

Dong Weon Lee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2800568/publications.pdf>

Version: 2024-02-01

77
papers

2,823
citations

147801

31
h-index

189892

50
g-index

77
all docs

77
docs citations

77
times ranked

3483
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanosilica coated polydimethylsiloxane mushroom structure: A next generation flexible, transparent, and mechanically durable superhydrophobic thin film. <i>Applied Surface Science</i> , 2022, 583, 152500.	6.1	17
2	Toward Point-of-Care chronic disease Management: Biomarker detection in exhaled breath using an E-Nose sensor based on rGO/SnO ₂ superstructures. <i>Chemical Engineering Journal</i> , 2022, 448, 137736.	12.7	26
3	Stabilizing nanocrystalline Cu ₂ O with ZnO/rGO: Engineered photoelectrodes enables efficient water splitting. <i>Ceramics International</i> , 2021, 47, 7558-7570.	4.8	9
4	MnS ₂ /carbon nanotube electrode for improved supercapacitor performance. <i>Solid State Sciences</i> , 2021, 111, 106449.	3.2	15
5	N-/S- dual doped C@ZnO: An excellent material for highly selective and responsive NO ₂ sensing at ambient temperatures. <i>Chemical Engineering Journal</i> , 2021, 421, 127740.	12.7	25
6	Flexible, polymer-supported, ZnO nanorod array photoelectrodes for PEC water splitting applications. <i>Materials Science in Semiconductor Processing</i> , 2021, 121, 105445.	4.0	13
7	Multi-layered polymer cantilever integrated with full-bridge strain sensor to enhance force sensitivity in cardiac contractility measurement. <i>Analyst, The</i> , 2021, 146, 7160-7167.	3.5	5
8	Bottom-up Approach for Designing Cobalt Tungstate Nanospheres through Sulfur Amendment for High-Performance Hybrid Supercapacitors. <i>ChemSusChem</i> , 2021, 14, 1602-1611.	6.8	16
9	64 PI/PDMS hybrid cantilever arrays with an integrated strain sensor for a high-throughput drug toxicity screening application. <i>Biosensors and Bioelectronics</i> , 2021, 190, 113380.	10.1	14
10	Enhancement of cardiac contractility using gold-coated SU-8 cantilevers and their application to drug-induced cardiac toxicity tests. <i>Analyst, The</i> , 2021, 146, 6768-6779.	3.5	4
11	Exposure to nanoplastics impairs collective contractility of neonatal cardiomyocytes under electrical synchronization. <i>Biomaterials</i> , 2021, 278, 121175.	11.4	24
12	Effects of low temperature on electrophysiology and mechanophysiology of human induced pluripotent stem cell-derived cardiomyocytes (hiPSC-CMs). <i>Micro and Nano Systems Letters</i> , 2021, 9, .	3.7	2
13	Two-dimensional Materials for High-Energy Solid-State Asymmetric Pseudocapacitors with High Mass Loadings. <i>ChemSusChem</i> , 2020, 13, 1582-1592.	6.8	43
14	Gold nanoparticles decorated rGO-ZnCo ₂ O ₄ nanocomposite: A promising positive electrode for high performance hybrid supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 379, 122211.	12.7	91
15	Micro-patterned SU-8 cantilever integrated with metal electrode for enhanced electromechanical stimulation of cardiac cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 186, 110682.	5.0	21
16	Transition metal sulfide-laminated copper wire for flexible hybrid supercapacitor. <i>New Journal of Chemistry</i> , 2020, 44, 18489-18495.	2.8	11
17	Highly Flexible Superhydrophobic Poly(Urethane Acrylate) Film for Applications Requiring High Optical Transparency. <i>Macromolecular Materials and Engineering</i> , 2020, 305, 2000292.	3.6	5
18	Galinstan-based flexible microfluidic device for wireless human-sensor applications. <i>Sensors and Actuators A: Physical</i> , 2020, 315, 112344.	4.1	17

