Wei Lin Leong

List of Publications by Year
in descending order

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63	7,801	117453	133063
papers	citations	34 h-index	59 g-index

65	65	65	9480
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionicâ€Liquid Induced Morphology Tuning of PEDOT:PSS for Highâ€Performance Organic Electrochemical Transistors. Advanced Functional Materials, 2022, 32, .	7.8	43
2	Halide perovskite-based indoor photovoltaics: recent development and challenges. Materials Today Energy, 2022, 23, 100907.	2.5	27
3	Alkali Additives Enable Efficient Large Area (>55 cm²) Slotâ€Die Coated Perovskite Solar Modules. Advanced Functional Materials, 2022, 32, .	7.8	39
4	Polaron Delocalization Dependence of the Conductivity and the Seebeck Coefficient in Doped Conjugated Polymers. Journal of Physical Chemistry B, 2022, 126, 2073-2085.	1.2	5
5	A Highly Conducting Polymer for Selfâ€Healable, Printable, and Stretchable Organic Electrochemical Transistor Arrays and Near Hysteresisâ€Free Soft Tactile Sensors. Advanced Materials, 2022, 34, e2200682.	11.1	63
6	Crown ether enabled enhancement of ionicâ€“electronic properties of PEDOT:PSS. Materials Horizons, 2022, 9, 2408-2415.	6.4	8
7	Enhancing the Electrochemical Doping Efficiency in Diketopyrrolopyrroleâ€Based Polymer for Organic Electrochemical Transistors. Advanced Electronic Materials, 2021, 7, .	2.6	39
8	Tuning Precursors Ink Stoichiometry for High Efficiency Scalable Perovskite Photovoltaics. , 2021, , .		0
9	Elastic modulus tailoring in CH3NH3PbI3 perovskite system by the introduction of two dimensionality using (5-AVA)2PbI4. Solar Energy, 2021, 224, 27-34.	2.9	10
10	Slot-die coated methylammonium-free perovskite solar cells with 18% efficiency. Solar Energy Materials and Solar Cells, 2021, 230, 111189.	3.0	28
11	Recent advancements and perspectives on light management and high performance in perovskite light-emitting diodes. Nanophotonics, 2021, 10, 2103-2143.	2.9	35
12	Organic Electrochemical Transistors for In Vivo Bioelectronics. Advanced Materials, 2021, 33, e2101874.	11.1	78
13	Operando Direct Observation of Filament Formation in Resistive Switching Devices Enabled by a Topological Transformation Molecule. Nano Letters, 2021, 21, 9262-9269.	4.5	4
14	Organic Electrochemical Transistors for In Vivo Bioelectronics (Adv. Mater. 49/2021). Advanced Materials, 2021, 33, .	11.1	1
15	Comparing data driven and physics inspired models for hopping transport in organic field effect transistors. Scientific Reports, 2021, 11, 23621.	1.6	4
16	Lightweight, Superelastic Boron Nitride/Polydimethylsiloxane Foam as Air Dielectric Substitute for Multifunctional Capacitive Sensor Applications. Advanced Functional Materials, 2020, 30, 1909604.	7.8	117
17	Cubic NaSbS₂ as an Ionicâ€“Electronic Coupled Semiconductor for Switchable Photovoltaic and Neuromorphic Device Applications. Advanced Materials, 2020, 32, e1906976.	11.1	34
18	Contact Modulated Ionic Transfer Doping in Allâ€Solidâ€State Organic Electrochemical Transistor for Ultraâ€High Sensitive Tactile Perception at Low Operating Voltage. Advanced Functional Materials, 2020, 30, 2006186.	7.8	42

