Ellen Moons

List of Publications by Year
in descending order

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96 papers	6,880 citations	109321 35 h-index	58581 82 g-index
98 all docs	98 docs citations	98 times ranked	8270 citing authors

#	Article	IF	Citations
1	An Integrated Bulk and Surface Modification Strategy for Gasâ€Quenched Inverted Perovskite Solar Cells with Efficiencies Exceeding 22%. Solar Rrl, 2022, 6, .	5.8	10
2	Electrically Switchable Film Structure of Conjugated Polymer Composites. Materials, 2022, 15, 2219.	2.9	0
3	Intrinsic Organic Semiconductors as Hole Transport Layers in pâ€“iâ€“n Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	8
4	Nonconjugated Terpolymer Acceptors with Two Different Fused-Ring Electron-Deficient Building Blocks for Efficient All-Polymer Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 6442-6449.	8.0	28
5	Efficient Wide-Bandgap Mixed-Cation and Mixed-Halide Perovskite Solar Cells by Vacuum Deposition. ACS Energy Letters, 2021, 6, 827-836.	17.4	81
6	High-performance all-polymer solar cells enabled by a novel low bandgap non-fully conjugated polymer acceptor. Science China Chemistry, 2021, 64, 1380-1388.	8.2	51
7	In Situ Optical Studies on Morphology Formation in Organic Photovoltaic Blends. Small Methods, 2021, 5, e2100585.	8.6	21
8	Suppressing Coâ€Crystallization of Halogenated Nonâ€Fullerene Acceptors for Thermally Stable Ternary Solar Cells. Advanced Functional Materials, 2020, 30, 2005462.	14.9	44
9	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. Energy and Environmental Science, 2020, 13, 5017-5027.	30.8	170
10	Fine regulation of crystallisation tendency to optimize the BHJ nanostructure and performance of polymer solar cells. Nanoscale, 2020, 12, 12928-12941.	5.6	9
11	Photo-Oxidation Reveals H-Aggregates Hidden in Spin-Cast-Conjugated Polymer Films as Observed by Two-Dimensional Polarization Imaging. Chemistry of Materials, 2019, 31, 8927-8936.	6.7	6
12	Impact of intentional photo-oxidation of a donor polymer and PC₇₀BM on solar cell performance. Physical Chemistry Chemical Physics, 2019, 21, 22259-22271.	2.8	4
13	Unravelling donorâ€“acceptor film morphology formation for environmentally-friendly OPV ink formulations. Green Chemistry, 2019, 21, 5090-5103.	9.0	31
14	A lattice model approach to the morphology formation from ternary mixtures during the evaporation of one component. European Physical Journal: Special Topics, 2019, 228, 55-68.	2.6	13
15	Initial photo-degradation of PCDTBT:PC70BM solar cells studied under various illumination conditions: Role of the hole transport layer. Solar Energy, 2019, 183, 234-239.	6.1	9
16	Photo-degradation in air of spin-coated PC60BM and PC70BM films. Synthetic Metals, 2018, 241, 26-30.	3.9	16
17	Fullerene Aggregation in Thin Films of Polymer Blends for Solar Cell Applications. Materials, 2018, 11, 2068.	2.9	4
18	Light-induced degradation of fullerenes in organic solar cells: a case study on TQ1:PC₇₁BM. Journal of Materials Chemistry A, 2018, 6, 11884-11889.	10.3	27

