Ashish Kulkarni

List of Publications by Year
in descending order

24 papers	3,624 citations	393982 19 h-index	610482 24 g-index
24 all docs	24 docs citations	24 times ranked	5078 citing authors

#	Article	IF	Citations
1	Halide Perovskite Photovoltaics: Background, Status, and Future Prospects. Chemical Reviews, 2019, 119, 3036-3103.	23.0	2,009
2	Effect of Electron Transporting Layer on Bismuth-Based Lead-Free Perovskite (CH₃NH₃)₃ Bi₂I₉ for Photovoltaic Applications. ACS Applied Materials & Interfaces, 2016, 8, 14542-14547.	4.0	270
3	Stabilization of Î±-CsPbI₃ in Ambient Room Temperature Conditions by Incorporating Eu into CsPbI₃. Chemistry of Materials, 2018, 30, 6668-6674.	3.2	199
4	Perovskite Solar Cells: Can We Go Organicâ€Free, Leadâ€Free, and Dopantâ€Free?. Advanced Energy Materials, 2020, 10, 1902500.	10.2	198
5	Poly(4â€Vinylpyridine)â€Based Interfacial Passivation to Enhance Voltage and Moisture Stability of Lead Halide Perovskite Solar Cells. ChemSusChem, 2017, 10, 2473-2479.	3.6	157
6	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. Nature Energy, 2022, 7, 107-115.	19.8	136
7	Lead(II) Propionate Additive and a Dopant-Free Polymer Hole Transport Material for CsPbI₂Br Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 1292-1299.	8.8	81
8	Photovoltaic enhancement of bismuth halide hybrid perovskite by N-methyl pyrrolidone-assisted morphology conversion. RSC Advances, 2017, 7, 9456-9460.	1.7	80
9	Understanding the interplay of stability and efficiency in A-site engineered lead halide perovskites. APL Materials, 2020, 8, .	2.2	57
10	Performance enhancement of AgBi₂I₇ solar cells by modulating a solvent-mediated adduct and tuning remnant BiI₃ in one-step crystallization. Chemical Communications, 2019, 55, 4031-4034.	2.2	54
11	Steady state performance, photo-induced performance degradation and their relation to transient hysteresis in perovskite solar cells. Journal of Power Sources, 2016, 309, 1-10.	4.0	49
12	Revealing and reducing the possible recombination loss within TiO2 compact layer by incorporating MgO layer in perovskite solar cells. Solar Energy, 2016, 136, 379-384.	2.9	48
13	Investigating the Growth of CH₃NH₃PbI₃ Thin Films on RFâ€Sputtered NiO<i>_x</i> for Inverted Planar Perovskite Solar Cells: Effect of CH₃NH₃⁺ Halide Additives versus CH₃NH₃⁺ Halide Vapor Annealing. Advanced Materials Interfaces, 2020, 7, 1901748.	1.9	48
14	Vapor Annealing Controlled Crystal Growth and Photovoltaic Performance of Bismuth Triiodide Embedded in Mesostructured Configurations. ACS Applied Materials & Interfaces, 2018, 10, 9547-9554.	4.0	45
15	Low-temperature and Ambient Air Processes of Amorphous SnO<i>_x</i>-based Mixed Halide Perovskite Planar Solar Cell. Chemistry Letters, 2017, 46, 382-384.	0.7	28
16	Concerted Ion Migration and Diffusionâ€Induced Degradation in Leadâ€Free Ag₃BiI₆ Rudorffite Solar Cells under Ambient Conditions. Solar Rrl, 2021, 5, 2100077.	3.1	28
17	A single-phase brookite TiO₂ nanoparticle bridge enhances the stability of perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 2009-2017.	2.5	25
18	Passivation of Bulk and Interface Defects in Sputtered-NiO_{<i>x</i>}-Based Planar Perovskite Solar Cells: A Facile Interfacial Engineering Strategy with Alkali Metal Halide Salts. ACS Applied Energy Materials, 2021, 4, 4530-4540.	2.5	25

#	Article	IF	Citations
19	Residual PbI₂ Beneficial in the Bulk or at the Interface? An Investigation Study in Sputtered NiO<i>_x</i> Hole-Transport-Layer-Based Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 6215-6221.	2.5	24
20	Single- or double A-site cations in A3Bi2I9 bismuth perovskites: What is the suitable choice?. Journal of Materials Research, 2021, 36, 1794-1804.	1.2	20
21	Bismuth-based halide perovskite and perovskite-inspired light absorbing materials for photovoltaics. Journal Physics D: Applied Physics, 2022, 55, 113002.	1.3	17
22	Solid-State Thin-Film Dye-Sensitized Solar Cell Co-Sensitized with Methylammonium Lead Bromide Perovskite. Bulletin of the Chemical Society of Japan, 2018, 91, 754-760.	2.0	14
23	Tetrahydrofuran as an Oxygen Donor Additive to Enhance Stability and Reproducibility of Perovskite Solar Cells Fabricated in High Relative Humidity (50%) Atmosphere. Energy Technology, 2020, 8, 1900990.	1.8	6
24	Tantalum Oxide as an Efficient Alternative Electron Transporting Layer for Perovskite Solar Cells. Nanomaterials, 2022, 12, 780.	1.9	6