Bui Thanh Tung

List of Publications by Year
in descending order

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108	902	516215	580395
papers	citations	16 h-index	25 g-index

109	109	109	615
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of strain sensing effect in modified single-defect photonic crystal nanocavity. Optics Express, 2011, 19, 8821.	1.7	48
2	Corona based air-flow using parallel discharge electrodes. Experimental Thermal and Fluid Science, 2016, 79, 52-56.	1.5	43
3	Micro/nano-mechanical sensors and actuators based on SOI-MEMS technology. Journal of Family Business Management, 2010, 1, 013001.	2.6	42
4	Bipolar corona discharge based air flow generation with low net charge. Sensors and Actuators A: Physical, 2016, 244, 146-155.	2.0	37
5	Micromachined NH3 Gas Sensor with ppb-level Sensitivity Based on WO3 Nanoparticles Thinfilm. Procedia Engineering, 2011, 25, 1149-1152.	1.2	31
6	Bipolar corona assisted jet flow for fluidic application. Flow Measurement and Instrumentation, 2016, 50, 252-260.	1.0	28
7	Jet flow generation in a circulatory miniaturized system. Sensors and Actuators B: Chemical, 2016, 223, 820-826.	4.0	28
8	Jet flow in a circulatory miniaturized system using ion wind. Mechatronics, 2017, 47, 126-133.	2.0	28
9	Integrated CNTs thin film for MEMS mechanical sensors. Microelectronics Journal, 2010, 41, 860-864.	1.1	26
10	Ion Wind Generator Utilizing Bipolar Discharge in Parallel Pin Geometry. IEEE Transactions on Plasma Science, 2016, 44, 2979-2987.	0.6	26
11	Pressure sensor based on bipolar discharge corona configuration. Sensors and Actuators A: Physical, 2016, 237, 81-90.	2.0	26
12	Integration of SWNT film into MEMS for a micro-thermoelectric device. Smart Materials and Structures, 2010, 19, 075003.	1.8	25
13	Dielectrophoresis Microfluidic Enrichment Platform with Built-In Capacitive Sensor for Rare Tumor Cell Detection. Biochip Journal, 2018, 12, 114-122.	2.5	24
14	Piezo-resistive and thermo-resistance effects of highly-aligned CNT based macrostructures. RSC Advances, 2016, 6, 106090-106095.	1.7	20
15	Strain Sensitive Effect in a Triangular Lattice Photonic Crystal Hole-Modified Nanocavity. IEEE Sensors Journal, 2011, 11, 2657-2663.	2.4	18
16	Particle precipitation by bipolar corona discharge ion winds. Journal of Aerosol Science, 2018, 124, 83-94.	1.8	18
17	High-Frequency Interdigitated Array Electrode-Based Capacitive Biosensor for Protein Detection. Biochip Journal, 2019, 13, 403-415.	2.5	17
18	A study of angular rate sensing by corona discharge ion wind. Sensors and Actuators A: Physical, 2018, 277, 169-180.	2.0	16

