

Neha Arora

List of Publications by Year in descending order

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37
papers

3,931
citations

236925
25
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345221
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all docs

37
docs citations

37
times ranked

6384
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite solar cells with CuSCN hole extraction layers yield stabilized efficiencies greater than 20%. <i>Science</i> , 2017, 358, 768-771.	12.6	1,285
2	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22%. <i>Science Advances</i> , 2019, 5, eaaw2543.	10.3	524
3	Origin of unusual bandgap shift and dual emission in organic-inorganic lead halide perovskites. <i>Science Advances</i> , 2016, 2, e1601156.	10.3	307
4	New Strategies for Defect Passivation in High-Efficiency Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 1903090.	19.5	237
5	Impact of Monovalent Cation Halide Additives on the Structural and Optoelectronic Properties of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Perovskite. <i>Advanced Energy Materials</i> , 2016, 6, 1502472.	19.5	196
6	Investigation Regarding the Role of Chloride in Organic-Inorganic Halide Perovskites Obtained from Chloride Containing Precursors. <i>Nano Letters</i> , 2014, 14, 6991-6996.	9.1	185
7	The Role of Rubidium in Multiple-Cation-Based High-Efficiency Perovskite Solar Cells. <i>Advanced Materials</i> , 2017, 29, 1701077.	21.0	120
8	High Open-Circuit Voltage: Fabrication of Formamidinium Lead Bromide Perovskite Solar Cells Using Fluorene-Dithiophene Derivatives as Hole-Transporting Materials. <i>ACS Energy Letters</i> , 2016, 1, 107-112.	17.4	105
9	Intrinsic and Extrinsic Stability of Formamidinium Lead Bromide Perovskite Solar Cells Yielding High Photovoltage. <i>Nano Letters</i> , 2016, 16, 7155-7162.	9.1	104
10	Low-Cost and Highly Efficient Carbon-Based Perovskite Solar Cells Exhibiting Excellent Long-Term Operational and UV Stability. <i>Small</i> , 2019, 15, e1904746.	10.0	83
11	Understanding the Impact of Bromide on the Photovoltaic Performance of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Solar Cells. <i>Advanced Materials</i> , 2015, 27, 7221-7228.	21.0	73
12	Photovoltaic and Amplified Spontaneous Emission Studies of High-Quality Formamidinium Lead Bromide Perovskite Films. <i>Advanced Functional Materials</i> , 2016, 26, 2846-2854.	14.9	66
13	Influence of the Nature of A Cation on Dynamics of Charge Transfer Processes in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1706073.	14.9	58
14	Reduced Graphene Oxide as a Stabilizing Agent in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800416.	3.7	45
15	Unraveling the Impact of Rubidium Incorporation on the Transport-Recombination Mechanisms in Highly Efficient Perovskite Solar Cells by Small-Perturbation Techniques. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24903-24908.	3.1	42
16	Growth Engineering of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Structures for High-Efficiency Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1501358.	19.5	36
17	Minimizing the Trade-Off between Photocurrent and Photovoltage in Triple-Cation Mixed-Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10188-10195.	4.6	36
18	From $(\text{Au}_5\text{Sn} + \text{AuSn})$ physical mixture to phase pure AuSn and Au_5Sn intermetallic nanocrystals with tailored morphology: digestive ripening assisted approach. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11381-11389.	2.8	35

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19	High photovoltage in perovskite solar cells: New physical insights from the ultrafast transient absorption spectroscopy. Chemical Physics Letters, 2017, 683, 211-215.	2.6	31
20	Donor–Acceptor-Type S ₃ N ₃ -Heteroacene-Based Hole-Transporting Materials for Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 44423-44428.	8.0	31
21	Monodispersity and stability: case of ultrafine aluminium nanoparticles (<5 nm) synthesized by the solvated metal atom dispersion approach. Journal of Materials Chemistry, 2012, 22, 9058.	6.7	30
22	Asymmetric Cathodoluminescence Emission in CH ₃ NH ₃ PbI ₃ –Br Perovskite Single Crystals. ACS Photonics, 2016, 3, 947-952.	6.6	30
23	Kinetics of Ion-Exchange Reactions in Hybrid Organic–Inorganic Perovskite Thin Films Studied by In Situ Real-Time X-ray Scattering. Journal of Physical Chemistry Letters, 2018, 9, 6750-6754.	4.6	28
24	Function Follows Form: Correlation between the Growth and Local Emission of Perovskite Structures and the Performance of Solar Cells. Advanced Functional Materials, 2017, 27, 1701433.	14.9	26
25	Cyclopentadithiophene-Based Hole-Transporting Material for Highly Stable Perovskite Solar Cells with Stabilized Efficiencies Approaching 21%. ACS Applied Energy Materials, 2020, 3, 7456-7463.	5.1	26
26	Carbonization of solvent and capping agent based enhancement in the stabilization of cobalt nanoparticles and their magnetic study. Journal of Materials Chemistry, 2012, 22, 20671.	6.7	25
27	Insights about the Absence of Rb Cation from the 3D Perovskite Lattice: Effect on the Structural, Morphological, and Photophysical Properties and Photovoltaic Performance. Small, 2018, 14, e1802033.	10.0	24
28	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. Research, 2019, 2019, 8474698.	5.7	22
29	Role of spectator ions in influencing the properties of dopant-free ZnO nanocrystals. New Journal of Chemistry, 2014, 38, 4783-4790.	2.8	21
30	Electrochemical Characterization of CuSCN Hole-Extracting Thin Films for Perovskite Photovoltaics. ACS Applied Energy Materials, 2019, 2, 4264-4273.	5.1	20
31	Halide Versus Nonhalide Salts: The Effects of Guanidinium Salts on the Structural, Morphological, and Photovoltaic Performances of Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900234.	5.8	19
32	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. Research, 2019, 2019, 1-9.	5.7	15
33	Quantifying Stabilized Phase Purity in Formamidinium-Based Multiple-Cation Hybrid Perovskites. Chemistry of Materials, 2021, 33, 2769-2776.	6.7	13
34	Kinetics and energetics of metal halide perovskite conversion reactions at the nanoscale. Communications Materials, 2022, 3, .	6.9	12
35	Digestive-Ripening-Facilitated Nanoengineering of Diverse Bimetallic Nanostructures. Langmuir, 2019, 35, 6493-6505.	3.5	11
36	High Open Circuit Voltage for Perovskite Solar Cells with S ₃ N ₃ -Heteropentacene-Based Hole Conductors. European Journal of Inorganic Chemistry, 2018, 2018, 4573-4578.	2.0	10

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37	Extraordinary Stability of Perovskite Solar Cells Yielding Photovoltage above 1.5V. , 0, , .		0