Francesco Ambrosio

List of Publications by Year
in descending order

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42 papers	1,866 citations	218381 26 h-index	276539 41 g-index
44 all docs	44 docs citations	44 times ranked	2550 citing authors

#	Article	IF	Citations
1	What Is the Best Anchoring Group for a Dye in a Dye-Sensitized Solar Cell?. Journal of Physical Chemistry Letters, 2012, 3, 1531-1535.	2.1	151
2	Instability of Tin Iodide Perovskites: Bulk p-Doping versus Surface Tin Oxidation. ACS Energy Letters, 2020, 5, 2787-2795.	8.8	143
3	Origin of low electronâ€“hole recombination rate in metal halide perovskites. Energy and Environmental Science, 2018, 11, 101-105.	15.6	113
4	Polarons in Metal Halide Perovskites. Advanced Energy Materials, 2020, 10, 1902748.	10.2	84
5	Alignment of Redox Levels at Semiconductorâ€“Water Interfaces. Chemistry of Materials, 2018, 30, 94-111.	3.2	74
6	Waterâ€Stable DMASnBr₃ Leadâ€Free Perovskite for Effective Solarâ€Driven Photocatalysis. Angewandte Chemie - International Edition, 2021, 60, 3611-3618.	7.2	72
7	Electronic Levels of Excess Electrons in Liquid Water. Journal of Physical Chemistry Letters, 2017, 8, 2055-2059.	2.1	70
8	Role of Polarons in Water Splitting: The Case of BiVO₄. ACS Energy Letters, 2018, 3, 1693-1697.	8.8	65
9	AbÂinitio Electronic Structure of Liquid Water. Physical Review Letters, 2016, 117, 186401.	2.9	64
10	Redox levels in aqueous solution: Effect of van der Waals interactions and hybrid functionals. Journal of Chemical Physics, 2015, 143, 244508.	1.2	62
11	Structural, Dynamical, and Electronic Properties of Liquid Water: A Hybrid Functional Study. Journal of Physical Chemistry B, 2016, 120, 7456-7470.	1.2	61
12	Experimental Strategy and Mechanistic View to Boost the Photocatalytic Activity of Cs₃Bi₂Br₉ Leadâ€Free Perovskite Derivative by gâ€C₃N₄ Composite Engineering. Advanced Functional Materials, 2021, 31, 2104428.	7.8	53
13	Absolute Energy Levels of Liquid Water. Journal of Physical Chemistry Letters, 2018, 9, 3212-3216.	2.1	51
14	On the Electronic and Optical Properties of Metalâ€“Organic Frameworks: Case Study of MIL-125 and MIL-125-NH₂. Journal of Physical Chemistry C, 2020, 124, 4065-4072.	1.5	50
15	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
16	Absolute band alignment at semiconductor-water interfaces using explicit and implicit descriptions for liquid water. Npj Computational Materials, 2019, 5, .	3.5	48
17	pH-Dependent Surface Chemistry from First Principles: Application to the BiVO₄(010)â€“Water Interface. ACS Applied Materials & Interfaces, 2018, 10, 10011-10021.	4.0	46
18	Comprehensive modeling of the band gap and absorption spectrum of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiVO</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> Physical Review Materials, 2017, 1, .	2.9	44

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19	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
20	Picture of the wet electron: a localized transient state in liquid water. Chemical Science, 2019, 10, 7442-7448.	3.7	43
21	Oxygen defects in amorphous Al2O3: A hybrid functional study. Applied Physics Letters, 2016, 109, .	1.5	41
22	pH-Dependent Catalytic Reaction Pathway for Water Splitting at the BiVO₄â€“Water Interface from the Band Alignment. ACS Energy Letters, 2018, 3, 829-834.	8.8	41
23	Surface Polarons Reducing Overpotentials in the Oxygen Evolution Reaction. ACS Catalysis, 2018, 8, 5847-5851.	5.5	37
24	Note: Assessment of the SCAN+rVV10 functional for the structure of liquid water. Journal of Chemical Physics, 2017, 147, 216101.	1.2	30
25	Stability of Tin- versus Lead-Halide Perovskites: Ab Initio Molecular Dynamics Simulations of Perovskite/Water Interfaces. Journal of Physical Chemistry Letters, 2022, 13, 2321-2329.	2.1	29
26	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
27	Mechanism suppressing charge recombination at iodine defects in CH3NH3PbI3 by polaron formation. Journal of Materials Chemistry A, 2018, 6, 16863-16867.	5.2	26
28	Reaction Mechanism of Photocatalytic Hydrogen Production at Water/Tin Halide Perovskite Interfaces. ACS Energy Letters, 2022, 7, 1308-1315.	8.8	26
29	Effect of the Solvent on the Oxygen Evolution Reaction at the TiO₂â€“Water Interface. Journal of Physical Chemistry C, 2019, 123, 18467-18474.	1.5	25
30	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
31	Effect of electronic doping and traps on carrier dynamics in tin halide perovskites. Materials Horizons, 2022, 9, 1763-1773.	6.4	23
32	Strong Electron Localization in Tin Halide Perovskites. Journal of Physical Chemistry Letters, 2021, 12, 5339-5343.	2.1	22
33	Combined Computational and Experimental Investigation on the Nature of Hydrated Iodoplumbate Complexes: Insights into the Dual Role of Water in Perovskite Precursor Solutions. Journal of Physical Chemistry B, 2020, 124, 11481-11490.	1.2	21
34	Evaluation of Photocatalysts for Water Splitting through Combined Analysis of Surface Coverage and Energy-Level Alignment. ACS Catalysis, 2020, 10, 13186-13195.	5.5	19
35	Hole diffusion across leaky amorphous TiO₂coating layers for catalytic water splitting at photoanodes. Journal of Materials Chemistry A, 2018, 6, 11804-11810.	5.2	18
36	Singlet fission in linear chains of molecules. Journal of Chemical Physics, 2014, 141, 204703.	1.2	16

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37	Charge Localization in Defective BiVO₄. Journal of Physical Chemistry C, 2022, 126, 2960-2970.	1.5	14
38	Strong Hole Trapping Due to Oxygen Dimers in BiVO₄: Effect on the Water Oxidation Reaction. Journal of Physical Chemistry Letters, 2019, 10, 7113-7118.	2.1	13
39	Waterâ€Stable DMASnBr₃ Leadâ€Free Perovskite for Effective Solarâ€Driven Photocatalysis. Angewandte Chemie, 2021, 133, 3655-3662.	1.6	12
40	Reactivity and energy level of a localized hole in liquid water. Physical Chemistry Chemical Physics, 2018, 20, 30281-30289.	1.3	10
41	Extrinsic Defects in Amorphous Oxides: Hydrogen, Carbon, and Nitrogen Impurities in Alumina. Physical Review Applied, 2019, 11, .	1.5	7
42	(In-)Stability of Tin Halide Perovskites: Ab Initio Molecular Dynamics Simulations of Perovskite/Water Interfaces. , 0, , .		0