

# Lin Han

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7401364/publications.pdf>

Version: 2024-02-01

73  
papers

2,165  
citations

218592

26  
h-index

243529

44  
g-index

73  
all docs

73  
docs citations

73  
times ranked

3207  
citing authors

#	ARTICLE	IF	CITATIONS
1	Controllable Nanoparticle Aggregation through a Superhydrophobic Laser-Induced Graphene Dynamic System for Surface-Enhanced Raman Scattering Detection. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 3504-3514.	4.0	13
2	Graphene oxide-graphene Van der Waals heterostructure transistor biosensor for SARS-CoV-2 protein detection. <i>Talanta</i> , 2022, 240, 123197.	2.9	40
3	Poly-L-lysine-Modified Graphene Field-Effect Transistor Biosensors for Ultrasensitive Breast Cancer miRNAs and SARS-CoV-2 RNA Detection. <i>Analytical Chemistry</i> , 2022, 94, 1626-1636.	3.2	48
4	Laser-Induced Graphene Superhydrophobic Surface Transition from Pinning to Rolling for Multiple Applications. <i>Small Methods</i> , 2022, 6, e2200096.	4.6	13
5	Rapid and High-Throughput SARS-CoV-2 RNA Detection without RNA Extraction and Amplification by Using a Microfluidic Biochip. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	9
6	Lys-AuNPs@MoS <sub>2</sub> Nanocomposite Self-Assembled Microfluidic Immunoassay Biochip for Ultrasensitive Detection of Multiplex Biomarkers for Cardiovascular Diseases. <i>Analytical Chemistry</i> , 2022, 94, 4720-4728.	3.2	17
7	High-Throughput, Living Single-Cell, Multiple Secreted Biomarker Profiling Using Microfluidic Chip and Machine Learning for Tumor Cell Classification. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102800.	3.9	14
8	Aptamer-based signal amplification strategies coupled with microchips for high-sensitivity bioanalytical applications: A review. <i>Analytica Chimica Acta</i> , 2022, 1209, 339893.	2.6	11
9	Unraveling the Mechanobiology Underlying Traumatic Brain Injury with Advanced Technologies and Biomaterials. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	2
10	Large-area surface-enhanced Raman spectroscopy substrate by hybrid porous GaN with Au/Ag for breast cancer miRNA detection. <i>Applied Surface Science</i> , 2021, 541, 148456.	3.1	35
11	Universal Criterion for Critical Motion of Droplets Adhered on Surfaces with Different Wettability in Laminar Flow. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 3397-3410.	1.8	3
12	Enrichment-Detection Integrated Exosome Profiling Biosensors Promising for Early Diagnosis of Cancer. <i>Analytical Chemistry</i> , 2021, 93, 4697-4706.	3.2	30
13	Attomolar-Level Ultrasensitive and Multiplex microRNA Detection Enabled by a Nanomaterial Locally Assembled Microfluidic Biochip for Cancer Diagnosis. <i>Analytical Chemistry</i> , 2021, 93, 5129-5136.	3.2	44
14	Synthesis of Wafer-Scale Graphene with Chemical Vapor Deposition for Electronic Device Applications. <i>Advanced Materials Technologies</i> , 2021, 6, 2000744.	3.0	46
15	Rapid and sensitive triple-mode detection of causative SARS-CoV-2 virus specific genes through interaction between genes and nanoparticles. <i>Analytica Chimica Acta</i> , 2021, 1154, 338330.	2.6	37
16	Performance-Enhanced CsPbBr <sub>3</sub> /HfO <sub>2</sub> /Si Heterostructure Optoelectronics through the Tunneling Effect. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100279.	1.9	1
17	Applications of 2D-Layered Palladium Diselenide and Its van der Waals Heterostructures in Electronics and Optoelectronics. <i>Nano-Micro Letters</i> , 2021, 13, 143.	14.4	61
18	Ultrasensitive, high-throughput, and rapid simultaneous detection of SARS-CoV-2 antigens and IgG/IgM antibodies within 10 min through an immunoassay biochip. <i>Mikrochimica Acta</i> , 2021, 188, 262.	2.5	23