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19	Recent Technological Advances in Fabrication and Application of Organic Electrochemical Transistors. Advanced Materials Technologies, 2020, 5, 2000523.	3.0	46
20	Novel amphiphilic corannulene additive for moisture-resistant perovskite solar cells. Chemical Communications, 2020, 56, 11997-12000.	2.2	15
21	Flexible Organic Electronics: Contact Modulated Ionic Transfer Doping in Allâ€Solidâ€State Organic Electrochemical Transistor for Ultraâ€High Sensitive Tactile Perception at Low Operating Voltage (Adv.) Tj ETQq1 1 0.784314 rgBT /O		
22	Non-Volatile Organic Transistor Memory Based on Black Phosphorus Quantum Dots as Charge Trapping Layer. IEEE Electron Device Letters, 2020, 41, 852-855.	2.2	6
23	Optogenetics inspired transition metal dichalcogenide neuristors for in-memory deep recurrent neural networks. Nature Communications, 2020, 11, 3211.	5.8	36
24	Biopolymer based gate dielectrics for high performance organic thin film transistors. , 2020, , .		1
25	Self-Healable Organic Electrochemical Transistor with High Transconductance, Fast Response, and Long-Term Stability. ACS Applied Materials & Interfaces, 2020, 12, 33979-33988.	4.0	40
26	Water robustness of organic thin-film transistors based on pyrazino[2,3-g]quinoxaline-dione conjugated polymer. Journal of Materials Chemistry C, 2020, 8, 4157-4163.	2.7	4
27	Universal Spray-Deposition Process for Scalable, High-Performance, and Stable Organic Electrochemical Transistors. ACS Applied Materials & Interfaces, 2020, 12, 20757-20764.	4.0	48
28	Perturbation-Induced Seeding and Crystallization of Hybrid Perovskites over Surface-Modified Substrates for Optoelectronic Devices. ACS Applied Materials & Interfaces, 2019, 11, 27727-27734.	4.0	12
29	All Inorganic Mixed Halide Perovskite Nanocrystalâ€“Graphene Hybrid Photodetector: From Ultrahigh Gain to Photostability. ACS Applied Materials & Interfaces, 2019, 11, 27064-27072.	4.0	37
30	Large area, high efficiency and stable perovskite solar cells enabled by fine control of intermediate phase. Solar Energy Materials and Solar Cells, 2019, 201, 110113.	3.0	9
31	Proquinoidal-Conjugated Polymer as an Effective Strategy for the Enhancement of Electrical Conductivity and Thermoelectric Properties. Chemistry of Materials, 2019, 31, 8543-8550.	3.2	43
32	Self-healable electrochromic ion gels for low power and robust displays. Organic Electronics, 2019, 71, 199-205.	1.4	21
33	Ionicâ€Liquid Doping Enables High Transconductance, Fast Response Time, and High Ion Sensitivity in Organic Electrochemical Transistors. Advanced Materials, 2019, 31, e1805544.	11.1	95
34	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. New Journal of Chemistry, 2018, 42, 4017-4028.	1.4	19
35	Efficient and Ambientâ€Airâ€Stable Solar Cell with Highly Oriented 2D@3D Perovskites. Advanced Functional Materials, 2018, 28, 1801654.	7.8	98
36	Direct arylation polymerization toward ultraâ€low bandgap poly(thienoisoindigoâ€altâ€diketopyrrolepyrrole) conjugated polymers: The effect of Î²â€protection on the polymerization and properties of the polymers. Journal of Polymer Science Part A, 2017, 55, 3205-3213.	2.5	9

