Iris Visoly-Fisher

List of Publications by Year
in descending order

59 papers	3,844 citations	257450 24 h-index	161849 54 g-index
62 all docs	62 docs citations	62 times ranked	6111 citing authors

#	Article	IF	Citations
1	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	39.5	797
2	Temperature- and Component-Dependent Degradation of Perovskite Photovoltaic Materials under Concentrated Sunlight. Journal of Physical Chemistry Letters, 2015, 6, 326-330.	4.6	472
3	Role of oxygen functional groups in reduced graphene oxide for lubrication. Scientific Reports, 2017, 7, 45030.	3.3	404
4	Stability of CdTe/CdS thin-film solar cells. Solar Energy Materials and Solar Cells, 2000, 62, 295-325.	6.2	315
5	How Polycrystalline Devices Can Outperform Single-Crystal Ones: Thin Film CdTe/CdS Solar Cells. Advanced Materials, 2004, 16, 879-883.	21.0	176
6	Understanding the Beneficial Role of Grain Boundaries in Polycrystalline Solar Cells from Single-Grain-Boundary Scanning Probe Microscopy. Advanced Functional Materials, 2006, 16, 649-660.	14.9	165
7	Photocurrent of a single photosynthetic protein. Nature Nanotechnology, 2012, 7, 673-676.	31.5	106
8	Current routes in polycrystalline CuInSe2 and Cu(In,Ga)Se2 films. Solar Energy Materials and Solar Cells, 2007, 91, 85-90.	6.2	104
9	Direct evidence for grain-boundary depletion in polycrystalline CdTe from nanoscale-resolved measurements. Applied Physics Letters, 2003, 82, 556-558.	3.3	98
10	Plasma polymerized thiophene: molecular structure and electrical properties. Polymer, 2002, 43, 11-20.	3.8	94
11	Conductance of a biomolecular wire. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8686-8690.	7.1	88
12	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	5.1	85
13	Bias-dependent degradation of various solar cells: lessons for stability of perovskite photovoltaics. Energy and Environmental Science, 2019, 12, 550-558.	30.8	84
14	Reconsidering figures of merit for performance and stability of perovskite photovoltaics. Energy and Environmental Science, 2018, 11, 739-743.	30.8	79
15	Factors Affecting the Stability of CdTe/CdS Solar Cells Deduced from Stress Tests at Elevated Temperature. Advanced Functional Materials, 2003, 13, 289-299.	14.9	77
16	Effect of Halide Composition on the Photochemical Stability of Perovskite Photovoltaic Materials. ChemSusChem, 2016, 9, 2572-2577.	6.8	62
17	Electronically active layers and interfaces in polycrystalline devices: Cross-section mapping of CdS/CdTe solar cells. Applied Physics Letters, 2003, 83, 4924-4926.	3.3	43
18	Concentrated sunlight for accelerated stability testing of organic photovoltaic materials: towards decoupling light intensity and temperature. Solar Energy Materials and Solar Cells, 2015, 134, 99-107.	6.2	36

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19	Effect of Orientation on Bulk and Surface Properties of Sn-doped Hematite (Î±-Fe₂O₃) Heteroepitaxial Thin Film Photoanodes. Journal of Physical Chemistry C, 2016, 120, 28961-28970.	3.1	35
20	Solvent effects on the morphology and stability of PTB7:PCBM based solar cells. Solar Energy, 2016, 137, 490-499.	6.1	31
21	Light intensity dependence of External Quantum Efficiency of fresh and degraded organic photovoltaics. Solar Energy Materials and Solar Cells, 2016, 144, 273-280.	6.2	31
22	Lead iodide as a buffer layer in UV-induced degradation of CH3NH3PbI3 films. Solar Energy, 2018, 159, 794-799.	6.1	28
23	Coupling Bulk and Near-Electrode Interfacial Nanostructuring in Ionic Liquids. Chemistry of Materials, 2015, 27, 4169-4179.	6.7	27
24	Application of luminescence downshifting materials for enhanced stability of CH3NH3PbI3(1-x)Cl3x perovskite photovoltaic devices. Organic Electronics, 2017, 49, 129-134.	2.6	25
25	Chemical bath deposited PbS thin films on ZnO nanowires for photovoltaic applications. Thin Solid Films, 2014, 550, 149-155.	1.8	24
26	Defect Segregation and Its Effect on the Photoelectrochemical Properties of Ti-Doped Hematite Photoanodes for Solar Water Splitting. Chemistry of Materials, 2020, 32, 1031-1040.	6.7	23
27	UV-Cross-linkable Donorâ€“Acceptor Polymers Bearing a Photostable Conjugated Backbone for Efficient and Stable Organic Photovoltaics. ACS Applied Materials & Interfaces, 2018, 10, 35430-35440.	8.0	22
28	Two-site H2O2 photo-oxidation on haematite photoanodes. Nature Communications, 2018, 9, 4060.	12.8	22
29	Molecular Adsorption-Mediated Control over the Electrical Characteristics of Polycrystalline CdTe/CdS Solar Cells. ChemPhysChem, 2005, 6, 277-285.	2.1	21
30	Porphyrins as ITO photosensitizers: substituents control photo-induced electron transfer direction. Journal of Materials Chemistry, 2012, 22, 20334.	6.7	19
31	Design of novel thiazolothiazole-containing conjugated polymers for organic solar cells and modules. Solar Energy, 2020, 198, 605-611.	6.1	18
32	Oriented Attachment: A Path to Columnar Morphology in Chemical Bath Deposited PbSe Thin Films. Crystal Growth and Design, 2018, 18, 1227-1235.	3.0	17
33	Mutual Composition Transformations Among 2D/3D Organolead Halide Perovskites and Mechanisms Behind. Solar Rrl, 2018, 2, 1800125.	5.8	17
34	Impact of P3HT materials properties and layer architecture on OPV device stability. Solar Energy Materials and Solar Cells, 2019, 202, 110151.	6.2	17
35	Biasâ€Dependent Stability of Perovskite Solar Cells Studied Using Natural and Concentrated Sunlight. Solar Rrl, 2020, 4, 1900335.	5.8	17
36	Pb in halide perovskites for photovoltaics: reasons for optimism. Materials Advances, 2021, 2, 6125-6135.	5.4	16