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19	Stability of organic solar cells with PCDTBT donor polymer: An interlaboratory study. Journal of Materials Research, 2018, 33, 1909-1924.	2.6	17
20	Engineering Two-Phase and Three-Phase Microstructures from Water-Based Dispersions of Nanoparticles for Eco-Friendly Polymer Solar Cell Applications. Chemistry of Materials, 2018, 30, 6521-6531.	6.7	25
21	Morphology in dip-coated blend films for photovoltaics studied by UV/VIS absorption and fluorescence spectroscopy. , 2018, , .		1
22	Modeling of oxygen permeation through filled polymeric layers for barrier coatings. Journal of Applied Polymer Science, 2017, 134, .	2.6	6
23	Low temperature processed NiOx hole transport layers for efficient polymer solar cells. Organic Electronics, 2017, 44, 59-66.	2.6	24
24	Opportunities and challenges in probing local composition of organic material blends for photovoltaics. Journal of Materials Research, 2017, 32, 1982-1992.	2.6	1
25	Scanning tunneling microscopy study of thin PTCDI films on Ag/Si(111)-â^š3 Ã— â^š3. Journal of Chemical Physics, 2017, 146, 114702.	3.0	6
26	Efficient ternary organic solar cells based on immiscible blends. Organic Electronics, 2017, 41, 130-136.	2.6	6
27	Brodie vs Hummers graphite oxides for preparation of multi-layered materials. Carbon, 2017, 115, 430-440.	10.3	104
28	The influence of moisture content on the polymer structure of polyvinyl alcohol in dispersion barrier coatings and its effect on the mass transport of oxygen. Journal of Coatings Technology Research, 2017, 14, 1345-1355.	2.5	28
29	Photodegradation of the electronic structure of PCBM and C60 films in air. Chemical Physics Letters, 2016, 652, 220-224.	2.6	14
30	Photo-degradation in air of the active layer components in a thiopheneâ€“quinoxaline copolymer:fullerene solar cell. Physical Chemistry Chemical Physics, 2016, 18, 11132-11138.	2.8	20
31	Organic heterojunctions: Contact-induced molecular reorientation, interface states and charge re-distribution. Scientific Reports, 2016, 6, 21291.	3.3	35
32	Comparing morphology in dip-coated and spin-coated polyfluorene:fullerene films. Proceedings of SPIE, 2016, , .	0.8	5
33	The influence of clay orientation and crystallinity on oxygen permeation in dispersion barrier coatings. Applied Clay Science, 2016, 126, 17-24.	5.2	14
34	Two-in-one: cathode modification and improved solar cell blend stability through addition of modified fullerenes. Journal of Materials Chemistry A, 2016, 4, 2663-2669.	10.3	27
35	Influence of kaolin addition on the dynamics of oxygen mass transport in polyvinyl alcohol dispersion coatings. Nordic Pulp and Paper Research Journal, 2015, 30, 385-392.	0.7	7
36	Fluorescence and UV/VIS absorption spectroscopy studies on polymer blend films for photovoltaics. , 2015, , .		5

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37	The influence of oxygen adsorption on the NEXAFS and core-level XPS spectra of the C60 derivative PCBM. Journal of Chemical Physics, 2015, 142, 054306.	3.0	24
38	Vertical and lateral morphology effects on solar cell performance for a thiopheneâ€“quinoxaline copolymer:PC₇₀BM blend. Journal of Materials Chemistry A, 2015, 3, 6970-6979.	10.3	46
39	Solvent vapor annealing on perylene-based organic solar cells. Journal of Materials Chemistry A, 2015, 3, 15700-15709.	10.3	29
40	Fluorescence spectroscopy studies on polymer blend solutions and films for photovoltaics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 292-296.	4.7	4
41	V_{oc} from a Morphology Point of View: the Influence of Molecular Orientation on the Open Circuit Voltage of Organic Planar Heterojunction Solar Cells. Journal of Physical Chemistry C, 2014, 118, 26462-26470.	3.1	78
42	Pattern replication in blends of semiconducting and insulating polymers casted by horizontal dipping. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1419-1426.	2.1	5
43	Simulation of Surface-Directed Phase Separation in a Solution-Processed Polymer/PCBM Blend. Macromolecules, 2013, 46, 8693-8701.	4.8	51
44	Molecular orientation and composition at the surface of spinâ€coated polyfluorene:Fullerene blend films. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 176-182.	2.1	11
45	Near-edge X-ray absorption fine structure study of the C60-derivative PCBM. Chemical Physics Letters, 2013, 568-569, 130-134.	2.6	18
46	USING A DISCIPLINARY DISCOURSE LENS TO EXPLORE HOW REPRESENTATIONS AFFORD MEANING MAKING IN A TYPICAL WAVE PHYSICS COURSE. International Journal of Science and Mathematics Education, 2013, 11, 625-650.	2.5	4
47	Polymer blends spinâ€cast into films with complementary elements for electronics and biotechnology. Journal of Applied Polymer Science, 2012, 125, 4275-4284.	2.6	16
48	Phase behaviour of liquid-crystalline polymer/fullerene organic photovoltaic blends: thermal stability and miscibility. Journal of Materials Chemistry, 2011, 21, 10676.	6.7	80
49	Tuning the Vertical Phase Separation in Polyfluorene:Fullerene Blend Films by Polymer Functionalization. Chemistry of Materials, 2011, 23, 2295-2302.	6.7	41
50	Coronene Fusion by Heat Treatment: Road to Nanographenes. Journal of Physical Chemistry C, 2011, 115, 13207-13214.	3.1	52
51	Device Performance of APFOâ€3/PCBM Solar Cells with Controlled Morphology. Advanced Materials, 2009, 21, 4398-4403.	21.0	52
52	Molecular orientation of thiol-derivatized tetraphenylporphyrin on gold studied by XPS and NEXAFS. Surface Science, 2009, 603, 1026-1033.	1.9	23
53	Ordering domains of spin cast blends of conjugated and dielectric polymers on surfaces patterned by soft- and photo-lithography. Soft Matter, 2009, 5, 234-241.	2.7	30
54	Mixed Self-Assembled Monolayers of Ferrocene-Terminated and Unsubstituted Alkanethiols on Gold: Surface Structure and Work Function. Journal of Physical Chemistry C, 2009, 113, 1972-1979.	3.1	50

