

# Yu-Hsiang Hsu

## List of Publications by Year in descending order

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62  
papers

1,089  
citations

758635

12  
h-index

414034

32  
g-index

62  
all docs

62  
docs citations

62  
times ranked

1644  
citing authors

#	ARTICLE	IF	CITATIONS
1	Programmed Topographic Substrates for Studying Roughness Gradient-Dependent Cell Migration Using Two-Photon Polymerization. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 825791.	1.8	5
2	A size reduction method for rapid digital PCR using thin-film chip and vacuum pouch microfluidic system. <i>Microfluidics and Nanofluidics</i> , 2022, 26, 1.	1.0	4
3	Development of a two-dimensional piezoelectric traveling-wave generator. <i>Journal of Intelligent Material Systems and Structures</i> , 2021, 32, 1071-1088.	1.4	3
4	A Gated Two-Frequency Two-Mode Method for Piezoelectric Motorization. <i>ASME Letters in Dynamic Systems and Control</i> , 2021, 1, .	0.4	2
5	Achieving junction stability in heavily doped epitaxial Si:P. <i>Materials Science in Semiconductor Processing</i> , 2021, 127, 105672.	1.9	6
6	A two-dimensional piezoelectric traveling wave generator using a multi-integer frequency, two-mode method (MIF-TM). <i>Smart Materials and Structures</i> , 2021, 30, 125026.	1.8	1
7	Development of a cardiac-and-piezoelectric hybrid system for application in drug screening. <i>Lab on A Chip</i> , 2020, 20, 3423-3434.	3.1	5
8	Analysis and development of a ferroelectret cellular PP film. , 2020, , .		1
9	Photonic Doppler velocimetry for high-speed fragment generator measurements. <i>Optics Express</i> , 2020, 28, 3864.	1.7	3
10	Design and experimental verification of a planar type two-dimensional piezoelectric actuator. , 2020, , .		0
11	A study on a Ferro-electret film-type speaker. , 2020, , .		0
12	Theoretical and experimental study on a piezoelectric linear motor driven by multi-integer-frequency multi-mode method. , 2020, , .		0
13	Development of an Elastic Piezoelectric Yarn for the Application of a Muscle Patch Sensor. <i>ACS Omega</i> , 2020, 5, 29427-29438.	1.6	1
14	Development of an Elastic Piezoelectric Yarn for the Application of a Muscle Patch Sensor. <i>ACS Omega</i> , 2020, 5, 29427-29438.	1.6	6
15	Vacuum pouch microfluidic system and its application for thin-film micromixers. <i>Lab on A Chip</i> , 2019, 19, 2834-2843.	3.1	12
16	Study of contraction profile of cardiomyocytes by using a piezoelectric membrane. , 2019, 2019, 6472-6475.		1
17	Study of diffusive- and convective-transport mediated microtumor growth in a controlled microchamber. <i>Biomedical Microdevices</i> , 2019, 21, 7.	1.4	2
18	Development of P(VDF-TrFE) yarn for strain sensing. , 2019, , .		0

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19	Manufacturing of substrates with different surface roughness for cell migration test by two-photon polymerization method. <i>Procedia CIRP</i> , 2018, 71, 305-308.	1.0	2
20	Light-activated piezoelectric linear motor by using a serial bimorph made of an optopiezoelectric composite. <i>Smart Materials and Structures</i> , 2018, 27, 105050.	1.8	3
21	Measuring the arterial-induced skin vibration by geometrical moiré fringe. , 2018, , .		1
22	Dynamic measurement of propagating waves in a piezoelectric linear motor by using shadow moiré method. , 2018, , .		0
23	Electrospun unidirectional P(VDF-TrFE) pressure sensor for small strain sensing. , 2018, , .		0
24	Optimization of a two-frequency-two-mode piezoelectric linear motor. , 2018, , .		0
25	Piezoelectric gas flow controller based on dual-bimorph actuators. , 2018, , .		0
26	Development of a simple LDV system for tube micro particles flow rate measurement. , 2018, , .		0
27	Profiling wrist pulse from skin surface by Advanced Vibrometer Interferometer Device. , 2017, , .		0
28	A highly flexible piezoelectret-fiber pressure sensor based on highly aligned P(VDF-TrFE) electrospun fibers. <i>Proceedings of SPIE</i> , 2017, , .	0.8	4
29	Development of an imaging method for quantifying a large digital PCR droplet. , 2017, , .		2
30	Using <i>in-situ</i> synchrotron x-ray diffraction to investigate phase transformation and lattice relaxation of a three-way piezo-phototronic soft material. <i>Semiconductor Science and Technology</i> , 2017, 32, 074005.	1.0	3
31	Alignment of Multiple Electrospun Piezoelectric Fiber Bundles Across Serrated Gaps at an Incline: A Method to Generate Textile Strain Sensors. <i>Scientific Reports</i> , 2017, 7, 15436.	1.6	17
32	Dual light-activated microfluidic pumps based on an optopiezoelectric composite. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 125003.	1.5	4
33	Performance Evaluation of Leader-Follower-Based Mobile Molecular Communication Networks for Target Detection Applications. <i>IEEE Transactions on Communications</i> , 2017, 65, 663-676.	4.9	65
34	Faraday Waves-Based Integrated Ultrasonic Micro-Droplet Generator and Applications. <i>Micromachines</i> , 2017, 8, 56.	1.4	12
35	Inspection of arterial-induced skin vibration by Moire fringe with two-dimensional continuous wavelet transform. , 2017, , .		1
36	Optimization of a one-frequency-two-mode traveling-wave piezoelectric linear motor by electrode design. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0

