

Hakho Lee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2436065/publications.pdf>

Version: 2024-02-01

132
papers

13,484
citations

28190

55
h-index

22764

112
g-index

144
all docs

144
docs citations

144
times ranked

18679
citing authors

#	ARTICLE	IF	CITATIONS
1	Label-free detection and molecular profiling of exosomes with a nano-plasmonic sensor. <i>Nature Biotechnology</i> , 2014, 32, 490-495.	9.4	1,060
2	New Technologies for Analysis of Extracellular Vesicles. <i>Chemical Reviews</i> , 2018, 118, 1917-1950.	23.0	1,041
3	Genome-wide CRISPR Screen in a Mouse Model of Tumor Growth and Metastasis. <i>Cell</i> , 2015, 160, 1246-1260.	13.5	746
4	Protein typing of circulating microvesicles allows real-time monitoring of glioblastoma therapy. <i>Nature Medicine</i> , 2012, 18, 1835-1840.	15.2	647
5	Chip-based NMR biosensor for detection and molecular analysis of cells. <i>Nature Medicine</i> , 2008, 14, 869-874.	15.2	561
6	Chip-based analysis of exosomal mRNA mediating drug resistance in glioblastoma. <i>Nature Communications</i> , 2015, 6, 6999.	5.8	484
7	Immune evasion mediated by PD-L1 on glioblastoma-derived extracellular vesicles. <i>Science Advances</i> , 2018, 4, eaar2766.	4.7	416
8	Acoustic Purification of Extracellular Microvesicles. <i>ACS Nano</i> , 2015, 9, 2321-2327.	7.3	413
9	Integrated Magneto-Electrochemical Sensor for Exosome Analysis. <i>ACS Nano</i> , 2016, 10, 1802-1809.	7.3	372
10	Bioorthogonal chemistry amplifies nanoparticle binding and enhances the sensitivity of cell detection. <i>Nature Nanotechnology</i> , 2010, 5, 660-665.	15.6	319
11	A magneto-DNA nanoparticle system for rapid detection and phenotyping of bacteria. <i>Nature Nanotechnology</i> , 2013, 8, 369-375.	15.6	307
12	COVID-19 diagnostics in context. <i>Science Translational Medicine</i> , 2020, 12, .	5.8	305
13	Multiplexed Profiling of Single Extracellular Vesicles. <i>ACS Nano</i> , 2018, 12, 494-503.	7.3	256
14	Recent Developments in Magnetic Diagnostic Systems. <i>Chemical Reviews</i> , 2015, 115, 10690-10724.	23.0	239
15	Ultrasensitive Clinical Enumeration of Rare Cells ex Vivo Using a Micro-Hall Detector. <i>Science Translational Medicine</i> , 2012, 4, 141ra92.	5.8	211
16	Multiparametric plasma EV profiling facilitates diagnosis of pancreatic malignancy. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	211
17	Micro-NMR for Rapid Molecular Analysis of Human Tumor Samples. <i>Science Translational Medicine</i> , 2011, 3, 71ra16.	5.8	191
18	Intra-Cardiac Release of Extracellular Vesicles Shapes Inflammation Following Myocardial Infarction. <i>Circulation Research</i> , 2018, 123, 100-106.	2.0	181