#	ARTICLE	IF	CITATIONS
19	Polymer-Based Functional Cantilevers Integrated with Interdigitated Electrode Arrays—A Novel Platform for Cardiac Sensing. <i>Micromachines</i> , 2020, 11, 450.	2.9	12
20	Highly durable crack sensor integrated with silicone rubber cantilever for measuring cardiac contractility. <i>Nature Communications</i> , 2020, 11, 535.	12.8	66
21	Carbon alternative pseudocapacitive V ₂ O ₅ nanobricks and MnO ₂ nanoflakes @ MnO ₂ nanowires hetero-phase for high-energy pseudocapacitor. <i>Journal of Power Sources</i> , 2020, 453, 227766.	7.8	43
22	Anion-exchange phase control of manganese sulfide for oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3901-3909.	10.3	37
23	Core-shell hetero-nanostructured 1D transition metal polyphosphates decorated 2D bimetallic layered double hydroxide for sustainable hybrid supercapacitor. <i>Journal of Power Sources</i> , 2020, 466, 228286.	7.8	42
24	Supercapacitive performance of vanadium sulfide deposited on stainless steel mesh: effect of etching. <i>Micro and Nano Systems Letters</i> , 2020, 8, .	3.7	10
25	Large scale roll-to-roll production of polyurethane-acrylate-based hydrophobic film: a next-generation protection layer for solar devices. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 115007.	2.6	0
26	ZnO/Cu ₂ O-decorated rGO: Heterojunction photoelectrode with improved solar water splitting performance. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 19177-19192.	7.1	44
27	Fabrication of surface-functionalized PUA composites to achieve superhydrophobicity. <i>Micro and Nano Systems Letters</i> , 2019, 7, .	3.7	8
28	Electrochemically controllable actuation of liquid metal droplets based on Marangoni effect. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	14
29	Artificial Heart Based on Electrically Controlled Non-Toxic Liquid Metal Pump. <i>Advanced Engineering Materials</i> , 2019, 21, 1900381.	3.5	16
30	Status review on the MEMS-based flexible supercapacitors. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 093001.	2.6	11
31	Realizing the flexible and transparent highly-hydrophobic film through siloxane functionalized polyurethane-acrylate micro-pattern. <i>Chemical Engineering Journal</i> , 2019, 373, 68-77.	12.7	30
32	Hierarchical nanohybrids of B- and N-codoped graphene/mesoporous NiO nanodisks: an exciting new material for selective sensing of H ₂ S at near ambient temperature. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9263-9278.	10.3	46
33	Miniaturized piezoelectric energy harvester for battery-free portable electronics. <i>International Journal of Energy Research</i> , 2019, 43, 2402.	4.5	6
34	Computational study of effects of contact resistance on a large-scale vanadium redox flow battery stack. <i>International Journal of Energy Research</i> , 2019, 43, 2343-2360.	4.5	12
35	Fully automated high-throughput cardiac toxicity screening platform using interlocking-structured 192 SU-8 cantilever arrays. <i>Sensors and Actuators B: Chemical</i> , 2019, 285, 129-136.	7.8	16
36	Scalable and ascendancy synthesis of carbon cloth coated hierarchical core-shell CoMoS@Co(OH) ₂ for flexible and high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9592-9603.	10.3	64

#	ARTICLE	IF	CITATIONS
37	A Quasi 2D Flexible Micro $\text{MnO}_2/\text{NiCo}_2\text{O}_4$ Supercapacitor Based on $\text{MnO}_2/\text{NiCo}_2\text{O}_4$ as a Miniaturized Energy Storage Device. Energy Technology, 2018, 6, 1380-1391.	3.8	15
38	Towards high performance unique microstructures of $\text{Co}_9\text{S}_8/\text{CoFe}_2\text{O}_4$ for asymmetric supercapacitor. Journal of Industrial and Engineering Chemistry, 2018, 61, 206-215.	5.8	22
39	Polyurethane-acrylate-based hydrophobic film: Facile fabrication, characterization, and application. Japanese Journal of Applied Physics, 2018, 57, 06HJ09.	1.5	5
40	Feasibility of Polycaprolactone Scaffolds Fabricated by Three-Dimensional Printing for Tissue Engineering of Tunica Albuginea. World Journal of Men's Health, 2018, 36, 66.	3.3	15
41	Facile in-situ formation of rGO/ZnO nanocomposite: Photocatalytic remediation of organic pollutants under solar illumination. Materials Chemistry and Physics, 2018, 218, 218-228.	4.0	40
42	Hierarchically self-assembled ZnO architectures: Establishing light trapping networks for effective photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2017, 42, 15126-15139.	7.1	29
43	Enhanced H_2S Sensing Performance of a p-type Semiconducting PdO-NiO Nanoscale Heteromixture. Applied Surface Science, 2017, 420, 638-650.	6.1	35
44	Graphene-nanosheet wrapped cobalt sulphide as a binder free hybrid electrode for asymmetric solid-state supercapacitor. Journal of Power Sources, 2017, 342, 652-665.	7.8	130
45	Au Decorated ZnO hierarchical architectures: Facile synthesis, tunable morphology and enhanced CO detection at room temperature. Sensors and Actuators B: Chemical, 2017, 243, 990-1001.	7.8	89
46	An advanced selective liquid-metal plating technique for stretchable biosensor applications. Lab on A Chip, 2017, 17, 3415-3421.	6.0	88
47	Realizing Synergy between In_2O_3 Nanocubes and Nitrogen-Doped Reduced Graphene Oxide: An Excellent Nanocomposite for the Selective and Sensitive Detection of CO at Ambient Temperatures. ACS Applied Materials & Interfaces, 2017, 9, 31728-31740.	8.0	44
48	Simple and cost-effective method for fabrication of optically transparent superhydrophobic thin film using reusable pua mold and roll-to-roll machine. , 2017, , .		0
49	Engineered ridge and micropillar array detectors to quantify the directional migration of fibroblasts. RSC Advances, 2017, 7, 51436-51443.	3.6	9
50	Piezoresistive sensor-integrated PDMS cantilever: A new class of device for measuring the drug-induced changes in the mechanical activity of cardiomyocytes. Sensors and Actuators B: Chemical, 2017, 240, 566-572.	7.8	67
51	A novel energy conversion method based on hydrogel material for self-powered sensor system applications. Applied Energy, 2016, 173, 103-110.	10.1	29
52	Hierarchical 3D nanostructure of GdInO_3 and reduced-graphene-decorated GdInO_3 nanocomposite for CO sensing applications. Sensors and Actuators B: Chemical, 2016, 234, 155-166.	7.8	33
53	Electrochemical impedance analysis of spray deposited CZTS thin film: Effect of Se introduction. Optical Materials, 2016, 58, 418-425.	3.6	41
54	Surface-patterned SU-8 cantilever arrays for preliminary screening of cardiac toxicity. Biosensors and Bioelectronics, 2016, 80, 456-462.	10.1	49

