Francesco Di Giacomo

List of Publications by Year
in descending order

59 papers	4,054 citations	136950 32 h-index	233421 45 g-index
60 all docs	60 docs citations	60 times ranked	4968 citing authors

#	Article	IF	Citations
1	Lowâ€Temperatureâ€Processed Stable Perovskite Solar Cells and Modules: A Comprehensive Review. Advanced Energy Materials, 2022, 12, .	19.5	38
2	Reevaluation of Photoluminescence Intensity as an Indicator of Efficiency in Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	19
3	Crystallization under control. Nature Energy, 2022, 7, 480-481.	39.5	3
4	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
5	Fiberâ€Shaped Electronic Devices. Advanced Energy Materials, 2021, 11, 2101443.	19.5	74
6	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. ACS Energy Letters, 2021, 6, 3916-3923.	17.4	115
7	A thin and flexible scanner for fingerprints and documents based on metal halide perovskites. Nature Electronics, 2021, 4, 818-826.	26.0	61
8	Role of surface recombination in perovskite solar cells at the interface of HTL/CH3NH3PbI3. Nano Energy, 2020, 67, 104186.	16.0	84
9	Biasâ€Dependent Stability of Perovskite Solar Cells Studied Using Natural and Concentrated Sunlight. Solar Rrl, 2020, 4, 1900335.	5.8	17
10	Effect of Different Bromine Sources on the Dual Cation Mixed Halide Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 8285-8294.	5.1	8
11	Progress, highlights and perspectives on NiO in perovskite photovoltaics. Chemical Science, 2020, 11, 7746-7759.	7.4	119
12	Upscaling Inverted Perovskite Solar Cells: Optimization of Laser Scribing for Highly Efficient Mini-Modules. Micromachines, 2020, 11, 1127.	2.9	42
13	Ion Migrationâ€Induced Amorphization and Phase Segregation as a Degradation Mechanism in Planar Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2000310.	19.5	103
14	Bifacial Four-Terminal Perovskite/Silicon Tandem Solar Cells and Modules. ACS Energy Letters, 2020, 5, 1676-1680.	17.4	49
15	Impact of the trap-assisted recombination in the perovskite solar cells. , 2020, , .		1
16	Semi-transparent triple cation Perovskite solar module exceeding 8% efficiency for BIPV applications. , 2020, , .		2
17	Peculiarities of perovskite photovoltaics degradation and how to account for them in stability studies. , 2020, , .		2
18	Large area perovskite light-emitting diodes by gas-assisted crystallization. Journal of Materials Chemistry C, 2019, 7, 3795-3801.	5.5	21

#	Article	IF	Citations
19	Towards Large Area Stable Perovskite Solar Cells and Modules. , 2019, , .		3
20	Scalable Processing of Low-Temperature TiO₂ Nanoparticles for High-Efficiency Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 47-58.	5.1	33
21	Reconsidering figures of merit for performance and stability of perovskite photovoltaics. Energy and Environmental Science, 2018, 11, 739-743.	30.8	79
22	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	5.1	85
23	Highly Efficient and Stable Flexible Perovskite Solar Cells with Metal Oxides Nanoparticle Charge Extraction Layers. Small, 2018, 14, e1702775.	10.0	111
24	Surface Fluorination of ALD TiO₂ Electron Transport LayerÂfor Efficient Planar Perovskite Solar Cells. Advanced Materials Interfaces, 2018, 5, 1701456.	3.7	27
25	Up-scalable sheet-to-sheet production of high efficiency perovskite module and solar cells on 6-in. substrate using slot die coating. Solar Energy Materials and Solar Cells, 2018, 181, 53-59.	6.2	196
26	Rollâ€toâ€Roll Slot Die Coated Perovskite for Efficient Flexible Solar Cells. Advanced Energy Materials, 2018, 8, 1801935.	19.5	189
27	Solvent Systems for Industrial-Scale Processing of Spiro-OMeTAD Hole Transport Layer in Perovskite Solar Sells. ACS Applied Energy Materials, 2018, 1, 6056-6063.	5.1	24
28	Efficient Perovskite Light-Emitting Diodes: Effect of Composition, Morphology, and Transport Layers. ACS Applied Materials & Interfaces, 2018, 10, 41586-41591.	8.0	23
29	Efficient light harvesting from flexible perovskite solar cells under indoor white light-emitting diode illumination. Nano Research, 2017, 10, 2130-2145.	10.4	97
30	Atomic layer deposition for perovskite solar cells: research status, opportunities and challenges. Sustainable Energy and Fuels, 2017, 1, 30-55.	4.9	150
31	Plasma-assisted atomic layer deposition of TiO2 compact layers for flexible mesostructured perovskite solar cells. Solar Energy, 2017, 150, 447-453.	6.1	37
32	Rapid and low temperature processing of mesoporous TiO2 for perovskite solar cells on flexible and rigid substrates. Materials Today Communications, 2017, 13, 232-240.	1.9	37
33	Highly Efficient Perovskite Solar Cells Using Nonâ€Toxic Industry Compatible Solvent System. Solar Rrl, 2017, 1, 1700091.	5.8	62
34	Up-scaling perovskite solar cell manufacturing from sheet-to-sheet to roll-to-roll: challenges and solutions. , 2017, , .		2
35	High efficiency photovoltaic module based on mesoscopic organometal halide perovskite. Progress in Photovoltaics: Research and Applications, 2016, 24, 436-445.	8.1	112
36	A Systematic Investigation of Permeation Barriers for Flexible Dyeâ€Sensitized Solar Cells. Energy Technology, 2016, 4, 1455-1462.	3.8	16

