Roger C Hiorns

List of Publications by Citations

63 papers	1,949 citations	22 h-index	43 g-index
72 ext. papers	2,095 ext. citations	4.8 avg, IF	4.5 L-index

#	Paper	IF	Citations
63	Review of electronic and optical properties of semiconducting π-conjugated polymers: applications in optoelectronics. *Polymer International*, **2004**, 53, 1397-1412	3.3	267
62	High Molecular Weights, Polydispersities, and Annealing Temperatures in the Optimization of Bulk-Heterojunction Photovoltaic Cells Based on Poly(3-hexylthiophene) or Poly(3-butylthiophene). *Advanced Functional Materials*, **2006**, 16, 2263-2273	15.6	195
61	Block copolymer strategies for solar cell technology. *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 1131-1156	2.6	163
60	Poly(3-hexylthiophene) Based Block Copolymers Prepared by "Click" Chemistry. *Macromolecules*, **2008**, 41, 7033-7040	5.5	129
59	Self-Assembled Structures from an Amphiphilic Multiblock Copolymer Containing Rigid Semiconductor Segments. *Macromolecules*, **2000**, 33, 8289-8294	5.5	112
58	Conjugated rod–coil block copolymers and optoelectronic applications. *Polymer International*, **2010**, 59, 1452-1476	3.3	85
57	Conjugated-polymer grafting on inorganic and organic substrates: A new trend in organic electronic materials. *Progress in Polymer Science*, **2014**, 39, 1847-1877	29.6	64
56	The first example of a poly(ethylene oxide)–poly(methylphenylsilane) amphiphilic block copolymer: vesicle formation in water. *Chemical Communications*, **1998**, 1445-1446	5.8	57
55	New Insights into the Mechanisms of Photodegradation/Stabilization of P3HT:PCBM Active Layers Using Poly(3-hexyl-d13-Thiophene). *Chemistry of Materials*, **2013**, 25, 4522-4528	9.6	54
54	Synthesis of Donor–Acceptor Multiblock Copolymers Incorporating Fullerene Backbone Repeat Units. *Macromolecules*, **2010**, 43, 6033-6044	5.5	47
53	Neutron Scattering of Hydrophobically Modified Poly(ethylene oxide) in Aqueous Solutions. *Macromolecules*, **2002**, 35, 7436-7447	5.5	46
52	Synthesis and Characterization of Star Copolymers Consisting of Fullerene and Conjugated Polyphenylene: 6-star-C60[styrene–poly(1,4-phenylene)-block-polystyrene] and 6-star-C60[polystyrene-block-poly(1,4-phenylene)]. *Macromolecules*, **2002**, 35, 6132-6141	5.5	46
51	Charge transport and its characterization using photo-CELIV in bulk heterojunction solar cells. *Polymer International*, **2017**, 66, 13-25	3.3	45
50	Synthesis, Thermal Processing, and Thin Film Morphology of Poly(3-hexylthiophene)–Poly(styrenesulfonate) Block Copolymers. *Macromolecules*, **2015**, 48, 2107-2117	5.5	41
49	Main-Chain Fullerene Polymers for Photovoltaic Devices. *Macromolecules*, **2009**, 42, 3549-3558	5.5	39
48	Photovoltaic cells based on polythiophenes carrying lateral phenyl groups. *Thin Solid Films*, **2008**, 516, 7199-7204	2.2	36
47	Extremely regio-regular poly (3-alkylthiophene)s from simplified chain-growth Grignard metathesis polymerisations and the modification of their chain-ends. *Polymer International*, **2006**, 55, 608-620	3.3	35