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37	Leader-follower based target detection model for mobile molecular communication networks. , 2016, , .		13
38	A miniature circular pump with a piezoelectric bimorph and a disposable chamber for biomedical applications. Sensors and Actuators A: Physical, 2016, 251, 108-118.	2.0	58
39	Integrating optopiezoelectric actuators and a two-mode excited linear ultrasonic motor for microfluidics. Proceedings of SPIE, 2016, , .	0.8	1
40	Advancing a smart air cushion system for preventing pressure ulcers using projection MoirÃ© for large deformation measurements. Proceedings of SPIE, 2016, , .	0.8	0
41	Visibleâ€Light Modulation on Lattice Dielectric Responses of a Piezoâ€Phototronic Soft Material. Advanced Materials, 2015, 27, 7728-7733.	11.1	9
42	A light-activated optopiezoelectric thin-film actuator for microfluidic applications. , 2015, , .		2
43	Development of a piezoelectric-driven miniature pump for biomedical applications. Sensors and Actuators A: Physical, 2015, 234, 23-33.	2.0	52
44	Full range physiological mass transport control in 3D tissue cultures. Lab on A Chip, 2013, 13, 81-89.	3.1	112
45	<i>In Vitro</i> Perfused Human Capillary Networks. Tissue Engineering - Part C: Methods, 2013, 19, 730-737.	1.1	337
46	A microfluidic platform for generating large-scale nearly identical human microphysiological vascularized tissue arrays. Lab on A Chip, 2013, 13, 2990.	3.1	175
47	Microplatforms for avian malaria studies. , 2011, , .		0
48	A microfluidic platform to isolate avian erythrocytes infected with Plasmodium gallinaceum malaria parasites based on surface morphological changes. Biomedical Microdevices, 2011, 13, 995-1004.	1.4	7
49	Microbioreactor designed for integration with piezoelectric transducers for cellular diagnostics. Microfluidics and Nanofluidics, 2011, 11, 459-468.	1.0	3
50	A microfabricated piezoelectric transducer platform for mechanical characterization of cellular events. Smart Materials and Structures, 2009, 18, 095014.	1.8	8
51	RF sputtered piezoelectric zinc oxide thin film for transducer applications. Journal of Materials Science: Materials in Electronics, 2008, 19, 653-661.	1.1	40
52	Microplatform for intercellular communication. , 2008, , .		12
53	P5K-2 Optimization and Characterization of RF Sputtered Piezoelectric Zinc Oxide Thin Film for Transducer Applications. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
54	Extending Point-sensor Performance by Incorporating Distributed-sensors and Window Functions. Journal of Intelligent Material Systems and Structures, 2005, 16, 149-161.	1.4	0

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55	Uncoupling Micromachined-Based Piezoelectric Accelerometer Performance From a Sensor Structure Transfer Function. IEEE/ASME Transactions on Mechatronics, 2005, 10, 338-341.	3.7	4
56	Electrical and mechanical fully coupled theory and experimental verification of Rosen-type piezoelectric transformers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1829-1839.	1.7	35
57	On the Autonomous Gain and Phase Tailoring Transfer Functions of Symmetrically Distributed Piezoelectric Sensors. Journal of Vibration and Acoustics, Transactions of the ASME, 2004, 126, 528-536.	1.0	2
58	Autonomous Gain-Phase Tailoring of Rotational Acceleration Rate Sensors. AIAA Journal, 2003, 41, 549-551.	1.5	1
59	Expanding the bandwidth of rotational accelerometers by autonomous gain&phase tailoring. Smart Materials and Structures, 2003, 12, 210-216.	1.8	3
60	Optimizing piezoelectric transformer for maximum power transfer. Smart Materials and Structures, 2003, 12, 373-383.	1.8	33
61	Targeted origin placement for the autonomous gain-phase tailoring of piezoelectric sensors. Smart Materials and Structures, 2002, 11, 444-458.	1.8	12
62	Miniature Free-Fall Sensors. Journal of Intelligent Material Systems and Structures, 2001, 12, 223-228.	1.4	4