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37	Progress, challenges and perspectives in flexible perovskite solar cells. Energy and Environmental Science, 2016, 9, 3007-3035.	30.8	345
38	Mesoporous perovskite solar cells and the role of nanoscale compact layers for remarkable all-round high efficiency under both indoor and outdoor illumination. Nano Energy, 2016, 30, 460-469.	16.0	103
39	Device architectures with nanocrystalline mesoporous scaffolds and thin compact layers for flexible perovskite solar cells and modules. , 2015, , .		0
40	Flexible Perovskite Photovoltaic Modules and Solar Cells Based on Atomic Layer Deposited Compact Layers and UVâ€Irradiated TiO₂ Scaffolds on Plastic Substrates. Advanced Energy Materials, 2015, 5, 1401808.	19.5	241
41	Role of morphology and crystallinity of nanorod and planar electron transport layers on the performance and long term durability of perovskite solar cells. Journal of Power Sources, 2015, 283, 61-67.	7.8	106
42	Vertical TiO₂ Nanorods as a Medium for Stable and High-Efficiency Perovskite Solar Modules. ACS Nano, 2015, 9, 8420-8429.	14.6	174
43	TCO-free flexible organo metal trihalide perovskite planar-heterojunction solar cells. Solar Energy Materials and Solar Cells, 2015, 140, 150-157.	6.2	72
44	Opportunities of Atomic Layer Deposition for Perovskite Solar Cells. ECS Transactions, 2015, 69, 15-22.	0.5	3
45	Solid state perovskite solar modules by vacuum-vapor assisted sequential deposition on Nd:YVO₄ laser patterned rutile TiO₂ nanorods. Nanotechnology, 2015, 26, 494002.	2.6	26
46	Perovskite solar cells and large area modules (100Âcm 2) based on an air flow-assisted PbI 2 blade coating deposition process. Journal of Power Sources, 2015, 277, 286-291.	7.8	332
47	Mesoscopic perovskite solar cells and modules. , 2014, , .		2
48	Outdoor and diurnal performance of large conformal flexible metal/plastic dye solar cells. Applied Energy, 2014, 113, 1155-1161.	10.1	24
49	High efficiency CH3NH3PbI(3âˆ'x)Clx perovskite solar cells with poly(3-hexylthiophene) hole transport layer. Journal of Power Sources, 2014, 251, 152-156.	7.8	179
50	Solid-state solar modules based on mesoscopic organometal halide perovskite: a route towards the up-scaling process. Physical Chemistry Chemical Physics, 2014, 16, 3918.	2.8	158
51	Progress in flexible dye solar cell materials, processes and devices. Journal of Materials Chemistry A, 2014, 2, 10788-10817.	10.3	135
52	Fully Plastic Dye Solar Cell Devices by Lowâ€Temperature UVâ€Irradiation of both the Mesoporous TiO₂ Photoâ€•and Platinized Counterâ€Electrodes. Advanced Energy Materials, 2013, 3, 1292-1298.	19.5	67
53	Upscaling Inverted Perovskite Solar Cells: n-side passivation for 10 cm2 minimodules with 18.1% efficiency. , 0, , .		0
54	Improved Stability of Inverted Perovskite Solar Cells with ITO Buffer Layer.. , 0, , .		0

#	Article	IF	Citations
55	Sodium Diffusion from P1 Lines Passivates Perovskite Solar Modules. , 0, , .		1
56	Scaling Up of Perovskite Solar Modules: from materials to design optimization. , 0, , .		0
57	Halide perovskite modules and panels. , 0, , .		0
58	Room-Temperature Sputtered Indium Tin Oxide Barrier Layer for High Stability Perovskite Solar Cells and Modules: A Holistic Approach. , 0, , .		0
59	Perovskite Technology Scaling Up From 32 cm2 to 320 cm2 Module by Fully Ambient Air Meniscus Coating Processes. , 0, , .		0