Hugo Bronstein

List of Publications by Citations

83 papers	6,189 citations	38 h-index	78 g-index
94 ext. papers	7,003 ext. citations	10.5 avg, IF	5.85 L-index

#	Paper	IF	Citations
83	Thieno[3,2-b]thiophene-diketopyrrolopyrrole-containing polymers for high-performance organic field-effect transistors and organic photovoltaic devices. *Journal of the American Chemical Society*, **2011**, 133, 3272-5	16.4	809
82	On the application of the tolerance factor to inorganic and hybrid halide perovskites: a revised system. *Chemical Science*, **2016**, 7, 4548-4556	9.4	507
81	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. *Nature Communications*, **2013**, 4, 2238	17.4	384
80	Recent Progress in High-Mobility Organic Transistors: A Reality Check. *Advanced Materials*, **2018**, 30, e1801079	24	358
79	Photocurrent enhancement from diketopyrrolopyrrole polymer solar cells through alkyl-chain branching point manipulation. *Journal of the American Chemical Society*, **2013**, 135, 11537-40	16.4	248
78	Exploring the origin of high optical absorption in conjugated polymers. *Nature Materials*, **2016**, 15, 746-52	27	233
77	Externally initiated regioregular P3HT with controlled molecular weight and narrow polydispersity. *Journal of the American Chemical Society*, **2009**, 131, 12894-5	16.4	230
76	Design of semiconducting indacenodithiophene polymers for high performance transistors and solar cells. *Accounts of Chemical Research*, **2012**, 45, 714-22	24.3	229
75	The role of chemical design in the performance of organic semiconductors. *Nature Reviews Chemistry*, **2020**, 4, 66-77	34.6	205
74	Effect of Fluorination on the Properties of a Donor–Acceptor Copolymer for Use in Photovoltaic Cells and Transistors. *Chemistry of Materials*, **2013**, 25, 277-285	9.6	201
73	Charge recombination in organic photovoltaic devices with high open-circuit voltages. *Journal of the American Chemical Society*, **2008**, 130, 13653-8	16.4	196
72	On the energetic dependence of charge separation in low-band-gap polymer/fullerene blends. *Journal of the American Chemical Society*, **2012**, 134, 18189-92	16.4	160
71	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. *Macromolecules*, **2011**, 44, 6649-6652	5.5	152
70	Correlating triplet yield, singlet oxygen generation and photochemical stability in polymer/fullerene blend films. *Chemical Communications*, **2013**, 49, 1291-3	5.8	125
69	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors *Chemistry of Materials*, **2011**, 23, 768-770	9.6	120
68	The influence of polymer purification on photovoltaic device performance of a series of indacenodithiophene donor polymers. *Advanced Materials*, **2013**, 25, 2029-34	24	119
67	Morphological stability and performance of polymer-fullerene solar cells under thermal stress: the impact of photoinduced PC60BM oligomerization. *ACS Nano*, **2014**, 8, 1297-308	16.7	111

