Ajay Kumar Baranwal

List of Publications by Year
in descending order

38 papers	1,035 citations	430874 18 h-index	414414 32 g-index
40 all docs	40 docs citations	40 times ranked	1476 citing authors

#	Article	IF	Citations
1	Large synergy effects of doping, a site substitution, and surface passivation in wide bandgap Pb-free ASnI2Br perovskite solar cells on efficiency and stability enhancement. Journal of Power Sources, 2022, 520, 230848.	7.8	13
2	Use of anti-solvent to enhance thermoelectric response of hybrid halide perovskite thin films. Japanese Journal of Applied Physics, 2022, 61, SE1019.	1.5	2
3	Tinâ€"Lead Perovskite Solar Cells Fabricated on Hole Selective Monolayers. ACS Energy Letters, 2022, 7, 966-974.	17.4	111
4	High performance wide bandgap Lead-free perovskite solar cells by monolayer engineering. Chemical Engineering Journal, 2022, 436, 135196.	12.7	33
5	Enhanced efficiency and stability in Sn-based perovskite solar cells by trimethylsilyl halide surface passivation. Journal of Energy Chemistry, 2022, 71, 604-611.	12.9	19
6	Enhancing the Electronic Properties and Stability of High-Efficiency Tinâ€"Lead Mixed Halide Perovskite Solar Cells via Doping Engineering. Journal of Physical Chemistry Letters, 2022, 13, 3130-3137.	4.6	12
7	Relationship between Carrier Density and Precursor Solution Stirring for Lead-Free Tin Halide Perovskite Solar Cells Performance. ACS Applied Energy Materials, 2022, 5, 4002-4007.	5.1	10
8	Tinâ€Lead Perovskite Fabricated via Ethylenediamine Interlayer Guides to the Solar Cell Efficiency of 21.74%. Advanced Energy Materials, 2021, 11, 2101069.	19.5	110
9	High-Efficiency Lead-Free Wide Band Gap Perovskite Solar Cells via Guanidinium Bromide Incorporation. ACS Applied Energy Materials, 2021, 4, 5615-5624.	5.1	19
10	Large Grain Growth and Energy Alignment Optimization by Diethylammonium Iodide Substitution at A Site in Leadâ€Free Tin Halide Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100633.	5.8	14
11	Interface engineering using Y2O3 scaffold to enhance the thermoelectric performance of CsSnI3 thin film. Organic Electronics, 2020, 76, 105488.	2.6	27
12	Effect of Precursor Solution Aging on the Thermoelectric Performance of CsSnI3 Thin Film. Journal of Electronic Materials, 2020, 49, 2698-2703.	2.2	15
13	Inverted CsPbI2Br perovskite solar cells with enhanced efficiency and stability in ambient atmosphere via formamidinium incorporation. Solar Energy Materials and Solar Cells, 2020, 218, 110741.	6.2	21
14	Parametric optimization of back-contact T-C-O-free dye-sensitized solar cells employing indoline and porphyrin sensitizer based on cobalt redox electrolyte. Solar Energy, 2020, 208, 411-418.	6.1	7
15	Boosting the Efficiency of Low-Cost T-C-O-Less Dye-Sensitized Solar Cells Employing Nanoparticle Spacers and Cobalt Complex Redox Shuttle. ACS Applied Electronic Materials, 2020, 2, 2721-2729.	4.3	4
16	Hybrid-Halide Perovskite Thin Film Growth for Thermoelectric Applications. Journal of Electronic Materials, 2020, 49, 2890-2894.	2.2	13
17	Unileg Thermoelectric Module Comprised by Coated Halide-Perovskite Thin Film. Journal of Heat Transfer, 2020, 142, .	2.1	5
18	Effect of electrolyte for back contact transparent conducting oxide-less dye-sensitized solar cells: iodine versus cobalt. Journal of Photonics for Energy, 2020, 10, .	1.3	0