46	Alternatively linking fullerene and conjugated polymers. *Journal of Polymer Science Part A*, **2009**, 47, 2304-2317	2.5	33
45	Is there a photostable conjugated polymer for efficient solar cells?. *Polymer Degradation and Stability*, **2015**, 112, 175-184	4.7	31
44	Association of Hydrophobically End-Capped Poly(ethylene oxide). 1. Preparation of Polymers and Characterization of Critical Association Concentrations. *Langmuir*, **2003**, 19, 2058-2066	4	31
43	Fullerene-capped copolymers for bulk heterojunctions: device stability and efficiency improvements. *Journal of Materials Chemistry A*, **2015**, 3, 18207-18221	13	25
42	Suppression of Thermally Induced Fullerene Aggregation in Polyfullerene-Based Multiacceptor Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 10971-10982	9.5	23
41	A universal route to improving conjugated macromolecule photostability. *RSC Advances*, **2014**, 4, 54919-54923	3.7	20
40	Structure and properties of hydrophobically end-capped poly(ethylene oxide) solutions in the presence of monovalent and divalent cations. *Journal of Colloid and Interface Science*, **2002**, 251, 398-408	9.3	20
39	Facile synthesis of poly(3-hexylthiophene)-block-poly(ethylene oxide) copolymers via Steglich esterification. *Polymer Chemistry*, **2013**, 4, 3652	4.9	19
38	Enhanced thermal stability of organic solar cells by using photolinkable end-capped polythiophenes. *Polymer Chemistry*, **2013**, 4, 4145	4.9	18
37	Electronic structure and optical properties of poly[3-(4-octylphenoxy)thiophene]: Experimental and theoretical studies. *Journal of Polymer Science Part A*, **2008**, 46, 7505-7516	2.5	18
36	Synthesis of Main-Chain Poly(fullerene)s from a Sterically Controlled Azomethine Ylide Cycloaddition Polymerization. *Macromolecules*, **2016**, 49, 1681-1691	5.5	16
35	Effect of spacer insertion in a commonly used dithienosilole/benzothiadiazole-based low band gap copolymer for polymer solar cells. *European Polymer Journal*, **2013**, 49, 4176-4188	5.2	16
34	Versatile functional poly(3-hexylthiophene) for hybrid particles synthesis by the grafting onto technique: Core@shell ZnO nanorods. *Journal of Polymer Science Part A*, **2014**, 52, 30-38	2.5	16
33	Theoretical and experimental study of low band gap polymers for organic solar cells. *Physical Chemistry Chemical Physics*, **2012**, 14, 5613-9	3.6	16
32	Surface Viscoelastic Properties of Spread Films of a Polysilylene–Poly(ethylene oxide) Multiblock Copolymer at the Air–Water Interface. *Macromolecules*, **2000**, 33, 2651-2661	5.5	15
31	Synthesis and characterization of poly(methylphenylsilylene)–poly(ethylene oxide) and poly(methylphenylsilylene)–polyisoprene multiblock copolymers. *Polymer International*, **2001**, 50, 1016-1028	3.3	12
30	Increased thermal stabilization of polymer photovoltaic cells with oligomeric PCBM. *Journal of Materials Chemistry C*, **2016**, 4, 8121-8129	7.1	12
29	Main-chain poly(fullerene) multiblock copolymers as organic photovoltaic donor–acceptors and stabilizers. *Journal of Materials Chemistry A*, **2017**, 5, 7533-7544	13	11

