

# 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	Self-Organized Discotic Liquid Crystals for High-Efficiency Organic Photovoltaics. <i>Science</i> , 2001, 293, 1119-1122.	12.6	2,286
2	Influence of Solvent Mixing on the Morphology and Performance of Solar Cells Based on Polyfluorene Copolymer/Fullerene Blends. <i>Advanced Functional Materials</i> , 2006, 16, 667-674.	14.9	439
3	Morphology and Phase Segregation of Spin-Casted Films of Polyfluorene/PCBM Blends. <i>Macromolecules</i> , 2007, 40, 8291-8301.	4.8	400
4	Barrier-Free Electron-Hole Capture in Polymer Blend Heterojunction Light-Emitting Diodes. <i>Advanced Materials</i> , 2003, 15, 1708-1712.	21.0	326
5	Conjugated polymer blends: linking film morphology to performance of light emitting diodes and photodiodes. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 12235-12260.	1.8	193
6	Kelvin probe and ultraviolet photoemission measurements of indium tin oxide work function: a comparison. <i>Synthetic Metals</i> , 2000, 111-112, 311-314.	3.9	175
7	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. <i>Energy and Environmental Science</i> , 2020, 13, 5017-5027.	30.8	170
8	A technique to compare polythiophene solid-state dye sensitized TiO <sub>2</sub> solar cells to liquid junction devices. <i>Solar Energy Materials and Solar Cells</i> , 2003, 76, 85-105.	6.2	147
9	Self-assembled monolayers as interfaces for organic opto-electronic devices. <i>European Physical Journal B</i> , 1999, 11, 505-512.	1.5	138
10	Vertical phase separation in spin-coated films of a low bandgap polyfluorene/PCBM blend—Effects of specific substrate interaction. <i>Applied Surface Science</i> , 2007, 253, 3906-3912.	6.1	130
11	Brodie vs Hummers graphite oxides for preparation of multi-layered materials. <i>Carbon</i> , 2017, 115, 430-440.	10.3	104
12	Hybrid Inorganic-Organic Core-Shell Nanoparticles from Surface-Functionalized Titanium, Zirconium, and Vanadium Oxo Clusters. <i>Chemistry of Materials</i> , 2002, 14, 4382-4389.	6.7	103
13	Multilayer formation in spin-coated thin films of low-bandgap polyfluorene:PCBM blends. <i>Journal of Physics Condensed Matter</i> , 2005, 17, L529-L534.	1.8	101
14	The Dependence of Electron Transfer Efficiency on the Conformational Order in Organic Monolayers. <i>Science</i> , 1994, 263, 948-950.	12.6	100
15	Polar Ligand Adsorption Controls Semiconductor Surface Potentials. <i>Journal of the American Chemical Society</i> , 1994, 116, 2972-2977.	13.7	98
16	Efficient Wide-Bandgap Mixed-Cation and Mixed-Halide Perovskite Solar Cells by Vacuum Deposition. <i>ACS Energy Letters</i> , 2021, 6, 827-836.	17.4	81
17	Phase behaviour of liquid-crystalline polymer/fullerene organic photovoltaic blends: thermal stability and miscibility. <i>Journal of Materials Chemistry</i> , 2011, 21, 10676.	6.7	80
18	Open-Circuit Voltage from a Morphology Point of View: the Influence of Molecular Orientation on the Open Circuit Voltage of Organic Planar Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26462-26470.	3.1	78

