Morten Madsen

List of Publications by Year
in descending order

78 papers	2,461 citations	331259 21 h-index	205818 48 g-index
83 all docs	83 docs citations	83 times ranked	4180 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.	19.8	797
2	Ultrathin compound semiconductor on insulator layers for high-performance nanoscale transistors. Nature, 2010, 468, 286-289.	13.7	373
3	Quantum Confinement Effects in Nanoscale-Thickness InAs Membranes. Nano Letters, 2011, 11, 5008-5012.	4.5	97
4	Nanoscale InGaSb Heterostructure Membranes on Si Substrates for High Hole Mobility Transistors. Nano Letters, 2012, 12, 2060-2066.	4.5	85
5	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	2.5	85
6	Reconsidering figures of merit for performance and stability of perovskite photovoltaics. Energy and Environmental Science, 2018, 11, 739-743.	15.6	79
7	Recent advances in fiber-shaped and planar-shaped textile solar cells. Nano Energy, 2020, 71, 104609.	8.2	73
8	Crystalline Molybdenum Oxide Thin-Films for Application as Interfacial Layers in Optoelectronic Devices. ACS Applied Materials & Interfaces, 2017, 9, 7717-7724.	4.0	44
9	Nanoscale Semiconductor â€œXâ€•on Substrate â€œYâ€•â€“ Processes, Devices, and Applications. Advanced Materials, 2011, 23, 3115-3127.	11.1	42
10	Role of the Charge-Transfer State in Reduced Langevin Recombination in Organic Solar Cells: A Theoretical Study. Journal of Physical Chemistry C, 2015, 119, 26588-26597.	1.5	38
11	Tuning the optoelectronic properties of amorphous MoOx films by reactive sputtering. Applied Physics Letters, 2015, 106, .	1.5	35
12	Cu(<scp>ii</scp>) and Zn(<scp>ii</scp>) based phthalocyanines as hole selective layers for perovskite solar cells. Sustainable Energy and Fuels, 2017, 1, 2071-2077.	2.5	35
13	Biomimetic Approach to Inhibition of Photooxidation in Organic Solar Cells Using Beta-Carotene as an Additive. ACS Applied Materials & Interfaces, 2019, 11, 41570-41579.	4.0	34
14	Slot-die processing and encapsulation of non-fullerene based ITO-free organic solar cells and modules. Flexible and Printed Electronics, 2019, 4, 045004.	1.5	33
15	The influence of electrical effects on device performance of organic solar cells with nano-structured electrodes. Scientific Reports, 2017, 7, 5300.	1.6	26
16	Crystalline Molybdenum Oxide Layers as Efficient and Stable Hole Contacts in Organic Photovoltaic Devices. ACS Applied Energy Materials, 2019, 2, 420-427.	2.5	26
17	Strain engineering of epitaxially transferred, ultrathin layers of III-V semiconductor on insulator. Applied Physics Letters, 2011, 98, 012111.	1.5	23
18	Long-term stabilization of organic solar cells using UV absorbers. Journal Physics D: Applied Physics, 2016, 49, 125604.	1.3	23