#	ARTICLE	IF	CITATIONS
19	Ultrasensitive, high-throughput and multiple cancer biomarkers simultaneous detection in serum based on graphene oxide quantum dots integrated microfluidic biosensing platform. <i>Analytica Chimica Acta</i> , 2021, 1178, 338791.	2.6	22
20	Mechanical Stress Induces a Transient Suppression of Cytokine Secretion in Astrocytes Assessed at the Single-Cell Level with a High-Throughput Microfluidic Chip. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100698.	3.9	4
21	Large area uniform PtSx synthesis on sapphire substrate for performance improved photodetectors. <i>Applied Materials Today</i> , 2021, 25, 101176.	2.3	10
22	A high-performance microfluidic detection platform to conduct a novel multiple-biomarker panel for ovarian cancer screening. <i>RSC Advances</i> , 2021, 11, 8124-8133.	1.7	10
23	Regulation of stem cell fate using nanostructure-mediated physical signals. <i>Chemical Society Reviews</i> , 2021, 50, 12828-12872.	18.7	35
24	Surface specifically modified NK-92 cells with CD56 antibody conjugated superparamagnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles for magnetic targeting immunotherapy of solid tumors. <i>Nanoscale</i> , 2021, 13, 19109-19122.	2.8	12
25	Ultrasensitive Detection of COVID-19 Causative Virus (SARS-CoV-2) Spike Protein Using Laser Induced Graphene Field-Effect Transistor. <i>Molecules</i> , 2021, 26, 6947.	1.7	22
26	Fabrication of a uniform Au nanodot array/monolayer graphene hybrid structure for high-performance surface-enhanced Raman spectroscopy. <i>Journal of Materials Science</i> , 2020, 55, 591-602.	1.7	20
27	Piezopotential gated two-dimensional InSe field-effect transistor for designing a pressure sensor based on piezotronic effect. <i>Nano Energy</i> , 2020, 70, 104457.	8.2	35
28	Graphene-based field-effect transistors integrated with microfluidic chip for real-time pH monitoring of seawater. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 15372-15380.	1.1	12
29	Reduction of the ambient effect in multilayer InSe transistors and a strategy toward stable 2D-based optoelectronic applications. <i>Nanoscale</i> , 2020, 12, 18356-18362.	2.8	13
30	Low Lattice Mismatch InSe/Se Vertical Van der Waals Heterostructure for High-Performance Transistors via Strong Fermi-Level Depinning. <i>Small Methods</i> , 2020, 4, 2000238.	4.6	22
31	Microfluidic chip for multiple detection of miRNA biomarkers in breast cancer based on three-segment hybridization. <i>AIP Advances</i> , 2020, 10, .	0.6	26
32	Construction of High Field-Effect Mobility Multilayer MoS <sub>2</sub> Field-Effect Transistors with Excellent Stability through Interface Engineering. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2132-2140.	2.0	32
33	Highly efficient UV-Ozone treatment for IAZO active layer to facilitate the low temperature fabrication of high performance thin film transistors. <i>Ceramics International</i> , 2020, 46, 17295-17299.	2.3	12
34	Tunable nanostructured distributed Bragg reflectors for III-nitride optoelectronic applications. <i>RSC Advances</i> , 2020, 10, 23341-23349.	1.7	15
35	A Facile and Sensitive DNA Sensing of Harmful Algal Blooms Based on Graphene Oxide Nanosheets. <i>Marine Biotechnology</i> , 2020, 22, 498-510.	1.1	6
36	Ultrasensitive Label-free MiRNA Sensing Based on a Flexible Graphene Field-Effect Transistor without Functionalization. <i>ACS Applied Electronic Materials</i> , 2020, 2, 1090-1098.	2.0	59

#	ARTICLE	IF	CITATIONS
37	A rapid and ultrasensitive colorimetric biosensor based on aptamer functionalized Au nanoparticles for detection of saxitoxin. <i>RSC Advances</i> , 2020, 10, 15293-15298.	1.7	33
38	Stable InSe transistors with high-field effect mobility for reliable nerve signal sensing. <i>Npj 2D Materials and Applications</i> , 2019, 3, .	3.9	31
39	Mechanoluminescence enhancement of ZnS:Cu,Mn with piezotronic effect induced trap-depth reduction originated from PVDF ferroelectric film. <i>Nano Energy</i> , 2019, 63, 103861.	8.2	50
40	Effect of Hydroxyapatite Nanorods on the Fate of Human Adipose-Derived Stem Cells Assessed In Situ at the Single Cell Level with a High-Throughput, Real-Time Microfluidic Chip. <i>Small</i> , 2019, 15, e1905001.	5.2	14
41	Field-Effect Transistors: A Facile and Effective Method for Patching Sulfur Vacancies of WS <sub>2</sub> via Nitrogen Plasma Treatment (Small 36/2019). <i>Small</i> , 2019, 15, 1970195.	5.2	0
42	A Facile and Effective Method for Patching Sulfur Vacancies of WS <sub>2</sub> via Nitrogen Plasma Treatment. <i>Small</i> , 2019, 15, e1901791.	5.2	48
43	A novel anti <i>Candida albicans</i> drug screening system based on high-throughput microfluidic chips. <i>Scientific Reports</i> , 2019, 9, 8087.	1.6	17
44	Effect of substrate temperature on sputtered indium-aluminum-zinc oxide films and thin film transistors. <i>Journal of Alloys and Compounds</i> , 2019, 791, 773-778.	2.8	14
45	Stem Cell Fate: Effect of Hydroxyapatite Nanorods on the Fate of Human Adipose-Derived Stem Cells Assessed In Situ at the Single Cell Level with a High-Throughput, Real-Time Microfluidic Chip (Small) <a href="#">Tj ETQq1 152784314rgBT / O</a>		
46	High Performance Thin Film Transistors With Sputtered In-Al-Zn-O Channel and Different Source/Drain Electrodes. <i>IEEE Electron Device Letters</i> , 2019, 40, 247-250.	2.2	16
47	Improved performance of InSe field-effect transistors by channel encapsulation. <i>Semiconductor Science and Technology</i> , 2018, 33, 06LT01.	1.0	13
48	A Novel Thermally Evaporated Etching Mask for Low-Damage Dry Etching. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 290-295.	1.1	5
49	Bisulfite-independent analysis of CpG island methylation enables genome-scale stratification of single cells. <i>Nucleic Acids Research</i> , 2017, 45, gkx026.	6.5	31
50	Interfacing Inorganic Nanowire Arrays and Living Cells for Cellular Function Analysis. <i>Small</i> , 2015, 11, 5600-5610.	5.2	50
51	Highly multiplexed profiling of single-cell effector functions reveals deep functional heterogeneity in response to pathogenic ligands. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E607-15.	3.3	245
52	Single-Crystalline, Nanoporous Gallium Nitride Films With Fine Tuning of Pore Size for Stem Cell Engineering. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2014, 5, 0410041-410049.	0.8	4
53	Nanowire array chips for molecular typing of rare trafficking leukocytes with application to neurodegenerative pathology. <i>Nanoscale</i> , 2014, 6, 6537-6550.	2.8	13
54	Co-detection and sequencing of genes and transcripts from the same single cells facilitated by a microfluidics platform. <i>Scientific Reports</i> , 2014, 4, 6485.	1.6	65

