Samuel E Root

List of Publications by Year
in descending order

23 papers	1,739 citations	471509 17 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	2789 citing authors

#	Article	IF	Citations
1	Mechanical Properties of Organic Semiconductors for Stretchable, Highly Flexible, and Mechanically Robust Electronics. Chemical Reviews, 2017, 117, 6467-6499.	47.7	624
2	Mechanical degradation and stability of organic solar cells: molecular and microstructural determinants. Energy and Environmental Science, 2015, 8, 55-80.	30.8	205
3	Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer Films for Stretchable Electronics. ACS Applied Materials & Interfaces, 2017, 9, 8855-8862.	8.0	136
4	Measuring the Glass Transition Temperature of Conjugated Polymer Films with Ultravioletâ€“Visible Spectroscopy. Chemistry of Materials, 2017, 29, 2646-2654.	6.7	90
5	Poly(3-hexylthiophene) (P3HT): fruit fly or outlier in organic solar cell research?. Journal of Materials Chemistry A, 2017, 5, 11396-11400.	10.3	74
6	Predicting the Mechanical Properties of Organic Semiconductors Using Coarse-Grained Molecular Dynamics Simulations. Macromolecules, 2016, 49, 2886-2894.	4.8	69
7	Stretchable and Degradable Semiconducting Block Copolymers. Macromolecules, 2018, 51, 5944-5949.	4.8	68
8	Effects of flexibility and branching of side chains on the mechanical properties of low-bandgap conjugated polymers. Polymer Chemistry, 2018, 9, 4354-4363.	3.9	68
9	Metallic Nanoislands on Graphene as Highly Sensitive Transducers of Mechanical, Biological, and Optical Signals. Nano Letters, 2016, 16, 1375-1380.	9.1	66
10	Modelling the morphology and thermomechanical behaviour of low-bandgap conjugated polymers and bulk heterojunction films. Energy and Environmental Science, 2017, 10, 558-569.	30.8	60
11	Quantifying the Fracture Behavior of Brittle and Ductile Thin Films of Semiconducting Polymers. Chemistry of Materials, 2017, 29, 10139-10149.	6.7	50
12	Grapheneâ€“Metal Composite Sensors with Near-Zero Temperature Coefficient of Resistance. ACS Omega, 2017, 2, 626-630.	3.5	42
13	Rectification in Molecular Tunneling Junctions Based on Alkanethiolates with Bipyridineâ€“Metal Complexes. Journal of the American Chemical Society, 2021, 143, 2156-2163.	13.7	40
14	Storing and Reading Information in Mixtures of Fluorescent Molecules. ACS Central Science, 2021, 7, 1728-1735.	11.3	29
15	Metallic nanoislands on graphene: a metamaterial for chemical, mechanical, optical, and biological applications. Nanoscale Horizons, 2017, 2, 311-318.	8.0	24
16	Ionotactile Stimulation: Nonvolatile Ionic Gels for Humanâ€“Machine Interfaces. ACS Omega, 2018, 3, 662-666.	3.5	24
17	Interfacial Drawing: Roll-to-Roll Coating of Semiconducting Polymer and Barrier Films onto Plastic Foils and Textiles. Chemistry of Materials, 2019, 31, 9078-9086.	6.7	19
18	Measurement of Cohesion and Adhesion of Semiconducting Polymers by Scratch Testing: Effect of Side-Chain Length and Degree of Polymerization. ACS Macro Letters, 2018, 7, 1003-1009.	4.8	14

#	Article	IF	Citations
19	Electropneumotactile Stimulation: Multimodal Haptic Actuators Enabled by a Stretchable Conductive Polymer on Inflatable Pockets. Advanced Materials Technologies, 2020, 5, 1901119.	5.8	13
20	Characterizing Chelation at Surfaces by Charge Tunneling. Journal of the American Chemical Society, 2021, 143, 5967-5977.	13.7	10
21	Estimating the Density of Thin Polymeric Films Using Magnetic Levitation. ACS Nano, 2021, 15, 15676-15686.	14.6	10
22	Controlled Hysteresis of Conductance in Molecular Tunneling Junctions. ACS Nano, 2022, 16, 4206-4216.	14.6	3
23	An Expanding Foamâ€Fabric Orthopedic Cast. Advanced Materials Technologies, 0, , 2101563.	5.8	1