Chun-Ho Lin

List of Publications by Year
in descending order

55 papers	3,287 citations	126858 33 h-index	175177 52 g-index
58 all docs	58 docs citations	58 times ranked	4119 citing authors

#	Article	IF	Citations
1	Micro-light-emitting diodes with quantum dots in display technology. Light: Science and Applications, 2020, 9, 83.	7.7	394
2	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. Nature Communications, 2021, 12, 466.	5.8	176
3	MXeneâ€Contacted Silicon Solar Cells with 11.5% Efficiency. Advanced Energy Materials, 2019, 9, 1900180.	10.2	161
4	Halide Perovskites: A New Era of Solutionâ€Processed Electronics. Advanced Materials, 2021, 33, e2005000.	11.1	138
5	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. Communications Physics, 2018, 1, .	2.0	135
6	Recent Progress in Shortâ€•to Longâ€Wave Infrared Photodetection Using 2D Materials and Heterostructures. Advanced Optical Materials, 2021, 9, 2001708.	3.6	118
7	High-Îº perovskite membranes as insulators for two-dimensional transistors. Nature, 2022, 605, 262-267.	13.7	109
8	Hybrid Organicâ€“Inorganic Materials and Composites for Photoelectrochemical Water Splitting. ACS Energy Letters, 2020, 5, 1487-1497.	8.8	104
9	Highly Deformable Origami Paper Photodetector Arrays. ACS Nano, 2017, 11, 10230-10235.	7.3	94
10	Orthogonal Lithography for Halide Perovskite Optoelectronic Nanodevices. ACS Nano, 2019, 13, 1168-1176.	7.3	90
11	Giant Optical Anisotropy of Perovskite Nanowire Array Films. Advanced Functional Materials, 2020, 30, 1909275.	7.8	89
12	Photostriction of CH₃NH₃PbBr₃ Perovskite Crystals. Advanced Materials, 2017, 29, 1701789.	11.1	86
13	Nonlinear Absorption Applications of CH₃NH₃PbBr₃ Perovskite Crystals. Advanced Functional Materials, 2018, 28, 1707175.	7.8	84
14	Lowâ€Dimensional Leadâ€Free Inorganic Perovskites for Resistive Switching with Ultralow Bias. Advanced Functional Materials, 2020, 30, 2002110.	7.8	78
15	Quantum Dots for Photovoltaics: A Tale of Two Materials. Advanced Energy Materials, 2021, 11, 2100354.	10.2	77
16	Optoelectronic Ferroelectric Domainâ€Wall Memories Made from a Single Van Der Waals Ferroelectric. Advanced Functional Materials, 2020, 30, 2004206.	7.8	67
17	A flexible solar-blind 2D boron nitride nanopaper-based photodetector with high thermal resistance. Npj 2D Materials and Applications, 2018, 2, .	3.9	64
18	Enhancing Resistive Switching Performance and Ambient Stability of Hybrid Perovskite Single Crystals via Embedding Colloidal Quantum Dots. Advanced Functional Materials, 2020, 30, 2002948.	7.8	59

#	Article	IF	Citations
19	Highly Efficient and Stable White Lightâ€Emitting Diodes Using Perovskite Quantum Dot Paper. Advanced Science, 2019, 6, 1902230.	5.6	56
20	Fastâ€Response, Highly Airâ€Stable, and Waterâ€Resistant Organic Photodetectors Based on a Singleâ€Crystal Pt Complex. Advanced Materials, 2020, 32, e1904634.	11.1	56
21	Organic intercalation engineering of quasi-2D Dionâ€“Jacobson Î±-CsPbI₃ perovskites. Materials Horizons, 2020, 7, 1042-1050.	6.4	55
22	Artificial Tactile Perceptual Neuron with Nociceptive and Pressure Decoding Abilities. ACS Applied Materials & Interfaces, 2020, 12, 26258-26266.	4.0	55
23	Electrode Engineering in Halide Perovskite Electronics: Plenty of Room at the Interfaces. Advanced Materials, 2022, 34, e2108616.	11.1	55
24	Understanding the Role of Vanadium Vacancies in BiVO₄ for Efficient Photoelectrochemical Water Oxidation. Chemistry of Materials, 2021, 33, 3553-3565.	3.2	54
25	Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. Nano Energy, 2020, 73, 104801.	8.2	53
26	A monolithic artificial iconic memory based on highly stable perovskite-metal multilayers. Applied Physics Reviews, 2020, 7, .	5.5	46
27	Spontaneous solar water splitting with decoupling of light absorption and electrocatalysis using silicon back-buried junction. Nature Communications, 2020, 11, 3930.	5.8	45
28	Phase segregation in inorganic mixed-halide perovskites: from phenomena to mechanisms. Photonics Research, 2020, 8, A56.	3.4	45
29	Ultrathin Perovskite Monocrystals Boost the Solar Cell Performance. Advanced Energy Materials, 2020, 10, 2000453.	10.2	42
30	P-type Charge Transport and Selective Gas Sensing of All-Inorganic Perovskite Nanocrystals. , 2020, 2, 1368-1374.		40
31	Optimizing Surface Chemistry of PbS Colloidal Quantum Dot for Highly Efficient and Stable Solar Cells via Chemical Binding. Advanced Science, 2021, 8, 2003138.	5.6	40
32	Oneâ€Dimensional Molecular Metal Halide Materials: Structures, Properties, and Applications. Small Structures, 2021, 2, 2000062.	6.9	40
33	Self-powered nanodevices for fast UV detection and energy harvesting using core-shell nanowire geometry. Nano Energy, 2018, 51, 294-299.	8.2	39
34	Improved performance and stability of photoelectrochemical water-splitting Si system using a bifacial design to decouple light harvesting and electrocatalysis. Nano Energy, 2020, 70, 104478.	8.2	37
35	Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. Advanced Science, 2022, 9, e2102258.	5.6	35
36	Highly UV Resistant Inchâ€Scale Hybrid Perovskite Quantum Dot Papers. Advanced Science, 2020, 7, 1902439.	5.6	33

