Chun-Ho Lin

List of Publications by Citations

53 papers	1,792 citations	25 h-index	41 g-index
58 ext. papers	2,578 ext. citations	15 avg, IF	5.19 L-index

#	Paper	IF	Citations
53	Micro-light-emitting diodes with quantum dots in display technology. *Light: Science and Applications*, **2020**, 9, 83	16.7	181
52	MXene-Contacted Silicon Solar Cells with 11.5% Efficiency. *Advanced Energy Materials*, **2019**, 9, 1900180	21.8	117
51	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. *Communications Physics*, **2018**, 1,	5.4	84
50	Orthogonal Lithography for Halide Perovskite Optoelectronic Nanodevices. *ACS Nano*, **2019**, 13, 1168-1176	16.7	74
49	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. *Nature Communications*, **2021**, 12, 466	17.4	73
48	Highly Deformable Origami Paper Photodetector Arrays. *ACS Nano*, **2017**, 11, 10230-10235	16.7	65
47	Giant Optical Anisotropy of Perovskite Nanowire Array Films. *Advanced Functional Materials*, **2020**, 30, 1909275	15.6	64
46	Nonlinear Absorption Applications of CH3NH3PbBr3 Perovskite Crystals. *Advanced Functional Materials*, **2018**, 28, 1707175	15.6	63
45	Photostriction of CH NH PbBr Perovskite Crystals. *Advanced Materials*, **2017**, 29, 1701789	24	59
44	Recent Progress in Short- to Long-Wave Infrared Photodetection Using 2D Materials and Heterostructures. *Advanced Optical Materials*, **2021**, 9, 2001708	8.1	59
43	Hybrid Organic–Inorganic Materials and Composites for Photoelectrochemical Water Splitting. *ACS Energy Letters*, **2020**, 5, 1487-1497	20.1	58
42	Halide Perovskites: A New Era of Solution-Processed Electronics. *Advanced Materials*, **2021**, 33, e2005000	24	48
41	A flexible solar-blind 2D boron nitride nanopaper-based photodetector with high thermal resistance. *Npj 2D Materials and Applications*, **2018**, 2,	8.8	46
40	Fast-Response, Highly Air-Stable, and Water-Resistant Organic Photodetectors Based on a Single-Crystal Pt Complex. *Advanced Materials*, **2020**, 32, e1904634	24	41
39	Low-Dimensional Lead-Free Inorganic Perovskites for Resistive Switching with Ultralow Bias. *Advanced Functional Materials*, **2020**, 30, 2002110	15.6	40
38	Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. *Nano Energy*, **2020**, 73, 104801	17.1	39
37	Highly Efficient and Stable White Light-Emitting Diodes Using Perovskite Quantum Dot Paper. *Advanced Science*, **2019**, 6, 1902230	13.6	37

36	Enhancing Resistive Switching Performance and Ambient Stability of Hybrid Perovskite Single Crystals via Embedding Colloidal Quantum Dots. *Advanced Functional Materials*, **2020**, 30, 2002948	15.6	34
35	Organic intercalation engineering of quasi-2D Dion□acobson □CsPbI3 perovskites. *Materials Horizons*, **2020**, 7, 1042-1050	14.4	33
34	Artificial Tactile Perceptual Neuron with Nociceptive and Pressure Decoding Abilities. *ACS Applied Materials & Interfaces*, **2020**, 12, 26258-26266	9.5	30
33	A monolithic artificial iconic memory based on highly stable perovskite-metal multilayers. *Applied Physics Reviews*, **2020**, 7, 031401	17.3	30
32	Self-powered nanodevices for fast UV detection and energy harvesting using core-shell nanowire geometry. *Nano Energy*, **2018**, 51, 294-299	17.1	30
31	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	17.1	29
30	Optoelectronic Ferroelectric Domain-Wall Memories Made from a Single Van Der Waals Ferroelectric. *Advanced Functional Materials*, **2020**, 30, 2004206	15.6	26
29	Quantum Dots for Photovoltaics: A Tale of Two Materials. *Advanced Energy Materials*, **2021**, 11, 2100354	21.8	25
28	Spontaneous solar water splitting with decoupling of light absorption and electrocatalysis using silicon back-buried junction. *Nature Communications*, **2020**, 11, 3930	17.4	24
27	Single-Crystal Hybrid Perovskite Platelets on Graphene: A Mixed-Dimensional Van Der Waals Heterostructure with Strong Interface Coupling. *Advanced Functional Materials*, **2020**, 30, 1909672	15.6	22
26	P-type Charge Transport and Selective Gas Sensing of All-Inorganic Perovskite Nanocrystals **2020**, 2, 1368-1374		22
25	Metal contact and carrier transport in single crystalline CH3NH3PbBr3 perovskite. *Nano Energy*, **2018**, 53, 817-827	17.1	21
24	Ultrathin Perovskite Monocrystals Boost the Solar Cell Performance. *Advanced Energy Materials*, **2020**, 10, 2000453	21.8	20
23	Highly UV Resistant Inch-Scale Hybrid Perovskite Quantum Dot Papers. *Advanced Science*, **2020**, 7, 1902439	15.6	19
22	Understanding the Role of Vanadium Vacancies in BiVO4 for Efficient Photoelectrochemical Water Oxidation. *Chemistry of Materials*, **2021**, 33, 3553-3565	9.6	18
21	One-Dimensional Molecular Metal Halide Materials: Structures, Properties, and Applications. *Small Structures*, **2021**, 2, 2000062	8.7	18
20	Phase segregation in inorganic mixed-halide perovskites: from phenomena to mechanisms. *Photonics Research*, **2020**, 8, A56	6	17
19	Optimizing Surface Chemistry of PbS Colloidal Quantum Dot for Highly Efficient and Stable Solar Cells via Chemical Binding. *Advanced Science*, **2021**, 8, 2003138	13.6	16

