Tao Dong

List of Publications by Year
in descending order

88 papers	2,896 citations	186209 28 h-index	182361 51 g-index
89 all docs	89 docs citations	89 times ranked	3339 citing authors

#	Article	IF	Citations
1	Photodynamic Therapy Review: Principles, Photosensitizers, Applications, and Future Directions. Pharmaceutics, 2021, 13, 1332.	2.0	336
2	Photoluminescence tuning in carbon dots: surface passivation or/and functionalization, heteroatom doping. Journal of Materials Chemistry C, 2018, 6, 7944-7970.	2.7	274
3	Recent Developments in Optical Detection Technologies in Lab-on-a-Chip Devices for Biosensing Applications. Sensors, 2014, 14, 15458-15479.	2.1	234
4	A Review of Wearable Technologies for Elderly Care that Can Accurately Track Indoor Position, Recognize Physical Activities and Monitor Vital Signs in Real Time. Sensors, 2017, 17, 341.	2.1	231
5	Flexible Photodetector Based on 2D Materials: Processing, Architectures, and Applications. Advanced Materials Interfaces, 2020, 7, 1901657.	1.9	109
6	Compatible immuno-NASBA LOC device for quantitative detection of waterborne pathogens: design and validation. Lab on A Chip, 2012, 12, 602-612.	3.1	84
7	Rapid Identification and Susceptibility Testing of Uropathogenic Microbes via Immunosorbent ATP-Bioluminescence Assay on a Microfluidic Simulator for Antibiotic Therapy. Analytical Chemistry, 2015, 87, 2410-2418.	3.2	63
8	An effective passive micromixer with shifted trapezoidal blades using wide Reynolds number range. Chemical Engineering Research and Design, 2015, 93, 1-11.	2.7	62
9	A smart fully integrated micromachined separator with soft magnetic micro-pillar arrays for cell isolation. Journal of Micromechanics and Microengineering, 2010, 20, 115021.	1.5	57
10	Integratable non-clogging microconcentrator based on counter-flow principle for continuous enrichment of CaSki cells sample. Microfluidics and Nanofluidics, 2011, 10, 855-865.	1.0	57
11	Measurement and modeling of R141b condensation heat transfer in silicon rectangular microchannels. Journal of Micromechanics and Microengineering, 2008, 18, 085012.	1.5	54
12	Power generation from conductive droplet sliding on electret film. Applied Physics Letters, 2012, 100, .	1.5	54
13	Immunodetection of salivary biomarkers by an optical microfluidic biosensor with polyethylenimine-modified polythiophene-C70 organic photodetectors. Biosensors and Bioelectronics, 2017, 94, 321-327.	5.3	54
14	Integrated optical microfluidic biosensor using a polycarbazole photodetector for point-of-care detection of hormonal compounds. Journal of Biomedical Optics, 2013, 18, 097001.	1.4	53
15	State-of-the-Art Power Management Circuits for Piezoelectric Energy Harvesters. IEEE Circuits and Systems Magazine, 2018, 18, 27-48.	2.6	52
16	An efficient passive planar micromixer with ellipse-like micropillars for continuous mixing of human blood. Computer Methods and Programs in Biomedicine, 2014, 117, 20-29.	2.6	45
17	Geometric effects on mixing performance in a novel passive micromixer with trapezoidal-zigzag channels. Journal of Micromechanics and Microengineering, 2015, 25, 094004.	1.5	45
18	Molecular simulations of R141b boiling flow in micro/nano channel: Interfacial phenomena. Energy Conversion and Management, 2006, 47, 2178-2191.	4.4	44

