Antonio Agresti

List of Publications by Year
in descending order

64 papers	2,986 citations	218677 26 h-index	175258 52 g-index
69 all docs	69 docs citations	69 times ranked	3725 citing authors

#	ARTICLE	IF	CITATIONS
1	Titanium-carbide MXenes for work function and interface engineering in perovskite solar cells. Nature Materials, 2019, 18, 1228-1234.	27.5	418
2	MoS₂ Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CH₃NH₃PbI₃ Perovskite Solar Cell with an Efficiency of over 20%. ACS Nano, 2018, 12, 10736-10754.	14.6	201
3	Graphene Interface Engineering for Perovskite Solar Modules: 12.6% Power Conversion Efficiency over 50 cm² Active Area. ACS Energy Letters, 2017, 2, 279-287.	17.4	196
4	Efficiency and Stability Enhancement in Perovskite Solar Cells by Inserting Lithiumâ€Neutralized Graphene Oxide as Electron Transporting Layer. Advanced Functional Materials, 2016, 26, 2686-2694.	14.9	180
5	Reduced graphene oxide as efficient and stable hole transporting material in mesoscopic perovskite solar cells. Nano Energy, 2016, 22, 349-360.	16.0	166
6	Grapheneâ€"Perovskite Solar Cells Exceed 18â€‰% Efficiency: A Stability Study. ChemSusChem, 2016, 9, 2609-2619.	6.8	163
7	Two-Dimensional Material Interface Engineering for Efficient Perovskite Large-Area Modules. ACS Energy Letters, 2019, 4, 1862-1871.	17.4	125
8	Mechanically Stacked, Two-Terminal Graphene-Based Perovskite/Silicon Tandem Solar Cell with Efficiency over 26%. Joule, 2020, 4, 865-881.	24.0	125
9	Laser-Patterning Engineering for Perovskite Solar Modules With 95% Aperture Ratio. IEEE Journal of Photovoltaics, 2017, 7, 1674-1680.	2.5	116
10	Solution-processed two-dimensional materials for next-generation photovoltaics. Chemical Society Reviews, 2021, 50, 11870-11965.	38.1	96
11	Grapheneâ€Based Electron Transport Layers in Perovskite Solar Cells: A Stepâ€Up for an Efficient Carrier Collection. Advanced Energy Materials, 2017, 7, 1701349.	19.5	85
12	Transition metal carbides (MXenes) for efficient NiO-based inverted perovskite solar cells. Nano Energy, 2021, 82, 105771.	16.0	74
13	Graphene-Induced Improvements of Perovskite Solar Cell Stability: Effects on Hot-Carriers. Nano Letters, 2019, 19, 684-691.	9.1	72
14	Integration of two-dimensional materials-based perovskite solar panels into a stand-alone solar farm. Nature Energy, 2022, 7, 597-607.	39.5	66
15	Facile synthesis of a SnO2@rGO nanohybrid and optimization of its methane-sensing parameters. Talanta, 2018, 181, 422-430.	5.5	62
16	Application of nitrogen-doped TiO2 nano-tubes in dye-sensitized solar cells. Applied Surface Science, 2017, 399, 515-522.	6.1	56
17	Perovskite-Polymer Blends Influencing Microstructures, Nonradiative Recombination Pathways, and Photovoltaic Performance of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 42542-42551.	8.0	50
18	Aging effects in interface-engineered perovskite solar cells with 2D nanomaterials: A depth profile analysis. Materials Today Energy, 2018, 9, 1-10.	4.7	48

#	Article	IF	Citations
19	Air-Processed Infrared-Annealed Printed Methylammonium-Free Perovskite Solar Cells and Modules Incorporating Potassium-Doped Graphene Oxide as an Interlayer. ACS Applied Materials & Interfaces, 2021, 13, 11741-11754.	8.0	45
20	Mesoscopic Perovskite Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2016, 8, 26989-26997.	8.0	44
21	Hybrid Perovskites Depth Profiling with Variable-Size Argon Clusters and Monatomic Ions Beams. Materials, 2019, 12, 726.	2.9	39
22	Low-Temperature Graphene-Based Paste for Large-Area Carbon Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 22368-22380.	8.0	39
23	Graphene-engineered automated sprayed mesoscopic structure for perovskite device scaling-up. 2D Materials, 2018, 5, 045034.	4.4	34
24	Trap states in multication mesoscopic perovskite solar cells: A deep levels transient spectroscopy investigation. Applied Physics Letters, 2018, 113, .	3.3	33
25	Stability of dye-sensitized solar cells under extended thermal stress. Physical Chemistry Chemical Physics, 2017, 19, 22546-22554.	2.8	28
26	Two-dimensional materials in perovskite solar cells. JPhys Energy, 2020, 2, 031003.	5.3	27
27	Advances in Perovskites for Photovoltaic Applications in Space. ACS Energy Letters, 2022, 7, 2490-2514.	17.4	27
28	Polyiodides formation in solvent based Dye Sensitized Solar Cells under reverse bias stress. Journal of Power Sources, 2015, 287, 87-95.	7.8	26
29	Copperâ€Based Corrole as Thermally Stable Hole Transporting Material for Perovskite Photovoltaics. Advanced Functional Materials, 2020, 30, 2003790.	14.9	26
30	Micro-Raman analysis of reverse bias stressed dye-sensitized solar cells. RSC Advances, 2014, 4, 12366.	3.6	25
31	A PdPt decorated SnO -rGO nanohybrid for high-performance resistive sensing of methane. Journal of the Taiwan Institute of Chemical Engineers, 2019, 95, 438-451.	5.3	23
32	Stability of dye-sensitized solar cell under reverse bias condition: Resonance Raman spectroscopy combined with spectrally resolved analysis by transmittance and efficiency mapping. Vibrational Spectroscopy, 2016, 84, 106-117.	2.2	20
33	Reevaluation of Photoluminescence Intensity as an Indicator of Efficiency in Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	19
34	Laser Processing Optimization for Large-Area Perovskite Solar Modules. Energies, 2021, 14, 1069.	3.1	17
35	Study of structural and optical properties of low temperature photo-activated ZnO-rGO composite thin film. Materials Research Bulletin, 2017, 91, 227-231.	5.2	16
36	Thermally Induced Fullerene Domain Coarsening Process in Organic Solar Cells. IEEE Transactions on Electron Devices, 2019, 66, 678-688.	3.0	16