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19	Simulation and Experimental Study of a Synthetic Jet Valveless Pump. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1162-1170.	3.7	16
20	Investigation of low-temperature deposition high-uniformity coverage Parylene-HT as a dielectric layer for 3D interconnection. , 2014, , .		15
21	A new structure of Tesla coupled nozzle in synthetic jet micro-pump. Sensors and Actuators A: Physical, 2020, 315, 112296.	2.0	15
22	Capacitive sensor based on PCB technology for air bubble inside fluidic flow detection. , 2014, , .		13
23	Corona anemometry using dual pin probe. Sensors and Actuators A: Physical, 2017, 257, 185-193.	2.0	13
24	A micromirror with CNTs hinge fabricated by the integration of CNTs film into a MEMS actuator. Journal of Micromechanics and Microengineering, 2013, 23, 075024.	1.5	12
25	Fabrication and stress analysis of annular-trench-isolated TSV. Microelectronics Reliability, 2016, 63, 142-147.	0.9	12
26	Sub-Micron-Accuracy Gold-to-Gold Interconnection Flip-Chip Bonding Approach for Electronicsâ€“Optics Heterogeneous Integration. Japanese Journal of Applied Physics, 2013, 52, 04CB08.	0.8	12
27	Fabrication and electrical characterization of Parylene-HT liner bottom-up copper filled through silicon via (TSV). , 2014, , .		10
28	15-Âµm-pitch Cu/Au interconnections relied on self-aligned low-temperature thermosonic flip-chip bonding technique for advanced chip stacking applications. Japanese Journal of Applied Physics, 2014, 53, 04EB04.	0.8	10
29	A compact microfluidic chip with integrated impedance biosensor for protein preconcentration and detection. Biomicrofluidics, 2017, 11, 054113.	1.2	10
30	Tri-axis convective accelerometer with closed-loop heat source. Sensors and Actuators A: Physical, 2018, 275, 51-59.	2.0	10
31	Dielectrophoresis can control the density of CNT membranes as confirmed by experiment and dissipative particle simulation. Carbon, 2019, 155, 279-286.	5.4	10
32	Copper-Filled Through-Silicon Vias With Parylene-HT Liner. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 510-517.	1.4	9
33	Dual-pin electrohydrodynamic generator driven by alternating current. Experimental Thermal and Fluid Science, 2018, 97, 290-295.	1.5	9
34	Vortex flow generator utilizing synthetic jets by diaphragm vibration. International Journal of Mechanical Sciences, 2018, 142-143, 432-439.	3.6	9
35	Biological Living Cell in-Flow Detection Based on Microfluidic Chip and Compact Signal Processing Circuit. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 1371-1380.	2.7	9
36	Towards highly sensitive strain sensing based on nanostructured materials. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2010, 1, 045012.	0.7	8

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37	Fluidic platform with embedded differential capacitively coupled contactless conductivity detector for micro-object sensing. International Journal of Nanotechnology, 2018, 15, 24.	0.1	8
38	A Circulatory Ionic Wind for Inertial Sensing Application. IEEE Electron Device Letters, 2019, 40, 1182-1185.	2.2	8
39	Evaluation of the piezoresistive effect in single crystalline silicon nanowires. , 2009, , .		7
40	Characterization of the piezoresistive effect and temperature coefficient of resistance in single crystalline silicon nanowires. , 2009, , .		7
41	Flip-chip bonding alignment accuracy enhancement using self-aligned interconnection elements to realize low-temperature construction of ultrafine-pitch copper bump interconnections. , 2014, , .		7
42	Differential capacitively coupled contactless conductivity detection (DC⁴D) sensor for detection of object in microfluidic channel. , 2015, , .		7
43	Piezoresistive effect in silicon nanowires — A comprehensive analysis based on first-principles calculations. , 2009, , .		6
44	Modified thermosonic flip-chip bonding based on electroplated Cu microbumps and concave pads for high-precision low-temperature assembly applications. , 2013, , .		6
45	Biological microparticles detection based on differential capacitive sensing and dielectrophoresis manipulation. , 2016, , .		6
46	Tilt sensor based on three electrodes dielectric liquid capacitive sensor. , 2016, , .		6
47	30-GHz High-Frequency Application of Screen Printed Interconnects on an Organic Substrate. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1506-1515.	1.4	6
48	Estimating the effect of asymmetric electrodes in bipolar discharge ion wind generator. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 900-907.	1.8	6
49	Development of a Passive Capacitively Coupled Contactless Conductivity Detection (PC4D) Sensor System for Fluidic Channel Analysis Toward Point-of-Care Applications. IEEE Sensors Journal, 2019, 19, 6371-6380.	2.4	6
50	Immunomagnetic separation in a novel cavity-added serpentine microchannel structure for the selective isolation of lung adenocarcinoma cells. Biomedical Microdevices, 2021, 23, 51.	1.4	6
51	High-precision heterogeneous integration based on flip-chip bonding using misalignment self-correction elements. , 2012, , .		5
52	Study on the PZT diaphragm actuated multiple jet flow in a circulatory miniaturized system. , 2015, , .		5
53	Two-axis tilt angle detection based on dielectric liquid capacitive sensor. , 2016, , .		5
54	A valveless micropump based on additive fabrication technology. International Journal of Nanotechnology, 2018, 15, 1010.	0.1	5