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19	Freon R141b flow boiling in silicon microchannel heat sinks: experimental investigation. Heat and Mass Transfer, 2007, 44, 315-324.	1.2	43
20	Entropy generation and optimization of laminar convective heat transfer and fluid flow in a microchannel with staggered arrays of pin fin structure with tip clearance. Energy Conversion and Management, 2015, 94, 493-504.	4.4	43
21	Multifunctional Sample Preparation Kit and On-Chip Quantitative Nucleic Acid Sequence-Based Amplification Tests for Microbial Detection. Analytical Chemistry, 2012, 84, 8541-8548.	3.2	42
22	Microfluidic Biosensor Array with Integrated Poly(2,7-Carbazole)/Fullerene-Based Photodiodes for Rapid Multiplexed Detection of Pathogens. Sensors, 2013, 13, 15898-15911.	2.1	42
23	Design and optimization of non-clogging counter-flow microconcentrator for enriching epidermoid cervical carcinoma cells. Biomedical Microdevices, 2011, 13, 179-190.	1.4	39
24	A mediator embedded micro-immunosensing unit for electrochemical detection on viruses within physiological saline media. Journal of Micromechanics and Microengineering, 2011, 21, 115031.	1.5	39
25	Sputum and salivary protein biomarkers and point-of-care biosensors for the management of COPD. Analyst, The, 2020, 145, 1583-1604.	1.7	36
26	Electrochemical methods for detection of biomarkers of Chronic Obstructive Pulmonary Disease in serum and saliva. Biosensors and Bioelectronics, 2019, 142, 111453.	5.3	35
27	A Microfluidic Device for Continuous Sensing of Systemic Acute Toxicants in Drinking Water. International Journal of Environmental Research and Public Health, 2013, 10, 6748-6763.	1.2	32
28	Integrated micro Pirani gauge based hermetical package monitoring for uncooled VO x bolometer FPAs. Microsystem Technologies, 2011, 17, 115-125.	1.2	30
29	Continuous and Real-Time Detection of Drinking-Water Pathogens with a Low-Cost Fluorescent Optofluidic Sensor. Sensors, 2018, 18, 2210.	2.1	29
30	Electrostatic Energy Harvester Employing Conductive Droplet and Thin-Film Electret. Journal of Microelectromechanical Systems, 2014, 23, 315-323.	1.7	27
31	Thermodynamic investigation and optimization of laminar forced convection in a rotating helical tube heat exchanger. Energy Conversion and Management, 2014, 86, 399-409.	4.4	27
32	A Si/SiGe quantum well based biosensor for direct analysis of exothermic biochemical reaction. Journal of Micromechanics and Microengineering, 2013, 23, 045011.	1.5	25
33	Capacitance Variation Induced by Microfluidic Two-Phase Flow across Insulated Interdigital Electrodes in Lab-On-Chip Devices. Sensors, 2015, 15, 2694-2708.	2.1	25
34	Smartphone-Based Rapid Screening of Urinary Biomarkers. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 455-463.	2.7	25
35	Temperature-Dependence in Battery Management Systems for Electric Vehicles: Challenges, Criteria, and Solutions. IEEE Access, 2019, 7, 142203-142213.	2.6	25
36	Nonâ€Fullerene Acceptor Organic Photodetector for Skinâ€Conformable Photoplethysmography Applications. Advanced Materials Interfaces, 2022, 9, .	1.9	25