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55	Structures in Multicomponent Polymer Films: Their Formation, Observation and Applications in Electronics and Biotechnology. Acta Physica Polonica A, 2009, 115, 435-440.	0.5	10
56	A spectroscopic study of self-assembled monolayer of porphyrin-functionalized oligo(phenyleneethynylene)s on gold: the influence of the anchor moiety. Physical Chemistry Chemical Physics, 2008, 10, 5264.	2.8	19
57	Polymer vs Solvent Diagram of Film Structures Formed in Spin-Cast Poly(3-alkylthiophene) Blends. Macromolecules, 2008, 41, 4802-4810.	4.8	55
58	Electron spectroscopy studies of PTCDA onAgâ•Si(111)â╳3Ã—3. Physical Review B, 2007, 75, .	3.2	27
59	Morphology and Phase Segregation of Spin-Casted Films of Polyfluorene/PCBM Blends. Macromolecules, 2007, 40, 8291-8301.	4.8	400
60	Characterization of Self-Assembled Monolayers of Oligo(phenyleneethynylene) Derivatives of Varying Shapes on Gold:Â Effect of Laterally Extended Ï€-Systems. Langmuir, 2007, 23, 6170-6181.	3.5	37
61	Vertical phase separation in spin-coated films of a low bandgap polyfluorene/PCBM blendâ€"Effects of specific substrate interaction. Applied Surface Science, 2007, 253, 3906-3912.	6.1	130
62	Growth and characterization of thin PTCDA films on 3C-SiC(001)c(2Ã—2). Surface Science, 2006, 600, 4758-4764.	1.9	8
63	Influence of Solvent Mixing on the Morphology and Performance of Solar Cells Based on Polyfluorene Copolymer/Fullerene Blends. Advanced Functional Materials, 2006, 16, 667-674.	14.9	439
64	Influence of solvents and substrates on the morphology and the performance of low-bandgap polyfluorene: PCBM photovoltaic devices. , 2006, 6192, 339.		5
65	Multilayer formation in spin-coated thin films of low-bandgap polyfluorene:PCBM blends. Journal of Physics Condensed Matter, 2005, 17, L529-L534.	1.8	101
66	Control of phase separation in blends of polyfluorene (co)polymers and the C60-derivative PCBM. Synthetic Metals, 2005, 152, 109-112.	3.9	38
67	Thin PTCDA films on Si(001): 2. Electronic structure. Surface Science, 2004, 572, 32-42.	1.9	28
68	Thin PTCDA films on Si(001): 1. Growth mode. Surface Science, 2004, 572, 23-31.	1.9	31
69	Preparation of stoichiometric GaN(0001)-1Ã—1 studied with spectromicroscopy. Surface Science, 2004, 572, 409-417.	1.9	7
70	Barrier-Free Electronâ€"Hole Capture in Polymer Blend Heterojunction Light-Emitting Diodes. Advanced Materials, 2003, 15, 1708-1712.	21.0	326
71	A technique to compare polythiophene solid-state dye sensitized TiO2 solar cells to liquid junction devices. Solar Energy Materials and Solar Cells, 2003, 76, 85-105.	6.2	147
72	Hybrid Inorganicâ╳Organic Coreâ╳Shell Nanoparticles from Surface-Functionalized Titanium, Zirconium, and Vanadium Oxo Clusters. Chemistry of Materials, 2002, 14, 4382-4389.	6.7	103

