Suren A Gevorgyan

List of Publications by Year
in descending order

62 papers	7,336 citations	126907 33 h-index	144013 57 g-index
64 all docs	64 docs citations	64 times ranked	7286 citing authors

#	Article	IF	Citations
1	Stability of Polymer Solar Cells. Advanced Materials, 2012, 24, 580-612.	21.0	1,249
2	A roll-to-roll process to flexible polymer solar cells: model studies, manufacture and operational stability studies. Journal of Materials Chemistry, 2009, 19, 5442.	6.7	1,168
3	Consensus stability testing protocols for organic photovoltaic materials and devices. Solar Energy Materials and Solar Cells, 2011, 95, 1253-1267.	6.2	812
4	Degradation Patterns in Water and Oxygen of an Inverted Polymer Solar Cell. Journal of the American Chemical Society, 2010, 132, 16883-16892.	13.7	529
5	Water-Induced Degradation of Polymer Solar Cells Studied by H₂¹⁸O Labeling. ACS Applied Materials & Interfaces, 2009, 1, 102-112.	8.0	271
6	Scalable, ambient atmosphere roll-to-roll manufacture of encapsulated large area, flexible organic tandem solar cell modules. Energy and Environmental Science, 2014, 7, 2925.	30.8	255
7	A round robin study of flexible large-area roll-to-roll processed polymer solar cell modules. Solar Energy Materials and Solar Cells, 2009, 93, 1968-1977.	6.2	205
8	The OE-A OPV demonstrator anno domini 2011. Energy and Environmental Science, 2011, 4, 4116.	30.8	183
9	â€œHairyâ€•Poly(3-hexylthiophene) Particles Prepared via Surface-Initiated Kumada Catalyst-Transfer Polycondensation. Journal of the American Chemical Society, 2009, 131, 16445-16453.	13.7	143
10	Investigation of the degradation mechanisms of a variety of organic photovoltaic devices by combination of imaging techniquesâ€”the ISOS-3 inter-laboratory collaboration. Energy and Environmental Science, 2012, 5, 6521.	30.8	134
11	Substituted 2,1,3-Benzothiadiazole- And Thiophene-Based Polymers for Solar Cells â^' Introducing a New Thermocleavable Precursor. Chemistry of Materials, 2009, 21, 4669-4675.	6.7	132
12	An inter-laboratory stability study of roll-to-roll coated flexible polymer solar modules. Solar Energy Materials and Solar Cells, 2011, 95, 1398-1416.	6.2	132
13	Scalability and stability of very thin, roll-to-roll processed, large area, indium-tin-oxide free polymer solar cell modules. Organic Electronics, 2013, 14, 984-994.	2.6	131
14	Water and oxygen induced degradation of small molecule organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1268-1277.	6.2	126
15	Freely available OPVâ€”The fast way to progress. Energy Technology, 2013, 1, 378-381.	3.8	122
16	Lifetime of Organic Photovoltaics: Status and Predictions. Advanced Energy Materials, 2016, 6, 1501208.	19.5	119
17	Bulk Heterojunctions Based on Native Polythiophene. Chemistry of Materials, 2008, 20, 4386-4390.	6.7	112
18	The ISOS-3 inter-laboratory collaboration focused on the stability of a variety of organic photovoltaic devices. RSC Advances, 2012, 2, 882-893.	3.6	108

#	Article	IF	Citations
19	Interlaboratory outdoor stability studies of flexible roll-to-roll coated organic photovoltaic modules: Stability over 10,000 h. Solar Energy Materials and Solar Cells, 2013, 116, 187-196.	6.2	107
20	Thermocleavable Low Band Gap Polymers and Solar Cells Therefrom with Remarkable Stability toward Oxygen. Macromolecules, 2008, 41, 8986-8994.	4.8	104
21	Overcoming the Scaling Lag for Polymer Solar Cells. Joule, 2017, 1, 274-289.	24.0	100
22	Roll-to-roll printed silver nanowires for increased stability of flexible ITO-free organic solar cell modules. Nanoscale, 2016, 8, 318-326.	5.6	90
23	A setup for studying stability and degradation of polymer solar cells. Solar Energy Materials and Solar Cells, 2008, 92, 736-745.	6.2	78
24	A rational method for developing and testing stable flexible indium- and vacuum-free multilayer tandem polymer solar cells comprising up to twelve roll processed layers. Solar Energy Materials and Solar Cells, 2014, 120, 735-743.	6.2	72
25	The Critical Choice of PEDOT:PSS Additives for Long Term Stability of Rollâ€toâ€Roll Processed OPVs. Advanced Energy Materials, 2015, 5, 1401912.	19.5	66
26	Aesthetically Pleasing Conjugated Polymer:Fullerene Blends for Blue-Green Solar Cells Via Roll-to-Roll Processing. ACS Applied Materials & Interfaces, 2012, 4, 1847-1853.	8.0	50
27	Improving, characterizing and predicting the lifetime of organic photovoltaics. Journal Physics D: Applied Physics, 2017, 50, 103001.	2.8	48
28	Outdoor Operational Stability of Indiumâ€Free Flexible Polymer Solar Modules Over 1 Year Studied in India, Holland, and Denmark. Advanced Engineering Materials, 2014, 16, 976-987.	3.5	46
29	Baselines for Lifetime of Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600910.	19.5	42
30	Lifetime of organic photovoltaics: Linking outdoor and indoor tests. Solar Energy Materials and Solar Cells, 2015, 143, 467-472.	6.2	41
31	Thermocleavable Materials for Polymer Solar Cells with High Open Circuit Voltageâ€”A Comparative Study. ACS Applied Materials & Interfaces, 2009, 1, 2768-2777.	8.0	40
32	Flexible ITO-free organic solar cells applying aqueous solution-processed V2O5 hole transport layer: An outdoor stability study. APL Materials, 2016, 4, .	5.1	40
33	On the stability of a variety of organic photovoltaic devices by IPCE and in situ IPCE analyses â€“ the ISOS-3 inter-laboratory collaboration. Physical Chemistry Chemical Physics, 2012, 14, 11824.	2.8	38
34	TOF-SIMS investigation of degradation pathways occurring in a variety of organic photovoltaic devices â€“ the ISOS-3 inter-laboratory collaboration. Physical Chemistry Chemical Physics, 2012, 14, 11780.	2.8	32
35	Synthesis and Self-Assembly of Donorâ€“Acceptorâ€“Donor Based Oligothiophenes and Their Optoelectronic Properties. Journal of Physical Chemistry C, 2011, 115, 14369-14376.	3.1	31
36	Inside or Outside? Linking Outdoor and Indoor Lifetime Tests of ITOâ€Free Organic Photovoltaic Devices for Greenhouse Applications. Energy Technology, 2017, 5, 338-344.	3.8	29