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37	LED Optrode with Integrated Temperature Sensing for Optogenetics. Micromachines, 2018, 9, 473.	1.4	24
38	Tuning 2D Black Phosphorus: Defect Tailoring and Surface Functionalization. Chemistry of Materials, 2019, 31, 9917-9938.	3.2	24
39	A Capacitive Touch Screen Sensor for Detection of Urinary Tract Infections in Portable Biomedical Devices. Sensors, 2014, 14, 13851-13862.	2.1	18
40	A fluorimetric nitrite biosensor with polythienothiophene-fullerene thin film detectors for on-site water monitoring. Analyst, The, 2019, 144, 4342-4350.	1.7	17
41	Design of a wearable device for real-time screening of urinary tract infection and kidney disease based on smartphone. Analyst, The, 2018, 143, 2812-2818.	1.7	16
42	A flexible and wearable NO2 gas detection and early warning device based on a spraying process and an interdigital electrode at room temperature. Microsystems and Nanoengineering, 2022, 8, 40.	3.4	15
43	Recovery ofCryptosporidiumandGiardiaorganisms from surface water by counter-flow refining microfiltration. Environmental Technology (United Kingdom), 2013, 34, 2541-2551.	1.2	14
44	Recent methods and biosensors for foodborne pathogen detection in fish: progress and future prospects to sustainable aquaculture systems. Critical Reviews in Food Science and Nutrition, 2021, 61, 1852-1876.	5.4	14
45	High-precision and low-cost wireless 16-channel measurement system for multi-layer thin film characterization. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3600-3611.	2.5	13
46	Modification of microfluidic paper-based devices with dye nanomaterials obtained by encapsulation of compounds in Y and ZSM5 zeolites. Sensors and Actuators B: Chemical, 2018, 261, 66-74.	4.0	13
47	Design and Fabrication of Low-Cost 1536-Chamber Microfluidic Microarrays for Mood-Disorders-Related Serological Studies. Sensors, 2013, 13, 14570-14582.	2.1	12
48	Ultrasensitive opto-microfluidic immunosensor integrating gold nanoparticleâ€“enhanced chemiluminescence and highly stable organic photodetector. Journal of Biomedical Optics, 2014, 19, 030504.	1.4	12
49	Development and optimization of an integrated capillary-based opto-microfluidic device for chemiluminescence quantitative detection. Journal of Micromechanics and Microengineering, 2014, 24, 125023.	1.5	11
50	A cascade-like silicon filter for improved recovery of oocysts from environmental waters. Environmental Technology (United Kingdom), 2014, 35, 781-790.	1.2	11
51	Monitoring Aquaculture Water Quality: Design of an Early Warning Sensor with Aliivibrio fischeri and Predictive Models. Sensors, 2018, 18, 2848.	2.1	11
52	Facile preparation and thermal properties of Fieldâ€™s alloy nanofluid for heat transfer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 581, 123805.	2.3	11
53	Epitaxial Growth and Characterization of Self-Doping ${m Si}_{1-{m x}}{m Ge}_{m x}{m/Si}$ Multi-Quantum Well Materials. Journal of Microelectromechanical Systems, 2014, 23, 213-219.	1.7	10
54	Photodynamic Therapy Review: Principles, Photosensitizers, Applications, and Future Directions. Pharmaceutics, 2021, 13, .	2.0	10

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55	Mitigating hook effect in one-step quantitative sandwich lateral flow assay by timed conjugate release. Talanta, 2022, 240, 123157.	2.9	10
56	Modelling and design of a capacitive touch sensor for urinary tract infection detection at the point-of-care. , 2014, 2014, 4995-8.		9
57	Integratable Capacitive Sensor for Identification of Microfluidic Two-Phase Flow Patterns in Lab-on-Chip Devices. Journal of Microelectromechanical Systems, 2016, 25, 197-206.	1.7	9
58	Identification of microfluidic two-phase flow patterns in lab-on-chip devices. Bio-Medical Materials and Engineering, 2014, 24, 77-83.	0.4	8
59	A CMOS Readout With High-Precision and Low-Temperature-Coefficient Background Current Skimming for Infrared Focal Plane Array. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 1447-1455.	5.6	8
60	A synthetic layout optimization of discrete heat sources flush mounted on a laminar flow cooled flat plate based on the constructal law. Energy Conversion and Management, 2015, 106, 300-307.	4.4	8
61	Point-of-care COPD diagnostics: biomarkers, sampling, paper-based analytical devices, and perspectives. Analyst, The, 2022, 147, 1273-1293.	1.7	8
62	An ultrasensitive fluorimetric sensor for pre-screening of water microbial contamination risk. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 258, 119805.	2.0	7
63	A Flexible and Wearable Nylon Fiber Sensor Modified by Reduced Graphene Oxide and ZnO Quantum Dots for Wide-Range NO2 Gas Detection at Room Temperature. Materials, 2022, 15, 3772.	1.3	7
64	Void-free wafer-level adhesive bonding utilizing modified poly (diallyl phthalate). Journal of Micromechanics and Microengineering, 2013, 23, 125021.	1.5	6
65	Numerical investigation of developing convective heat transfer in a rotating helical pipe. International Communications in Heat and Mass Transfer, 2014, 57, 170-182.	2.9	6
66	Detection of Urinary Tract Infections on lab-on-chip device by measuring photons emitted from ATP bioluminescence. , 2014, 2014, 3114-7.		5
67	PDMS Microlenses for Focusing Light in Narrow Band Imaging Diagnostics. Sensors, 2019, 19, 1057.	2.1	5
68	A Low-Power CMOS Current Reference for Piezoelectric Energy Harvesters. IEEE Transactions on Electron Devices, 2020, 67, 3403-3410.	1.6	5
69	Design and Experimental Approach to the Construction of a Human Signal-Molecule-Profiling Database. International Journal of Environmental Research and Public Health, 2013, 10, 6887-6908.	1.2	4
70	Modeling, Design, and Fabrication of Self-Doping Si1â^'xGex/Si Multiquantum Well Material for Infrared Sensing. Journal of Sensors, 2016, 2016, 1-7.	0.6	4
71	Design of a microfluidic paper-based device for analysis of biomarkers from urine samples on diapers. , 2017, 2017, 181-184.		4
72	A Diaper Pad for Diaper-Based Urine Collection and Colorimetric Screening of Urinary Biomarkers. Annals of Biomedical Engineering, 2018, 46, 717-725.	1.3	4