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73	Conjugated polymer blends: linking film morphology to performance of light emitting diodes and photodiodes. Journal of Physics Condensed Matter, 2002, 14, 12235-12260.	1.8	193
74	Optical and morphological investigations of non-homogeneity in polyfluorene blends. Synthetic Metals, 2001, 124, 63-66.	3.9	28
75	Ultravioletâ€“visible near-field microscopy of phase-separated blends of polyfluorene-based conjugated semiconductors. Applied Physics Letters, 2001, 79, 833-835.	3.3	41
76	New efficient light-emitting polymer diode for flat-panel display applications. , 2001, , .		6
77	De-mixing of Polyfluorene-Based Blends by Contact with Acetone: Electro- and Photo-luminescence Probes. Advanced Materials, 2001, 13, 810-814.	21.0	73
78	Self-Organized Discotic Liquid Crystals for High-Efficiency Organic Photovoltaics. Science, 2001, 293, 1119-1122.	12.6	2,286
79	Kelvin probe and ultraviolet photoemission measurements of indium tin oxide work function: a comparison. Synthetic Metals, 2000, 111-112, 311-314.	3.9	175
80	Self-assembled monolayers as interfaces for organic opto-electronic devices. European Physical Journal B, 1999, 11, 505-512.	1.5	138
81	Construction of the energy diagram of an organic semiconductor film on SnO2:F by surface photovoltage spectroscopy. Optical Materials, 1998, 9, 138-144.	3.6	12
82	Photogeneration and transport of charge carriers in a porphyrin p/n heterojunction. Physical Review B, 1997, 55, 9685-9692.	3.2	36
83	Determination of the energy diagram of the dithioketopyrrolopyrrole/SnO2:F heterojunction by surface photovoltage spectroscopy. Applied Physics Letters, 1997, 71, 3305-3307.	3.3	14
84	Surface Photovoltage of Porphyrin Layers Using the Kelvin Probe Technique. Journal of Physical Chemistry B, 1997, 101, 8492-8498.	2.6	57
85	Electron transfer in hybrid molecular solid-state devices. Synthetic Metals, 1996, 76, 245-248.	3.9	21
86	Effect of air annealing on the electronic properties of CdSCu(In,Ga)Se2 solar cells. Solar Energy Materials and Solar Cells, 1996, 43, 73-78.	6.2	24
87	Band diagram of the polycrystalline CdS/Cu(In,Ga)Se2 heterojunction. Applied Physics Letters, 1995, 67, 1405-1407.	3.3	58
88	Controlling the Work Function of CdSe by Chemisorption of Benzoic Acid Derivatives and Chemical Etching. The Journal of Physical Chemistry, 1995, 99, 8368-8373.	2.9	73
89	Determination of undoped CdTe(111) surface polarity by surface photovoltage spectroscopy. Applied Surface Science, 1994, 74, 201-206.	6.1	11
90	The Dependence of Electron Transfer Efficiency on the Conformational Order in Organic Monolayers. Science, 1994, 263, 948-950.	12.6	100

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91	Polar Ligand Adsorption Controls Semiconductor Surface Potentials. Journal of the American Chemical Society, 1994, 116, 2972-2977.	13.7	98
92	Ohmic contacts to p-CuInSe2 crystals. Journal of Electronic Materials, 1993, 22, 275-280.	2.2	27
93	Molecular Approach to Surface Control of Chalcogenide Semiconductors. Japanese Journal of Applied Physics, 1993, 32, 730.	1.5	4
94	Photo-oxidation of a non-fullerene acceptor polymer. , 0, , .		0
95	Donor-acceptor polymer complex formation in solution behind highly efficient all-polymer solar cells ?. , 0, , .		0
96	Thermodynamics aspects of charge transfer processes in organic photovoltaics materials: Insights from atomic scale modelling. , 0, , .		0