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	A European proficiency test on thinâ€film tandem photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2020, 28, 1258-1276.	8.1	0
2	Compact multifunctional source-meter system for characterisation of laboratory-scale solar cell devices. Measurement Science and Technology, 2019, 30, 035901.	2.6	2
3	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
4	A Novel Algorithm for Lifetime Extrapolation, Prediction, and Estimation of Emerging PV Technologies. Small Methods, 2018, 2, 1700285.	8.6	3
5	Improving, characterizing and predicting the lifetime of organic photovoltaics. Journal Physics D: Applied Physics, 2017, 50, 103001.	2.8	48
6	Analysis of electrical and thermal stress effects on PCBM:P3HT solar cells by photocurrent and impedance spectroscopy modeling. , 2017, , .		1
7	Overcoming the Scaling Lag for Polymer Solar Cells. Joule, 2017, 1, 274-289.	24.0	100
8	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
9	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
10	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
11	Application of Photocurrent Model on Polymer Solar Cells Under Forward Bias Stress. IEEE Journal of Photovoltaics, 2016, 6, 1542-1548.	2.5	4
12	Baselines for Lifetime of Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600910.	19.5	42
13	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
14	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
15	Effects of current stress and thermal storage on polymeric heterojunction P3HT:PCBM solar cell. , 2016, , .		6
16	Improving the Operational Stability of PBDTTTzâ€4 Polymer Solar Cells Modules by Electrode Modification. Advanced Engineering Materials, 2016, 18, 511-517.	3.5	17
17	Lifetime of Organic Photovoltaics: Status and Predictions. Advanced Energy Materials, 2016, 6, 1501208.	19.5	119
18	Role of Stress Factors on the Adhesion of Interfaces in R2R Fabricated Organic Photovoltaics. Advanced Energy Materials, 2016, 6, 1501927.	19.5	18

#	Article	IF	Citations
19	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
20	Bipolar polaron pair recombination in polymer/fullerene solar cells. Physical Review B, 2015, 92, .	3.2	13
21	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
22	Lifetime of organic photovoltaics: Linking outdoor and indoor tests. Solar Energy Materials and Solar Cells, 2015, 143, 467-472.	6.2	41
23	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
24	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
25	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
26	Round robin performance testing of organic photovoltaic devices. Renewable Energy, 2014, 63, 376-387.	8.9	15
27	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
28	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
29	Worldwide outdoor round robin study of organic photovoltaic devices and modules. Solar Energy Materials and Solar Cells, 2014, 130, 281-290.	6.2	23
30	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
31	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
32	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
33	Accurate characterization of OPVs: Device masking and different solar simulators. Solar Energy Materials and Solar Cells, 2013, 110, 24-35.	6.2	28
34	Freely available OPVâ€”The fast way to progress. Energy Technology, 2013, 1, 378-381.	3.8	122
35	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
36	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

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37	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
38	Combined characterization techniques to understand the stability of a variety of organic photovoltaic devices: the ISOS-3 inter-laboratory collaboration. , 2012, , .		3
39	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
40	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
41	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
42	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
43	Stability and degradation of organic photovoltaics fabricated, aged, and characterized by the ISOS 3 inter-laboratory collaboration. , 2012, , .		2
44	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
45	Stability of Polymer Solar Cells. Advanced Materials, 2012, 24, 580-612.	21.0	1,249
46	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
47	The OE-A OPV demonstrator anno domini 2011. Energy and Environmental Science, 2011, 4, 4116.	30.8	183
48	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
49	Consensus stability testing protocols for organic photovoltaic materials and devices. Solar Energy Materials and Solar Cells, 2011, 95, 1253-1267.	6.2	812
50	Water and oxygen induced degradation of small molecule organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1268-1277.	6.2	126
51	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
52	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
53	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
54	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

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55	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
56	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
57	Water-Induced Degradation of Polymer Solar Cells Studied by H₂¹⁸O Labeling. ACS Applied Materials & Interfaces, 2009, 1, 102-112.	8.0	271
58	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
59	A setup for studying stability and degradation of polymer solar cells. Solar Energy Materials and Solar Cells, 2008, 92, 736-745.	6.2	78
60	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
61	Bulk Heterojunctions Based on Native Polythiophene. Chemistry of Materials, 2008, 20, 4386-4390.	6.7	112
62	Thermocleavable Low Band Gap Polymers and Solar Cells Therefrom with Remarkable Stability toward Oxygen. Macromolecules, 2008, 41, 8986-8994.	4.8	104