28	A convenient route to high molecular weight highly isotactic polystyrene using Ziegler–Natta catalysts and ultrasound. *Polymer*, **2002**, 43, 3365-3369	3.9	11
27	A tentative theory for conjugated rod-coil multi-block copolymer assembly and the initial characterisation by atomic force microscopy and small angle neutron scattering of poly(polymethylphenylsilane-block-polyisoprene). *Synthetic Metals*, **2003**, 139, 463-469	3.6	11
26	Sterically controlled azomethine ylide cycloaddition polymerization of phenyl-C61-butyric acid methyl ester. *Chemical Communications*, **2016**, 52, 6107-10	5.8	10
25	Oligo- and poly(fullerene)s for photovoltaic applications: Modeled electronic behaviors and synthesis. *Journal of Polymer Science Part A*, **2017**, 55, 1345-1355	2.5	9
24	Correlating geometry of multidimensional carbon allotropes molecules and stability. *Organic Electronics*, **2015**, 26, 395-399	3.5	9
23	Main-chain alternating fullerene and dye oligomers for organic photovoltaics. *Polymer International* , **2017**, 66, 388-398	3.3	9
22	The synthesis of organometallic rod–coil block copolymers from polysilanes. *Polymer International*, **2009**, 58, 323-329	3.3	9
21	Designing intrinsically photostable low band gap polymers: a smart tool combining EPR spectroscopy and DFT calculations. *Journal of Materials Chemistry A*, **2016**, 4, 15647-15654	13	9
20	Neutron scattering of hydrophobically modified poly(ethylene oxide) in aqueous solutions in the presence of latex particles. *Polymer*, **2002**, 43, 2677-2689	3.9	8
19	Molecular organization relationship of low-bandgap polymers at the air-water interface and in solid films. *Journal of Molecular Liquids*, **2018**, 268, 114-121	6	7
18	Targeting ideal acceptor-donor materials based on hexabenzocoronene. *Journal of Molecular Structure*, **2018**, 1161, 442-452	3.4	5
17	Graphene-based acceptor molecules for organic photovoltaic cells: a predictive study identifying high modularity and morphological stability. *RSC Advances*, **2016**, 6, 13653-13656	3.7	5
16	A Brief Guide to Polymer Nomenclature. *Polymer*, **2013**, 54, 3-4	3.9	5
15	Langmuir and Langmuir–Blodgett films of low-bandgap polymers. *Polymer International*, **2018**, 67, 1028-1034	3.3	2
14	In Situ Generation of Fullerene from a Poly(fullerene). *Journal of Polymer Science, Part B: Polymer Physics*, **2019**, 57, 1434-1452	2.6	2
13	A brief guide to polymer nomenclature from IUPAC. *Colloid and Polymer Science*, **2013**, 291, 457-458	2.4	2
12	Effect of molar mass and regioregularity on the photovoltaic properties of a reduced bandgap phenyl-substituted polythiophene. *Journal of Polymer Science Part A*, **2012**, 50, 1953-1966	2.5	2
11	Regioregular Phenyl and Phenoxy Substituted Polythiophenes for Bulk Heterojunction Solar Cells. *Macromolecular Symposia*, **2008**, 268, 19-24	0.8	2

10	Optical characterization of polychromatic organic light emitting diodes. *Journal of Applied Physics*, **2005**, 97, 043103	2.5	2
9	Review: materials and modelling for organic photovoltaic devices. *Polymer International*,	3.3	2
8	Understanding the langmuir and Langmuir-Schaefer film conformation of low-bandgap polymers and their bulk heterojunctions with PCBM. *Nanotechnology*, **2020**, 31, 315712	3.4	1
7	Towards the synthesis of poly(azafulleroid)s: main chain fullerene oligomers for organic photovoltaic devices. *Polymer International*, **2017**, 66, 1364-1371	3.3	1
6	A concise guide to polymer nomenclature for authors of papers and reports in polymer science and technology (IUPAC Technical Report). *Pure and Applied Chemistry*, **2020**, 92, 797-813	2.1	1
5	The Contribution of IUPAC to Polymer Science Education. *Journal of Chemical Education*, **2017**, 94, 1618-1628	1.4	0
4	Terminology and Nomenclature: A Prerequisite or Nuisance for Polymer Science Education?. *Macromolecular Symposia*, **2015**, 355, 13-19	0.8	0
3	In focus: opto- and electro-active polymers Editorial. *Polymer International*, **2006**, 55, 571-571	3.3	0
2	List of keywords for polymer science (IUPAC Technical Report). *Pure and Applied Chemistry*, **2019**, 91, 997-1027	2.1	
1	Hybrid Conjugated Polymer–Inorganic Objects: Elaboration of Novel Organic Electronic Materials **2017**, 241-299		