18	High-□perovskite membranes as insulators for two-dimensional transistors.. *Nature*, **2022**, 605, 262-267	50.4	16
17	Linking Phase Segregation and Photovoltaic Performance of Mixed-Halide Perovskite Films through Grain Size Engineering. *ACS Energy Letters*,1649-1658	20.1	15
16	Electrode Engineering in Halide Perovskite Electronics: Plenty of Room at the Interfaces.. *Advanced Materials*, **2022**, e2108616	24	12
15	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	9.5	12
14	Surface effects of electrode-dependent switching behavior of resistive random-access memory. *Applied Physics Letters*, **2016**, 109, 131603	3.4	11
13	Surface-Controlled Metal Oxide Resistive Memory. *IEEE Electron Device Letters*, **2015**, 36, 1307-1309	4.4	9
12	Microwave Synthesis and High-Mobility Charge Transport of Carbon-Nanotube-in-Perovskite Single Crystals. *Advanced Optical Materials*, **2020**, 8, 2001740	8.1	9
11	A flexible capacitive photoreceptor for the biomimetic retina.. *Light: Science and Applications*, **2022**, 11, 3	16.7	8
10	Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. *Advanced Science*, **2021**, e2102258	13.6	8
9	A Solution-Processed All-Perovskite Memory with Dual-Band Light Response and Tri-Mode Operation. *Advanced Functional Materials*,2110975	15.6	5
8	An efficient and stable solar flow battery enabled by a single-junction GaAs photoelectrode. *Nature Communications*, **2021**, 12, 156	17.4	5
7	CsPbBr3 perovskite quantum-dot paper exhibiting highest 3-dB bandwidth and realizing flexible white-light system for visible-light communication. *Photonics Research*,	6	5
6	Solar Cells: MXene-Contacted Silicon Solar Cells with 11.5% Efficiency (Adv. Energy Mater. 22/2019). *Advanced Energy Materials*, **2019**, 9, 1970083	21.8	3
5	Giant Piezoresistance in B-Doped SiC Nanobelts with a Gauge Factor of -1800. *ACS Applied Materials & Interfaces*, **2020**, 12, 47848-47853	9.5	3
4	Optimization of the Selenization Pressure Enables Efficient Cu 2 ZnSn(S,Se) 4 Solar Cells. *Solar Rrl*,	7.1	2
3	Perovskite Quantum Dot Solar Cells Fabricated from Recycled Lead-Acid Battery Waste **2022**, 4, 120-127		2
2	Perovskite Monocrystals: Ultrathin Perovskite Monocrystals Boost the Solar Cell Performance (Adv. Energy Mater. 34/2020). *Advanced Energy Materials*, **2020**, 10, 2070144	21.8	1
1	Anomalous Structural Evolution and Glassy Lattice in Mixed-Halide Hybrid Perovskites.. *Small*, **2022**, e2200847	1	