Hyungsoon Im

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2694466/publications.pdf

Version: 2024-02-01

71 papers	7,743 citations	108046 37 h-index	120465 65 g-index
75 all docs	75 docs citations	75 times ranked	12596 citing authors

#	Article	IF	Citations
1	Computational Optics for Point-of-Care Breast Cancer Profiling. Methods in Molecular Biology, 2022, 2393, 153-162.	0.4	0
2	Plasmon color-preserved gold nanoparticle clusters for high sensitivity detection of SARS-CoV-2 based on lateral flow immunoassay. Biosensors and Bioelectronics, 2022, 205, 114094.	5.3	37
3	Integrated Analytical System for Clinical Singleâ€Cell Analysis. Advanced Science, 2022, 9, e2200415.	5.6	5
4	Physisorption of Affinity Ligands Facilitates Extracellular Vesicle Detection with Low Non-Specific Binding to Plasmonic Gold Substrates. ACS Applied Materials & Interfaces, 2022, 14, 26548-26556.	4.0	6
5	Hydrogel Stamping for Rapid, Multiplexed, Point-of-Care Immunostaining of Cells and Tissues. ACS Applied Materials & Interfaces, 2022, 14, 27613-27622.	4.0	7
6	Kaleidoscopic fluorescent arrays for machine-learning-based point-of-care chemical sensing. Sensors and Actuators B: Chemical, 2021, 329, 129248.	4.0	11
7	Addressing cervical cancer screening disparities through advances in artificial intelligence and nanotechnologies for cellular profiling. Biophysics Reviews, 2021, 2, 011303.	1.0	2
8	Abstract PO-080: Deep learning-based analysis of heterogeneity of breast cancer cells using lens-free digital in-line holography. , 2021, , .		0
9	Hydrogel-Based Stamping Technology for Solution-Free Blood Cell Staining. ACS Applied Materials & Interfaces, 2021, 13, 22124-22130.	4.0	8
10	CytoPANâ€”Portable cellular analyses for rapid point-of-care cancer diagnosis. Science Translational Medicine, 2020, 12, .	5.8	21
11	Beadâ€Based Extracellular Vesicle Analysis Using Flow Cytometry. Advanced Biology, 2020, 4, 2000203.	3.0	15
12	Plasmonic Sensors for Extracellular Vesicle Analysis: From Scientific Development to Translational Research. ACS Nano, 2020, 14, 14528-14548.	7.3	69
13	Plasmonâ€Enhanced Biosensing for Multiplexed Profiling of Extracellular Vesicles. Advanced Biology, 2020, 4, e2000003.	3.0	40
14	Integrated Dualâ€Mode Chromatography to Enrich Extracellular Vesicles from Plasma. Advanced Biology, 2020, 4, e1900310.	3.0	46
15	Selfâ€Assembly of Nanoparticleâ€Spiked Pillar Arrays for Plasmonic Biosensing. Advanced Functional Materials, 2019, 29, 1904257.	7.8	47
16	Point-of-care cervical cancer screening using deep learning-based microholography. Theranostics, 2019, 9, 8438-8447.	4.6	12
17	New Technologies for Analysis of Extracellular Vesicles. Chemical Reviews, 2018, 118, 1917-1950.	23.0	1,041
18	Integrated Biosensor for Rapid and Point-of-Care Sepsis Diagnosis. ACS Nano, 2018, 12, 3378-3384.	7.3	122

