

# Weiwei Deng

## List of Publications by Year in descending order

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Version: 2024-02-01

64  
papers

1,927  
citations

279487

23  
h-index

264894

42  
g-index

68  
all docs

68  
docs citations

68  
times ranked

1864  
citing authors

#	ARTICLE	IF	CITATIONS
1	Increase of electrospray throughput using multiplexed microfabricated sources for the scalable generation of monodisperse droplets. <i>Journal of Aerosol Science</i> , 2006, 37, 696-714.	1.8	275
2	Controlling the morphology of electrospray-generated PLGA microparticles for drug delivery. <i>Journal of Colloid and Interface Science</i> , 2010, 343, 125-133.	5.0	226
3	Compact multiplexing of monodisperse electrospays. <i>Journal of Aerosol Science</i> , 2009, 40, 907-918.	1.8	131
4	Electrospray cooling for microelectronics. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 2270-2275.	2.5	109
5	Influence of space charge on the scale-up of multiplexed electrospays. <i>Journal of Aerosol Science</i> , 2007, 38, 1062-1078.	1.8	80
6	Liquid fuel microcombustor using microfabricated multiplexed electrospray sources. <i>Proceedings of the Combustion Institute</i> , 2007, 31, 2239-2246.	2.4	60
7	Stabilization of monodisperse electrospays in the multi-jet mode via electric field enhancement. <i>Journal of Aerosol Science</i> , 2006, 37, 306-322.	1.8	59
8	The role of electric charge in microdroplets impacting on conducting surfaces. <i>Physics of Fluids</i> , 2010, 22, .	1.6	55
9	Crossover of Varicose and Whipping Instabilities in Electrified Microjets. <i>Physical Review Letters</i> , 2014, 112, 054501.	2.9	49
10	Enhancement of the performance of organic solar cells by electrospray deposition with optimal solvent system. <i>Solar Energy Materials and Solar Cells</i> , 2014, 121, 119-125.	3.0	49
11	All electrospray printed perovskite solar cells. <i>Nano Energy</i> , 2018, 53, 440-448.	8.2	46
12	Synthetic CT Generation Based on T2 Weighted MRI of Nasopharyngeal Carcinoma (NPC) Using a Deep Convolutional Neural Network (DCNN). <i>Frontiers in Oncology</i> , 2019, 9, 1333.	1.3	46
13	Effects of insoluble nano-particles on nanofluid droplet evaporation. <i>International Journal of Heat and Mass Transfer</i> , 2016, 97, 725-734.	2.5	45
14	Interactions and deposition patterns of multiplexed electrospays. <i>Journal of Aerosol Science</i> , 2012, 46, 20-33.	1.8	39
15	Pinhole formation from liquid metal microdroplets impact on solid surfaces. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	37
16	Full-cycle electrochemical-thermal coupling analysis for commercial lithium-ion batteries. <i>Applied Thermal Engineering</i> , 2021, 184, 116258.	3.0	31
17	Near-Field Electrospray Microprinting of Polymer-Derived Ceramics. <i>Journal of Microelectromechanical Systems</i> , 2013, 22, 1-3.	1.7	29
18	Design, Fabrication, and Characterization of Linear Multiplexed Electrospray Atomizers Micro-Machined from Metal and Polymers. <i>Aerosol Science and Technology</i> , 2013, 47, 146-152.	1.5	29

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19	Direct Electro spray Printing of Gradient Refractive Index Chalcogenide Glass Films. ACS Applied Materials & Interfaces, 2017, 9, 26990-26995.	4.0	27
20	All Electro spray Printing of Carbon-Based Cost-Effective Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2006803.	7.8	26
21	Full transient response of Taylor cones to a step change in electric field. Microfluidics and Nanofluidics, 2012, 12, 383-393.	1.0	25
22	Effects of Damkhöfler number of evaporation on the morphology of active layer and the performance of organic heterojunction solar cells fabricated by electro spray method. Solar Energy Materials and Solar Cells, 2015, 134, 140-147.	3.0	25
23	Challenges in simulating and modeling the airborne virus transmission: A state-of-the-art review. Physics of Fluids, 2021, 33, 101302.	1.6	24
24	Electro spray Dense Suspensions of TiO <sub>2</sub> Nanoparticles for Dye Sensitized Solar Cells. Aerosol Science and Technology, 2013, 47, 1302-1309.	1.5	23
25	Deposition of Ge <sub>23</sub> Sb <sub>7</sub> S <sub>70</sub> chalcogenide glass films by electro spray. Thin Solid Films, 2015, 588, 56-60.	0.8	21
26	Weakly charged droplets fundamentally change impact dynamics on flat surfaces. Soft Matter, 2019, 15, 5548-5553.	1.2	20
27	Efficient Non-Fullerene Organic Photovoltaics Printed by Electro spray via Solvent Engineering. ACS Applied Materials & Interfaces, 2020, 12, 27405-27415.	4.0	20
28	Printing photovoltaics by electro spray. Opto-Electronic Advances, 2020, 3, 190038-190038.	6.4	20
29	Digital electro spray for controlled deposition. Review of Scientific Instruments, 2010, 81, 035114.	0.6	17
30	Effects of internal circulation and particle mobility during nanofluid droplet evaporation. International Journal of Heat and Mass Transfer, 2016, 103, 1335-1347.	2.5	17
31	Generation of monodisperse aerosols by combining aerodynamic flow-focusing and mechanical perturbation. Aerosol Science and Technology, 2016, 50, 17-25.	1.5	17
32	Soft Porous Blade Printing of Nonfullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 25843-25852.	4.0	17
33	Toward all aerosol printing of high-efficiency organic solar cells using environmentally friendly solvents in ambient air. Journal of Materials Chemistry A, 2021, 9, 17198-17210.	5.2	16
34	Ballpoint pen tips as robust cone-jet electro spray emitters. Journal of Aerosol Science, 2014, 77, 10-15.	1.8	15
35	In situ preparation of hierarchically structured dual-layer TiO <sub>2</sub> films by E-spray method for efficient dye-sensitized solar cells. Organic Electronics, 2017, 49, 135-141.	1.4	15
36	Massively Multiplexed Electrohydrodynamic Tip Streaming from a Thin Disc. Physical Review Letters, 2021, 126, 064502.	2.9	15

