Sang Woo Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9399489/publications.pdf

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45	740	567281 15	552781 26
papers	citations	h-index	g-index

47	47	47	1005
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Label-Free and Recalibrated Multilayer MoS₂ Biosensor for Point-of-Care Diagnostics. ACS Applied Materials & Interfaces, 2017, 9, 43490-43497.	8.0	62
2	Single-Molecule Recognition of Biomolecular Interaction via Kelvin Probe Force Microscopy. ACS Nano, 2011, 5, 6981-6990.	14.6	59
3	Mapping the surface charge distribution of amyloid fibril. Applied Physics Letters, 2012, 101, 043703.	3.3	57
4	â€œBottom-upâ€•approach for implementing nano/microstructure using biological and chemical interactions. Biotechnology and Bioprocess Engineering, 2007, 12, 185-199.	2.6	42
5	Real-time electrical detection of epidermal skin MoS2 biosensor for point-of-care diagnostics. Nano Research, 2017, 10, 767-775.	10.4	42
6	Convex Grooves in Staggered Herringbone Mixer Improve Mixing Efficiency of Laminar Flow in Microchannel. PLoS ONE, 2016, 11, e0166068.	2.5	41
7	Aptamer-functionalized nano-pattern based on carbon nanotube for sensitive, selective protein detection. Journal of Materials Chemistry, 2012, 22, 23348.	6.7	36
8	MoS₂ Field-Effect Transistor-Amyloid-Î²_{1â€“42} Hybrid Device for Signal Amplified Detection of MMP-9. Analytical Chemistry, 2019, 91, 8252-8258.	6.5	34
9	Characterization of the regrowth behavior of amyloid-like fragmented fibrils decomposed by ultrasonic treatment. RSC Advances, 2014, 4, 56561-56566.	3.6	33
10	Microfluidic Multifunctional Probe Array Dielectrophoretic Force Spectroscopy with Wide Loading Rates. ACS Nano, 2012, 6, 8665-8673.	14.6	32
11	Detection of Silver Ions Using Dielectrophoretic Tweezers-Based Force Spectroscopy. Analytical Chemistry, 2016, 88, 10867-10875.	6.5	28
12	Quantifying L-ascorbic acid-driven inhibitory effect on amyloid fibrillation. Macromolecular Research, 2016, 24, 868-873.	2.4	22
13	Biaxial Dielectrophoresis Force Spectroscopy: A Stoichiometric Approach for Examining Intermolecular Weak Binding Interactions. ACS Nano, 2016, 10, 4011-4019.	14.6	21
14	Nature-Inspired Construction of Two-Dimensionally Self-Assembled Peptide on Pristine Graphene. Journal of Physical Chemistry Letters, 2017, 8, 3734-3739.	4.6	21
15	Real-Time Analysis of Cellular Response to Small-Molecule Drugs within a Microfluidic Dielectrophoresis Device. Analytical Chemistry, 2015, 87, 5914-5920.	6.5	15
16	Kelvin probe force microscopy of DNA-capped nanoparticles for single-nucleotide polymorphism detection. Nanoscale, 2016, 8, 13537-13544.	5.6	15
17	Electrochemical detection of high-sensitivity CRP inside a microfluidic device by numerical and experimental studies. Biomedical Microdevices, 2012, 14, 375-384.	2.8	12
18	Extremely sensitive and wide-range silver ion detection via assessing the integrated surface potential of a DNA-capped gold nanoparticle. Nanotechnology, 2019, 30, 085501.	2.6	12

