

# Bui Thanh Tung

## List of Publications by Year in descending order

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Version: 2024-02-01

108  
papers

902  
citations

516215

16  
h-index

580395

25  
g-index

109  
all docs

109  
docs citations

109  
times ranked

615  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	A combination of 3D printing and PCB technologies in microfluidic sensing device fabrication. Microsystem Technologies, 2022, 28, 1607-1619.	1.2	3
3	Numerical Study and Experimental Investigation of an Electrohydrodynamic Device for Inertial Sensing. , 2021, , .		0
4	A Serpentine Microchannel with Added Cavities Platform for Magnetic Separation of Lung Adenocarcinoma Cells Utilizing Aptamer-Conjugated Magnetic Bead Approach. , 2021, , .		0
5	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
6	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
7	A Wireless Passive Capacitively Coupled Contactless Conductivity Detection (WPC4D) for Microfluidic Flow Monitoring. , 2021, , .		1
8	A Microfluidic Impedance Flow Detection Platform Based on Rapid PolyJet 3D Printing Fabrication Toward Biomedical Analysis Applications. , 2021, , .		0
9	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
10	Simulation and Experimental Study of a Synthetic Jet Valveless Pump. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1162-1170.	3.7	16
11	A new structure of Tesla coupled nozzle in synthetic jet micro-pump. Sensors and Actuators A: Physical, 2020, 315, 112296.	2.0	15
12	An electrohydrodynamic gyroscope. Sensors and Actuators A: Physical, 2020, 315, 112291.	2.0	4
13	Study on Design Optimization of a Symmetry Two-Axis Tilt Angle Capacitive Sensor. IETE Journal of Research, 2020, , 1-8.	1.8	2
14	Wearable Fluidic Strain Sensor for Human Motion Sensing. , 2020, , .		2
15	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
16	Development of a microfluidic flow-focusing droplet generating device utilising rapid prototyping technique. International Journal of Nanotechnology, 2020, 17, 708.	0.1	4
17	Study on Design Optimization of a Capacitive Tilt Angle Sensor. IETE Journal of Research, 2019, , 1-8.	1.8	5
18	Study on Point-to-Ring Corona Based Gyroscope. , 2019, , .		3

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19	Angular Rate Sensing by Circulatory Vortex Flow: Design, Simulation and Experiment. , 2019, , .		0
20	Dielectrophoresis can control the density of CNT membranes as confirmed by experiment and dissipative particle simulation. Carbon, 2019, 155, 279-286.	5.4	10
21	A Circulatory Ionic Wind for Inertial Sensing Application. IEEE Electron Device Letters, 2019, 40, 1182-1185.	2.2	8
22	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
23	Liquid Pumping and Mixing by Pzt Synthetic Jet. , 2019, , .		1
24	High-Frequency Interdigitated Array Electrode-Based Capacitive Biosensor for Protein Detection. Biochip Journal, 2019, 13, 403-415.	2.5	17
25	Experimental Characterization of an Ionically Conductive Fluid Based High Flexibility Strain Sensor. Lecture Notes in Networks and Systems, 2019, , 318-323.	0.5	2
26	Dual-pin electrohydrodynamic generator driven by alternating current. Experimental Thermal and Fluid Science, 2018, 97, 290-295.	1.5	9
27	Dielectrophoresis Microfluidic Enrichment Platform with Built-In Capacitive Sensor for Rare Tumor Cell Detection. Biochip Journal, 2018, 12, 114-122.	2.5	24
28	Fluidic platform with embedded differential capacitively coupled contactless conductivity detector for micro-object sensing. International Journal of Nanotechnology, 2018, 15, 24.	0.1	8
29	Tri-axis convective accelerometer with closed-loop heat source. Sensors and Actuators A: Physical, 2018, 275, 51-59.	2.0	10
30	Development of an Impedance Spectroscopy Measurement Circuit Board for Protein Detection. , 2018, , .		1
31	A 3D Printed Two-axis Tilt Angle Capacitive Sensor. , 2018, , .		4
32	Development of a LC Passive Wireless Sensor Utilizing Capacitively Coupled Contactless Detection Structure. , 2018, , .		2
33	Robust Angular Rate Sensor Based on Corona Discharge Ion Wind. , 2018, , .		1
34	Study on Miniaturized Tri-Axis Heat Convection Accelerometer with Experimental Validation. , 2018, , .		2
35	A Closed Device to Generate Vortex Flow Using PZT. , 2018, , .		0
36	A valveless micropump based on additive fabrication technology. International Journal of Nanotechnology, 2018, 15, 1010.	0.1	5