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37	Linking Phase Segregation and Photovoltaic Performance of Mixed-Halide Perovskite Films through Grain Size Engineering. ACS Energy Letters, 0, , 1649-1658.	8.8	33
38	A flexible capacitive photoreceptor for the biomimetic retina. Light: Science and Applications, 2022, 11, 3.	7.7	33
39	CsPbBr₃ perovskite quantum-dot paper exhibiting a highest 3â€‰â€‰dB bandwidth and realizing a flexible white-light system for visible-light communication. Photonics Research, 2021, 9, 2341.	3.4	30
40	A Solutionâ€Processed Allâ€Perovskite Memory with Dualâ€Band Light Response and Triâ€Mode Operation. Advanced Functional Materials, 2022, 32, 2110975.	7.8	30
41	Singleâ€Crystal Hybrid Perovskite Platelets on Graphene: A Mixedâ€Dimensional Van Der Waals Heterostructure with Strong Interface Coupling. Advanced Functional Materials, 2020, 30, 1909672.	7.8	28
42	Metal contact and carrier transport in single crystalline CH3NH3PbBr3 perovskite. Nano Energy, 2018, 53, 817-827.	8.2	26
43	Enhancing the Efficiency and Stability of PbS Quantum Dot Solar Cells through Engineering an Ultrathin NiO Nanocrystalline Interlayer. ACS Applied Materials & Interfaces, 2020, 12, 46239-46246.	4.0	24
44	An efficient and stable solar flow battery enabled by a single-junction GaAs photoelectrode. Nature Communications, 2021, 12, 156.	5.8	22
45	Tuning Phase Transition and Thermochromic Properties of Vanadium Dioxide Thin Films via Cobalt Doping. ACS Applied Materials & Interfaces, 2022, 14, 19736-19746.	4.0	16
46	Microwave Synthesis and Highâ€Mobility Charge Transport of Carbonâ€Nanotubeâ€inâ€Perovskite Single Crystals. Advanced Optical Materials, 2020, 8, 2001740.	3.6	15
47	Surface-Controlled Metal Oxide Resistive Memory. IEEE Electron Device Letters, 2015, 36, 1307-1309.	2.2	13
48	Surface effects of electrode-dependent switching behavior of resistive random-access memory. Applied Physics Letters, 2016, 109, .	1.5	13
49	Anomalous Structural Evolution and Glassy Lattice in Mixedâ€Halide Hybrid Perovskites. Small, 2022, 18, e2200847.	5.2	13
50	Multi-functional multi-gate one-transistor process-in-memory electronics with foundry processing and footprint reduction. Communications Materials, 2022, 3, .	2.9	10
51	Optimization of the Selenization Pressure Enabling Efficient Cu₂ZnSn(S,Se)₄ Solar Cells. Solar Rrl, 2022, 6, .	3.1	8
52	Solar Cells: MXeneâ€Contacted Silicon Solar Cells with 11.5% Efficiency (Adv. Energy Mater. 22/2019). Advanced Energy Materials, 2019, 9, 1970083.	10.2	7
53	Perovskite Quantum Dot Solar Cells Fabricated from Recycled Lead-Acid Battery Waste. , 2022, 4, 120-127.		7
54	Giant Piezoresistance in B-Doped SiC Nanobelts with a Gauge Factor of â˜’1800. ACS Applied Materials & Interfaces, 2020, 12, 47848-47853.	4.0	6

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55	Perovskite Monocrystals: Ultrathin Perovskite Monocrystals Boost the Solar Cell Performance (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlo	10.2	2