#	Article	IF	Citations
19	Identifying DNA mismatches at single-nucleotide resolution by probing individual surface potentials of DNA-capped nanoparticles. Nanoscale, 2018, 10, 538-547.	5.6	11
20	Diffusion-based multi-stream bioluminescent reaction in a microfluidic device. Chemical Engineering Journal, 2012, 185-186, 321-327.	12.7	10
21	Nanomechanical Characterization of Amyloid Fibrils Using Single-Molecule Experiments and Computational Simulations. Journal of Nanomaterials, 2016, 2016, 1-16.	2.7	10
22	Characterization of the Stiffness of Multiple Particles Trapped by Dielectrophoretic Tweezers in a Microfluidic Device. Langmuir, 2016, 32, 922-927.	3.5	10
23	Non-Linear Cellular Dielectrophoretic Behavior Characterization Using Dielectrophoretic Tweezers-Based Force Spectroscopy inside a Microfluidic Device. Sensors, 2018, 18, 3543.	3.8	10
24	Microfluidic room temperature ionic liquid droplet generation depending on the hydrophobicity and interfacial tension. Korean Journal of Chemical Engineering, 2016, 33, 57-62.	2.7	8
25	Nanoelectrical characterization of amyloid-Î²42 aggregates via Kelvin probe force microscopy. Macromolecular Research, 2017, 25, 1187-1191.	2.4	8
26	Automated Dielectrophoretic Tweezers-Based Force Spectroscopy System in a Microfluidic Device. Sensors, 2017, 17, 2272.	3.8	8
27	Investigation of the Binding Force between Protein A and Immunoglobulin G Using Dielectrophoretic(DEP) Tweezers Inside a Microfluidic Chip. Journal of Biomedical Engineering Research, 2013, 34, 123-128.	0.1	8
28	Research Update: Nanoscale surface potential analysis of MoS2 field-effect transistors for biomolecular detection using Kelvin probe force microscopy. APL Materials, 2016, 4, .	5.1	7
29	Variable Membrane Dielectric Polarization Characteristic in Individual Live Cells. Journal of Physical Chemistry Letters, 2020, 11, 7197-7203.	4.6	7
30	K-band loss characterization of electroplated nickel for RF MEMS devices. , 2007, , .		6
31	Recent research trends in nanoscale electro-mechanical systems for bio-medical applications. Biomedical Engineering Letters, 2011, 1, 7-10.	4.1	6
32	Mechanical Deformation Mechanisms and Properties of Prion Fibrils Probed by Atomistic Simulations. Nanoscale Research Letters, 2017, 12, 228.	5.7	6
33	Selective position of individual cells without lysis on a circular window array using dielectrophoresis in a microfluidic device. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	6
34	A novel automatic segmentation and tracking method to measure cellular dielectrophoretic mobility from individual cell trajectories for high throughput assay. Computer Methods and Programs in Biomedicine, 2020, 195, 105662.	4.7	5
35	Characterization of Dielectrophoretic Force for the Structural Shapes of Window in Microfluidic Dielectrophoretic Chip. Journal of Biomedical Engineering Research, 2013, 34, 189-196.	0.1	5
36	Rapid fabrication of versatile omni-directional and long-distance three-dimensional flow paper-fluidic analytical devices using a cut-and-insert method for biomedical applications. Analytical Methods, 2018, 10, 4648-4654.	2.7	4

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37	Current on/off ratio enhancement through the electrical burning process in ambient with/without oxygen for the generation of high-performance aligned single-walled carbon nanotube field effect transistors. Applied Physics Letters, 2010, 97, 173102.	3.3	3
38	Size-Selective Particle Trapping in Dielectrophoretic Corral Traps. Journal of Physical Chemistry C, 2021, 125, 6278-6286.	3.1	3
39	Melanoma Detection by AFM Indentation of Histological Specimens. Diagnostics, 2022, 12, 1736.	2.6	3
40	Characterization of anomalous movements of spherical living cells on a silicon dioxide glassy substrate. Biomicrofluidics, 2015, 9, 014102.	2.4	2
41	Adhesive Leaf Created by a Corona Discharge. Scientific Reports, 2018, 8, 1737.	3.3	2
42	Analysis of Random Dynamics of Cell Segmented by a Modified Active Contour Method. Applied Sciences (Switzerland), 2020, 10, 6806.	2.5	1
43	Ultra-sensitive dielectrophoretic surface charge multiplex detection inside a micro-dielectrophoretic device. Biosensors and Bioelectronics, 2022, 210, 114235.	10.1	1
44	InnenrÃ¼cktitelbild: Real-Time Quantitative Monitoring of Specific Peptide Cleavage by a Proteinase for Cancer Diagnosis (Angew. Chem. 24/2012). Angewandte Chemie, 2012, 124, 6119-6119.	2.0	0
45	Inside Back Cover: Real-Time Quantitative Monitoring of Specific Peptide Cleavage by a Proteinase for Cancer Diagnosis (Angew. Chem. Int. Ed. 24/2012). Angewandte Chemie - International Edition, 2012, 51, 6015-6015.	13.8	0