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55	Study on Design Optimization of a Capacitive Tilt Angle Sensor. IETE Journal of Research, 2019, , 1-8.	1.8	5
56	A Robust Two-axis Tilt Angle Sensor Based on Air/Liquid Two-phase Dielectric Capacitive Sensing Structure. IETE Journal of Research, 2020, 66, 685-696.	1.8	5
57	Design and Simulation of Convective Inertial Sensor. , 2008, , .		4
58	Development of a 3-DOF Micro Accelerometer with Wireless Readout. IEEJ Transactions on Sensors and Micromachines, 2008, 128, 235-239.	0.0	4
59	Low Residual Stress in Si Substrate of Annular-Trench-Isolated TSV. , 2016, , .		4
60	A 3D Printed Two-axis Tilt Angle Capacitive Sensor. , 2018, , .		4
61	An electrohydrodynamic gyroscope. Sensors and Actuators A: Physical, 2020, 315, 112291.	2.0	4
62	Development of a microfluidic flow-focusing droplet generating device utilising rapid prototyping technique. International Journal of Nanotechnology, 2020, 17, 708.	0.1	4
63	Longitudinal strain sensitive effect in a photonic crystal cavity. Procedia Engineering, 2011, 25, 1357-1360.	1.2	3
64	Study on Point-to-Ring Corona Based Gyroscope. , 2019, , .		3
65	A combination of 3D printing and PCB technologies in microfluidic sensing device fabrication. Microsystem Technologies, 2022, 28, 1607-1619.	1.2	3
66	Piezoresistive and thermoelectric effects of CNT thin film patterned by EB lithography. , 2009, , .		2
67	Copper filled TSV formation with Parylene-HT insulator for low-temperature compatible 3D integration. , 2014, , .		2
68	Twice-etched silicon approach for via-last through-silicon-via with a Parylene-HT liner. , 2015, , .		2
69	Jet flow focusing by corona discharge for fluidic application. , 2016, , .		2
70	Absolute pressure sensing with bipolar corona discharge: Design, simulation and experimental validation. , 2016, , .		2
71	Ionic JET flow in a circulatory miniaturized system. , 2017, , .		2
72	Novel apparatus for simultaneous monitoring of electrocardiogram in awake zebrafish. , 2017, , .		2

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73	Computational and experimental study on ion wind scheme based aerosol sampling for biomedical applications. , 2017, , .		2
74	Development of a LC Passive Wireless Sensor Utilizing Capacitively Coupled Contactless Detection Structure. , 2018, , .		2
75	Study on Miniaturized Tri-Axis Heat Convection Accelerometer with Experimental Validation. , 2018, , .		2
76	Experimental Characterization of an Ionically Conductive Fluid Based High Flexibility Strain Sensor. Lecture Notes in Networks and Systems, 2019, , 318-323.	0.5	2
77	Study on Design Optimization of a Symmetry Two-Axis Tilt Angle Capacitive Sensor. IETE Journal of Research, 2020, , 1-8.	1.8	2
78	Wearable Fluidic Strain Sensor for Human Motion Sensing. , 2020, , .		2
79	Development of a Compact Electrical Impedance Measurement Circuit for Protein Detection Two-electrode Impedance Micro-sensor. IETE Journal of Research, 2023, 69, 2478-2486.	1.8	2
80	Design and Fabrication of a Miniaturized Three-Degree-of-Freedom Piezoresistive Acceleration Sensor Based on MEMS Technology Using Deep Reactive Ion Etching. Springer Proceedings in Physics, 2009, , 377-383.	0.1	2
81	Measurement of mechanical and thermal properties of co-sputtered WSi thin film for MEMS applications. Microsystem Technologies, 2010, 16, 1881-1886.	1.2	1
82	Strain sensitivity of a modified single-defect photonic crystal nanocavity for mechanical sensing. , 2010, , .		1
83	Silver screen printed transmission lines- analyzing the influence of substrate roughness on the RF performance up to 30 GHz. , 2014, , .		1
84	High-precision integration approach based on alignment maintaining flip-chip bonding using cone shaped bump and truncated pyramid pad. , 2014, , .		1
85	Coplanar differential capacitively coupled contactless conductivity detection (CD-C4D) sensor for micro object inside fluidic flow recognization. , 2017, , .		1
86	Dielectrophoresis enrichment with built-in capacitive sensor microfluidic platform for tumor rare cell detection. , 2017, , .		1
87	A symmetrically arranged electrodes for corona discharge anemometry. , 2017, , .		1
88	Development of an Impedance Spectroscopy Measurement Circuit Board for Protein Detection. , 2018, , .		1
89	Robust Angular Rate Sensor Based on Corona Discharge Ion Wind. , 2018, , .		1
90	Liquid Pumping and Mixing by Pzt Synthetic Jet. , 2019, , .		1