#	Article	IF	Citations
19	Analyses of Intravesicular Exosomal Proteins Using a Nano-Plasmonic System. ACS Photonics, 2018, 5, 487-494.	3.2	55
20	Deep transfer learning-based hologram classification for molecular diagnostics. Scientific Reports, 2018, 8, 17003.	1.6	48
21	Design and clinical validation of a point-of-care device for the diagnosis of lymphoma via contrast-enhanced microholography and machine learning. Nature Biomedical Engineering, 2018, 2, 666-674.	11.6	55
22	Computational Optics Enables Breast Cancer Profiling in Point-of-Care Settings. ACS Nano, 2018, 12, 9081-9090.	7.3	26
23	Nanotechnology Platforms for Cancer Exosome Analyses. , 2018, , 119-128.		1
24	Multiparametric plasma EV profiling facilitates diagnosis of pancreatic malignancy. Science Translational Medicine, 2017, 9, .	5.8	211
25	Characterization of Extracellular Vesicles by Surface Plasmon Resonance. Methods in Molecular Biology, 2017, 1660, 133-141.	0.4	13
26	Novel nanosensing technologies for exosome detection and profiling. Lab on A Chip, 2017, 17, 2892-2898.	3.1	71
27	Holographic Assessment of Lymphoma Tissue (HALT) for Global Oncology Field Applications. Theranostics, 2016, 6, 1603-1610.	4.6	12
28	Sparsity-Based Pixel Super Resolution for Lens-Free Digital In-line Holography. Scientific Reports, 2016, 6, 24681.	1.6	29
29	Challenges influencing next generation technologies for precision medicine. Expert Review of Precision Medicine and Drug Development, 2016, 1, 121-123.	0.4	2
30	Reduced Proteolytic Shedding of Receptor Tyrosine Kinases Is a Post-Translational Mechanism of Kinase Inhibitor Resistance. Cancer Discovery, 2016, 6, 382-399.	7.7	139
31	Digital diffraction detection of protein markers for avian influenza. Lab on A Chip, 2016, 16, 1340-1345.	3.1	11
32	Nano-plasmonic exosome diagnostics. Expert Review of Molecular Diagnostics, 2015, 15, 725-733.	1.5	44
33	Exploring alternative ovarian cancer biomarkers using innovative nanotechnology strategies. Cancer and Metastasis Reviews, 2015, 34, 75-82.	2.7	8
34	Nanostar Clustering Improves the Sensitivity of Plasmonic Assays. Bioconjugate Chemistry, 2015, 26, 1470-1474.	1.8	28
35	Digital diffraction analysis enables low-cost molecular diagnostics on a smartphone. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5613-5618.	3.3	80
36	Oxidation Sharpening, Template Stripping, and Passivation of Ultraâ€Sharp Metallic Pyramids and Wedges. Small, 2014, 10, 680-684.	5.2	14

#	Article	IF	Citations
37	Label-free detection and molecular profiling of exosomes with a nano-plasmonic sensor. Nature Biotechnology, 2014, 32, 490-495.	9.4	1,060
38	Magnetic Ligation Method for Quantitative Detection of MicroRNAs. Advanced Healthcare Materials, 2014, 3, 1015-1019.	3.9	4
39	Atomic layer lithography of wafer-scale nanogap arrays for extreme confinement of electromagnetic waves. Nature Communications, 2013, 4, 2361.	5.8	286
40	Magnetic Nanosensor for Detection and Profiling of Erythrocyte-Derived Microvesicles. ACS Nano, 2013, 7, 11227-11233.	7.3	96
41	Selfâ€Assembled Plasmonic Nanoring Cavity Arrays for SERS and LSPR Biosensing. Advanced Materials, 2013, 25, 2678-2685.	11.1	222
42	A magneto-DNA nanoparticle system for rapid detection and phenotyping of bacteria. Nature Nanotechnology, 2013, 8, 369-375.	15.6	307
43	Self-Assembled Plasmonic Nanoring Cavity Arrays for SERS and LSPR Biosensing (Adv. Mater. 19/2013). Advanced Materials, 2013, 25, 2677-2677.	11.1	3
44	Atomic layer deposition: A versatile technique for plasmonics and nanobiotechnology. Journal of Materials Research, 2012, 27, 663-671.	1.2	54
45	Nanohole-Based Surface Plasmon Resonance Instruments with Improved Spectral Resolution Quantify a Broad Range of Antibody-Ligand Binding Kinetics. Analytical Chemistry, 2012, 84, 1941-1947.	3.2	96
46	High-Affinity Binding of Remyelinating Natural Autoantibodies to Myelin-Mimicking Lipid Bilayers Revealed by Nanohole Surface Plasmon Resonance. Analytical Chemistry, 2012, 84, 6031-6039.	3.2	38
47	Linewidthâ€Optimized Extraordinary Optical Transmission in Water with Templateâ€Stripped Metallic Nanohole Arrays. Advanced Functional Materials, 2012, 22, 4439-4446.	7.8	49
48	Recent progress in SERS biosensing. Physical Chemistry Chemical Physics, 2011, 13, 11551.	1.3	598
49	Template-Stripped Smooth Ag Nanohole Arrays with Silica Shells for Surface Plasmon Resonance Biosensing. ACS Nano, 2011, 5, 6244-6253.	7.3	203
50	Facile Assembly of Micro- and Nanoarrays for Sensing with Natural Cell Membranes. ACS Nano, 2011, 5, 7555-7564.	7.3	49
51	Atomic Layer Deposition of Dielectric Overlayers for Enhancing the Optical Properties and Chemical Stability of Plasmonic Nanoholes. ACS Nano, 2010, 4, 947-954.	7.3	90
52	Vertically Oriented Sub-10-nm Plasmonic Nanogap Arrays. Nano Letters, 2010, 10, 2231-2236.	4.5	384
53	Membrane protein biosensing with plasmonic nanopore arrays and pore-spanning lipid membranes. Chemical Science, 2010, 1, 688.	3.7	118
54	Plasmonic Nanoholes in a Multichannel Microarray Format for Parallel Kinetic Assays and Differential Sensing. Analytical Chemistry, 2009, 81, 2854-2859.	3.2	112