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19	Controlling the Work Function of CdSe by Chemisorption of Benzoic Acid Derivatives and Chemical Etching. <i>The Journal of Physical Chemistry</i> , 1995, 99, 8368-8373.	2.9	73
20	De-mixing of Polyfluorene-Based Blends by Contact with Acetone: Electro- and Photo-luminescence Probes. <i>Advanced Materials</i> , 2001, 13, 810-814.	21.0	73
21	Band diagram of the polycrystalline CdS/Cu(In,Ga)Se <sub>2</sub> heterojunction. <i>Applied Physics Letters</i> , 1995, 67, 1405-1407.	3.3	58
22	Surface Photovoltage of Porphyrin Layers Using the Kelvin Probe Technique. <i>Journal of Physical Chemistry B</i> , 1997, 101, 8492-8498.	2.6	57
23	Polymer vs Solvent Diagram of Film Structures Formed in Spin-Cast Poly(3-alkylthiophene) Blends. <i>Macromolecules</i> , 2008, 41, 4802-4810.	4.8	55
24	Device Performance of APFO/PCBM Solar Cells with Controlled Morphology. <i>Advanced Materials</i> , 2009, 21, 4398-4403.	21.0	52
25	Coronene Fusion by Heat Treatment: Road to Nanographenes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13207-13214.	3.1	52
26	Simulation of Surface-Directed Phase Separation in a Solution-Processed Polymer/PCBM Blend. <i>Macromolecules</i> , 2013, 46, 8693-8701.	4.8	51
27	High-performance all-polymer solar cells enabled by a novel low bandgap non-fully conjugated polymer acceptor. <i>Science China Chemistry</i> , 2021, 64, 1380-1388.	8.2	51
28	Mixed Self-Assembled Monolayers of Ferrocene-Terminated and Unsubstituted Alkanethiols on Gold: Surface Structure and Work Function. <i>Journal of Physical Chemistry C</i> , 2009, 113, 1972-1979.	3.1	50
29	Vertical and lateral morphology effects on solar cell performance for a thiophene-quinoline copolymer:PC <sub>70</sub> BM blend. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6970-6979.	10.3	46
30	Suppressing Co-Crystallization of Halogenated Non-Fullerene Acceptors for Thermally Stable Ternary Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2005462.	14.9	44
31	Ultraviolet-visible near-field microscopy of phase-separated blends of polyfluorene-based conjugated semiconductors. <i>Applied Physics Letters</i> , 2001, 79, 833-835.	3.3	41
32	Tuning the Vertical Phase Separation in Polyfluorene:Fullerene Blend Films by Polymer Functionalization. <i>Chemistry of Materials</i> , 2011, 23, 2295-2302.	6.7	41
33	Control of phase separation in blends of polyfluorene (co)polymers and the C60-derivative PCBM. <i>Synthetic Metals</i> , 2005, 152, 109-112.	3.9	38
34	Characterization of Self-Assembled Monolayers of Oligo(phenyleneethynylene) Derivatives of Varying Shapes on Gold: A Effect of Laterally Extended $\pi$ -Systems. <i>Langmuir</i> , 2007, 23, 6170-6181.	3.5	37
35	Photogeneration and transport of charge carriers in a porphyrin p/n heterojunction. <i>Physical Review B</i> , 1997, 55, 9685-9692.	3.2	36
36	Organic heterojunctions: Contact-induced molecular reorientation, interface states and charge re-distribution. <i>Scientific Reports</i> , 2016, 6, 21291.	3.3	35

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37	Thin PTCDA films on Si(001): 1. Growth mode. <i>Surface Science</i> , 2004, 572, 23-31.	1.9	31
38	Unravelling donor-acceptor film morphology formation for environmentally-friendly OPV ink formulations. <i>Green Chemistry</i> , 2019, 21, 5090-5103.	9.0	31
39	Ordering domains of spin cast blends of conjugated and dielectric polymers on surfaces patterned by soft- and photo-lithography. <i>Soft Matter</i> , 2009, 5, 234-241.	2.7	30
40	Solvent vapor annealing on perylene-based organic solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15700-15709.	10.3	29
41	Optical and morphological investigations of non-homogeneity in polyfluorene blends. <i>Synthetic Metals</i> , 2001, 124, 63-66.	3.9	28
42	Thin PTCDA films on Si(001): 2. Electronic structure. <i>Surface Science</i> , 2004, 572, 32-42.	1.9	28
43	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. <i>Journal of Coatings Technology Research</i> , 2017, 14, 1345-1355.	2.5	28
44	Nonconjugated Terpolymer Acceptors with Two Different Fused-Ring Electron-Deficient Building Blocks for Efficient All-Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 6442-6449.	8.0	28
45	Ohmic contacts to p-CuInSe <sub>2</sub> crystals. <i>Journal of Electronic Materials</i> , 1993, 22, 275-280.	2.2	27
46	Electron spectroscopy studies of PTCDA on Ag <sup>+</sup> -Si(111)- $\sqrt{3}\times\sqrt{3}$ . <i>Physical Review B</i> , 2007, 75, .	3.2	27
47	Two-in-one: cathode modification and improved solar cell blend stability through addition of modified fullerenes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2663-2669.	10.3	27
48	Light-induced degradation of fullerenes in organic solar cells: a case study on TQ1:PC <sub>71</sub> BM. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11884-11889.	10.3	27
49	Engineering Two-Phase and Three-Phase Microstructures from Water-Based Dispersions of Nanoparticles for Eco-Friendly Polymer Solar Cell Applications. <i>Chemistry of Materials</i> , 2018, 30, 6521-6531.	6.7	25
50	Effect of air annealing on the electronic properties of CdSCu(In,Ga)Se <sub>2</sub> solar cells. <i>Solar Energy Materials and Solar Cells</i> , 1996, 43, 73-78.	6.2	24
51	The influence of oxygen adsorption on the NEXAFS and core-level XPS spectra of the C60 derivative PCBM. <i>Journal of Chemical Physics</i> , 2015, 142, 054306.	3.0	24
52	Low temperature processed NiOx hole transport layers for efficient polymer solar cells. <i>Organic Electronics</i> , 2017, 44, 59-66.	2.6	24
53	Molecular orientation of thiol-derivatized tetraphenylporphyrin on gold studied by XPS and NEXAFS. <i>Surface Science</i> , 2009, 603, 1026-1033.	1.9	23
54	Electron transfer in hybrid molecular solid-state devices. <i>Synthetic Metals</i> , 1996, 76, 245-248.	3.9	21