66	Identification of oxidation products of squalene in solution and in latent fingerprints by ESI-MS and LC/APCI-MS. *Analytical Chemistry*, **2007**, 79, 2650-7	7.8	87
65	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. *Polymers*, **2016**, 8,	4.5	81
64	A Simple Molecular Design Strategy for Delayed Fluorescence toward 1000 nm. *Journal of the American Chemical Society*, **2019**, 141, 18390-18394	16.4	77
63	Synthesis and Exciton Dynamics of Donor-Orthogonal Acceptor Conjugated Polymers: Reducing the Singlet-Triplet Energy Gap. *Journal of the American Chemical Society*, **2017**, 139, 11073-11080	16.4	71
62	Thieno[3,2-b]thiophene-diketopyrrolopyrrole Containing Polymers for Inverted Solar Cells Devices with High Short Circuit Currents. *Advanced Functional Materials*, **2013**, 23, 5647-5654	15.6	71
61	Scalable route to CH3NH3PbI3 perovskite thin films by aerosol assisted chemical vapour deposition. *Journal of Materials Chemistry A*, **2015**, 3, 9071-9073	13	67
60	Alkyl Chain Extension as a Route to Novel Thieno[3,2-b]thiophene Flanked Diketopyrrolopyrrole Polymers for Use in Organic Solar Cells and Field Effect Transistors. *Macromolecules*, **2013**, 46, 5961-5967	5.5	67
59	Charge recombination and exciton annihilation reactions in conjugated polymer blends. *Journal of the American Chemical Society*, **2010**, 132, 328-35	16.4	63
58	Constructing Regioregular Star Poly(3-hexylthiophene) via Externally Initiated Kumada Catalyst-Transfer Polycondensation.. *ACS Macro Letters*, **2012**, 1, 392-395	6.6	60
57	Material Crystallinity as a Determinant of Triplet Dynamics and Oxygen Quenching in Donor Polymers for Organic Photovoltaic Devices. *Advanced Functional Materials*, **2014**, 24, 1474-1482	15.6	56
56	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. *Journal of the American Chemical Society*, **2019**, 141, 13867-13876	16.4	55
55	Manipulating molecules with strong coupling: harvesting triplet excitons in organic exciton microcavities. *Chemical Science*, **2020**, 11, 343-354	9.4	55
54	Probing the chemical structure of monolayer covalent-organic frameworks grown via Schiff-base condensation reactions. *Chemical Communications*, **2016**, 52, 9941-4	5.8	53
53	Isostructural, Deeper Highest Occupied Molecular Orbital Analogues of Poly(3-hexylthiophene) for High-Open Circuit Voltage Organic Solar Cells. *Chemistry of Materials*, **2013**, 25, 4239-4249	9.6	50
52	Highly Luminescent Encapsulated Narrow Bandgap Polymers Based on Diketopyrrolopyrrole. *Journal of the American Chemical Society*, **2018**, 140, 1622-1626	16.4	48
51	A Systematic Approach to the Design Optimization of Light-Absorbing Indenofluorene Polymers for Organic Photovoltaics. *Advanced Energy Materials*, **2012**, 2, 260-265	21.8	47
50	Enhanced sub-bandgap efficiency of a solid-state organic intermediate band solar cell using triplet–triplet annihilation. *Energy and Environmental Science*, **2017**, 10, 1465-1475	35.4	46
49	Indolo-naphthyridine-6,13-dione Thiophene Building Block for Conjugated Polymer Electronics: Molecular Origin of Ultrahigh n-Type Mobility. *Chemistry of Materials*, **2016**, 28, 8366-8378	9.6	45