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19	Long-term stabilization of organic solar cells using hydroperoxide decomposers as additives. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	23
20	Modeling Multijunction Solar Cells by Nonlocal Tunneling and Subcell Analysis. IEEE Journal of Photovoltaics, 2018, 8, 1363-1369.	1.5	23
21	Electrospun ZnO nanofiber interlayers for enhanced performance of organic photovoltaic devices. Solar Energy, 2020, 197, 311-316.	2.9	23
22	Oxygen-dependent photophysics and photochemistry of prototypical compounds for organic photovoltaics: inhibiting degradation initiated by singlet oxygen at a molecular level. Methods and Applications in Fluorescence, 2020, 8, 014001.	1.1	22
23	Progress of hybrid nanocomposite materials for thermoelectric applications. Materials Advances, 2021, 2, 1927-1956.	2.6	22
24	Flexible organic solar cells including efficiency enhancing grating structures. Nanotechnology, 2013, 24, 145301.	1.3	21
25	4P-NPD ultra-thin films as efficient exciton blocking layers in DBP/C₇₀ based organic solar cells. Journal Physics D: Applied Physics, 2017, 50, 385101.	1.3	21
26	Improving the efficiency of solar cells by upconverting sunlight using field enhancement from optimized nano structures. Optical Materials, 2018, 83, 279-289.	1.7	21
27	Degradation pathways in standard and inverted DBP-C70 based organic solar cells. Scientific Reports, 2019, 9, 4024.	1.6	20
28	2D materials for organic and perovskite photovoltaics. Nano Energy, 2022, 94, 106833.	8.2	20
29	Numerical analysis on effects of experimental Ga grading on Cu(In,Ga)Se 2 solar cell performance. Journal of Physics and Chemistry of Solids, 2018, 120, 190-196.	1.9	19
30	Degradation Behavior of Scalable Nonfullerene Organic Solar Cells Assessed by Outdoor and Indoor ISOS Stability Protocols. Energy Technology, 2020, 8, 2000295.	1.8	19
31	Area dependent behavior of bathocuproine (BCP) as cathode interfacial layers in organic photovoltaic cells. Scientific Reports, 2018, 8, 12608.	1.6	18
32	Stability of organic solar cells with PCDTBT donor polymer: An interlaboratory study. Journal of Materials Research, 2018, 33, 1909-1924.	1.2	17
33	In situâ€“Directed Growth of Organic Nanofibers and Nanoflakes: Electrical and Morphological Properties. Nanoscale Research Letters, 2011, 6, 11.	3.1	15
34	Work function mapping of MoOx thin-films for application in electronic devices. Ultramicroscopy, 2017, 183, 99-103.	0.8	15
35	Inverted organic solar cells with non-clustering bathocuproine (BCP) cathode interlayers obtained by fullerene doping. Scientific Reports, 2019, 9, 10422.	1.6	15
36	Current Matching in Multifold DBP/C70 Organic Solar Cells With Open-Circuit Voltages of up to 6.44 V. IEEE Journal of Photovoltaics, 2017, 7, 1319-1323.	1.5	13

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37	Sputter-Deposited Titanium Oxide Layers as Efficient Electron Selective Contacts in Organic Photovoltaic Devices. ACS Applied Energy Materials, 2020, 3, 253-259.	2.5	12
38	Bias-Dependent Dynamics of Degradation and Recovery in Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 6562-6573.	2.5	11
39	ITO with embedded silver grids as transparent conductive electrodes for large area organic solar cells. Nanotechnology, 2017, 28, 405303.	1.3	10
40	Deciphering Electron Interplay at the Fullerene/Sputtered TiO_x Interface: A Barrier-Free Electron Extraction for Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 19460-19466.	4.0	10
41	Improving the efficiency of upconversion by light concentration using nanoparticle design. Journal Physics D: Applied Physics, 2020, 53, 073001.	1.3	9
42	Influence of solvent additive on the performance and aging behavior of non-fullerene organic solar cells. Solar Energy, 2022, 232, 120-127.	2.9	9
43	Benzothiadiazoleâ€“triphenylamine as an efficient exciton blocking layer in small molecule based organic solar cells. Sustainable Energy and Fuels, 2018, 2, 2296-2302.	2.5	8
44	Near-Infrared to Visible Photon Upconversion by Palladium(II) Octabutoxyphthalocyanine and Rubrene in the Solid State. Journal of Physical Chemistry C, 2021, 125, 25643-25650.	1.5	8
45	The surface microstructure controlled growth of organic nanofibres. Nanotechnology, 2009, 20, 115601.	1.3	7
46	Identification of Degradation Mechanisms in Slot-Die-Coated Nonfullerene ITO-Free Organic Solar Cells Using Different Illumination Spectra. ACS Applied Energy Materials, 2020, 3, 6476-6485.	2.5	7
47	Photo-induced and electrical degradation of organic field-effect transistors. Organic Electronics, 2020, 82, 105717.	1.4	7
48	Synergistic effect of carotenoid and silicone-based additives for photooxidatively stable organic solar cells with enhanced elasticity. Journal of Materials Chemistry C, 2021, 9, 11838-11850.	2.7	7
49	A soft lithographic approach to fabricate InAs nanowire field-effect transistors. Scientific Reports, 2018, 8, 3204.	1.6	6
50	Dibenzo-tetraphenyl diindeno perylene as hole transport layer for high-bandgap perovskite solar cells. Emergent Materials, 2020, 3, 109-116.	3.2	6
51	Growth of Î±-sexithiophene nanostructures on C60 thin film layers. Thin Solid Films, 2014, 558, 165-169.	0.8	5
52	Light scattering from an ordered array of needle-shaped organic nanoaggregates: Evidence for optical mode launching. Applied Physics Letters, 2008, 92, 073302.	1.5	4
53	Nanoscale aluminum concaves for light-trapping in organic thin-films. Optics Communications, 2016, 370, 135-139.	1.0	4
54	Photo-induced degradation mechanisms in 4P-NPD thin films. Organic Electronics, 2018, 63, 114-119.	1.4	4