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55	In Situ Optical Studies on Morphology Formation in Organic Photovoltaic Blends. <i>Small Methods</i> , 2021, 5, e2100585.	8.6	21
56	Photo-degradation in air of the active layer components in a thiophene-quinoxaline copolymer:fullerene solar cell. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11132-11138.	2.8	20
57	A spectroscopic study of self-assembled monolayer of porphyrin-functionalized oligo(phenyleneethynylene)s on gold: the influence of the anchor moiety. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 5264.	2.8	19
58	Near-edge X-ray absorption fine structure study of the C60-derivative PCBM. <i>Chemical Physics Letters</i> , 2013, 568-569, 130-134.	2.6	18
59	Stability of organic solar cells with PCDTBT donor polymer: An interlaboratory study. <i>Journal of Materials Research</i> , 2018, 33, 1909-1924.	2.6	17
60	Polymer blends spin-cast into films with complementary elements for electronics and biotechnology. <i>Journal of Applied Polymer Science</i> , 2012, 125, 4275-4284.	2.6	16
61	Photo-degradation in air of spin-coated PC60BM and PC70BM films. <i>Synthetic Metals</i> , 2018, 241, 26-30.	3.9	16
62	Determination of the energy diagram of the dithioketopyrrolopyrrole/SnO <sub>2</sub> :F heterojunction by surface photovoltage spectroscopy. <i>Applied Physics Letters</i> , 1997, 71, 3305-3307.	3.3	14
63	Photodegradation of the electronic structure of PCBM and C60 films in air. <i>Chemical Physics Letters</i> , 2016, 652, 220-224.	2.6	14
64	The influence of clay orientation and crystallinity on oxygen permeation in dispersion barrier coatings. <i>Applied Clay Science</i> , 2016, 126, 17-24.	5.2	14
65	A lattice model approach to the morphology formation from ternary mixtures during the evaporation of one component. <i>European Physical Journal: Special Topics</i> , 2019, 228, 55-68.	2.6	13
66	Construction of the energy diagram of an organic semiconductor film on SnO <sub>2</sub> :F by surface photovoltage spectroscopy. <i>Optical Materials</i> , 1998, 9, 138-144.	3.6	12
67	Determination of undoped CdTe(111) surface polarity by surface photovoltage spectroscopy. <i>Applied Surface Science</i> , 1994, 74, 201-206.	6.1	11
68	Molecular orientation and composition at the surface of spin-coated polyfluorene:Fullerene blend films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 176-182.	2.1	11
69	Structures in Multicomponent Polymer Films: Their Formation, Observation and Applications in Electronics and Biotechnology. <i>Acta Physica Polonica A</i> , 2009, 115, 435-440.	0.5	10
70	An Integrated Bulk and Surface Modification Strategy for Gas-Quenched Inverted Perovskite Solar Cells with Efficiencies Exceeding 22%. <i>Solar Rrl</i> , 2022, 6, .	5.8	10
71	Initial photo-degradation of PCDTBT:PC70BM solar cells studied under various illumination conditions: Role of the hole transport layer. <i>Solar Energy</i> , 2019, 183, 234-239.	6.1	9
72	Fine regulation of crystallisation tendency to optimize the BHJ nanostructure and performance of polymer solar cells. <i>Nanoscale</i> , 2020, 12, 12928-12941.	5.6	9



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91	Opportunities and challenges in probing local composition of organic material blends for photovoltaics. Journal of Materials Research, 2017, 32, 1982-1992.	2.6	1
92	Morphology in dip-coated blend films for photovoltaics studied by UV/VIS absorption and fluorescence spectroscopy. , 2018, , .		1
93	Photo-oxidation of a non-fullerene acceptor polymer. , 0, , .		0
94	Donor-acceptor polymer complex formation in solution behind highly efficient all-polymer solar cells ?. , 0, , .		0
95	Electrically Switchable Film Structure of Conjugated Polymer Composites. Materials, 2022, 15, 2219.	2.9	0
96	Thermodynamics aspects of charge transfer processes in organic photovoltaics materials: Insights from atomic scale modelling. , 0, , .		0