Suchol Savagatrup

List of Publications by Citations

43 papers	3,032 citations	27 h-index	45 g-index
45 ext. papers	3,547 ext. citations	13.5 avg, IF	5.6 L-index

#	Paper	IF	Citations
43	Carbon Nanotube Chemical Sensors. *Chemical Reviews*, **2019**, 119, 599-663	68.1	444
42	Mechanical Properties of Organic Semiconductors for Stretchable, Highly Flexible, and Mechanically Robust Electronics. *Chemical Reviews*, **2017**, 117, 6467-6499	68.1	430
41	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
40	Mechanical Properties of Conjugated Polymers and Polymer-Fullerene Composites as a Function of Molecular Structure. *Advanced Functional Materials*, **2014**, 24, 1169-1181	15.6	181
39	Mechanical degradation and stability of organic solar cells: molecular and microstructural determinants. *Energy and Environmental Science*, **2015**, 8, 55-80	35.4	172
38	Molecularly Stretchable Electronics. *Chemistry of Materials*, **2014**, 26, 3028-3041	9.6	157
37	Best of Both Worlds: Conjugated Polymers Exhibiting Good Photovoltaic Behavior and High Tensile Elasticity. *Macromolecules*, **2014**, 47, 1981-1992	5.5	121
36	Mechanical Properties of a Library of Low-Band-Gap Polymers. *Chemistry of Materials*, **2016**, 28, 2363-2373	9.6	101
35	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
34	Role of Mechanical Factors in Controlling the Structure–Function Relationship of PFSA Ionomers. *Macromolecules*, **2012**, 45, 7467-7476	5.5	89
33	Viability of stretchable poly(3-heptylthiophene) (P3HpT) for organic solar cells and field-effect transistors. *Synthetic Metals*, **2015**, 203, 208-214	3.6	67
32	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
31	Effect of Broken Conjugation on the Stretchability of Semiconducting Polymers. *Macromolecular Rapid Communications*, **2016**, 37, 1623-1628	4.8	64
30	Stretching and conformal bonding of organic solar cells to hemispherical surfaces. *Energy and Environmental Science*, **2014**, 7, 370-378	35.4	56
29	Janus Emulsions for the Detection of Bacteria. *ACS Central Science*, **2017**, 3, 309-313	16.8	54
28	Insights into Magneto-Optics of Helical Conjugated Polymers. *Journal of the American Chemical Society*, **2018**, 140, 6501-6508	16.4	53
27	Modelling the morphology and thermomechanical behaviour of low-bandgap conjugated polymers and bulk heterojunction films. *Energy and Environmental Science*, **2017**, 10, 558-569	35.4	50

26	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
25	Predicting the Mechanical Properties of Organic Semiconductors Using Coarse-Grained Molecular Dynamics Simulations. *Macromolecules*, **2016**, 49, 2886-2894	5.5	49
24	Mechanical Properties of Solution-Processed Small-Molecule Semiconductor Films. *ACS Applied Materials & Interfaces*, **2016**, 8, 11649-57	9.5	46
23	[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
22	Stretchable and Degradable Semiconducting Block Copolymers. *Macromolecules*, **2018**, 51, 5944-5949	5.5	44
21	Chemiresistive Sensor Array and Machine Learning Classification of Food. *ACS Sensors*, **2019**, 4, 2101-2108	9.2	43
20	Effects of flexibility and branching of side chains on the mechanical properties of low-bandgap conjugated polymers. *Polymer Chemistry*, **2018**, 9, 4354-4363	4.9	39
19	Rapid Detection of via Directional Emission from Carbohydrate-Functionalized Dynamic Double Emulsions. *ACS Central Science*, **2019**, 5, 789-795	16.8	36
18	Janus Graphene: Scalable Self-Assembly and Solution-Phase Orthogonal Functionalization. *Advanced Materials*, **2019**, 31, e1900438	24	31
17	Metal-assisted exfoliation (MAE): green, roll-to-roll compatible method for transferring graphene to flexible substrates. *Nanotechnology*, **2015**, 26, 045301	3.4	30
16	Bio-Inspired Carbon Monoxide Sensors with Voltage-Activated Sensitivity. *Angewandte Chemie - International Edition*, **2017**, 56, 14066-14070	16.4	22
15	Waveguide-based chemo- and biosensors: complex emulsions for the detection of caffeine and proteins. *Lab on A Chip*, **2019**, 19, 1327-1331	7.2	21
14	Precision pH Sensor Based on WO Nanofiber-Polymer Composites and Differential Amplification. *ACS Sensors*, **2019**, 4, 2593-2598	9.2	20
13	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
12	Interfacial Polymerization on Dynamic Complex Colloids: Creating Stabilized Janus Droplets. *ACS Applied Materials & Interfaces*, **2017**, 9, 7804-7811	9.5	13
11	Morphology-Dependent Luminescence in Complex Liquid Colloids. *Journal of the American Chemical Society*, **2019**, 141, 3802-3806	16.4	13
10	Programmable Emulsions via Nucleophile-Induced Covalent Surfactant Modifications. *Chemistry of Materials*, **2020**, 32, 4663-4671	9.6	12
9	Porous Ion Exchange Polymer Matrix for Ultrasmall Au Nanoparticle-Decorated Carbon Nanotube Chemiresistors. *Chemistry of Materials*, **2019**, 31, 5413-5420	9.6	12

8	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
7	Bio-Inspired Carbon Monoxide Sensors with Voltage-Activated Sensitivity. *Angewandte Chemie*, **2017**, 129, 14254-14258	3.6	10
6	Fluorescent Janus emulsions for biosensing of. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 11923-11930	11.5	10
5	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
4	Dynamic Complex Emulsions as Amplifiers for On-Chip Photonic Cavity-Enhanced Resonators. *ACS Sensors*, **2020**, 5, 1996-2002	9.2	5
3	Rapid Detection of Sepsis: Recent Advances in Biomarker Sensing Platforms. *ACS Omega*, **2021**, 6, 31390-31395	3.7	3
2	Modular Synthesis of Polymers Containing 2,5-di(thiophenyl)-N-arylpyrrole. *Journal of Polymer Science Part A*, **2018**, 56, 1133-1139	2.5	2
1	Toward intrinsically stretchable organic semiconductors: mechanical properties of high-performance conjugated polymers **2014**,		1