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37	[1]Benzothieno[3,2â€b][1]benzothiopheneâ€Phthalocyanine Derivatives: A Subclass of Solutionâ€Processable Electronâ€Rich Hole Transport Materials. ChemPlusChem, 2020, 85, 2376-2386.	2.8	16
38	Synergic use of two-dimensional materials to tailor interfaces in large area perovskite modules. Nano Energy, 2022, 95, 107019.	16.0	16
39	Fabrication and reliability of dye solar cells: A resonance Raman scattering study. Microelectronics Reliability, 2012, 52, 2487-2489.	1.7	15
40	Mixed Cation Halide Perovskite under Environmental and Physical Stress. Materials, 2021, 14, 3954.	2.9	14
41	Effect of Calcination Time on the Physicochemical Properties and Photocatalytic Performance of Carbon and Nitrogen Co-Doped TiO2 Nanoparticles. Catalysts, 2020, 10, 847.	3.5	13
42	Spin Coating Immobilisation of C-N-TiO2 Co-Doped Nano Catalyst on Glass and Application for Photocatalysis or as Electron Transporting Layer for Perovskite Solar Cells. Coatings, 2020, 10, 1029.	2.6	12
43	Wet-Chemical Synthesis of ZnO Nanowires on Low-Temperature Photo-Activated ZnO-rGO Composite Thin Film with Enhanced Photoconduction. Journal of Electronic Materials, 2018, 47, 5863-5869.	2.2	11
44	Graphene-Based Interconnects for Stable Dye-Sensitized Solar Modules. ACS Applied Energy Materials, 2021, 4, 98-110.	5.1	9
45	Graphene and related 2D materials for high efficient and stable perovskite solar cells. , 2017, , .		8
46	Effects of Crystal Morphology on the Hot-Carrier Dynamics in Mixed-Cation Hybrid Lead Halide Perovskites. Energies, 2021, 14, 708.	3.1	8
47	Interface Engineering for Perovskite Solar Cells Based on 2D-Materials: A Physics Point of View. Materials, 2021, 14, 5843.	2.9	7
48	Hybrid perovskite as substituent of indium and gallium in light emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 958-961.	0.8	5
49	Large area perovskite solar modules with improved efficiency and stability. , 2019, , .		5
50	New Insights into the Structure of Glycols and Derivatives: A Comparative X-Ray Diffraction, Raman and Molecular Dynamics Study of Ethane-1,2-Diol, 2-Methoxyethan-1-ol and 1,2-Dimethoxy Ethane. Crystals, 2020, 10, 1011.	2.2	5
51	Systematic approach to the study of the photoluminescence of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>MAPb</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2021, 5, .	2.4	5
52	Ion Dynamics in Single and Multi-Cation Perovskite. ECS Journal of Solid State Science and Technology, 2020, 9, 065015.	1.8	5
53	High efficient perovskite solar cells by employing zinc-phthalocyanine as hole transporting layer. , 2015, , .		4
54	Ag/MgO Nanoparticles via Gas Aggregation Nanocluster Source for Perovskite Solar Cell Engineering. Materials, 2021, 14, 5507.	2.9	4

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55	Graphene Oxide for DSSC, OPV and Perovskite Stability. , 2018, , 503-531.		3
56	XPS depth profiles of organo lead halide layers and full perovskite solar cells by variable-size argon clusters. , 2018, , .		3
57	Two-dimensional MXenes for interface engineering in Perovskite solar cells. , 0, , .		1
58	Enhanced stability for dye-sensitized solar cells. , 2015, , .		0
59	Graphene and Related 2D Materials: A Winning Strategy for Enhanced Efficiency and Stability in Perovskite Photovoltaics. , 2018, , .		0
60	Modeling of Halide Perovskite/Ti3C2TX MXenes Solar Cells. , 2019, , .		0
61	On the scaling of perovskite photovoltaics to modules and panels. , 2021, , .		0
62	2D material engineering of perovskite solar cells: the emergence of MXenes. , 0, , .		0
63	Halide Perovskite Modules and Panels.. , 0, , .		0
64	Halide perovskite modules and panels. , 0, , .		0