#	ARTICLE	IF	CITATIONS
19	Ultrasensitive Detection of Bacteria Using Core-Shell Nanoparticles and an NMR-Filter System. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 5657-5660.	7.2	179
20	Rapid detection and profiling of cancer cells in fine-needle aspirates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 12459-12464.	3.3	176
21	Magnetic barcode assay for genetic detection of pathogens. <i>Nature Communications</i> , 2013, 4, 1752.	5.8	161
22	Single-cell magnetic imaging using a quantum diamond microscope. <i>Nature Methods</i> , 2015, 12, 736-738.	9.0	161
23	Fast detection of SARS-CoV-2 RNA via the integration of plasmonic thermocycling and fluorescence detection in a portable device. <i>Nature Biomedical Engineering</i> , 2020, 4, 1159-1167.	11.6	159
24	Magnetic Nanoparticles and microNMR for Diagnostic Applications. <i>Theranostics</i> , 2012, 2, 55-65.	4.6	152
25	Molecular and Immunological Diagnostic Tests of COVID-19: Current Status and Challenges. <i>IScience</i> , 2020, 23, 101406.	1.9	144
26	Nanoparticles for cancer imaging: The good, the bad, and the promise. <i>Nano Today</i> , 2013, 8, 454-460.	6.2	140
27	Reduced Proteolytic Shedding of Receptor Tyrosine Kinases Is a Post-Translational Mechanism of Kinase Inhibitor Resistance. <i>Cancer Discovery</i> , 2016, 6, 382-399.	7.7	139
28	Ubiquitous Detection of Gram-Positive Bacteria with Bioorthogonal Magnetofluorescent Nanoparticles. <i>ACS Nano</i> , 2011, 5, 8834-8841.	7.3	127
29	Highly Magnetic Core-Shell Nanoparticles with a Unique Magnetization Mechanism. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4663-4666.	7.2	126
30	Miniature magnetic resonance system for point-of-care diagnostics. <i>Lab on A Chip</i> , 2011, 11, 2282.	3.1	124
31	Integrated Biosensor for Rapid and Point-of-Care Sepsis Diagnosis. <i>ACS Nano</i> , 2018, 12, 3378-3384.	7.3	122
32	Palm NMR and 1-Chip NMR. <i>IEEE Journal of Solid-State Circuits</i> , 2011, 46, 342-352.	3.5	121
33	Mechanism of Magnetic Relaxation Switching Sensing. <i>ACS Nano</i> , 2012, 6, 6821-6828.	7.3	115
34	Integrated Kidney Exosome Analysis for the Detection of Kidney Transplant Rejection. <i>ACS Nano</i> , 2017, 11, 11041-11046.	7.3	106
35	Ultrasound-Mediated Gene and Drug Delivery Using a Microbubble-Liposome Particle System. <i>Theranostics</i> , 2014, 4, 1133-1144.	4.6	100
36	Magnetic Nanosensor for Detection and Profiling of Erythrocyte-Derived Microvesicles. <i>ACS Nano</i> , 2013, 7, 11227-11233.	7.3	96

#	ARTICLE	IF	CITATIONS
37	Photocleavable DNA Barcode Antibody Conjugates Allow Sensitive and Multiplexed Protein Analysis in Single Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 18499-18502.	6.6	93
38	Multicore Assemblies Potentiate Magnetic Properties of Biomagnetic Nanoparticles. <i>Advanced Materials</i> , 2011, 23, 4793-4797.	11.1	92
39	An integrated magneto-electrochemical device for the rapid profiling of tumour extracellular vesicles from blood plasma. <i>Nature Biomedical Engineering</i> , 2021, 5, 678-689.	11.6	90
40	Magnetic nanoparticles for biomedical NMR-based diagnostics. <i>Beilstein Journal of Nanotechnology</i> , 2010, 1, 142-154.	1.5	87
41	Digital diffraction analysis enables low-cost molecular diagnostics on a smartphone. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5613-5618.	3.3	80
42	High-throughput intensity diffraction tomography with a computational microscope. <i>Biomedical Optics Express</i> , 2018, 9, 2130.	1.5	79
43	Integrated Magneto-Chemical Sensor For On-Site Food Allergen Detection. <i>ACS Nano</i> , 2017, 11, 10062-10069.	7.3	75
44	Characterization of single microvesicles in plasma from glioblastoma patients. <i>Neuro-Oncology</i> , 2019, 21, 606-615.	0.6	72
45	Novel nanosensing technologies for exosome detection and profiling. <i>Lab on A Chip</i> , 2017, 17, 2892-2898.	3.1	71
46	Miniaturized nuclear magnetic resonance platform for detection and profiling of circulating tumor cells. <i>Lab on A Chip</i> , 2014, 14, 14-23.	3.1	70
47	Plasmonic Sensors for Extracellular Vesicle Analysis: From Scientific Development to Translational Research. <i>ACS Nano</i> , 2020, 14, 14528-14548.	7.3	69
48	A Magnetic Gram Stain for Bacterial Detection. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7752-7755.	7.2	65
49	Supramolecular Metallo-Bioadhesive for Minimally Invasive Use. <i>Advanced Materials</i> , 2016, 28, 8675-8680.	11.1	64
50	Sensitive and Direct Detection of Circulating Tumor Cells by Multimarker μ -Nuclear Magnetic Resonance. <i>Neoplasia</i> , 2012, 14, 388-IN2.	2.3	61
51	Carboxymethylated Polyvinyl Alcohol Stabilizes Doped Ferrofluids for Biological Applications. <i>Advanced Materials</i> , 2010, 22, 5168-5172.	11.1	59
52	Specific Pathogen Detection Using Bioorthogonal Chemistry and Diagnostic Magnetic Resonance. <i>Bioconjugate Chemistry</i> , 2011, 22, 2390-2394.	1.8	59
53	Supramolecular Host-Guest Interaction for Labeling and Detection of Cellular Biomarkers. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 450-454.	7.2	59
54	MicroRNA Signatures and Molecular Subtypes of Glioblastoma: The Role of Extracellular Transfer. <i>Stem Cell Reports</i> , 2017, 8, 1497-1505.	2.3	58