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73	Fully integrated micro-separator with soft-magnetic micro-pillar arrays for filtrating lymphocytes. , 2010, 2010, 6522-6.		3
74	Characterization of the Electrical Properties of a Double Heterostructure GaN/AlGaN Epitaxial Layer with an AlGaN Interlayer. Journal of Electronic Materials, 2021, 50, 2521-2529.	1.0	3
75	A Pressure Driven Nanoconcentrator with Anti-Clogging Behavior for Recovery of Bio-Nanoparticles. Chemical Engineering Communications, 2015, 202, 718-727.	1.5	2
76	Colorimetric recognition for urinalysis dipsticks based on quadratic discriminant analysis. , 2017, 2017, 3902-3905.		2
77	Stability of colorimetric results in the detection of urine biomarkers using a paper-based analytical device. , 2017, 2017, 185-188.		2
78	Bi-objective optimization of axial profile of pin fin with uniform base heat flux. Applied Thermal Engineering, 2018, 128, 830-836.	3.0	2
79	A Fluorescence Sensing Method with Reduced DNA Typing and Low-Cost Instrumentation for Detection of Sample Tampering Cases in Urinalysis. Annals of Biomedical Engineering, 2020, 48, 644-654.	1.3	2
80	A household LOC device for online monitoring bacterial pathogens in drinking water with green design concept. , 2013, 2013, 1708-11.		1
81	Detection of stress hormones by a microfluidic-integrated polycarbazole/fullerene photodetector. , 2013, 2013, 4470-3.		1
82	Comments on â€œDetailed analysis for the cooling performance enhancement of a heat source under a thick plateâ€•by Hajmohammadi M.R. [Energy Convers. Manage. 76 (2013) 691â€“700]. Energy Conversion and Management, 2016, 129, 34-35.	4.4	1
83	Profiling a multiplex short tandem repeat loci from human urine with use of low cost on-site technology for verification of sample authenticity. , 2017, 2017, 3441-3444.		1
84	Lower-Order Compensation Chain Threshold-Reduction Technique for Multi-Stage Voltage Multipliers. Sensors, 2018, 18, 1245.	2.1	1
85	0.13 Î¼m Low-Power CMOS Current Starved VCO for Vibration Energy Harvesters. IEEE Transactions on Electron Devices, 2021, 68, 2167-2172.	1.6	1
86	Applicability and practical concerns of lock-in thermography for measurement of heat transfer coefficients. International Communications in Heat and Mass Transfer, 2021, 126, 105259.	2.9	1
87	A resistorless MOSFET-only current reference for energy harvesting applications. , 2022, , .		1
88	Highly conductive thermal inserts and conjugated conductionâ€“convection design. , 2019, , 11-76.		0