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37	Human Hair Keratin for Biocompatible Flexible and Transient Electronic Devices. ACS Applied Materials & Interfaces, 2017, 9, 43004-43012.	4.0	74
38	Flexible Ionicâ€Electronic Hybrid Oxide Synaptic TFTs with Programmable Dynamic Plasticity for Brainâ€Inspired Neuromorphic Computing. Small, 2017, 13, 1701193.	5.2	152
39	Identifying Fundamental Limitations in Halide Perovskite Solar Cells. Advanced Materials, 2016, 28, 2439-2445.	11.1	129
40	Efficient Polymer Solar Cells Enabled by Low Temperature Processed Ternary Metal Oxide as Electron Transport Interlayer with Large Stoichiometry Window. ACS Applied Materials & Interfaces, 2015, 7, 11099-11106.	4.0	15
41	Improvement in polymer solar cell performance and eliminating light soaking effect via UV-light treatment on conjugated polyelectrolyte interlayer. Organic Electronics, 2015, 25, 105-111.	1.4	4
42	Formamidinium tin-based perovskite with low E_g for photovoltaic applications. Journal of Materials Chemistry A, 2015, 3, 14996-15000.	5.2	449
43	Lead-free germanium iodide perovskite materials for photovoltaic applications. Journal of Materials Chemistry A, 2015, 3, 23829-23832.	5.2	841
44	A swivel-cruciform thiophene based hole-transporting material for efficient perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 6305-6309.	5.2	167
45	Leadâ€Free Halide Perovskite Solar Cells with High Photocurrents Realized Through Vacancy Modulation. Advanced Materials, 2014, 26, 7122-7127.	11.1	942
46	Intensity Dependence of Currentâ€“Voltage Characteristics and Recombination in High-Efficiency Solution-Processed Small-Molecule Solar Cells. ACS Nano, 2013, 7, 4569-4577.	7.3	857
47	Understanding the Role of Thermal Processing in High Performance Solution Processed Small Molecule Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2013, 3, 356-363.	10.2	52
48	Effects of Impurities on Operational Mechanism of Organic Bulk Heterojunction Solar Cells. Advanced Materials, 2013, 25, 1706-1712.	11.1	42
49	Solution-processed small-molecule solar cells with 6.7% efficiency. Nature Materials, 2012, 11, 44-48.	13.3	1,437
50	Role of trace impurities in the photovoltaic performance of solution processed small-molecule bulk heterojunction solar cells. Chemical Science, 2012, 3, 2103.	3.7	84
51	Charge Formation, Recombination, and Sweepâ€Out Dynamics in Organic Solar Cells. Advanced Functional Materials, 2012, 22, 1116-1128.	7.8	286
52	Manifestation of Carrier Relaxation Through the Manifold of Localized States in PCDTBT:PC₆₀BM Bulk Heterojunction Material: The Role of PC₈₄BM Traps on the Carrier Transport. Advanced Materials, 2012, 24, 2273-2277.	11.1	18
53	A New Terthiopheneâ€Thienopyrrolodione Copolymerâ€Based Bulk Heterojunction Solar Cell with High Openâ€Circuit Voltage. Advanced Energy Materials, 2012, 2, 1397-1403.	10.2	98
54	Solution processed non-volatile top-gate polymer field-effect transistors. Journal of Materials Chemistry, 2011, 21, 8971.	6.7	34

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55	Towards printable organic thin film transistor based flash memory devices. Journal of Materials Chemistry, 2011, 21, 5203.	6.7	133
56	Identifying a Threshold Impurity Level for Organic Solar Cells: Enhanced Firstâ€Order Recombination Via Wellâ€Defined PC₈₄BM Traps in Organic Bulk Heterojunction Solar Cells. Advanced Functional Materials, 2011, 21, 3083-3092.	7.8	212
57	Differential Resistance Analysis of Charge Carrier Losses in Organic Bulk Heterojunction Solar Cells: Observing the Transition from Bimolecular to Trapâ€Assisted Recombination and Quantifying the Order of Recombination. Advanced Energy Materials, 2011, 1, 517-522.	10.2	204
58	Micellar poly(styrene-b-4-vinylpyridine)-nanoparticle hybrid system for non-volatile organic transistor memory. Journal of Materials Chemistry, 2009, 19, 7354.	6.7	99
59	Nonâ€Volatile Organic Memory Applications Enabled by In Situ Synthesis of Gold Nanoparticles in a Selfâ€Assembled Block Copolymer. Advanced Materials, 2008, 20, 2325-2331.	11.1	186
60	Charging dynamics of discrete gold nanoparticle arrays self-assembled within a poly(styrene-b-4-vinylpyridine) diblock copolymer template. Applied Physics Letters, 2008, 93, 222908.	1.5	20
61	Charging phenomena in pentacene-gold nanoparticle memory device. Applied Physics Letters, 2007, 90, 042906.	1.5	141
62	Ammonium sulfate treatment at TiO2/perovskite interface boosts operational stability of perovskite solar cells. Journal of Materials Chemistry C, 0, , .	2.7	0
63	Selfâ€Powered Organic Electrochemical Transistors with Stable, Lightâ€Intensity Independent Operation Enabled by Carbonâ€Based Perovskite Solar Cells. Advanced Materials Technologies, 0, , 2100565.	3.0	7