48	The Effects of Binding Ligand Variation on the Nickel Catalyzed Externally Initiated Polymerization of 2-Bromo-3-hexyl-5-iodothiophene. *Macromolecular Chemistry and Physics*, **2009**, 210, 1966-1972	2.6	43
47	A Nature-Inspired Conjugated Polymer for High Performance Transistors and Solar Cells. *Macromolecules*, **2015**, 48, 5148-5154	5.5	40
46	Synthesis and Exciton Dynamics of Triplet Sensitized Conjugated Polymers. *Journal of the American Chemical Society*, **2015**, 137, 10383-90	16.4	38
45	Synthesis of a novel fused thiophene-thieno[3,2-b]thiophene-thiophene donor monomer and co-polymer for use in OPV and OFETs. *Macromolecular Rapid Communications*, **2011**, 32, 1664-8	4.8	38
44	Investigation into the Phosphorescence of a Series of Regioisomeric Iridium(III) Complexes. *Organometallics*, **2008**, 27, 2980-2989	3.8	35
43	Thieno[3,2-b]thiophene Flanked Isoindigo Polymers for High Performance Ambipolar OFET Applications. *Advanced Functional Materials*, **2014**, 24, n/a-n/a	15.6	31
42	Sequencing conjugated polymers by eye. *Science Advances*, **2018**, 4, eaas9543	14.3	26
41	Effect of Interfacial Energetics on Charge Transfer from Lead Halide Perovskite to Organic Hole Conductors. *Journal of Physical Chemistry C*, **2018**, 122, 1326-1332	3.8	25
40	Spatial Electron-hole Separation in a One Dimensional Hybrid Organic-Inorganic Lead Iodide. *Scientific Reports*, **2016**, 6, 20626	4.9	23
39	Hybrid Organic-Inorganic Coordination Complexes as Tunable Optical Response Materials. *Inorganic Chemistry*, **2016**, 55, 3393-400	5.1	23
38	Optimisation of diketopyrrolopyrrole:fullerene solar cell performance through control of polymer molecular weight and thermal annealing. *Journal of Materials Chemistry A*, **2014**, 2, 19282-19289	13	23
37	Tunable Semiconducting Polymer Nanoparticles with INDT-Based Conjugated Polymers for Photoacoustic Molecular Imaging. *Bioconjugate Chemistry*, **2017**, 28, 1734-1740	6.3	21
36	Role of Polymer Fractionation in Energetic Losses and Charge Carrier Lifetimes of Polymer: Fullerene Solar Cells. *Journal of Physical Chemistry C*, **2015**, 119, 19668-19673	3.8	21
35	Polythiophenes with vinylene linked ortho, meta and para-carborane sidechains. *Polymer Chemistry*, **2014**, 5, 6190-6199	4.9	21
34	Benzocarborano[2,1-b:3,4-b?]dithiophene Containing Conjugated Polymers: Synthesis, Characterization, and Optoelectronic Properties. *Macromolecules*, **2014**, 47, 89-96	5.5	18
33	Bithiazole: An Intriguing Electron-Deficient Building for Plastic Electronic Applications. *Macromolecular Rapid Communications*, **2017**, 38, 1600610	4.8	17
32	Pressure-induced delocalization of photoexcited states in a semiconducting polymer. *Physical Review Letters*, **2010**, 105, 195501	7.4	17
31	Synthesis of fluoro-substituted silole-containing conjugated materials. *Journal of Polymer Science Part A*, **2009**, 47, 5116-5125	2.5	17