#	ARTICLE	IF	CITATIONS
55	Nanotopography Influences Adhesion, Spreading, and Self-Renewal of Human Embryonic Stem Cells. ACS Nano, 2012, 6, 4094-4103.	7.3	353
56	Nanowire Substrate-Based Laser Scanning Cytometry for Quantitation of Circulating Tumor Cells. Nano Letters, 2012, 12, 2697-2704.	4.5	123
57	Self-Aligned Top-Gate Coplanar a-Si:H Thin-Film Transistors With a $\text{SiO}_2$ "Silicone Hybrid Gate Dielectric. IEEE Electron Device Letters, 2011, 32, 36-38.	2.2	6
58	17.3: aSi:H Thinfilm Transistors with a New Hybrid Dielectric Highly Stable under Mechanical and Electrical Stress. Digest of Technical Papers SID International Symposium, 2010, 41, 238-240.	0.1	0
59	61.3: Amorphous Silicon TFT Technology for Rollable OLED Displays. Digest of Technical Papers SID International Symposium, 2010, 41, 917-920.	0.1	3
60	(Invited) A New Insulator for Thin-Film Transistor Backplanes and for Flexible Passivation Layers. ECS Transactions, 2010, 33, 125-134.	0.3	0
61	Ultraflexible amorphous silicon transistors made with a resilient insulator. Applied Physics Letters, 2010, 96, 042111.	1.5	53
62	Amorphous silicon thin-film transistors with field-effect mobilities of $2 \times 10^4 \text{ cm}^2/\text{Vs}$ for electrons and $0.1 \times 10^4 \text{ cm}^2/\text{Vs}$ for holes. Applied Physics Letters, 2009, 94, 162105.	1.5	34
63	A New Gate Dielectric for Highly Stable Amorphous-Silicon Thin-Film Transistors With $\sim 1.5 \times 10^{17} \text{ cm}^{-3}$ Electron Field-Effect Mobility. IEEE Electron Device Letters, 2009, 30, 502-504.	2.2	7
64	Effects of Mechanical Strain on the Electrical Performance of Amorphous Silicon Thin-Film Transistors with a New Gate Dielectric. Materials Research Society Symposia Proceedings, 2009, 1196, 8.	0.1	0
65	Properties of a Permeation Barrier Material Deposited from Hexamethyl Disiloxane and Oxygen. Journal of the Electrochemical Society, 2009, 156, H106.	1.3	28
66	New Type of Thermal-Isolation Structure Based on PI and OPS Used in Uncooled Infrared Detector. IEEE Sensors Journal, 2008, 8, 354-356.	2.4	1
67	A single-layer permeation barrier for organic light-emitting displays. Applied Physics Letters, 2008, 92, 103309.	1.5	71
68	Diffusion of atmospheric gases into barrier-layer sealed organic light emitting diodes. Applied Physics Letters, 2008, 93, 203306.	1.5	14
69	Structure design of amorphous silicon thin film transistor used as uncooled infrared sensors. Infrared Physics and Technology, 2007, 50, 47-50.	1.3	3
70	New application of polyimide in uncooled a-Si TFT infrared sensors. Microelectronics Journal, 2007, 38, 278-281.	1.1	0
71	A High Performance Uncooled a-Si TFT Infrared Sensor. , 2006, , .		1
72	A novel uncooled a-Si microbolometer for infrared detection. , 2006, , .		2

#	ARTICLE	IF	CITATIONS
73	Rapid, amplification-free and high-throughput SARS-CoV-2 RNA detection via a reduced-graphene-oxide based fluorescence assay. <i>Sensors &amp; Diagnostics</i> , 0, , .	1.9	2