

# Xiaohong Gu

## List of Publications by Year in descending order

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26  
papers

493  
citations

759233

12  
h-index

839539

18  
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26  
all docs

26  
docs citations

26  
times ranked

493  
citing authors

#	ARTICLE	IF	CITATIONS
1	Statistical Methods for Degradation Data With Dynamic Covariates Information and Application to Outdoor Weathering Data. <i>Technometrics</i> , 2015, 57, 180-193.	1.9	69
2	C30 Self-Assembled Monolayers on Silica, Titania, and Zirconia: HPLC Performance, Atomic Force Microscopy, Ellipsometry, and NMR Studies of Molecular Dynamics and Uniformity of Coverage. <i>Journal of the American Chemical Society</i> , 2000, 122, 6997-7011.	13.7	60
3	Depth profiling of degradation of multilayer photovoltaic backsheets after accelerated laboratory weathering: Cross-sectional Raman imaging. <i>Solar Energy Materials and Solar Cells</i> , 2016, 144, 289-299.	6.2	60
4	Differential degradation patterns of photovoltaic backsheets at the array level. <i>Solar Energy</i> , 2018, 163, 62-69.	6.1	42
5	Impact of environmental variables on the degradation of photovoltaic components and perspectives for the reliability assessment methodology. <i>Solar Energy</i> , 2020, 199, 425-436.	6.1	41
6	Probing photodegradation beneath the surface: a depth profiling study of UV-degraded polymeric coatings with microchemical imaging and nanoindentation. <i>Journal of Coatings Technology Research</i> , 2007, 4, 389-399.	2.5	36
7	Drivers for the cracking of multilayer polyamide-based backsheets in field photovoltaic modules: In-depth degradation mapping analysis. <i>Progress in Photovoltaics: Research and Applications</i> , 2020, 28, 704-716.	8.1	33
8	Degradation in photovoltaic encapsulant transmittance: Results of the first PVQAT TG5 artificial weathering study. <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 391-409.	8.1	29
9	A novel test method for quantifying cracking propensity of photovoltaic backsheets after ultraviolet exposure. <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 44-54.	8.1	24
10	Degradation in PV encapsulation transmittance: An interlaboratory study towards a climate-specific test. , 2015, , .		18
11	Green Composite of Instant Coffee and Poly(vinyl alcohol): An Excellent Transparent UV-Shielding Material with Superior Thermal-Oxidative Stability. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 8640-8648.	3.7	17
12	Fluorescence imaging analysis of depth-dependent degradation in photovoltaic laminates: insights to the failure. <i>Progress in Photovoltaics: Research and Applications</i> , 2020, 28, 122-134.	8.1	14
13	Developing methodology for service life prediction of PV materials: Quantitative effects of light intensity and wavelength on discoloration of a glass/EVA/PPE laminate. <i>Solar Energy</i> , 2018, 174, 515-526.	6.1	13
14	Generalized Spatio-Temporal Model of Backsheet Degradation From Field Surveys of Photovoltaic Modules. <i>IEEE Journal of Photovoltaics</i> , 2019, 9, 1374-1381.	2.5	7
15	Transparent backsheets for bifacial photovoltaic (PV) modules: Material characterization and accelerated laboratory testing. <i>Progress in Photovoltaics: Research and Applications</i> , 2022, 30, 959-969.	8.1	5
16	Measurement of crack length in width tapered beam experiments. <i>Journal of Adhesion Science and Technology</i> , 2021, 35, 357-374.	2.6	4
17	Linking accelerated laboratory and outdoor exposure results for PV polymeric materials: a mechanistic study of EVA. <i>Proceedings of SPIE</i> , 2013, , .	0.8	3
18	An experimental approach to investigate behaviors of crack formation of PV backsheets. , 2018, , .		3

#	ARTICLE	IF	CITATIONS
19	Two-dimensional correlation spectroscopy studies on degradation of photovoltaic backsheets from indoor to outdoor. <i>Polymer Degradation and Stability</i> , 2020, 181, 109341.	5.8	3
20	Characterizations of aged Glass/Ethylene Vinyl Acetate/Glass using fluorescence spectroscopy and instrumented indentation. , 2017, , .		2
21	Degradation Models of Photovoltaic Module Backsheets Exposed to Diverse Real World Condition. , 2017, , .		2
22	Fluorescence imaging on the cross-section of photovoltaic laminates aged under different UV intensities. , 2017, , .		2
23	Wavelength Sensitivity in Photodegradation of Polymer PV Backsheets. , 2018, , .		2
24	Nanomechanical and Fluorescence Characterizations of Weathered PV Module Encapsulation. <i>IEEE Journal of Photovoltaics</i> , 2021, 11, 725-730.	2.5	2
25	Characterization of Real-world and Accelerated Exposed PV Module Backsheet Degradation. , 2019, , .		2
26	Transparent Backsheets for Bifacial PV Modules: Material Characterization and Weathering. , 2021, , .		0