#	ARTICLE	IF	CITATIONS
55	Large and small extracellular vesicles released by glioma cells <i>in vitro</i> and <i>in vivo</i> . <i>Journal of Extracellular Vesicles</i> , 2020, 9, 1689784.	5.5	57
56	µHall Chip for Sensitive Detection of Bacteria. <i>Advanced Healthcare Materials</i> , 2013, 2, 1224-1228.	3.9	55
57	Analyses of Intravesicular Exosomal Proteins Using a Nano-Plasmonic System. <i>ACS Photonics</i> , 2018, 5, 487-494.	3.2	55
58	Design and clinical validation of a point-of-care device for the diagnosis of lymphoma via contrast-enhanced microholography and machine learning. <i>Nature Biomedical Engineering</i> , 2018, 2, 666-674.	11.6	55
59	Engineering Materials for Electrochemical Sweat Sensing. <i>Advanced Functional Materials</i> , 2021, 31, 2008130.	7.8	52
60	<i>TERT</i> Promoter Mutation Analysis for Blood-Based Diagnosis and Monitoring of Gliomas. <i>Clinical Cancer Research</i> , 2021, 27, 169-178.	3.2	50
61	Deep transfer learning-based hologram classification for molecular diagnostics. <i>Scientific Reports</i> , 2018, 8, 17003.	1.6	48
62	Real-time quantitative analysis of metabolic flux in live cells using a hyperpolarized micromagnetic resonance spectrometer. <i>Science Advances</i> , 2017, 3, e1700341.	4.7	47
63	Orthogonal Amplification of Nanoparticles for Improved Diagnostic Sensing. <i>ACS Nano</i> , 2012, 6, 3506-3513.	7.3	46
64	Ascites analysis by a microfluidic chip allows tumor-cell profiling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4978-86.	3.3	46
65	Rare cell isolation and profiling on a hybrid magnetic/size-sorting chip. <i>Biomicrofluidics</i> , 2013, 7, 54107.	1.2	46
66	Physical and Molecular Landscapes of Mouse Glioma Extracellular Vesicles Define Heterogeneity. <i>Cell Reports</i> , 2019, 27, 3972-3987.e6.	2.9	46
67	Integrated Dual-Mode Chromatography to Enrich Extracellular Vesicles from Plasma. <i>Advanced Biology</i> , 2020, 4, e1900310.	3.0	46
68	Nano-plasmonic exosome diagnostics. <i>Expert Review of Molecular Diagnostics</i> , 2015, 15, 725-733.	1.5	44
69	Rapid identification of health care-associated infections with an integrated fluorescence anisotropy system. <i>Science Advances</i> , 2016, 2, e1600300.	4.7	44
70	Fluorescence polarization system for rapid COVID-19 diagnosis. <i>Biosensors and Bioelectronics</i> , 2021, 178, 113049.	5.3	44
71	Microfluidic Cell Sorter (<i>µ</i> FCS) for On-chip Capture and Analysis of Single Cells. <i>Advanced Healthcare Materials</i> , 2012, 1, 432-436.	3.9	43
72	Advances, challenges, and opportunities in extracellular RNA biology: insights from the NIH exRNA Strategic Workshop. <i>JCI Insight</i> , 2018, 3, .	2.3	41

