Cheng-Hung Hou

List of Publications by Year
in descending order

32	770	566801 15	552369 26
papers	citations	h-index	g-index

32	32	32	749
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bright and stable light-emitting diodes made with perovskite nanocrystals stabilized in metalâ€“organic frameworks. Nature Photonics, 2021, 15, 843-849.	15.6	117
2	Depth-dependent defect manipulation in perovskites for high-performance solar cells. Energy and Environmental Science, 2021, 14, 6526-6535.	15.6	114
3	Chemical Polishing of Perovskite Surface Enhances Photovoltaic Performances. Journal of the American Chemical Society, 2022, 144, 1700-1708.	6.6	88
4	Fast growth of large-grain and continuous MoS2 films through a self-capping vapor-liquid-solid method. Nature Communications, 2020, 11, 3682.	5.8	76
5	Slow Passivation and Inverted Hysteresis for Hybrid Tin Perovskite Solar Cells Attaining 13.5% via Sequential Deposition. Journal of Physical Chemistry Letters, 2021, 12, 10106-10111.	2.1	57
6	Atomic layer deposition of NiO hole-transporting layers for polymer solar cells. Nanotechnology, 2015, 26, 385201.	1.3	31
7	Robust Unencapsulated Perovskite Solar Cells Protected by a Fluorinated Fullerene Electron Transporting Layer. ACS Energy Letters, 2021, 6, 3376-3385.	8.8	27
8	In situ unraveling of the effect of the dynamic chemical state on selective CO₂ reduction upon zinc electrocatalysts. Nanoscale, 2020, 12, 18013-18021.	2.8	23
9	Work-Function-Tunable Electron Transport Layer of Molecule-Capped Metal Oxide for a High-Efficiency and Stable pâ€“iâ€“n Perovskite Solar Cell. ACS Applied Materials & Interfaces, 2020, 12, 45936-45949.	4.0	23
10	Cesium Lead Halide Perovskite Nanocrystals Assembled in Metalâ€Organic Frameworks for Stable Blue Light Emitting Diodes. Advanced Science, 2022, 9, e2105850.	5.6	23
11	Validated Analysis of Component Distribution Inside Perovskite Solar Cells and Its Utility in Unveiling Factors of Device Performance and Degradation. ACS Applied Materials & Interfaces, 2020, 12, 22730-22740.	4.0	20
12	Superior Stability and Emission Quantum Yield (23% Â± 3%) of Singleâ€Layer 2D Tin Perovskite TEA₂SnI₄ via Thiocyanate Passivation. Small, 2020, 16, e2000903.	5.2	19
13	Catalytic metal-induced crystallization of solâ€“gel metal oxides for high-efficiency flexible perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 16450-16457.	5.2	18
14	How can a hydrophobic polymer PTAA serve as a hole- transport layer for an inverted tin perovskite solar cell?. Chemical Engineering Journal, 2022, 450, 138037.	6.6	18
15	Engineering Antifouling and Antibacterial Stainless Steel for Orthodontic Appliances through Layer-by-Layer Deposition of Nanocomposite Coatings. ACS Applied Bio Materials, 2020, 3, 486-494.	2.3	17
16	Chloride gradient render carrier extraction of hole transport layer for high V and efficient inverted organometal halide perovskite solar cell. Chemical Engineering Journal, 2021, 409, 128100.	6.6	13
17	Acetamidinium Cation to Confer Ion Immobilization and Structure Stabilization of Organometal Halide Perovskite Toward Long Life and Highâ€Efficiency pâ€iâ€n Planar Solar Cell via Airâ€Processable Method. Solar Rrl, 2020, 4, 2000197.	3.1	12
18	Annealed Polycrystalline TiO₂ Interlayer of the n-Si/TiO₂/Ni Photoanode for Efficient Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2020, 3, 3902-3908.	2.5	10

#	Article	IF	Citations
19	Substrate Lattice-Guided MoS₂ Crystal Growth: Implications for van der Waals Epitaxy. ACS Applied Nano Materials, 2021, 4, 4930-4938.	2.4	9
20	Seedâ€Assisted Growth of Methylammoniumâ€Free Perovskite for Efficient Inverted Perovskite Solar Cells. Small Methods, 2022, 6, e2200048.	4.6	9
21	Perfluorinated ionomer and poly(3,4-ethylenedioxythiophene) colloid as a hole transporting layer for optoelectronic devices. Journal of Materials Chemistry A, 2021, 9, 17967-17977.	5.2	8
22	Improving Thermal and Photostability of Polymer Solar Cells by Robust Interface Engineering. Small, 2022, 18, e2107834.	5.2	8
23	Atomic Layer Nucleation Engineering: Inhibitor-Free Area-Selective Atomic Layer Deposition of Oxide and Nitride. Chemistry of Materials, 2021, 33, 5584-5590.	3.2	6
24	Heterocyclic-Additive-Activated Dinuclear Dysprosium Electrocatalysts for Heterogeneous Water Oxidation. Inorganic Chemistry, 2021, 60, 6930-6938.	1.9	5
25	Sandwich Evaporationâ€“Solvent Annealing Fabrication of Highly Crystalline MAPbIxCl3â€“x Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 45355-45364.	4.0	5
26	Growth process control produces high-crystallinity and complete-reaction perovskite solar cells. RSC Advances, 2020, 10, 35898-35905.	1.7	4
27	In situ Observation of Electrodeposited Bimetallic pâ€Si Micropillar Array Photocathode for Solarâ€Driven Hydrogen Evolution. Solar Rrl, 2020, 4, 2000028.	3.1	3
28	Junction Engineering in Si Photoanodes for Efficient Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2022, 5, 8483-8491.	2.5	3
29	Acetamidinium Cation to Confer Ion Immobilization and Structure Stabilization of Organometal Halide Perovskite Toward Long Life and Highâ€Efficiency pâ€iâ€n Planar Solar Cell via Airâ€Processable Method. Solar Rrl, 2020, 4, 2070092.	3.1	2
30	Formamide iodide: a new cation additive for inhibiting Î´-phase formation of formamidinium lead iodide perovskite. Materials Advances, 2021, 2, 2272-2277.	2.6	2
31	Revealing Performance Governing Factors of Perovskite Solar Cells via Artifact-Free ToF-SIMS Depth Profiles. , 0, , .		0
32	Revealing Performance Governing Factors of Perovskite Solar Cells via Artifact-Free ToF-SIMS Depth Profiles. , 0, , .		0