

Jong-Hyun Lee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/740141/publications.pdf>

Version: 2024-02-01

76
papers

579
citations

687363

13
h-index

713466

21
g-index

77
all docs

77
docs citations

77
times ranked

725
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	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
5	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
6	Portable low-power thermal cycler with dual thin-film Pt heaters for a polymeric PCR chip. <i>Biomedical Microdevices</i> , 2018, 20, 14.	2.8	25
7	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
8	Flow characterization of valveless micropump using driving equivalent moment: theory and experiments. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 795-807.	2.2	20
9	Hydrogen Ion Sensing Using Schottky Contacted Silicon Nanowire FETs. <i>IEEE Nanotechnology Magazine</i> , 2008, 7, 745-748.	2.0	20
10	Spherically Encapsulated Variable Liquid Lens on Coplanar Electrodes. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1703-1705.	2.5	18
11	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
12	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
13	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
14	Battery-operated portable PCR system with enhanced stability of Pt RTD. <i>PLoS ONE</i> , 2019, 14, e0218571.	2.5	14
15	Continuous cell cross over and lysis in a microfluidic device. <i>Microfluidics and Nanofluidics</i> , 2010, 8, 695-701.	2.2	13
16	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
17	Fiber-Optic Laser Doppler Vibrometer to Dynamically Measure MEMS Actuator With In-Plane Motion. <i>Journal of Microelectromechanical Systems</i> , 2009, 18, 1365-1370.	2.5	12
18	High-Resolution Capacitive Microinclinometer With Oblique Comb Electrodes Using (110) Silicon. <i>Journal of Microelectromechanical Systems</i> , 2011, 20, 1269-1276.	2.5	11

#	ARTICLE	IF	CITATIONS
19	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
20	A Micromachined 2×2 Optical Switch Aligned With Bevel-Ended Fibers for Low Return Loss. <i>Journal of Microelectromechanical Systems</i> , 2004, 13, 258-263.	2.5	10
21	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
22	Gimbal-Less Two-Axis Electromagnetic Microscanner with Twist Mechanism. <i>Micromachines</i> , 2018, 9, 219.	2.9	10
23	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
24	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
25	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
26	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
27	Enhancement of detection accuracy in depth-profiling using electrochemical impedance spectroscopy-on-a-needle by incremental compensation for immersion depth. <i>Journal of Electroanalytical Chemistry</i> , 2019, 838, 48-56.	3.8	7
28	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
29	Micro Electrical Impedance Spectroscopy ($\hat{1}/4$ EIS) Fabricated on the Curved Surface of a Fine Needle for Biotissue Discrimination. <i>Electroanalysis</i> , 2016, 28, 733-741.	2.9	6
30	Adjustable Tilt Angle of Liquid Microlens With Four Coplanar Electrodes. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 79-82.	2.5	6
31	Via-Less Two-Axis Electromagnetic Micro Scanner Based on Dual Radial Magnetic Fields. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 443-446.	2.5	6
32	Crystalline Si-based in-plane tunable Fabry-Perot filter with wide tunable range. , 0, , .		5
33	Novel method for the detection of the facial nerve using electrical impedance spectroscopy during otologic surgery. <i>Sensors and Actuators B: Chemical</i> , 2018, 261, 467-473.	7.8	5
34	Differentiation Between Normal and Cancerous Human Urothelial Cell Lines Using Micro-Electrical Impedance Spectroscopy at Multiple Frequencies. <i>Journal of Medical and Biological Engineering</i> , 2019, 39, 86-95.	1.8	5
35	Label-free electrochemical impedance spectroscopy using a micro interdigitated electrode inside a PCR chip for real-time monitoring. <i>Microsystem Technologies</i> , 2019, 25, 3503-3510.	2.0	5
36	A Micromachined Reaction Force Actuator (RFA) for a Nanomanipulator Preparation. <i>Journal of Microelectromechanical Systems</i> , 2006, 15, 492-497.	2.5	4