#	ARTICLE	IF	CITATIONS
73	Comparison of select cancer biomarkers in human circulating and bulk tumor cells using magnetic nanoparticles and a miniaturized micro-NMR system. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 1009-1017.	1.7	40
74	Plasmon-enhanced Biosensing for Multiplexed Profiling of Extracellular Vesicles. <i>Advanced Biology</i> , 2020, 4, e2000003.	3.0	40
75	Methods for Systematic Identification of Membrane Proteins for Specific Capture of Cancer-Derived Extracellular Vesicles. <i>Cell Reports</i> , 2019, 27, 255-268.e6.	2.9	38
76	Molecular characterization of scant lung tumor cells using iron-oxide nanoparticles and micro-nuclear magnetic resonance. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 661-668.	1.7	35
77	Sparsity-Based Pixel Super Resolution for Lens-Free Digital In-line Holography. <i>Scientific Reports</i> , 2016, 6, 24681.	1.6	29
78	Nanoparticle Detection of Urinary Markers for Point-of-Care Diagnosis of Kidney Injury. <i>PLoS ONE</i> , 2015, 10, e0133417.	1.1	29
79	Nanostar Clustering Improves the Sensitivity of Plasmonic Assays. <i>Bioconjugate Chemistry</i> , 2015, 26, 1470-1474.	1.8	28
80	3D tracking of extracellular vesicles by holographic fluorescence imaging. <i>Science Advances</i> , 2020, 6, .	4.7	27
81	Computational Optics Enables Breast Cancer Profiling in Point-of-Care Settings. <i>ACS Nano</i> , 2018, 12, 9081-9090.	7.3	26
82	Multichannel digital heteronuclear magnetic resonance biosensor. <i>Biosensors and Bioelectronics</i> , 2019, 126, 240-248.	5.3	25
83	Characterization and modulation of surface charges to enhance extracellular vesicle isolation in plasma. <i>Theranostics</i> , 2022, 12, 1988-1998.	4.6	23
84	Compact and Filter-Free Luminescence Biosensor for Mobile <i>in Vitro</i> Diagnoses. <i>ACS Nano</i> , 2019, 13, 11698-11706.	7.3	22
85	Multiplexed Magnetic Labeling Amplification Using Oligonucleotide Hybridization. <i>Advanced Materials</i> , 2011, 23, H254-7.	11.1	21
86	CytoPAN—Portable cellular analyses for rapid point-of-care cancer diagnosis. <i>Science Translational Medicine</i> , 2020, 12, .	5.8	21
87	Automated molecular-image cytometry and analysis in modern oncology. <i>Nature Reviews Materials</i> , 2020, 5, 409-422.	23.3	19
88	Palm NMR and one-chip NMR. , 2010, , .		17
89	Bioorthogonal Radiopaque Hydrogel for Endoscopic Delivery and Universal Tissue Marking. <i>Advanced Healthcare Materials</i> , 2016, 5, 421-426.	3.9	17
90	Membrane-bound Gaussia luciferase as a tool to track shedding of membrane proteins from the surface of extracellular vesicles. <i>Scientific Reports</i> , 2019, 9, 17387.	1.6	17

#	ARTICLE	IF	CITATIONS
91	Zwitterionic Polymer Electroplating Facilitates the Preparation of Electrode Surfaces for Biosensing. <i>Advanced Materials</i> , 2022, 34, e2107892.	11.1	17
92	Oxidation Kinetics and Magnetic Properties of Elemental Iron Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 667-671.	1.2	16
93	Fluorescence Polarization Based Nucleic Acid Testing for Rapid and Cost-Effective Diagnosis of Infectious Disease. <i>Chemistry - A European Journal</i> , 2015, 21, 16359-16363.	1.7	16
94	Bead-Based Extracellular Vesicle Analysis Using Flow Cytometry. <i>Advanced Biology</i> , 2020, 4, 2000203.	3.0	15
95	Rapid Serial Immunoprofiling of the Tumor Immune Microenvironment by Fine Needle Sampling. <i>Clinical Cancer Research</i> , 2021, 27, 4781-4793.	3.2	14
96	Dual Imaging and Photoactivated Nanoprobe for Controlled Cell Tracking. <i>Small</i> , 2013, 9, 222-227.	5.2	13
97	Integrated microHall magnetometer to measure the magnetic properties of nanoparticles. <i>Lab on A Chip</i> , 2017, 17, 4000-4007.	3.1	13
98	Characterization of Extracellular Vesicles by Surface Plasmon Resonance. <i>Methods in Molecular Biology</i> , 2017, 1660, 133-141.	0.4	13
99	Facile Coating Strategy to Functionalize Inorganic Nanoparticles for Biosensing. <i>Bioconjugate Chemistry</i> , 2017, 28, 33-37.	1.8	13
100	Magnetic Gold Nanoparticles with Idealized Coating for Enhanced Point-of-Care Sensing. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102035.	3.9	13
101	On Chip Analysis of CNS Lymphoma in Cerebrospinal Fluid. <i>Theranostics</i> , 2015, 5, 796-804.	4.6	12
102	Holographic Assessment of Lymphoma Tissue (HALT) for Global Oncology Field Applications. <i>Theranostics</i> , 2016, 6, 1603-1610.	4.6	12
103	Nanomagnetic System for Rapid Diagnosis of Acute Infection. <i>ACS Nano</i> , 2017, 11, 11425-11432.	7.3	12
104	Point-of-care cervical cancer screening using deep learning-based microholography. <i>Theranostics</i> , 2019, 9, 8438-8447.	4.6	12
105	Comprehensive Characterization of Nanosized Extracellular Vesicles from Central and Peripheral Organs: Implications for Preclinical and Clinical Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 8906-8919.	2.4	12
106	Precise Nanosizing with High Dynamic Range Holography. <i>Nano Letters</i> , 2021, 21, 317-322.	4.5	12
107	A rapid assay provides on-site quantification of tetrahydrocannabinol in oral fluid. <i>Science Translational Medicine</i> , 2021, 13, eabe2352.	5.8	12
108	Multielectrode Spectroscopy Enables Rapid and Sensitive Molecular Profiling of Extracellular Vesicles. <i>ACS Central Science</i> , 2022, 8, 110-117.	5.3	12