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37	Electrospray as a Fabrication Tool in Organic Photovoltaics. <i>Reviews in Nanoscience and Nanotechnology</i> , 2012, 1, 172-186.	0.4	15
38	Electrospray deposition of quantum dot-doped Ge <sub>23</sub> Sb <sub>7</sub> S <sub>70</sub> chalcogenide glass films. <i>Thin Solid Films</i> , 2017, 626, 194-199.	0.8	13
39	Optofluidic Resonance of a Transparent Liquid Jet Excited by a Continuous Wave Laser. <i>Physical Review Letters</i> , 2021, 127, 244502.	2.9	12
40	Morphology and electrical characteristics of polymer: Fullerene films deposited by electrospray. <i>Solar Energy Materials and Solar Cells</i> , 2018, 183, 137-145.	3.0	11
41	Additive-free organic solar cells with enhanced efficiency enabled by unidirectional printing flow of high shear rate. <i>Organic Electronics</i> , 2021, 97, 106274.	1.4	10
42	Organic Photovoltaics Printed via Sheet Electrospray Enabled by Quadrupole Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 56375-56384.	4.0	9
43	Flow-Enhanced Flexible Microcomb Printing of Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 13572-13583.	4.0	7
44	Study on mechanism of C <sup>•</sup> H radicals recombination into acetylene in the process of coal pyrolysis in hydrogen plasma. <i>Thin Solid Films</i> , 2001, 390, 170-174.	0.8	6
45	Nanostructured Semiconducting Polymer Films with Enhanced Crystallinity and Reorientation of Crystalline Domains by Electrospray Deposition. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1700090.	1.7	6
46	Paper-based electrospray emitters. <i>Journal of Aerosol Science</i> , 2017, 113, 108-113.	1.8	6
47	Electrospray Deposition of Uniform Thickness Ge <sub>23</sub> Sb <sub>7</sub> S <sub>70</sub> and As <sub>40</sub> S <sub>60</sub> Chalcogenide Glass Films. <i>Journal of Visualized Experiments</i> , 2016, . .	0.2	6
48	Charged Satellite Drop Avoidance in Electrohydrodynamic Dripping. <i>Micromachines</i> , 2019, 10, 172.	1.4	5
49	Shaping electrospray deposition profile by a quadrupole: From circular to elliptical patterns. <i>Journal of Aerosol Science</i> , 2021, 154, 105739.	1.8	5
50	Visualization of the interaction of water aerosol and nanofiber mesh. <i>Physics of Fluids</i> , 2021, 33, 092106.	1.6	5
51	Advances in infrared GRIN: a review of novel materials towards components and devices. , 2018, , .		5
52	Printed Kirigami Organic Photovoltaics for Efficient Solar Tracking. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	5
53	Scalable Generation of Strictly Monodisperse Droplets by Transverse Electrohydrodynamic Excitations. <i>Aerosol Science and Technology</i> , 2013, 47, 1174-1179.	1.5	4
54	Gas-focused liquid microjets from a slit. <i>Physics of Fluids</i> , 2015, 27, .	1.6	4

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55	Multiplexed electro spray emitters fabricated by rapid laser micromachining. Journal of Aerosol Science, 2020, 150, 105616.	1.8	4
56	Two dimensional liquid flow focusing. Physics of Fluids, 2020, 32, .	1.6	4
57	MICROFABRICATED HIGH DENSITY MULTIPLEXED ELECTROSPRAY. , 2008, , .		3
58	Axisymmetric thin film flow on a flat disk foil subject to intense radial electric fields. Physics of Fluids, 2022, 34, .	1.6	3
59	Advances of Patient-Derived Organoids in Personalized Radiotherapy. Frontiers in Oncology, 2022, 12, 888416.	1.3	3
60	A Flexible, metallic electro spray emitter with embedded flow homogenizer. , 2015, , .		2
61	Effect of transport processes on ignition of stretched diffusion flames using laser spark. International Journal of Heat and Mass Transfer, 2018, 123, 988-993.	2.5	2
62	Controlling instabilities of electrified liquid jets via orthogonal perturbations. Physical Review Fluids, 2022, 7, .	1.0	2
63	Study on Arc Movement in Hollow Electrode Plasma Generators with Impressed Double Magnetic Fields. Plasma Chemistry and Plasma Processing, 2004, 24, 73-84.	1.1	1
64	Response of $100\text{-}\mu\text{m}$ micron water jets to intense nanosecond laser blasts. Physical Review Fluids, 2022, 7, .		