Daniele Meggiolaro

List of Publications by Year
in descending order

39 papers	4,568 citations	212478 28 h-index	340414 39 g-index
39 all docs	39 docs citations	39 times ranked	6765 citing authors

#	Article	IF	Citations
1	Role of Terminal Group Position in Triphenylamine-Based Self-Assembled Hole-Selective Molecules in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 17461-17469.	4.0	15
2	Tuning halide perovskite energy levels. Energy and Environmental Science, 2021, 14, 1429-1438.	15.6	124
3	Halide-driven formation of lead halide perovskites: insight from ab initio molecular dynamics simulations. Materials Advances, 2021, 2, 3915-3926.	2.6	18
4	Composition-Dependent Struggle between Iodine and Tin Chemistry at the Surface of Mixed Tin/Lead Perovskites. ACS Energy Letters, 2021, 6, 969-976.	8.8	27
5	Energy vs Charge Transfer in Manganese-Doped Lead Halide Perovskites. ACS Energy Letters, 2021, 6, 1869-1878.	8.8	36
6	Large Cation Engineering in Two-Dimensional Silverâ€“Bismuth Bromide Double Perovskites. Chemistry of Materials, 2021, 33, 4688-4700.	3.2	25
7	Suppression of Tin Oxidation by 3D/2D Perovskite Interfacing. Journal of Physical Chemistry C, 2021, 125, 10901-10908.	1.5	15
8	Defect activity in metal halide perovskites with wide and narrow bandgap. Nature Reviews Materials, 2021, 6, 986-1002.	23.3	121
9	Brightly Luminescent and Moisture Tolerant Phenyl Viologen Lead Iodide Perovskites for Light Emission Applications. Journal of Physical Chemistry Letters, 2021, 12, 5456-5462.	2.1	5
10	Halogenâ€Bonded Holeâ€Transport Material Suppresses Charge Recombination and Enhances Stability of Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2101553.	10.2	44
11	In situ cadmium surface passivation of perovskite nanocrystals for blue LEDs. Journal of Materials Chemistry A, 2021, 9, 26750-26757.	5.2	18
12	The Doping Mechanism of Halide Perovskite Unveiled by Alkaline Earth Metals. Journal of the American Chemical Society, 2020, 142, 2364-2374.	6.6	132
13	Modulating Band Alignment in Mixed Dimensionality 3D/2D Perovskites by Surface Termination Ligand Engineering. Chemistry of Materials, 2020, 32, 105-113.	3.2	19
14	Polarons in Metal Halide Perovskites. Advanced Energy Materials, 2020, 10, 1902748.	10.2	84
15	Lanthanide-Induced Photoluminescence in Lead-Free Cs₂AgBiBr₆ Bulk Perovskite: Insights from Optical and Theoretical Investigations. Journal of Physical Chemistry Letters, 2020, 11, 8893-8900.	2.1	38
16	Formation of Color Centers in Lead Iodide Perovskites: Self-Trapping and Defects in the Bulk and Surfaces. Chemistry of Materials, 2020, 32, 6916-6924.	3.2	23
17	Instability of Tin Iodide Perovskites: Bulk p-Doping versus Surface Tin Oxidation. ACS Energy Letters, 2020, 5, 2787-2795.	8.8	143
18	Charge localization and trapping at surfaces in lead-iodide perovskites: the role of polarons and defects. Journal of Materials Chemistry A, 2020, 8, 6882-6892.	5.2	49

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19	Coupling halide perovskites with different materials: From doping to nanocomposites, beyond photovoltaics. Progress in Materials Science, 2020, 110, 100639.	16.0	38
20	Tin versus Lead Redox Chemistry Modulates Charge Trapping and Self-Doping in Tin/Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 3546-3556.	2.1	132
21	Charge Carriers Are Not Affected by the Relatively Slow-Rotating Methylammonium Cations in Lead Halide Perovskite Thin Films. Journal of Physical Chemistry Letters, 2019, 10, 5128-5134.	2.1	16
22	Energy Level Tuning at the MAPbI₃ Perovskite/Contact Interface Using Chemical Treatment. ACS Energy Letters, 2019, 4, 2181-2184.	8.8	45
23	Defect Activity in Lead Halide Perovskites. Advanced Materials, 2019, 31, e1901183.	11.1	191
24	Charge Localization, Stabilization, and Hopping in Lead Halide Perovskites: Competition between Polaron Stabilization and Cation Disorder. ACS Energy Letters, 2019, 4, 2013-2020.	8.8	43
25	The nature of the lead-iodine bond in PbI2: A case study for the modelling of lead halide perovskites. Computational and Theoretical Chemistry, 2019, 1164, 112558.	1.1	9
26	Controlling competing photochemical reactions stabilizes perovskite solar cells. Nature Photonics, 2019, 13, 532-539.	15.6	273
27	Electrochemical Hole Injection Selectively Expels Iodide from Mixed Halide Perovskite Films. Journal of the American Chemical Society, 2019, 141, 10812-10820.	6.6	104
28	Ultrafast THz Probe of Photoinduced Polarons in Lead-Halide Perovskites. Physical Review Letters, 2019, 122, 166601.	2.9	98
29	From Large to Small Polarons in Lead, Tin, and Mixed Leadâ€“Tin Halide Perovskites. Journal of Physical Chemistry Letters, 2019, 10, 1790-1798.	2.1	72
30	Formation of Surface Defects Dominates Ion Migration in Lead-Halide Perovskites. ACS Energy Letters, 2019, 4, 779-785.	8.8	219
31	Modeling the Interaction of Molecular Iodine with MAPbI₃: A Probe of Lead-Halide Perovskites Defect Chemistry. ACS Energy Letters, 2018, 3, 447-451.	8.8	88
32	Iodine chemistry determines the defect tolerance of lead-halide perovskites. Energy and Environmental Science, 2018, 11, 702-713.	15.6	480
33	First-Principles Modeling of Bismuth Doping in the MAPbI₃ Perovskite. Journal of Physical Chemistry C, 2018, 122, 14107-14112.	1.5	64
34	First-Principles Modeling of Defects in Lead Halide Perovskites: Best Practices and Open Issues. ACS Energy Letters, 2018, 3, 2206-2222.	8.8	202
35	Broadband Emission in Two-Dimensional Hybrid Perovskites: The Role of Structural Deformation. Journal of the American Chemical Society, 2017, 139, 39-42.	6.6	336
36	Fluorescent Alloy CsPb_xMn_{1â€“x}I₃ Perovskite Nanocrystals with High Structural and Optical Stability. ACS Energy Letters, 2017, 2, 2183-2186.	8.8	305

#	Article	IF	Citations
37	Large polarons in lead halide perovskites. Science Advances, 2017, 3, e1701217.	4.7	515
38	Mechanism of Reversible Trap Passivation by Molecular Oxygen in Lead-Halide Perovskites. ACS Energy Letters, 2017, 2, 2794-2798.	8.8	100
39	Light-induced annihilation of Frenkel defects in organo-lead halide perovskites. Energy and Environmental Science, 2016, 9, 3180-3187.	15.6	302