Robert S Gurney

List of Publications by Citations

34 papers	1,335 citations	23 h-index	35 g-index
35 ext. papers	1,571 ext. citations	10.3 avg, IF	4.93 L-index

#	Paper	IF	Citations
34	Molecular engineering of conjugated polymers for efficient hole transport and defect passivation in perovskite solar cells. *Nano Energy*, **2018**, 45, 28-36	17.1	174
33	Molecular Order Control of Non-fullerene Acceptors for High-Efficiency Polymer Solar Cells. *Joule*, **2019**, 3, 819-833	27.8	144
32	A review of non-fullerene polymer solar cells: from device physics to morphology control. *Reports on Progress in Physics*, **2019**, 82, 036601	14.4	127
31	Ionic Additive Engineering Toward High-Efficiency Perovskite Solar Cells with Reduced Grain Boundaries and Trap Density. *Advanced Functional Materials*, **2018**, 28, 1801985	15.6	101
30	Achieving over 11% power conversion efficiency in PffBT4T-2OD-based ternary polymer solar cells with enhanced open-circuit-voltage and suppressed charge recombination. *Nano Energy*, **2018**, 44, 155-163	17.1	77
29	Environmentally durable superhydrophobic surfaces with robust photocatalytic self-cleaning and self-healing properties prepared via versatile film deposition methods. *Journal of Colloid and Interface Science*, **2018**, 527, 107-116	9.3	52
28	Contrasting Effects of Energy Transfer in Determining Efficiency Improvements in Ternary Polymer Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1704212	15.6	49
27	Superhydrophobic and photocatalytic PDMS/TiO2 coatings with environmental stability and multifunctionality. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 561, 101-108	5.1	48
26	Switching off the tackiness of a nanocomposite adhesive in 30 s via infrared sintering. *ACS Applied Materials & Interfaces*, **2012**, 4, 5442-52	9.5	40
25	Correlating Three-dimensional Morphology With Function in PBDB-T:IT-M Non-Fullerene Organic Solar Cells. *Solar Rrl*, **2018**, 2, 1800114	7.1	39
24	Influences of Non-fullerene Acceptor Fluorination on Three-Dimensional Morphology and Photovoltaic Properties of Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 26194-26203	9.5	33
23	Retarding the Crystallization of a Nonfullerene Electron Acceptor for High-Performance Polymer Solar Cells. *Advanced Functional Materials*, **2018**, 29, 1807662	15.6	33
22	Restrained light-soaking and reduced hysteresis in perovskite solar cells employing a helical perylene diimide interfacial layer. *Journal of Materials Chemistry A*, **2018**, 6, 10379-10387	13	33
21	Correlating the electron-donating core structure with morphology and performance of carbon oxygen-bridged ladder-type non-fullerene acceptor based organic solar cells. *Nano Energy*, **2019**, 61, 318-326	17.1	32
20	Morphology and efficiency enhancements of PTB7-Th:ITIC nonfullerene organic solar cells processed via solvent vapor annealing. *Journal of Energy Chemistry*, **2019**, 37, 148-156	12	30
19	Influence of Polyol Molecular Weight and Type on the Tack and Peel Properties of Waterborne Polyurethane Pressure-Sensitive Adhesives. *Macromolecular Reaction Engineering*, **2013**, 7, 493-503	1.5	29
18	Halogen-substituted fullerene derivatives for interface engineering of perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 21368-21378	13	26

17	Mechanical properties of a waterborne pressure-sensitive adhesive with a percolating poly(acrylic acid)-based diblock copolymer network: effect of pH. *Journal of Colloid and Interface Science*, **2015**, 448, 8-16	9.3	25
16	Eliminating Light-Soaking Instability in Planar Heterojunction Perovskite Solar Cells by Interfacial Modifications. *ACS Applied Materials & Interfaces*, **2018**, 10, 33144-33152	9.5	24
15	Regulating the morphology of fluorinated non-fullerene acceptor and polymer donor via binary solvent mixture for high efficiency polymer solar cells. *Science China Chemistry*, **2019**, 62, 1221-1229	7.9	23
14	Trap passivation and efficiency improvement of perovskite solar cells by a guanidinium additive. *Materials Chemistry Frontiers*, **2019**, 3, 1357-1364	7.8	23
13	Ligand-Exchange of Low-Temperature Synthesized CsPbBr3 Perovskite toward High-Efficiency Light-Emitting Diodes. *Small Methods*, **2019**, 3, 1800489	12.8	23
12	The impacts of PbI2 purity on the morphology and device performance of one-step spray-coated planar heterojunction perovskite solar cells. *Sustainable Energy and Fuels*, **2018**, 2, 436-443	5.8	23
11	TDI/TiO Hybrid Networks for Superhydrophobic Coatings with Superior UV Durability and Cation Adsorption Functionality. *ACS Applied Materials & Interfaces*, **2019**, 11, 7488-7497	9.5	19
10	Evolution of molecular aggregation in bar-coated non-fullerene organic solar cells. *Materials Chemistry Frontiers*, **2019**, 3, 1062-1070	7.8	19
9	Bright perovskite light-emitting diodes with improved film morphology and reduced trap density via surface passivation using quaternary ammonium salts. *Organic Electronics*, **2019**, 67, 187-193	3.5	18
8	Versatile Device Architectures for High-Performing Light-Soaking-Free Inverted Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 32678-32687	9.5	17
7	Improved Performance of Perovskite Light-Emitting Diodes by Dual Passivation with an Ionic Additive. *ACS Applied Energy Materials*, **2019**, 2, 3336-3342	6.1	13
6	Sodium bromide additive improved film morphology and performance in perovskite light-emitting diodes. *Applied Physics Letters*, **2017**, 111, 053301	3.4	13
5	Correlating Nanoscale Morphology with Device Performance in Conventional and Inverted PffBT4T-2OD:PC71BM Polymer Solar Cells. *ACS Applied Energy Materials*, **2018**, 1, 3505-3512	6.1	7
4	Improved efficiency in fullerene and non-fullerene polymer solar cells having an interdigitated interface with the electron transport layer. *Materials Chemistry Frontiers*, **2018**, 2, 1859-1865	7.8	6
3	Large-area patterning of the tackiness of a nanocomposite adhesive by sintering of nanoparticles under IR radiation. *ACS Applied Materials & Interfaces*, **2013**, 5, 2137-45	9.5	5
2	Perovskite Solar Cells: Ionic Additive Engineering Toward High-Efficiency Perovskite Solar Cells with Reduced Grain Boundaries and Trap Density (Adv. Funct. Mater. 34/2018). *Advanced Functional Materials*, **2018**, 28, 1870240	15.6	3
1	Power Density Threshold for Switching Off the Tack Adhesion of Colloidal Nanocomposites. *Macromolecular Chemistry and Physics*, **2014**, 215, 998-1003	2.6	1