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37	A study of angular rate sensing by corona discharge ion wind. Sensors and Actuators A: Physical, 2018, 277, 169-180.	2.0	16
38	Particle precipitation by bipolar corona discharge ion winds. Journal of Aerosol Science, 2018, 124, 83-94.	1.8	18
39	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
40	Vortex flow generator utilizing synthetic jets by diaphragm vibration. International Journal of Mechanical Sciences, 2018, 142-143, 432-439.	3.6	9
41	Corona anemometry using dual pin probe. Sensors and Actuators A: Physical, 2017, 257, 185-193.	2.0	13
42	Jet flow in a circulatory miniaturized system using ion wind. Mechatronics, 2017, 47, 126-133.	2.0	28
43	A compact microfluidic chip with integrated impedance biosensor for protein preconcentration and detection. Biomicrofluidics, 2017, 11, 054113.	1.2	10
44	A compact exclusion-enrichment microfluidic chip with integrated impedance biosensor for lowconcentration protein detection. , 2017, , .		0
45	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
46	Ionic JET flow in a circulatory miniaturized system. , 2017, , .		2
47	Coplanar differential capacitively coupled contactless conductivity detection (CD-C4D) sensor for micro object inside fluidic flow recognition. , 2017, , .		1
48	Novel apparatus for simultaneous monitoring of electrocardiogram in awake zebrafish. , 2017, , .		2
49	Computational and experimental study on ion wind scheme based aerosol sampling for biomedical applications. , 2017, , .		2
50	Dielectrophoresis enrichment with built-in capacitive sensor microfluidic platform for tumor rare cell detection. , 2017, , .		1
51	A symmetrically arranged electrodes for corona discharge anemometry. , 2017, , .		1
52	Biological microparticles detection based on differential capacitive sensing and dielectrophoresis manipulation. , 2016, , .		6
53	Low Residual Stress in Si Substrate of Annular-Trench-Isolated TSV. , 2016, , .		4
54	Integration of a microfluidic chip with multiplexed optical fluorescence detector through anisotropic etching of Si using Tetramethylammonium hydroxide (TMAH). , 2016, , .		0

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55	Jet flow focusing by corona discharge for fluidic application. , 2016, , .		2
56	Two-axis tilt angle detection based on dielectric liquid capacitive sensor. , 2016, , .		5
57	Fabrication and stress analysis of annular-trench-isolated TSV. Microelectronics Reliability, 2016, 63, 142-147.	0.9	12
58	Bipolar corona discharge based air flow generation with low net charge. Sensors and Actuators A: Physical, 2016, 244, 146-155.	2.0	37
59	Tilt sensor based on three electrodes dielectric liquid capacitive sensor. , 2016, , .		6
60	Bipolar corona assisted jet flow for fluidic application. Flow Measurement and Instrumentation, 2016, 50, 252-260.	1.0	28
61	A Prospective Low-k Insulator for Via-Last through-Silicon-Vias (TSVs) in 3D Integration. , 2016, , .		0
62	Piezo-resistive and thermo-resistance effects of highly-aligned CNT based macrostructures. RSC Advances, 2016, 6, 106090-106095.	1.7	20
63	Ion Wind Generator Utilizing Bipolar Discharge in Parallel Pin Geometry. IEEE Transactions on Plasma Science, 2016, 44, 2979-2987.	0.6	26
64	Corona based air-flow using parallel discharge electrodes. Experimental Thermal and Fluid Science, 2016, 79, 52-56.	1.5	43
65	Pressure sensor based on bipolar discharge corona configuration. Sensors and Actuators A: Physical, 2016, 237, 81-90.	2.0	26
66	Absolute pressure sensing with bipolar corona discharge: Design, simulation and experimental validation. , 2016, , .		2
67	Copper-Filled Through-Silicon Vias With Parylene-HT Liner. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 510-517.	1.4	9
68	Jet flow generation in a circulatory miniaturized system. Sensors and Actuators B: Chemical, 2016, 223, 820-826.	4.0	28
69	A method enabling height-control of chips for edge-emitting laser stacking. Japanese Journal of Applied Physics, 2015, 54, 04DB02.	0.8	0
70	Twice-etched silicon approach for via-last through-silicon-via with a Parylene-HT liner. , 2015, , .		2
71	Study on the PZT diaphragm actuated multiple jet flow in a circulatory miniaturized system. , 2015, , .		5
72	Differential capacitively coupled contactless conductivity detection (DC <sup>4</sup> ) sensor for detection of object in microfluidic channel. , 2015, , .		7