#	ARTICLE	IF	CITATIONS
37	A beam reconfigurable antenna using MEMS switches. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	4
38	Micromachined ultrasonic transducer using piezoelectric PVDF film to measure the mechanical properties of bio cells. , 2009, , .		4
39	Polymeric (SU-8) optical microscanner driven by electrostatic actuation. Microsystem Technologies, 2011, 17, 1439-1445.	2.0	4
40	Input Shaping Based on an Experimental Transfer Function for an Electrostatic Microscanner in a Quasistatic Mode. Micromachines, 2019, 10, 217.	2.9	4
41	A micromachined 4-port optical switch with no propagation length difference for add drop modules. , 0, , .		3
42	A Discrete Positioning Microactuator: Linearity Modeling and VOA Application. Journal of Microelectromechanical Systems, 2007, 16, 16-23.	2.5	3
43	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
44	A micromirror scanner with vertical combs tilted by assembly process. , 2008, , .		3
45	Novel Micro Capacitive Inclinator with Oblique Comb Electrode and Suspension Spring Aligned Parallel to {111} Vertical Planes of (110) Silicon. , 2009, , .		3
46	Performance comparison of illumination methods for finger-vein imaging and liveness detection. Microsystem Technologies, 2018, 24, 4955-4964.	2.0	3
47	<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
48	Smart needle to diagnose metastatic lymph node using electrical impedance spectroscopy. Auris Nasus Larynx, 2021, 48, 281-287.	1.2	3
49	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
50	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
51	Glass Reflowed Microlens Array and its Optical Characteristics. , 2007, , .		2
52	Micro real-time PCR device using a circulation pump. Microsystem Technologies, 2017, 23, 4405-4412.	2.0	2
53	Detection of ischemic changes in the vascular endothelial cell layer by using microelectrochemical impedance spectroscopy. Medical Engineering and Physics, 2018, 62, 58-62.	1.7	2
54	Design and experimental characterization of the chevron-type bi-stable actuator for optical switch applications. , 0, , .		1

#	ARTICLE	IF	CITATIONS
55	Micro xy-stages with spider-leg actuators for 2-dimensional optical scanning. , 0, , .		1
56	A micro-plasma ganerator using a water electrode for detection of heavy metals. , 2008, , .		1
57	Mechanical cell lysis chip with ultra-sharp nano-blade array fabricated by crystalline wet etching of (110) silicon. , 2010, , .		1
58	Design and characterisation of a threeâ€forked micropump on a fluid circulation channel. Micro and Nano Letters, 2013, 8, 70-73.	1.3	1
59	The effects of silodosin in the treatment of ureteral stent related symptoms. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2015, 82, 259-263.	1.6	1
60	Microactuator for autofocus and optical image stabilization in mobile phone cameras using unlevelled comb electrodes. , 2016, , .		1
61	Fabrication of Fine Electrodes on the Tip of Hypodermic Needle Using Photoresist Spray Coating and Flexible Photomask for Biomedical Applications. Journal of Visualized Experiments, 2017, , .	0.3	1
62	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
63	Immobilized DNA aptamers used as potent attractors for vascular endothelial cell: in vitro study of female rat. Bioscience Reports, 2020, 40, .	2.4	1
64	A 2x2 optical add-drop module with attenuation controllability using two 45° movable micromirrors. , 0, , .		0
65	A discrete positioning microactuator: linearity modeling and VOA application. , 2005, , .		0
66	In-Line Fiber Optic Chemical Sensor with Gold Coated, Self-Aligned Epoxy Waveguide. , 2006, , .		0
67	Laser Doppler Vibrometer Using a 45Â°-angled Optical Fiber for In-plane Dynamic Measurement of MEMS Actuators. , 2007, , .		0
68	Capacitive micro inclinometer with scalloping-free and footing-free vertical electrodes using crystalline etching of (110) silicon. , 2008, , .		0
69	Off-centering reduction of coplanar micro liquid lens using a thickness-gradient dielectric. , 2012, , .		0
70	A microassembly process to realize angular vertical comb electrodes for a gimbal-less two-axis electrostatic scanner. , 2012, , .		0
71	The efficacy of potassium p-aminobenzoate to assist with visual internal urethrotomy for urethral stricture. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2015, 82, 265-269.	1.6	0
72	Two-axis MEMS scanner in a resonance operation for diagnosis of middle ear diseases. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
73	Linearization of an Electrostatic Microscanner with Concentrically Tilted Stationary Comb Electrodes. , 2018, , .		0
74	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
75	Photovoltaic Detection of Hydrogen Peroxide over a Wide Range of Concentrations for Agricultural Applications. Journal of Chemical Engineering of Japan, 2015, 48, 575-583.	0.6	0
76	<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