#	Article	IF	Citations
55	Plasmonic nano-structures for optical data storage. Optics Express, 2009, 17, 14001.	1.7	150
56	Sub-micron resolution surface plasmon resonance imaging enabled by nanohole arrays with surrounding Bragg mirrors for enhanced sensitivity and isolation. Lab on A Chip, 2009, 9, 382-387.	3.1	126
57	Plasmonic nanohole arrays for label-free kinetic biosensing in a lipid membrane environment. , 2009, 2009, 1481-4.		5
58	Plasmonic oOptical data storage. , 2009, , .		1
59	Plasmonic nano-structures for optical data storage. Proceedings of SPIE, 2009, , .	0.8	0
60	Plasmonic Nano-structures for Optical Data Storage. , 2009, , .		4
61	Laser-illuminated nanohole arrays for multiplex plasmonic microarray sensing. Optics Express, 2008, 16, 219.	1.7	105
62	Plasmonic nanohole arrays for real-time multiplex biosensing. Proceedings of SPIE, 2008, , .	0.8	10
63	Construction of a Magnetic Biosensor for Pathogen Detection. Journal of Medical Devices, Transactions of the ASME, 2008, 2, .	0.4	2
64	Periodic nanohole arrays with shape-enhanced plasmon resonance as real-time biosensors. Applied Physics Letters, 2007, 90, 243110.	1.5	254
65	Ferrocene Functionalized Single-Walled Carbon Nanotube Bundles. Hybrid Interdigitated Construction Film for l-Glutamate Detection. Journal of Physical Chemistry C, 2007, 111, 1200-1206.	1.5	64
66	Wet Chemical Needlelike Assemblies of Single-Walled Carbon Nanotubes on a Silicon Surface. Langmuir, 2007, 23, 991-994.	1.6	25
67	A dielectric-modulated field-effect transistor for biosensing. Nature Nanotechnology, 2007, 2, 430-434.	15.6	448
68	Direct Electrochemistry of Uric Acid at Chemically Assembled Carboxylated Single-Walled Carbon Nanotubes Netlike Electrode. Journal of Physical Chemistry B, 2006, 110, 21850-21856.	1.2	74
69	Aspartate Aminotransferase (AST/GOT) and Alanine Aminotransferase (ALT/GPT) Detection Techniques. Sensors, 2006, 6, 756-782.	2.1	314
70	Electrochemical behavior of needle-like and forest-like single-walled carbon nanotube electrodes. Journal of Electroanalytical Chemistry, 2006, 594, 27-34.	1.9	25
71	Morphology-controlled SWCNT/polymeric microsphere arrays by a wet chemical self-assembly technique and their application for sensors. Nanotechnology, 2006, 17, 2988-2993.	1.3	26