Francesco Di Giacomo

List of Publications by Year
in descending order

59	4,054	136950	233421
papers	citations	32 h-index	45 g-index

60	60	60	4968
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Progress, challenges and perspectives in flexible perovskite solar cells. Energy and Environmental Science, 2016, 9, 3007-3035.	30.8	345
2	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
3	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
4	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
5	Rollâ€toâ€Roll Slot Die Coated Perovskite for Efficient Flexible Solar Cells. Advanced Energy Materials, 2018, 8, 1801935.	19.5	189
6	High efficiency CH3NH3PbI(3â^'x)Clx perovskite solar cells with poly(3-hexylthiophene) hole transport layer. Journal of Power Sources, 2014, 251, 152-156.	7.8	179
7	Vertical TiO₂ Nanorods as a Medium for Stable and High-Efficiency Perovskite Solar Modules. ACS Nano, 2015, 9, 8420-8429.	14.6	174
8	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
9	Atomic layer deposition for perovskite solar cells: research status, opportunities and challenges. Sustainable Energy and Fuels, 2017, 1, 30-55.	4.9	150
10	Progress in flexible dye solar cell materials, processes and devices. Journal of Materials Chemistry A, 2014, 2, 10788-10817.	10.3	135
11	Progress, highlights and perspectives on NiO in perovskite photovoltaics. Chemical Science, 2020, 11, 7746-7759.	7.4	119
12	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
13	High efficiency photovoltaic module based on mesoscopic organometal halide perovskite. Progress in Photovoltaics: Research and Applications, 2016, 24, 436-445.	8.1	112
14	Highly Efficient and Stable Flexible Perovskite Solar Cells with Metal Oxides Nanoparticle Charge Extraction Layers. Small, 2018, 14, e1702775.	10.0	111
15	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
16	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
17	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
18	Efficient light harvesting from flexible perovskite solar cells under indoor white light-emitting diode illumination. Nano Research, 2017, 10, 2130-2145.	10.4	97

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19	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	5.1	85
20	Role of surface recombination in perovskite solar cells at the interface of HTL/CH3NH3PbI3. Nano Energy, 2020, 67, 104186.	16.0	84
21	Reconsidering figures of merit for performance and stability of perovskite photovoltaics. Energy and Environmental Science, 2018, 11, 739-743.	30.8	79
22	Fiberâ€Shaped Electronic Devices. Advanced Energy Materials, 2021, 11, 2101443.	19.5	74
23	TCO-free flexible organo metal trihalide perovskite planar-heterojunction solar cells. Solar Energy Materials and Solar Cells, 2015, 140, 150-157.	6.2	72
24	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
25	Highly Efficient Perovskite Solar Cells Using Nonâ€Toxic Industry Compatible Solvent System. Solar Rrl, 2017, 1, 1700091.	5.8	62
26	A thin and flexible scanner for fingerprints and documents based on metal halide perovskites. Nature Electronics, 2021, 4, 818-826.	26.0	61
27	Bifacial Four-Terminal Perovskite/Silicon Tandem Solar Cells and Modules. ACS Energy Letters, 2020, 5, 1676-1680.	17.4	49
28	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
29	Upscaling Inverted Perovskite Solar Cells: Optimization of Laser Scribing for Highly Efficient Mini-Modules. Micromachines, 2020, 11, 1127.	2.9	42
30	Lowâ€Temperatureâ€Processed Stable Perovskite Solar Cells and Modules: A Comprehensive Review. Advanced Energy Materials, 2022, 12, .	19.5	38
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	Scalable Processing of Low-Temperature TiO₂ Nanoparticles for High-Efficiency Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 47-58.	5.1	33
34	Surface Fluorination of ALD TiO₂ Electron Transport LayerÂfor Efficient Planar Perovskite Solar Cells. Advanced Materials Interfaces, 2018, 5, 1701456.	3.7	27
35	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
36	Outdoor and diurnal performance of large conformal flexible metal/plastic dye solar cells. Applied Energy, 2014, 113, 1155-1161.	10.1	24

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37	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
38	Efficient Perovskite Light-Emitting Diodes: Effect of Composition, Morphology, and Transport Layers. ACS Applied Materials & Interfaces, 2018, 10, 41586-41591.	8.0	23
39	Large area perovskite light-emitting diodes by gas-assisted crystallization. Journal of Materials Chemistry C, 2019, 7, 3795-3801.	5.5	21
40	Reevaluation of Photoluminescence Intensity as an Indicator of Efficiency in Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	19
41	Biasâ€Dependent Stability of Perovskite Solar Cells Studied Using Natural and Concentrated Sunlight. Solar Rrl, 2020, 4, 1900335.	5.8	17
42	A Systematic Investigation of Permeation Barriers for Flexible Dyeâ€Sensitized Solar Cells. Energy Technology, 2016, 4, 1455-1462.	3.8	16
43	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
44	Opportunities of Atomic Layer Deposition for Perovskite Solar Cells. ECS Transactions, 2015, 69, 15-22.	0.5	3
45	Towards Large Area Stable Perovskite Solar Cells and Modules. , 2019, , .		3
46	Crystallization under control. Nature Energy, 2022, 7, 480-481.	39.5	3
47	Mesoscopic perovskite solar cells and modules. , 2014, , .		2
48	Up-scaling perovskite solar cell manufacturing from sheet-to-sheet to roll-to-roll: challenges and solutions. , 2017, , .		2
49	Semi-transparent triple cation Perovskite solar module exceeding 8% efficiency for BIPV applications. , 2020, , .		2
50	Peculiarities of perovskite photovoltaics degradation and how to account for them in stability studies. , 2020, , .		2
51	Sodium Diffusion from P1 Lines Passivates Perovskite Solar Modules. , 0, , .		1
52	Impact of the trap-assisted recombination in the perovskite solar cells. , 2020, , .		1
53	Device architectures with nanocrystalline mesoporous scaffolds and thin compact layers for flexible perovskite solar cells and modules. , 2015, , .		0
54	Upscaling Inverted Perovskite Solar Cells: n-side passivation for 10 cm2 minimodules with 18.1% efficiency. , 0, , .		0

#	Article	IF	Citations
55	Improved Stability of Inverted Perovskite Solar Cells with ITO Buffer Layer.. , 0, , .		0
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