

# Hugo Bronstein

## List of Publications by Year in descending order

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92  
papers

7,841  
citations

76196

40  
h-index

54797

84  
g-index

94  
all docs

94  
docs citations

94  
times ranked

9746  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thieno[3,2- <i>b</i> ]thiophene-Diketopyrrolopyrrole-Containing Polymers for High-Performance Organic Field-Effect Transistors and Organic Photovoltaic Devices. <i>Journal of the American Chemical Society</i> , 2011, 133, 3272-3275.	6.6	854
2	On the application of the tolerance factor to inorganic and hybrid halide perovskites: a revised system. <i>Chemical Science</i> , 2016, 7, 4548-4556.	3.7	757
3	Recent Progress in High-Mobility Organic Transistors: A Reality Check. <i>Advanced Materials</i> , 2018, 30, e1801079.	11.1	498
4	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. <i>Nature Communications</i> , 2013, 4, 2238.	5.8	456
5	The role of chemical design in the performance of organic semiconductors. <i>Nature Reviews Chemistry</i> , 2020, 4, 66-77.	13.8	444
6	Exploring the origin of high optical absorption in conjugated polymers. <i>Nature Materials</i> , 2016, 15, 746-753.	13.3	314
7	Photocurrent Enhancement from Diketopyrrolopyrrole Polymer Solar Cells through Alkyl-Chain Branching Point Manipulation. <i>Journal of the American Chemical Society</i> , 2013, 135, 11537-11540.	6.6	258
8	Design of Semiconducting Indacenodithiophene Polymers for High Performance Transistors and Solar Cells. <i>Accounts of Chemical Research</i> , 2012, 45, 714-722.	7.6	256
9	Externally Initiated Regioregular P3HT with Controlled Molecular Weight and Narrow Polydispersity. <i>Journal of the American Chemical Society</i> , 2009, 131, 12894-12895.	6.6	255
10	Effect of Fluorination on the Properties of a Donor-Acceptor Copolymer for Use in Photovoltaic Cells and Transistors. <i>Chemistry of Materials</i> , 2013, 25, 277-285.	3.2	218
11	Charge Recombination in Organic Photovoltaic Devices with High Open-Circuit Voltages. <i>Journal of the American Chemical Society</i> , 2008, 130, 13653-13658.	6.6	204
12	On the Energetic Dependence of Charge Separation in Low-Band-Gap Polymer/Fullerene Blends. <i>Journal of the American Chemical Society</i> , 2012, 134, 18189-18192.	6.6	180
13	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. <i>Macromolecules</i> , 2011, 44, 6649-6652.	2.2	165
14	A Simple Molecular Design Strategy for Delayed Fluorescence toward 1000 nm. <i>Journal of the American Chemical Society</i> , 2019, 141, 18390-18394.	6.6	137
15	Correlating triplet yield, singlet oxygen generation and photochemical stability in polymer/fullerene blend films. <i>Chemical Communications</i> , 2013, 49, 1291.	2.2	136
16	The Influence of Polymer Purification on Photovoltaic Device Performance of a Series of Indacenodithiophene Donor Polymers. <i>Advanced Materials</i> , 2013, 25, 2029-2034.	11.1	129
17	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. <i>Chemistry of Materials</i> , 2011, 23, 768-770.	3.2	126
18	Morphological Stability and Performance of Polymer-Fullerene Solar Cells under Thermal Stress: The Impact of Photoinduced PC <sub>60</sub> BM Oligomerization. <i>ACS Nano</i> , 2014, 8, 1297-1308.	7.3	122

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19	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. <i>Polymers</i> , 2016, 8, 14.	2.0	111
20	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. <i>Journal of the American Chemical Society</i> , 2019, 141, 13867-13876.	6.6	104
21	Manipulating molecules with strong coupling: harvesting triplet excitons in organic exciton microcavities. <i>Chemical Science</i> , 2020, 11, 343-354.	3.7	98
22	Identification of Oxidation Products of Squalene in Solution and in Latent Fingerprints by ESI-MS and LC/APCI-MS. <i>Analytical Chemistry</i> , 2007, 79, 2650-2657.	3.2	97
23	Synthesis and Exciton Dynamics of Donor-Orthogonal Acceptor Conjugated Polymers: Reducing the Singlet-Triplet Energy Gap. <i>Journal of the American Chemical Society</i> , 2017, 139, 11073-11080.	6.6	95
24	Thieno[3,2- <i>b</i> ]thiophene-diketopyrrolopyrrole Containing Polymers for Inverted Solar Cells Devices with High Short Circuit Currents. <i>Advanced Functional Materials</i> , 2013, 23, 5647-5654.	7.8	78
25	Probing the chemical structure of monolayer covalent-organic frameworks grown via Schiff-base condensation reactions. <i>Chemical Communications</i> , 2016, 52, 9941-9944.	2.2	78
26	Scalable route to CH <sub>3</sub> NH <sub>3</sub> Pb <sub>3</sub> perovskite thin films by aerosol assisted chemical vapour deposition. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9071-9073.	5.2	75
27	Material Crystallinity as a Determinant of Triplet Dynamics and Oxygen Quenching in Donor Polymers for Organic Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2014, 24, 1474-1482.	7.8	71
28	Highly Luminescent Encapsulated Narrow Bandgap Polymers Based on Diketopyrrolopyrrole. <i>Journal of the American Chemical Society</i> , 2018, 140, 1622-1626.	6.6	70
29	Alkyl Chain Extension as a Route to Novel Thieno[3,2- <i>b</i> ]thiophene Flanked Diketopyrrolopyrrole Polymers for Use in Organic Solar Cells and Field Effect Transistors. <i>Macromolecules</i> , 2013, 46, 5961-5967.	2.2	67
30	Charge Recombination and Exciton Annihilation Reactions in Conjugated Polymer Blends. <i>Journal of the American Chemical Society</i> , 2010, 132, 328-335.	6.6	65
31	Constructing Regioregular Star Poly(3-hexylthiophene) via Externally Initiated Kumada Catalyst-Transfer Polycondensation. <i>ACS Macro Letters</i> , 2012, 1, 392-395.	2.3	65
32	Thieno[3,2- <i>b</i> ]thiophene Flanked Isoindigo Polymers for High Performance Ambipolar OFET Applications. <i>Advanced Functional Materials</i> , 2014, 24, 7109-7115.	7.8	58
33	Isostructural, Deeper Highest Occupied Molecular Orbital Analogues of Poly(3-hexylthiophene) for High-Open Circuit Voltage Organic Solar Cells. <i>Chemistry of Materials</i> , 2013, 25, 4239-4249.	3.2	55
34	Enhanced sub-bandgap efficiency of a solid-state organic intermediate band solar cell using triplet-triplet annihilation. <i>Energy and Environmental Science</i> , 2017, 10, 1465-1475.	15.6	54
35	Indolo-naphthyridine-6,13-dione Thiophene Building Block for Conjugated Polymer Electronics: Molecular Origin of Ultrahigh n-Type Mobility. <i>Chemistry of Materials</i> , 2016, 28, 8366-8378.	3.2	52
36	A Systematic Approach to the Design Optimization of Light-Absorbing Indenofluorene Polymers for Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2012, 2, 260-265.	10.2	48