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91	Integration of CNTs thin film for sensing and actuating micro structures. Vietnam Journal of Mechanics, 2012, 34, 299-309.	0.2	1
92	A Wireless Passive Capacitively Coupled Contactless Conductivity Detection (WPC4D) for Microfluidic Flow Monitoring. , 2021, , .		1
93	Investigation of strain sensitivity of photonic crystal nanocavity for mechanical sensing. , 2010, , .		0
94	Combination compress sensing and digital wireless transmission for the MRI signal. , 2010, , .		0
95	Theoretical investigation of piezo-optic effect in photonic crystal nanocavity for nanostrain detection. , 2010, , .		0
96	Investigation of a microchannel-based cooling interposer for high-performance memory-on-logic 3DIC design. , 2013, , .		0
97	A method enabling height-control of chips for edge-emitting laser stacking. Japanese Journal of Applied Physics, 2015, 54, 04DB02.	0.8	0
98	Integration of a microfluidic chip with multiplexed optical fluorescence detector through anisotropic etching of Si using Tetramethylammonium hydroxide (TMAH). , 2016, , .		0
99	A Prospective Low-k Insulator for Via-Last through-Silicon-Vias (TSVs) in 3D Integration. , 2016, , .		0
100	A compact exclusion-enrichment microfluidic chip with integrated impedance biosensor for lowconcentration protein detection. , 2017, , .		0
101	A Closed Device to Generate Vortex Flow Using PZT. , 2018, , .		0
102	Angular Rate Sensing by Circulatory Vortex Flow: Design, Simulation and Experiment. , 2019, , .		0
103	Numerical Study and Experimental Investigation of an Electrohydrodynamic Device for Inertial Sensing. , 2021, , .		0
104	A Serpentine Microchannel with Added Cavities Platform for Magnetic Separation of Lung Adenocarcinoma Cells Utilizing Aptamer-Conjugated Magnetic Bead Approach. , 2021, , .		0
105	Nanostrain Sensing Based on Piezo-Optic Property of a Photonic Crystal Cavity. IEEJ Transactions on Sensors and Micromachines, 2011, 131, 258-263.	0.0	0
106	Heterogeneous integration approach based on flip-chip bonding and misalignment self-correction elements for electronics-optics integration applications. Vietnam Journal of Mechanics, 2012, 34, 289-297.	0.2	0
107	Study on Thermal Convective Gas Gyroscope Based on Corona Discharge Ion Wind and Coriolis Effect. Lecture Notes in Networks and Systems, 2021, , 741-747.	0.5	0
108	A Microfluidic Impedance Flow Detection Platform Based on Rapid PolyJet 3D Printing Fabrication Toward Biomedical Analysis Applications. , 2021, , .		0