30	Effect of Alkyl Chain Branching Point on 3D Crystallinity in High N-Type Mobility Indolonaphthyridine Polymers. *Advanced Functional Materials*, **2017**, 27, 1704069	15.6	16
29	Highly red-shifted NIR emission from a novel anthracene conjugated polymer backbone containing Pt(II) porphyrins. *Polymer Chemistry*, **2016**, 7, 722-730	4.9	15
28	Impact of Marginal Exciton□Charge-Transfer State Offset on Charge Generation and Recombination in Polymer:Fullerene Solar Cells. *ACS Energy Letters*, **2019**, 4, 2096-2103	20.1	14
27	Power conversion efficiency enhancement in diketopyrrolopyrrole based solar cells through polymer fractionation. *Journal of Materials Chemistry C*, **2014**, 2, 8593-8598	7.1	14
26	Indacenodithiazole-Ladder-Type Bridged Di(thiophene)-Difluoro-Benzothiadiazole-Conjugated Copolymers as Ambipolar Organic Field-Effect Transistors. *Chemistry of Materials*, **2019**, 31, 9488-9496	9.6	13
25	Ultra-fast spin-mixing in a diketopyrrolopyrrole monomer/fullerene blend charge transfer state. *Journal of Materials Chemistry A*, **2017**, 5, 24335-24343	13	13
24	Doubly Encapsulated Perylene Diimides: Effect of Molecular Encapsulation on Photophysical Properties. *Journal of Organic Chemistry*, **2020**, 85, 207-214	4.2	13
23	Polaron stability in semiconducting polymer neat films. *Chemical Communications*, **2014**, 50, 14425-8	5.8	12
22	Suppressing Solid-State Quenching in Red-Emitting Conjugated Polymers. *Chemistry of Materials*, **2020**, 32, 10140-10145	9.6	12
21	A novel low-bandgap pyridazine thiadiazole-based conjugated polymer with deep molecular orbital levels. *Polymer Chemistry*, **2020**, 11, 581-585	4.9	11
20	Operational electrochemical stability of thiophene-thiazole copolymers probed by resonant Raman spectroscopy. *Journal of Chemical Physics*, **2015**, 142, 244904	3.9	10
19	Conjugated polymer-porphyrin complexes for organic electronics. *ChemPhysChem*, **2015**, 16, 1223-30	3.2	10
18	Macrocyclic Encapsulated Conjugated Polymers. *Macromolecules*, **2021**, 54, 1083-1094	5.5	9
17	Discerning Bulk and Interfacial Polarons in a Dual Electron Donor/Acceptor Polymer. *Journal of Physical Chemistry Letters*, **2019**, 10, 3813-3819	6.4	8
16	Perspectives for next generation lithium-ion battery cathode materials. *APL Materials*, **2021**, 9, 109201	5.7	8
15	Alkyl side-chain branching point effects in thieno[3,4-c]pyrrole-4,6-dione copolymers **2013**, 1, 30-35		7
14	Excited state character of Cibalackrot-type compounds interpreted in terms of H□kel-aromaticity: a rationale for singlet fission chromophore design. *Chemical Science*, **2021**, 12, 6159-6171	9.4	7
13	Suppressing aggregation induced quenching in anthracene based conjugated polymers. *Polymer Chemistry*, **2021**, 12, 1830-1836	4.9	6

12	Deep-red electrophosphorescence from a platinum(II) porphyrin complex copolymerised with polyfluorene for efficient energy transfer and triplet harvesting **2015**, 3, 1-7		5
11	Indolonaphthyridine: A Versatile Chromophore for Organic Electronics Inspired by Natural Indigo Dye. *Accounts of Chemical Research*, **2021**, 54, 182-193	24.3	5
10	Solvent-dependent photophysics of a red-shifted, biocompatible coumarin photocage. *Organic and Biomolecular Chemistry*, **2019**, 17, 6178-6183	3.9	4
9	Synthesis of fully asymmetric diketopyrrolopyrrole derivatives.. *RSC Advances*, **2021**, 11, 5276-5283	3.7	4
8	Molecular Encapsulation of Naphthalene Diimide (NDI) Based Conjugated Polymers: A Tool for Understanding Photoluminescence. *Angewandte Chemie - International Edition*, **2021**, 60, 25005-25012	16.4	3
7	Bis-lactam-based donor polymers for organic solar cells: Evolution by design. *Thin Solid Films*, **2014**, 560, 82-85	2.2	2
6	Energetic Tuning in Spirocyclic Conjugated Polymers. *Polymers*, **2016**, 8,	4.5	2
5	Intrinsic photogeneration of long-lived charges in a donor-orthogonal acceptor conjugated polymer. *Chemical Science*, **2021**, 12, 8165-8177	9.4	1
4	Tyrian purple: an ancient natural dye for cross-conjugated n-type charge transport. *Journal of Materials Chemistry C*, **2021**, 9, 4200-4205	7.1	1
3	Energy-Transfer Pathways and Triplet Lifetime Manipulation in a Zinc Porphyrin/F8BT Hybrid Polymer. *Journal of Physical Chemistry C*, **2018**, 122, 23950-23958	3.8	1
2	Transition-Metal-Free Homopolymerization of Pyrrolo[2,3-:5,4-]bisthiazoles via Nucleophilic Aromatic Substitution. *ACS Applied Materials & Interfaces*, **2021**, 13, 41094-41101	9.5	0
1	Electro-optical radicals: design advances, applications and future perspectives. *Journal of Materials Chemistry C*,	7.1	0