

# Tie Li

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

1,150  
citations

623574

14  
h-index

377752

34  
g-index

40  
all docs

40  
docs citations

40  
times ranked

1547  
citing authors

#	ARTICLE	IF	CITATIONS
1	Detection of TNT in sulfuric acid solution by SiNWs-FET based sensor. <i>Microsystem Technologies</i> , 2022, 28, 1525-1534.	1.2	4
2	Micromachined Thermocouple for Rapid Detection of Ultrahigh Heat Flux at High Temperature. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 2099-2106.	5.2	9
3	Rapid detection of airborne protein from <i>Mycobacterium tuberculosis</i> using a biosensor detection system. <i>Analyst</i> , 2022, 147, 614-624.	1.7	9
4	Portable immunosensor directly and rapidly detects <i>Mycobacterium tuberculosis</i> in sputum. <i>Analytical Methods</i> , 2022, 14, 438-448.	1.3	2
5	Thermal Conductivity Gas Sensor with Enhanced Flow-Rate Independence. <i>Sensors</i> , 2022, 22, 1308.	2.1	7
6	A self-contained and integrated microfluidic nano-detection system for the biosensing and analysis of molecular interactions. <i>Lab on A Chip</i> , 2022, 22, 1702-1713.	3.1	7
7	MEMS Thermocouple Sensor Based on 4H-Silicon-Carbide-On-Insulator (4H-SiCOI). <i>IEEE Sensors Journal</i> , 2022, 22, 13930-13936.	2.4	4
8	A controllable fabrication improved silicon nanowire array sensor on (111) SOI for accurate bio-analysis application. <i>Nano Research</i> , 2022, 15, 7468-7475.	5.8	7
9	A Theoretical and Simulation Analysis of the Sensitivity of SiNWs-FET Sensors. <i>Biosensors</i> , 2021, 11, 121.	2.3	3
10	Efficient Infrared-Thermal-Electric Conversion with Textured Dielectric Film. , 2021, , .		0
11	Simultaneously controlling heat conduction and infrared absorption with a textured dielectric film to enhance the performance of thermopiles. <i>Microsystems and Nanoengineering</i> , 2021, 7, 36.	3.4	6
12	Surface Charge Density Inside a Silicon Nitride Nanopore. <i>Langmuir</i> , 2021, 37, 10521-10528.	1.6	15
13	Rapid and Sensitive Detection of <i>Mycobacterium tuberculosis</i> by an Enhanced Nanobiosensor. <i>ACS Sensors</i> , 2021, 6, 3367-3376.	4.0	26
14	Influence of thickness of SiO <sub>2</sub> layer on the performance of SINW sensors. <i>Micro and Nano Letters</i> , 2021, 16, 64-70.	0.6	1
15	Decoding the Double/Multiple Hysteresis Loops in Antiferroelectric Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 60241-60249.	4.0	10
16	Novel fabrication for vertically stacked inverted triangular and diamond-shaped silicon nanowires on (100) single crystal silicon wafer. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 015003.	1.5	3
17	Micromachined Thermopile Based High Heat Flux Sensor. <i>Journal of Microelectromechanical Systems</i> , 2020, 29, 36-42.	1.7	16
18	High Response Photodetection by Applying the Optimized Photoreceptor Protein Modification on Graphene Based Field Effect Transistors. <i>Frontiers in Materials</i> , 2020, 7, .	1.2	3

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19	Gold nanoparticle modified silicon nanowire array based sensor for low-cost, high sensitivity and selectivity detection of mercury ions. <i>Materials Research Express</i> , 2020, 7, 035017.	0.8	8
20	Trace Level Analysis of Nerve Agent Simulant DMMP With Silicon Nanowire FET Sensor. <i>IEEE Sensors Journal</i> , 2020, 20, 12096-12101.	2.4	9
21	Improved Thermopile on Pyramidally-Textured Dielectric Film. <i>IEEE Electron Device Letters</i> , 2020, , 1-1.	2.2	9
22	Au-Decorated ZnFe <sub>2</sub> O <sub>4</sub> Yolk-Shell Spheres for Trace Sensing of Chlorobenzene. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 16792-16804.	4.0	38
23	Performance Enhanced Thermopile With Rough Dielectric Film Black. <i>IEEE Electron Device Letters</i> , 2020, 41, 593-596.	2.2	15
24	A robust bioderived wavelength-specific photosensor based on BLUF proteins. <i>Sensors and Actuators B: Chemical</i> , 2020, 310, 127838.	4.0	4
25	Highly sensitive and selective detection of human-derived volatile organic compounds based on odorant binding proteins functionalized silicon nanowire array. <i>Sensors and Actuators B: Chemical</i> , 2020, 309, 127762.	4.0	24
26	MEMS thermal gas flow sensor with self-test function. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 125009.	1.5	13
27	Sub-ppb and ultra selective nitrogen dioxide sensor based on sulfur doped graphene. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 2258-2263.	4.0	30
28	Wafer-level and highly controllable fabricated silicon nanowire transistor arrays on (111) silicon-on-insulator (SOI) wafers for highly sensitive detection in liquid and gaseous environments. <i>Nano Research</i> , 2018, 11, 1520-1529.	5.8	32
29	Design, fabrication, and characterization of a high-performance CMOS-compatible thermopile infrared detector with self-test function. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 125017.	1.5	18
30	Amino Monolayer Modified Nanowire Array for Trinitrotoluene Detection. <i>Sensors and Materials</i> , 2018, 30, 2669.	0.3	3
31	Multiplexed detection of lung cancer biomarkers in patients serum with CMOS-compatible silicon nanowire arrays. <i>Biosensors and Bioelectronics</i> , 2017, 91, 482-488.	5.3	81
32	MEMS-based thermoelectric infrared sensors: A review. <i>Frontiers of Mechanical Engineering</i> , 2017, 12, 557-566.	2.5	88
33	Wafer-level site-controlled growth of silicon nanowires by Cu pattern dewetting. <i>Nano Research</i> , 2015, 8, 2646-2653.	5.8	4
34	Direct ultrasensitive electrical detection of prostate cancer biomarkers with CMOS-compatible n- and p-type silicon nanowire sensor arrays. <i>Nanoscale</i> , 2014, 6, 13036-13042.	2.8	54
35	CMOS-Compatible Silicon Nanowire Field-Effect Transistors for Ultrasensitive and Label-Free MicroRNAs Sensing. <i>Small</i> , 2014, 10, 2022-2028.	5.2	99
36	Top-Down Fabricated Silicon-Nanowire-Based Field-Effect Transistor Device on a (111) Silicon Wafer. <i>Small</i> , 2013, 9, 525-530.	5.2	29

#	ARTICLE	IF	CITATIONS
37	Enhanced Sensing of Nucleic Acids with Silicon Nanowire Field Effect Transistor Biosensors. Nano Letters, 2012, 12, 5262-5268.	4.5	189
38	Robust Array-Composite Micromachined Thermopile IR Detector by CMOS Technology. IEEE Electron Device Letters, 2011, 32, 1761-1763.	2.2	14
39	Silicon-Nanowire-Based CMOS-Compatible Field-Effect Transistor Nanosensors for Ultrasensitive Electrical Detection of Nucleic Acids. Nano Letters, 2011, 11, 3974-3978.	4.5	257
40	Flow-insensitive micro-thermal conductivity detector with semi-diffusion gas channel. Journal of Micromechanics and Microengineering, 0, , .	1.5	0