#	ARTICLE	IF	CITATIONS
109	Recapitulated Crosstalk between Cerebral Metastatic Lung Cancer Cells and Brain Perivascular Tumor Microenvironment in a Microfluidic Co-culture Chip. <i>Advanced Science</i> , 2022, 9, .	5.6	12
110	A magneto-DNA nanoparticle system for the rapid and sensitive diagnosis of enteric fever. <i>Scientific Reports</i> , 2016, 6, 32878.	1.6	11
111	Digital diffraction detection of protein markers for avian influenza. <i>Lab on A Chip</i> , 2016, 16, 1340-1345.	3.1	11
112	Kaleidoscopic fluorescent arrays for machine-learning-based point-of-care chemical sensing. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129248.	4.0	11
113	Development of Integrated Systems for On-Site Infection Detection. <i>Accounts of Chemical Research</i> , 2021, 54, 3991-4000.	7.6	10
114	Point of care assessment of melanoma tumor signaling and metastatic burden from ¹ H NMR analysis of tumor fine needle aspirates and peripheral blood. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 821-828.	1.7	9
115	Advances in Biosensor Technologies for Infection Diagnostics. <i>Accounts of Chemical Research</i> , 2022, 55, 121-122.	7.6	9
116	Exploring alternative ovarian cancer biomarkers using innovative nanotechnology strategies. <i>Cancer and Metastasis Reviews</i> , 2015, 34, 75-82.	2.7	8
117	Design of a Microfluidic Chip for Magnetic-Activated Sorting of One-Bead-One-Compound Libraries. <i>ACS Combinatorial Science</i> , 2016, 18, 271-278.	3.8	8
118	Normalizing the Optical Signal Enables Robust Assays with Lateral Flow Biosensors. <i>ACS Omega</i> , 2022, 7, 17723-17731.	1.6	8
119	Highly sensitive detection of protein biomarkers via nuclear magnetic resonance biosensor with magnetically engineered nanoferrite particles. <i>International Journal of Nanomedicine</i> , 2016, Volume 11, 5497-5503.	3.3	7
120	Facile silicification of plastic surface for bioassays. <i>Chemical Communications</i> , 2017, 53, 2134-2137.	2.2	7
121	Thermophoretically enriched detection. <i>Nature Biomedical Engineering</i> , 2019, 3, 163-164.	11.6	7
122	Bioassay for monitoring the anti-aging effect of cord blood treatment. <i>Theranostics</i> , 2019, 9, 1-10.	4.6	5
123	Integrated Analytical System for Clinical Single-Cell Analysis. <i>Advanced Science</i> , 2022, 9, e2200415.	5.6	5
124	Magnetic Ligation Method for Quantitative Detection of MicroRNAs. <i>Advanced Healthcare Materials</i> , 2014, 3, 1015-1019.	3.9	4
125	Electrochemical Sweat Sensing: Engineering Materials for Electrochemical Sweat Sensing (<i>Adv. Funct. Mater.</i>)	7.8	4
126	Diagnostic Magnetic Resonance Technology. <i>Biological and Medical Physics Series</i> , 2013, , 197-222.	0.3	4

#	ARTICLE	IF	CITATIONS
127	Challenges influencing next generation technologies for precision medicine. Expert Review of Precision Medicine and Drug Development, 2016, 1, 121-123.	0.4	2
128	Silicon RF NMR biomolecular sensor - review. , 2010, , .		1
129	Rapid and simple single-chamber nucleic acid detection system prepared through nature-inspired surface engineering. Theranostics, 2021, 11, 6735-6745.	4.6	1
130	On-chip analysis of glioblastoma cell chemoresistance. , 2021, , 473-490.		0
131	Computational Optics for Point-of-Care Breast Cancer Profiling. Methods in Molecular Biology, 2022, 2393, 153-162.	0.4	0
132	Abstract P056: Rapid serial immunoprofiling of the tumor immune microenvironment by fine needle sampling. , 2022, , .		0