

Jong-Hyun Lee

List of Publications by Year in descending order

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papers

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citations

687363

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times ranked

725
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In-Vivo</i> Detection of the Facial Nerve From Adjacent Tissues Using Microelectrodes With Selective Passivation During Parotidectomy. IEEE Sensors Journal, 2022, 22, 1890-1897.	4.7	0
2	Smart needle to diagnose metastatic lymph node using electrical impedance spectroscopy. Auris Nasus Larynx, 2021, 48, 281-287.	1.2	3
3	Two-axis crosstalk analysis of gimbal-less MEMS scanners with consideration of rotational alignment. Measurement: Journal of the International Measurement Confederation, 2021, 171, 108785.	5.0	3
4	An analysis method to detect the presence of DNA using electrochemical impedance spectroscopy (EIS) for real-time PCR. Microsystem Technologies, 2021, 27, 3211-3217.	2.0	3
5	<i>Ex</i>-<i>Vivo</i> Identification of Tumor From Parenchyma in Human Liver Using Electrochemical Impedance Spectroscopy on a Needle. IEEE Sensors Journal, 2020, 20, 14042-14049.	4.7	3
6	Comparison of Detection Error in Depth-Profiling Between Selective-Passivation and Incremental Compensation for Electrical Impedance Spectroscopy on a Needle. IEEE Sensors Journal, 2020, 20, 5750-5758.	4.7	1
7	Immobilized DNA aptamers used as potent attractors for vascular endothelial cell: in vitro study of female rat. Bioscience Reports, 2020, 40, .	2.4	1
8	Differentiation Between Normal and Cancerous Human Urothelial Cell Lines Using Micro-Electrical Impedance Spectroscopy at Multiple Frequencies. Journal of Medical and Biological Engineering, 2019, 39, 86-95.	1.8	5
9	Battery-operated portable PCR system with enhanced stability of Pt RTD. PLoS ONE, 2019, 14, e0218571.	2.5	14
10	Input Shaping Based on an Experimental Transfer Function for an Electrostatic Microscanner in a Quasistatic Mode. Micromachines, 2019, 10, 217.	2.9	4
11	Electrophysiological differences between typical and dense benign prostatic hyperplasia tissues retrieved after holmium laser enucleation of the prostate. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2019, 94, 319-327.	1.6	0
12	Enhancement of detection accuracy in depth-profiling using electrochemical impedance spectroscopy-on-a-needle by incremental compensation for immersion depth. Journal of Electroanalytical Chemistry, 2019, 838, 48-56.	3.8	7
13	Label-free electrochemical impedance spectroscopy using a micro interdigitated electrode inside a PCR chip for real-time monitoring. Microsystem Technologies, 2019, 25, 3503-3510.	2.0	5
14	Novel method for the detection of the facial nerve using electrical impedance spectroscopy during otologic surgery. Sensors and Actuators B: Chemical, 2018, 261, 467-473.	7.8	5
15	Via-Less Two-Axis Electromagnetic Micro Scanner Based on Dual Radial Magnetic Fields. IEEE Photonics Technology Letters, 2018, 30, 443-446.	2.5	6
16	Portable low-power thermal cyler with dual thin-film Pt heaters for a polymeric PCR chip. Biomedical Microdevices, 2018, 20, 14.	2.8	25
17	Performance comparison of illumination methods for finger-vein imaging and liveness detection. Microsystem Technologies, 2018, 24, 4955-4964.	2.0	3
18	Gimbal-Less Two-Axis Electromagnetic Microscanner with Twist Mechanism. Micromachines, 2018, 9, 219.	2.9	10