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55	Unveiling the Energy Alignment across Ultrathin 4P-NPD Hole Extraction Interlayers in Organic Solar Cells. ACS Applied Energy Materials, 2022, 5, 5018-5025.	2.5	4
56	Crystallites ofÎ±-Sexithiophene in Bilayer Small Molecule Organic Solar Cells Double Efficiency. Journal of Nanomaterials, 2014, 2014, 1-6.	1.5	3
57	Periodically arranged colloidal gold nanoparticles for enhanced light harvesting in organic solar cells. , 2016, , .		3
58	Organic nanofiber nanosensors. Proceedings of SPIE, 2007, , .	0.8	2
59	Printed second harmonic active organic nanofiber arrays. Proceedings of SPIE, 2007, , .	0.8	2
60	Periodic structures modified with silver nanoparticles for novel plasmonic application. Proceedings of SPIE, 2008, , .	0.8	2
61	Efficiencyâ€Enhanced Scalable Organic Photovoltaics Using Rollâ€toâ€Roll Nanoimprint Lithography. ChemSusChem, 2022, 15, .	3.6	2
62	Peculiarities of perovskite photovoltaics degradation and how to account for them in stability studies. , 2020, , .		2
63	Bottom-up tailoring of photonic nanofibers. Proceedings of SPIE, 2008, , .	0.8	1
64	Controlled growth of organic nanofibers on nano- and micro-structured gold surfaces. Proceedings of SPIE, 2009, , .	0.8	1
65	Para-hexaphenyl nanofiber growth on Au-coated porous alumina templates. Applied Physics A: Materials Science and Processing, 2009, 96, 591-594.	1.1	1
66	Ultra-thin compound semiconductor on insulator (XOI) for MOSFETs and TFETs. , 2011, , .		1
67	AC-driven light emission from in situ grown organic nanofibers. , 2012, , .		1
68	UV-laser Treatment in the Nanodomain: Forming of Organic Nanofibers. Journal of Laser Micro Nanoengineering, 2006, 1, 275-280.	0.4	1
69	World Scientific Reference of Hybrid Materials. World Scientific Series in Nanoscience and Nanotechnology, 2019, , .	0.1	1
70	Efficiencyâ€Enhanced Scalable Organic Photovoltaics Using Rollâ€toâ€Roll Nanoimprint Lithography. ChemSusChem, 2022, 15, e202102617.	3.6	1
71	Electrical properties of in-situ grown and transferred organic nanofibers. Proceedings of SPIE, 2010, , .	0.8	0
72	Efficiency enhancement of ITO-free organic polymeric solar cells by light trapping. Proceedings of SPIE, 2012, , .	0.8	0

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73	Flexible PCPDTBT:PCBM solar cells with integrated grating structures. Proceedings of SPIE, 2013, , .	0.8	0
74	Nanoscale concave structures for field enhancement in organic thin films. , 2015, , .		0
75	Enhanced Absorption in Organic Thin-Films from Imprinted Concave Nanostructures. Medziagotyra, 2017, 23, .	0.1	0
76	Additive-Assisted Stabilization Against Photooxidation of Organic and Hybrid Solar Cells. , 2022, , 169-193.		0
77	Inhibiting Photo-oxidative Degradation in Organic Solar Cells using Stabilizing Additives. World Scientific Series in Nanoscience and Nanotechnology, 2019, , 367-421.	0.1	0
78	Planar Perovskite Solar Cells Using Fullerene C70 as Electron Selective Transport Layer. International Journal of Optics and Photonics, 2020, 14, 15-24.	0.2	0