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73	Fabrication and electrical characterization of Parylene-HT liner bottom-up copper filled through silicon via (TSV). , 2014, , .		10
74	Silver screen printed transmission lines- analyzing the influence of substrate roughness on the RF performance up to 30 GHz. , 2014, , .		1
75	Capacitive sensor based on PCB technology for air bubble inside fluidic flow detection. , 2014, , .		13
76	Copper filled TSV formation with Parylene-HT insulator for low-temperature compatible 3D integration. , 2014, , .		2
77	Investigation of low-temperature deposition high-uniformity coverage Parylene-HT as a dielectric layer for 3D interconnection. , 2014, , .		15
78	15-µm-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
79	High-precision integration approach based on alignment maintaining flip-chip bonding using cone shaped bump and truncated pyramid pad. , 2014, , .		1
80	Flip-chip bonding alignment accuracy enhancement using self-aligned interconnection elements to realize low-temperature construction of ultrafine-pitch copper bump interconnections. , 2014, , .		7
81	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
82	Modified thermosonic flip-chip bonding based on electroplated Cu microbumps and concave pads for high-precision low-temperature assembly applications. , 2013, , .		6
83	Investigation of a microchannel-based cooling interposer for high-performance memory-on-logic 3DIC design. , 2013, , .		0
84	Sub-Micron-Accuracy Gold-to-Gold Interconnection Flip-Chip Bonding Approach for Electronics-Optics Heterogeneous Integration. Japanese Journal of Applied Physics, 2013, 52, 04CB08.	0.8	12
85	High-precision heterogeneous integration based on flip-chip bonding using misalignment self-correction elements. , 2012, , .		5
86	Integration of CNTs thin film for sensing and actuating micro structures. Vietnam Journal of Mechanics, 2012, 34, 299-309.	0.2	1
87	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
88	Micromachined NH <sub>3</sub> Gas Sensor with ppb-level Sensitivity Based on WO <sub>3</sub> Nanoparticles Thinfilm. Procedia Engineering, 2011, 25, 1149-1152.	1.2	31
89	Longitudinal strain sensitive effect in a photonic crystal cavity. Procedia Engineering, 2011, 25, 1357-1360.	1.2	3
90	Strain Sensitive Effect in a Triangular Lattice Photonic Crystal Hole-Modified Nanocavity. IEEE Sensors Journal, 2011, 11, 2657-2663.	2.4	18

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91	Investigation of strain sensing effect in modified single-defect photonic crystal nanocavity. Optics Express, 2011, 19, 8821.	1.7	48
92	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
93	Measurement of mechanical and thermal properties of co-sputtered WSi thin film for MEMS applications. Microsystem Technologies, 2010, 16, 1881-1886.	1.2	1
94	Integrated CNTs thin film for MEMS mechanical sensors. Microelectronics Journal, 2010, 41, 860-864.	1.1	26
95	Strain sensitivity of a modified single-defect photonic crystal nanocavity for mechanical sensing. , 2010, , .		1
96	Investigation of strain sensitivity of photonic crystal nanocavity for mechanical sensing. , 2010, , .		0
97	Towards highly sensitive strain sensing based on nanostructured materials. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2010, 1, 045012.	0.7	8
98	Micro/nano-mechanical sensors and actuators based on SOI-MEMS technology. Journal of Family Business Management, 2010, 1, 013001.	2.6	42
99	Integration of SWNT film into MEMS for a micro-thermoelectric device. Smart Materials and Structures, 2010, 19, 075003.	1.8	25
100	Combination compress sensing and digital wireless transmission for the MRI signal. , 2010, , .		0
101	Theoretical investigation of piezo-optic effect in photonic crystal nanocavity for nanostrain detection. , 2010, , .		0
102	Piezoresistive effect in silicon nanowires &#x2014; A comprehensive analysis based on first-principles calculations. , 2009, , .		6
103	Evaluation of the piezoresistive effect in single crystalline silicon nanowires. , 2009, , .		7
104	Piezoresistive and thermoelectric effects of CNT thin film patterned by EB lithography. , 2009, , .		2
105	Characterization of the piezoresistive effect and temperature coefficient of resistance in single crystalline silicon nanowires. , 2009, , .		7
106	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
107	Design and Simulation of Convective Inertial Sensor. , 2008, , .		4
108	Development of a 3-DOF Micro Accelerometer with Wireless Readout. IEEJ Transactions on Sensors and Micromachines, 2008, 128, 235-239.	0.0	4