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19	Detection of ischemic changes in the vascular endothelial cell layer by using microelectrochemical impedance spectroscopy. <i>Medical Engineering and Physics</i> , 2018, 62, 58-62.	1.7	2
20	Linearization of an Electrostatic Microscanner with Concentrically Tilted Stationary Comb Electrodes. , 2018, , .		0
21	Micro real-time PCR device using a circulation pump. <i>Microsystem Technologies</i> , 2017, 23, 4405-4412.	2.0	2
22	Electrical impedance spectroscopy on a needle for safer Veress needle insertion during laparoscopic surgery. <i>Sensors and Actuators B: Chemical</i> , 2017, 250, 453-460.	7.8	7
23	Evaluation of Electrical Impedance Spectroscopy-on-a-Needle as a Novel Tool to Determine Optimal Surgical Margin in Partial Nephrectomy. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700356.	7.6	7
24	Fabrication of Fine Electrodes on the Tip of Hypodermic Needle Using Photoresist Spray Coating and Flexible Photomask for Biomedical Applications. <i>Journal of Visualized Experiments</i> , 2017, , .	0.3	1
25	Two-axis MEMS scanner in a resonance operation for diagnosis of middle ear diseases. , 2017, , .		0
26	Imaging of the Finger Vein and Blood Flow for Anti-Spoofing Authentication Using a Laser and a MEMS Scanner. <i>Sensors</i> , 2017, 17, 925.	3.8	15
27	Cell Electrical Impedance as a Novel Approach for Studies on Senescence Not Based on Biomarkers. <i>BioMed Research International</i> , 2016, 2016, 1-9.	1.9	6
28	Microelectrical Impedance Spectroscopy for the Differentiation between Normal and Cancerous Human Urothelial Cell Lines: Real-Time Electrical Impedance Measurement at an Optimal Frequency. <i>BioMed Research International</i> , 2016, 2016, 1-10.	1.9	22
29	Improvement of Depth Profiling into Biotissues Using Micro Electrical Impedance Spectroscopy on a Needle with Selective Passivation. <i>Sensors</i> , 2016, 16, 2207.	3.8	16
30	Ex vivo characterization of age-associated impedance changes of single vascular endothelial cells using micro electrical impedance spectroscopy with a cell trap. <i>Biomicrofluidics</i> , 2016, 10, 014114.	2.4	11
31	Evaluation of a Polymeric Flap Valve-Attached Ureteral Stent for Preventing Vesicoureteral Reflux in Elevated Intravesical Pressure Conditions: A Pilot Study Using a Porcine Model. <i>Journal of Endourology</i> , 2016, 30, 428-432.	2.1	13
32	Micro Electrical Impedance Spectroscopy ($\hat{I}/4$ EIS) Fabricated on the Curved Surface of a Fine Needle for Biotissue Discrimination. <i>Electroanalysis</i> , 2016, 28, 733-741.	2.9	6
33	Micro electrical impedance spectroscopy on a needle for <i>ex vivo</i> discrimination between human normal and cancer renal tissues. <i>Biomicrofluidics</i> , 2016, 10, 034109.	2.4	14
34	Electrochemical impedance spectroscopy with interdigitated electrodes at the end of hypodermic needle for depth profiling of biotissues. <i>Sensors and Actuators B: Chemical</i> , 2016, 237, 984-991.	7.8	34
35	Microactuator for autofocus and optical image stabilization in mobile phone cameras using unlevelled comb electrodes. , 2016, , .		1
36	Two-Axis Electrostatic Gimbaled Mirror Scanner With Self-Aligned Tilted Stationary Combs. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 557-560.	2.5	25

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37	Polymeric check valve with an elevated pedestal for precise cracking pressure in a glaucoma drainage device. <i>Biomedical Microdevices</i> , 2016, 18, 20.	2.8	10
38	Adjustable Tilt Angle of Liquid Microlens With Four Coplanar Electrodes. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 79-82.	2.5	6
39	Fabrication of a 2-D in-plane micro needle array integrated with microfluidic components using crystalline wet etching of (110) silicon. <i>Microsystem Technologies</i> , 2016, 22, 2287-2294.	2.0	7
40	The effects of silodosin in the treatment of ureteral stent related symptoms. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2015, 82, 259-263.	1.6	1
41	Fiber optic Fabry-Pérot pressure sensor based on lensed fiber and polymeric diaphragm. <i>Sensors and Actuators A: Physical</i> , 2015, 225, 25-32.	4.1	62
42	The efficacy of potassium p-aminobenzoate to assist with visual internal urethrotomy for urethral stricture. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2015, 82, 265-269.	1.6	0
43	Anti-Reflux Ureteral Stent with Polymeric Flap Valve Using Three-Dimensional Printing: An <i>In Vitro</i> Study. <i>Journal of Endourology</i> , 2015, 29, 933-938.	2.1	34
44	Photovoltaic Detection of Hydrogen Peroxide over a Wide Range of Concentrations for Agricultural Applications. <i>Journal of Chemical Engineering of Japan</i> , 2015, 48, 575-583.	0.6	0
45	Self-Centering Effect of a Thickness-Gradient Dielectric of an Electrowetting Liquid Lens. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 623-625.	2.5	7
46	Discrimination between the human prostate normal cell and cancer cell by using a novel electrical impedance spectroscopy controlling the cross-sectional area of a microfluidic channel. <i>Biomicrofluidics</i> , 2013, 7, 44126.	2.4	25
47	Design and characterisation of a three-forked micropump on a fluid circulation channel. <i>Micro and Nano Letters</i> , 2013, 8, 70-73.	1.3	1
48	Off-centering reduction of coplanar micro liquid lens using a thickness-gradient dielectric. , 2012, , .		0
49	A microassembly process to realize angular vertical comb electrodes for a gimbal-less two-axis electrostatic scanner. , 2012, , .		0
50	Spherically Encapsulated Variable Liquid Lens on Coplanar Electrodes. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1703-1705.	2.5	18
51	Polymeric (SU-8) optical microscanner driven by electrostatic actuation. <i>Microsystem Technologies</i> , 2011, 17, 1439-1445.	2.0	4
52	High-Resolution Capacitive Microinclinometer With Oblique Comb Electrodes Using (110) Silicon. <i>Journal of Microelectromechanical Systems</i> , 2011, 20, 1269-1276.	2.5	11
53	Continuous cell cross over and lysis in a microfluidic device. <i>Microfluidics and Nanofluidics</i> , 2010, 8, 695-701.	2.2	13
54	Mechanical cell lysis chip with ultra-sharp nano-blade array fabricated by crystalline wet etching of (110) silicon. , 2010, , .		1

