Particle Concentrator. <i>Environmental Science & Technology</i> , 2016, 50, 12365-12372.	10.0	38
25	Biofilm Removal Using Carbon Dioxide Aerosols without Nitrogen Purge. <i>Journal of Visualized Experiments</i> , 2016, . .	0.3	1
26	Rapid electrical immunoassay of the cardiac biomarker troponin I through dielectrophoretic concentration using imbedded electrodes. <i>Biosensors and Bioelectronics</i> , 2016, 82, 78-84.	10.1	45
27	Effects of Carbon Dioxide Aerosols on the Viability of <i>Escherichia coli</i> during Biofilm Dispersal. <i>Scientific Reports</i> , 2015, 5, 13766.	3.3	8
28	Single-walled carbon nanotube based transparent immunosensor for detection of a prostate cancer biomarker osteopontin. <i>Analytica Chimica Acta</i> , 2015, 869, 68-73.	5.4	57
29	Simultaneous position and mass determination of a nanoscale-thickness cantilever sensor in viscous fluids. <i>Applied Physics Letters</i> , 2015, 106, 063106.	3.3	4
30	Mechanical desorption of immobilized proteins using carbon dioxide aerosols for reusable biosensors. <i>Analytica Chimica Acta</i> , 2015, 853, 588-595.	5.4	6
31	Electrical immunosensor based on dielectrophoretically-deposited carbon nanotubes for detection of influenza virus H1N1. <i>Analyst</i> , The, 2014, 139, 5415-5421.	3.5	56
32	Removal of different-age biofilms using carbon dioxide aerosols. <i>Biotechnology and Bioprocess Engineering</i> , 2014, 19, 503-509.	2.6	7
33	Simultaneous determination of position and mass in the cantilever sensor using transfer function method. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	17
34	Gas-phase removal of biofilms from various surfaces using carbon dioxide aerosols. <i>Biofouling</i> , 2012, 28, 681-686.	2.2	13
35	Combined application of bacterial predation and carbon dioxide aerosols to effectively remove biofilms. <i>Biofouling</i> , 2012, 28, 671-680.	2.2	26
36	Diffusion-based multi-stream bioluminescent reaction in a microfluidic device. <i>Chemical Engineering Journal</i> , 2012, 185-186, 321-327.	12.7	10

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37	Numerical analysis on the electrostatic capture of airborne nanoparticles and viruses in a homemade particle concentrator without a unipolar charger. <i>Journal of Electrostatics</i> , 2012, 70, 192-200.	1.9	5
38	Recent Developments in Microparticle Image Velocimetry. , 2011, , 29-88.		0
39	Gaseous slip flow of a rectangular microchannel with non-uniform slip boundary conditions. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 513-522.	2.2	9
40	Removal of biofilms using carbon dioxide aerosols. <i>Journal of Aerosol Science</i> , 2010, 41, 1044-1051.	3.8	18
41	Effects of planar inlet plenums on the hydrodynamically developing flows in rectangular microchannels of complementary aspect ratios. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 1-12.	2.2	18
42	â€œLiving cantilever arraysâ€™ for characterization of mass of single live cells in fluids. <i>Lab on A Chip</i> , 2008, 8, 1034.	6.0	123
43	Effects of inlet/outlet configurations on the electrostatic capture of airborne nanoparticles and viruses. <i>Measurement Science and Technology</i> , 2008, 19, 065204.	2.6	5
44	Real-time detection of airborne viruses on a mass-sensitive device. <i>Applied Physics Letters</i> , 2008, 93, 13901.	3.3	49
45	Gaseous slip flow analysis of a micromachined flow sensor for ultra small flow applications. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 229-237.	2.6	8
46	Microresonator mass sensors for detection of Bacillus anthracis Sterne spores in air and water. <i>Biosensors and Bioelectronics</i> , 2007, 22, 3028-3035.	10.1	80
47	Capture of airborne nanoparticles in swirling flows using non-uniform electrostatic fields for bio-sensor applications. <i>Sensors and Actuators B: Chemical</i> , 2007, 121, 560-566.	7.8	9
48	BIOMEMS AND NANOTECHNOLOGY-BASED APPROACHES FOR RAPID DETECTION OF BIOLOGICAL ENTITIES. <i>Journal of Rapid Methods and Automation in Microbiology</i> , 2007, 15, 1-32.	0.4	85
49	Effective heights and tangential momentum accommodation coefficients of gaseous slip flows in deep reactive ion etching rectangular microchannels. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 493-504.	2.6	28
50	Pressure distributions of gaseous slip flow in straight and uniform rectangular microchannels. <i>Microfluidics and Nanofluidics</i> , 2004, 1, 41-51.	2.2	60
51	Theoretical and experimental study of MHD (magnetohydrodynamic) micropump. <i>Sensors and Actuators A: Physical</i> , 2000, 80, 84-89.	4.1	405