#	ARTICLE	IF	CITATIONS
55	A galinstan-based inkjet printing system for highly stretchable electronics with self-healing capability. Lab on A Chip, 2016, 16, 1366-1373.	6.0	135
56	Enhanced CO ₂ gas-sensing performance of ZnO nanopowder by La loaded during simple hydrothermal method. Sensors and Actuators B: Chemical, 2016, 229, 288-296.	7.8	91
57	An oxidized liquid metal-based microfluidic platform for tunable electronic device applications. Lab on A Chip, 2015, 15, 766-775.	6.0	56
58	Selectively plated stretchable liquid metal wires for transparent electronics. Sensors and Actuators B: Chemical, 2015, 221, 1114-1119.	7.8	132
59	Perovskite hexagonal YMnO ₃ nanopowder as p-type semiconductor gas sensor for H ₂ S detection. Sensors and Actuators B: Chemical, 2015, 221, 857-866.	7.8	67
60	Magnetic coupling between folded cantilevers for high-efficiency broadband energy harvesting. Sensors and Actuators A: Physical, 2015, 234, 17-22.	4.1	16
61	A novel liquid metal-based inkjet nozzle for flexible electronics. , 2015, , .		2
62	Hydrochloric acid-impregnated paper for gallium-based liquid metal microfluidics. Sensors and Actuators B: Chemical, 2015, 207, 199-205.	7.8	32
63	A selective NH ₃ gas sensor based on mesoporous p-type NiV ₂ O ₆ semiconducting nanorods synthesized using solution method. Sensors and Actuators B: Chemical, 2014, 192, 414-422.	7.8	54
64	A Seesaw-Structured Energy Harvester With Superwide Bandwidth for TPMS Application. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1514-1522.	5.8	34
65	An electromagnetic energy harvesting device based on high efficiency windmill structure for wireless forest fire monitoring application. Sensors and Actuators A: Physical, 2014, 219, 73-79.	4.1	38
66	Structural, optical, and selective ethanol sensing properties of p-type semiconducting CoNb ₂ O ₆ nanopowder. Sensors and Actuators B: Chemical, 2014, 205, 289-297.	7.8	31
67	PDMS based coplanar microfluidic channels for the surface reduction of oxidized Galinstan. Lab on A Chip, 2014, 14, 200-209.	6.0	80
68	Fabrication of Optically Transparent PDMS Artificial Lotus Leaf Film Using Underexposed and Underbaked Photoresist Mold. Journal of Microelectromechanical Systems, 2013, 22, 1073-1080.	2.5	26
69	Preparation and LPG-gas sensing characteristics of p-type semiconducting LaNbO ₄ ceramic material. Applied Surface Science, 2013, 283, 58-64.	6.1	34
70	Recovery of Nonwetting Characteristics by Surface Modification of Gallium-Based Liquid Metal Droplets Using Hydrochloric Acid Vapor. ACS Applied Materials & Interfaces, 2013, 5, 179-185.	8.0	225
71	Surface modified nano-patterned SU-8 pillar array optically transparent super-hydrophobic thin film. Journal of Micromechanics and Microengineering, 2012, 22, 035012.	2.6	17
72	Fabrication and characterization of microcapsules with polyamide-polyurea as hybrid shell. Journal of Materials Science, 2012, 47, 2040-2044.	3.7	22

#	ARTICLE	IF	CITATIONS
73	A further discussion of nonlinear mechanical behavior for FGM beams under in-plane thermal loading. <i>Composite Structures</i> , 2011, 93, 831-842.	5.8	96
74	Flexible and tactile sensor based on a photosensitive polymer. <i>Microelectronic Engineering</i> , 2010, 87, 1400-1403.	2.4	10
75	A piezoresistive tactile sensor based on carbon fibers and polymer substrates. <i>Microelectronic Engineering</i> , 2009, 86, 1250-1253.	2.4	37
76	Measurement of the gauge factor of carbon fiber and its application to sensors. <i>Microelectronic Engineering</i> , 2008, 85, 787-791.	2.4	13
77	A switchable cantilver for a chemically sensitive scanning force microscope. <i>Journal of Mechanical Science and Technology</i> , 2005, 19, 2172-2178.	1.5	0