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55	A beam reconfigurable antenna using MEMS switches. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	4
56	Novel Micro Capacitive Inclinometer with Oblique Comb Electrode and Suspension Spring Aligned Parallel to {111} Vertical Planes of (110) Silicon. , 2009, , .		3
57	Fiber-Optic Laser Doppler Vibrometer to Dynamically Measure MEMS Actuator With In-Plane Motion. Journal of Microelectromechanical Systems, 2009, 18, 1365-1370.	2.5	12
58	Micromachined ultrasonic transducer using piezoelectric PVDF film to measure the mechanical properties of bio cells. , 2009, , .		4
59	Flow characterization of valveless micropump using driving equivalent moment: theory and experiments. Microfluidics and Nanofluidics, 2008, 5, 795-807.	2.2	20
60	A micromirror scanner with vertical combs tilted by assembly process. , 2008, , .		3
61	A micro-plasma ganerator using a water electrode for detection of heavy metals. , 2008, , .		1
62	Capacitive micro inclinometer with scalloping-free and footing-free vertical electrodes using crystalline etching of (110) silicon. , 2008, , .		0
63	Hydrogen Ion Sensing Using Schottky Contacted Silicon Nanowire FETs. IEEE Nanotechnology Magazine, 2008, 7, 745-748.	2.0	20
64	Laser Doppler Vibrometer Using a 45°-angled Optical Fiber for In-plane Dynamic Measurement of MEMS Actuators. , 2007, , .		0
65	A Discrete Positioning Microactuator: Linearity Modeling and VOA Application. Journal of Microelectromechanical Systems, 2007, 16, 16-23.	2.5	3
66	Glass Reflowed Microlens Array and its Optical Characteristics. , 2007, , .		2
67	Inline Fiber Optic Chemical Sensor Using a Self-Aligned Epoxy Microbridge With a Metal Layer. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 381-385.	2.9	3
68	A Micromachined Reaction Force Actuator (RFA) for a Nanomanipulator Preparation. Journal of Microelectromechanical Systems, 2006, 15, 492-497.	2.5	4
69	In-Line Fiber Optic Chemical Sensor with Gold Coated, Self-Aligned Epoxy Waveguide. , 2006, , .		0
70	A discrete positioning microactuator: linearity modeling and VOA application. , 2005, , .		0
71	A Micromachined 2×2 Optical Switch Aligned With Bevel-Ended Fibers for Low Return Loss. Journal of Microelectromechanical Systems, 2004, 13, 258-263.	2.5	10
72	A micromachined 4-port optical switch with no propagation length difference for add drop modules. , 0, , .		3

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73	Crystalline Si-based in-plane tunable Fabry-Perot filter with wide tunable range. , 0, , .		5
74	Design and experimental characterization of the chevron-type bi-stable actuator for optical switch applications. , 0, , .		1
75	A 2x2 optical add-drop module with attenuation controllability using two 45° movable micromirrors. , 0, , .		0
76	Micro xy-stages with spider-leg actuators for 2-dimensional optical scanning. , 0, , .		1