Adam D Printz

List of Publications by Year in Descending Order

35 papers	2,182 citations	21 h-index	37 g-index
37 ext. papers	2,499 ext. citations	12.4 avg, IF	5.11 L-index

#	Paper	IF	Citations
35	Residual Film Stresses in Perovskite Solar Cells: Origins, Effects, and Mitigation Strategies. *ACS Omega*, **2021**, 6, 30214-30223	3.9	5
34	Synergistic effect of carotenoid and silicone-based additives for photooxidatively stable organic solar cells with enhanced elasticity. *Journal of Materials Chemistry C*, **2021**, 9, 11838-11850	7.1	2
33	Performance and stability improvements in metal halide perovskite with intralayer incorporation of organic additives. *Journal of Materials Chemistry A*, **2021**, 9, 16281-16338	13	9
32	Self-aligned concentrating immersion-lens arrays for patterning and efficiency recovery in scaffold-reinforced perovskite solar cells. *Applied Materials Today*, **2020**, 20, 100704	6.6	1
31	Perspectives on intrinsic toughening strategies and passivation of perovskite films with organic additives. *Solar Energy Materials and Solar Cells*, **2020**, 209, 110433	6.4	11
30	Poly(triarylamine) composites with carbon nanomaterials for highly transparent and conductive coatings. *Thin Solid Films*, **2018**, 646, 61-66	2.2	6
29	Effect of Cation Composition on the Mechanical Stability of Perovskite Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1702116	21.8	84
28	Engineering Stress in Perovskite Solar Cells to Improve Stability. *Advanced Energy Materials*, **2018**, 8, 1802139	21.8	148
27	Effect of heat, UV radiation, and moisture on the decohesion kinetics of inverted organic solar cells. *Solar Energy Materials and Solar Cells*, **2017**, 170, 239-245	6.4	8
26	Mechanical Properties of Organic Semiconductors for Stretchable, Highly Flexible, and Mechanically Robust Electronics. *Chemical Reviews*, **2017**, 117, 6467-6499	68.1	430
25	Measuring the Glass Transition Temperature of Conjugated Polymer Films with Ultraviolet-Visible Spectroscopy. *Chemistry of Materials*, **2017**, 29, 2646-2654	9.6	47
24	Improved stability and efficiency of perovskite solar cells with submicron flexible barrier films deposited in air. *Journal of Materials Chemistry A*, **2017**, 5, 22975-22983	13	29
23	Scaffold-reinforced perovskite compound solar cells. *Energy and Environmental Science*, **2017**, 10, 2500-2508	33.4	50
22	Efficient Characterization of Bulk Heterojunction Films by Mapping Gradients by Reversible Contact with Liquid Metal Top Electrodes. *Chemistry of Materials*, **2017**, 29, 389-398	9.6	9
21	Fatigue in organic semiconductors: Spectroscopic evolution of microstructure due to cyclic loading in poly(3-heptylthiophene). *Synthetic Metals*, **2016**, 217, 144-151	3.6	11
20	Metallic Nanoislands on Graphene as Highly Sensitive Transducers of Mechanical, Biological, and Optical Signals. *Nano Letters*, **2016**, 16, 1375-80	11.5	52
19	Wearable organic solar cells with high cyclic bending stability: Materials selection criteria. *Solar Energy Materials and Solar Cells*, **2016**, 144, 438-444	6.4	93

18	Competition between deformability and charge transport in semiconducting polymers for flexible and stretchable electronics. *Applied Physics Reviews*, **2016**, 3, 021302	17.3	69
17	Large increase in stretchability of organic electronic materials by encapsulation. *Extreme Mechanics Letters*, **2016**, 8, 78-87	3.9	19
16	Plasticization of PEDOT:PSS by Common Additives for Mechanically Robust Organic Solar Cells and Wearable Sensors. *Advanced Functional Materials*, **2015**, 25, 427-436	15.6	234
15	Viability of stretchable poly(3-heptylthiophene) (P3HpT) for organic solar cells and field-effect transistors. *Synthetic Metals*, **2015**, 203, 208-214	3.6	67
14	Toward organic electronics with properties inspired by biological tissue. *Journal of Materials Chemistry B*, **2015**, 3, 4947-4952	7.3	35
13	Asymmetric Colloidal Janus Particle Formation Is Core-Size-Dependent. *Langmuir*, **2015**, 31, 9148-54	4	10
12	Role of molecular mixing on the stiffness of polymer:fullerene bulk heterojunction films. *Solar Energy Materials and Solar Cells*, **2015**, 134, 64-72	6.4	18
11	Mechanical degradation and stability of organic solar cells: molecular and microstructural determinants. *Energy and Environmental Science*, **2015**, 8, 55-80	35.4	172
10	[70]PCBM and Incompletely Separated Grades of Methanofullerenes Produce Bulk Heterojunctions with Increased Robustness for Ultra-Flexible and Stretchable Electronics. *Chemistry of Materials*, **2015**, 27, 3902-3911	9.6	45
9	Yield Point of Semiconducting Polymer Films on Stretchable Substrates Determined by Onset of Buckling. *ACS Applied Materials & Interfaces*, **2015**, 7, 23257-64	9.5	49
8	Metal-assisted exfoliation (MAE): green, roll-to-roll compatible method for transferring graphene to flexible substrates. *Nanotechnology*, **2015**, 26, 045301	3.4	30
7	Molecularly Stretchable Electronics. *Chemistry of Materials*, **2014**, 26, 3028-3041	9.6	157
6	Stretching and conformal bonding of organic solar cells to hemispherical surfaces. *Energy and Environmental Science*, **2014**, 7, 370-378	35.4	56
5	Increased elasticity of a low-bandgap conjugated copolymer by random segmentation for mechanically robust solar cells. *RSC Advances*, **2014**, 4, 13635-13643	3.7	67
4	Designing hollow nano gold golf balls. *ACS Applied Materials & Interfaces*, **2014**, 6, 9937-41	9.5	31
3	Best of Both Worlds: Conjugated Polymers Exhibiting Good Photovoltaic Behavior and High Tensile Elasticity. *Macromolecules*, **2014**, 47, 1981-1992	5.5	121
2	Toward intrinsically stretchable organic semiconductors: mechanical properties of high-performance conjugated polymers **2014**,		1
1	Photoresist-free patterning by mechanical abrasion of water-soluble lift-off resists and bare substrates: toward green fabrication of transparent electrodes. *PLoS ONE*, **2013**, 8, e83939	3.7	6