#	ARTICLE	IF	CITATIONS
19	Thermal Degradation Analysis of Sealed Perovskite Solar Cell with Porous Carbon Electrode at 100â€‰Â°C for 7000â€…h. Energy Technology, 2019, 7, 245-252.	3.8	29
20	Structured crystallization for efficient all-inorganic perovskite solar cells with high phase stability. Journal of Materials Chemistry A, 2019, 7, 20390-20397.	10.3	25
21	Growth of halide perovskites thin films for thermoelectric applications. MRS Advances, 2019, 4, 1719-1725.	0.9	27
22	Delocalized molecule surface electronic modification for enhanced performance and high environmental stability of CsPbI2Br perovskite solar cells. Nano Energy, 2019, 66, 104180.	16.0	40
23	Dependence of ITOâ€Coated Flexible Substrates in the Performance and Bending Durability of Perovskite Solar Cells. Advanced Engineering Materials, 2019, 21, 1900288.	3.5	32
24	Xanthate-induced sulfur doped all-inorganic perovskite with superior phase stability and enhanced performance. Nano Energy, 2019, 59, 258-267.	16.0	61
25	Fabrication of fully non-vacuum processed perovskite solar cells using an inorganic CuSCN hole-transporting material and carbon-back contact. Sustainable Energy and Fuels, 2018, 2, 2778-2787.	4.9	27
26	Transparent conductive oxide-less back contact dye-sensitized solar cells using flat titanium sheet with microholes for photoanode fabrication. Journal of Photonics for Energy, 2017, 7, 015501.	1.3	2
27	Transparent Conductive Oxide-Less Dye-Sensitized Solar Cells Consisting of Dye-Cocktail and Cobalt Based Redox Electrolyte. Journal of Nanoscience and Nanotechnology, 2017, 17, 4748-4754.	0.9	7
28	Enhancement of the hole conducting effect of NiO by a N₂blow drying method in printable perovskite solar cells with low-temperature carbon as the counter electrode. Nanoscale, 2017, 9, 5475-5482.	5.6	33
29	All-inorganic inverse perovskite solar cells using zinc oxide nanocolloids on spin coated perovskite layer. Nano Convergence, 2017, 4, 18.	12.1	17
30	Lead-free perovskite solar cells using Sb and Bi-based A3B2X9 and A3BX6 crystals with normal and inverse cell structures. Nano Convergence, 2017, 4, 26.	12.1	67
31	Effect of Electrochemically Deposited MgO Coating on Printable Perovskite Solar Cell Performance. Coatings, 2017, 7, 36.	2.6	11
32	Mechanisms of charge accumulation in the dark operation of perovskite solar cells. Physical Chemistry Chemical Physics, 2016, 18, 14970-14975.	2.8	11
33	100â€‰Â°C Thermal Stability of Printable Perovskite Solar Cells Using Porous Carbon Counter Electrodes. ChemSusChem, 2016, 9, 2604-2608.	6.8	103
34	Analysis of Sputtering Damage on <i>I</i>â€"<i>V</i> Curves for Perovskite Solar Cells and Simulation with Reversed Diode Model. Journal of Physical Chemistry C, 2016, 120, 28441-28447.	3.1	61
35	Tandem Dye-Sensitized Solar Cells Based on TCO-less Back Contact Bottom Electrodes. Journal of Physics: Conference Series, 2016, 704, 012003.	0.4	4
36	Enhancing the performance of transparent conductive oxide-less back contact dye-sensitized solar cells by facile diffusion of cobalt species through TiO₂ nanopores. RSC Advances, 2016, 6, 33353-33360.	3.6	9

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37	Combining novel device architecture and NIR dye towards the fabrication of transparent conductive oxide-less tandem dye sensitized solar cells. Applied Physics Express, 2015, 8, 102301.	2.4	8
38	Tandem dye-sensitized solar cells with a back-contact bottom electrode without a transparent conductive oxide layer. RSC Advances, 2014, 4, 47735-47742.	3.6	24