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37	Accurate characterization of OPVs: Device masking and different solar simulators. Solar Energy Materials and Solar Cells, 2013, 110, 24-35.	6.2	28
38	Predicting, categorizing and intercomparing the lifetime of OPVs for different ageing tests. Solar Energy Materials and Solar Cells, 2014, 130, 99-106.	6.2	28
39	Slotâ€Dieâ€Coated V₂O₅ as Hole Transport Layer for Flexible Organic Solar Cells and Optoelectronic Devices. Advanced Engineering Materials, 2016, 18, 1494-1503.	3.5	28
40	Cyclopolymerization-derived block-copolymers of 4,4-bis(octyloxymethyl)-1,6-heptadiyne with 4,4-dipropargyl malonodinitrile for use in photovoltaics. Polymer Chemistry, 2013, 4, 1590-1599.	3.9	24
41	High stability of benzotriazole and benzodithiophene containing medium band-gap polymer solar cell. Solar Energy Materials and Solar Cells, 2018, 174, 433-444.	6.2	24
42	Worldwide outdoor round robin study of organic photovoltaic devices and modules. Solar Energy Materials and Solar Cells, 2014, 130, 281-290.	6.2	23
43	A compact multi-chamber setup for degradation and lifetime studies of organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1389-1397.	6.2	22
44	Role of Stress Factors on the Adhesion of Interfaces in R2R Fabricated Organic Photovoltaics. Advanced Energy Materials, 2016, 6, 1501927.	19.5	18
45	Interlaboratory indoor ageing of roll-to-roll and spin coated organic photovoltaic devices: Testing the ISOS tests. Polymer Degradation and Stability, 2014, 109, 162-170.	5.8	17
46	Improving the Operational Stability of PBDTTTzâ€4 Polymer Solar Cells Modules by Electrode Modification. Advanced Engineering Materials, 2016, 18, 511-517.	3.5	17
47	Comparison of two types of vertically aligned ZnO NRs for highly efficient polymer solar cells. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 272-280.	2.1	15
48	Round robin performance testing of organic photovoltaic devices. Renewable Energy, 2014, 63, 376-387.	8.9	15
49	Model of Organic Solar Cell Photocurrent Including the Effect of Charge Accumulation at Interfaces and Non-Uniform Carrier Generation. IEEE Journal of the Electron Devices Society, 2016, 4, 387-395.	2.1	15
50	Applicability of X-ray reflectometry to studies of polymer solar cell degradation. Solar Energy Materials and Solar Cells, 2008, 92, 793-798.	6.2	14
51	Bipolar polaron pair recombination in polymer/fullerene solar cells. Physical Review B, 2015, 92, .	3.2	13
52	A round robin study of polymer solar cells and small modules across China. Solar Energy Materials and Solar Cells, 2013, 117, 382-389.	6.2	10
53	Comparison of ultramicrotomy and focused-ion-beam for the preparation of TEM and STEM cross section of organic solar cells. Applied Surface Science, 2016, 389, 462-468.	6.1	10
54	Roundâ€Robin Studies on Rollâ€Processed ITOâ€free Organic Tandem Solar Cells Combined with Interâ€Laboratory Stability Studies. Energy Technology, 2015, 3, 423-427.	3.8	7

#	Article	IF	Citations
55	Effects of current stress and thermal storage on polymeric heterojunction P3HT:PCBM solar cell. , 2016, , .		6
56	Application of Photocurrent Model on Polymer Solar Cells Under Forward Bias Stress. IEEE Journal of Photovoltaics, 2016, 6, 1542-1548.	2.5	4
57	Combined characterization techniques to understand the stability of a variety of organic photovoltaic devices: the ISOS-3 inter-laboratory collaboration. , 2012, , .		3
58	A Novel Algorithm for Lifetime Extrapolation, Prediction, and Estimation of Emerging PV Technologies. Small Methods, 2018, 2, 1700285.	8.6	3
59	Stability and degradation of organic photovoltaics fabricated, aged, and characterized by the ISOS 3 inter-laboratory collaboration. , 2012, , .		2
60	Compact multifunctional source-meter system for characterisation of laboratory-scale solar cell devices. Measurement Science and Technology, 2019, 30, 035901.	2.6	2
61	Analysis of electrical and thermal stress effects on PCBM:P3HT solar cells by photocurrent and impedance spectroscopy modeling. , 2017, , .		1
62	A European proficiency test on thinâ€film tandem photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2020, 28, 1258-1276.	8.1	0