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37	Advanced Nonvolatile Organic Optical Memory Using Self-Assembled Monolayers of Porphyrinâ€“Fullerene Dyads. ACS Applied Materials & Interfaces, 2022, 14, 15461-15467.	8.0	15
38	Hybrid organic nanocrystal/carbon nanotube film electrodes for air- and photo-stable perovskite photovoltaics. Nanoscale, 2019, 11, 3733-3740.	5.6	14
39	Concentrated Sunlight for Materials Synthesis and Diagnostics. Advanced Materials, 2018, 30, e1800444.	21.0	12
40	Photovoltaic Recovery of All Printable Mesoporousâ€Carbonâ€based Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100028.	5.8	11
41	Broadband absorption enhancement via light trapping in periodically patterned polymeric solar cells. Journal of Applied Physics, 2013, 114, 013102.	2.5	10
42	PTB7 as an Ink-Additive for Spin-Coated Versus Inkjet-Printed Perovskite Solar Cells. ACS Applied Energy Materials, 2022, 5, 4085-4095.	5.1	10
43	Nanostructured Photocathodes for Infrared Photodetectors and Photovoltaics. Journal of Physical Chemistry C, 2015, 119, 1683-1689.	3.1	9
44	Microscopic Investigation of Degradation Processes in a Polyfluorene Blend by Near-Field Scanning Optical Microscopy. Macromolecules, 2016, 49, 6439-6444.	4.8	9
45	Donorâ€“acceptor photovoltaic polymers based on 1,4â€dithienylâ€2,5â€dialkoxybenzene with intramolecular noncovalent interactions. Journal of Polymer Science Part A, 2018, 56, 689-698.	2.3	8
46	When, Why and Where are CdTe/CdS Solar Cells Stable?. Materials Research Society Symposia Proceedings, 2001, 668, 1.	0.1	7
47	Metal-free molecular junctions on ITO via amino-silane bindingâ€"towards optoelectronic molecular junctions. Nanotechnology, 2013, 24, 455204.	2.6	7
48	Pulsed electrodeposition of CuSCN for superfilling of ZnO nanowire array electrodes. Electrochimica Acta, 2014, 125, 65-70.	5.2	7
49	Electrical and optical characterization of extended SWIR detectors based on thin films of nano-columnar PbSe. Infrared Physics and Technology, 2019, 96, 89-97.	2.9	6
50	Postgrowth Control of the Interfacial Oxide Thickness in Semiconductorâ€“Insulatorâ€“Semiconductor Heterojunctions. Advanced Materials Interfaces, 2018, 5, 1800231.	3.7	5
51	Photoconductance of ITO/Conductive Polymer Junctions in the UV and Visible Ranges. Journal of Physical Chemistry C, 2018, 122, 7288-7295.	3.1	4
52	Models of Surface Morphology and Electronic Structure of Indium Oxide and Indium Tin Oxide for Several Surface Hydroxylation Levels. Journal of Physical Chemistry C, 2018, 122, 584-595.	3.1	4
53	Architecture, development and implementation of a SWIR to visible integrated up-conversion imaging device. Proceedings of SPIE, 2016, , .	0.8	3
54	Molecular functionalization of surfaces for device applications. Journal of Physics Condensed Matter, 2016, 28, 090301.	1.8	2

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55	A Solution-Processed Tetra-Alkoxylated Zinc Phthalocyanine as Hole Transporting Material for Emerging Photovoltaic Technologies. International Journal of Photoenergy, 2018, 2018, 1-9.	2.5	1
56	On the â€œChemical Inertnessâ€•of Teflon in Chemical Synthesis. Industrial & Engineering Chemistry Research, 2021, 60, 11995-12000.	3.7	1
57	Naphthalene dithiol additive reduces trap-assisted recombination and improves outdoor operational stability of organic solar cells. Sustainable Energy and Fuels, 0, , .	4.9	1
58	Initial Stages of Phoodegradation of MAPBI3 Perovskite: Accelerated Study by Concentrated Sunlight. , 0, , .		0
59	Bias-Dependent Stability of Perovskite Solar Cells: Degradation Mechanisms Reconsidered. , 0, , .		0