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37	A Nature-Inspired Conjugated Polymer for High Performance Transistors and Solar Cells. <i>Macromolecules</i> , 2015, 48, 5148-5154.	2.2	48
38	The Effects of Binding Ligand Variation on the Nickel Catalyzed Externally Initiated Polymerization of 2-(Bromo(3-hexyl-5-iodothiophene). <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 1966-1972.	1.1	46
39	Perspectives for next generation lithium-ion battery cathode materials. <i>APL Materials</i> , 2021, 9, .	2.2	44
40	Synthesis of a Novel Fused Thiophene-thieno[3,2-b]thiophene-thiophene Donor Monomer and Co-polymer for Use in OPV and OFETs. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1664-1668.	2.0	41
41	Synthesis and Exciton Dynamics of Triplet Sensitized Conjugated Polymers. <i>Journal of the American Chemical Society</i> , 2015, 137, 10383-10390.	6.6	41
42	Investigation into the Phosphorescence of a Series of Regioisomeric Iridium(III) Complexes. <i>Organometallics</i> , 2008, 27, 2980-2989.	1.1	38
43	Sequencing conjugated polymers by eye. <i>Science Advances</i> , 2018, 4, eaas9543.	4.7	35
44	Effect of Interfacial Energetics on Charge Transfer from Lead Halide Perovskite to Organic Hole Conductors. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1326-1332.	1.5	32
45	Hybrid Organic-Inorganic Coordination Complexes as Tunable Optical Response Materials. <i>Inorganic Chemistry</i> , 2016, 55, 3393-3400.	1.9	31
46	Excited state character of Cibalackrot-type compounds interpreted in terms of Hückel-aromaticity: a rationale for singlet fission chromophore design. <i>Chemical Science</i> , 2021, 12, 6159-6171.	3.7	30
47	Bithiazole: An Intriguing Electron-Deficient Building for Plastic Electronic Applications. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1600610.	2.0	27
48	Tunable Semiconducting Polymer Nanoparticles with INDT-Based Conjugated Polymers for Photoacoustic Molecular Imaging. <i>Bioconjugate Chemistry</i> , 2017, 28, 1734-1740.	1.8	26
49	Optimisation of diketopyrrolopyrrole:fullerene solar cell performance through control of polymer molecular weight and thermal annealing. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19282-19289.	5.2	25
50	Spatial Electron-hole Separation in a One Dimensional Hybrid Organic-Inorganic Lead Iodide. <i>Scientific Reports</i> , 2016, 6, 20626.	1.6	25
51	Indacenodithiazole-Ladder-Type Bridged Di(thiophene)-Difluoro-Benzothiadiazole-Conjugated Copolymers as Ambipolar Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2019, 31, 9488-9496.	3.2	25
52	Doubly Encapsulated Perylene Diimides: Effect of Molecular Encapsulation on Photophysical Properties. <i>Journal of Organic Chemistry</i> , 2020, 85, 207-214.	1.7	25
53	Impact of Marginal Exciton-Charge-Transfer State Offset on Charge Generation and Recombination in Polymer:Fullerene Solar Cells. <i>ACS Energy Letters</i> , 2019, 4, 2096-2103.	8.8	24
54	A novel low-bandgap pyridazine thiadiazole-based conjugated polymer with deep molecular orbital levels. <i>Polymer Chemistry</i> , 2020, 11, 581-585.	1.9	24

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55	Polythiophenes with vinylene linked <i>ortho</i> , <i>meta</i> and <i>para</i> -carborane sidechains. <i>Polymer Chemistry</i> , 2014, 5, 6190-6199.	1.9	23
56	Suppressing Solid-State Quenching in Red-Emitting Conjugated Polymers. <i>Chemistry of Materials</i> , 2020, 32, 10140-10145.	3.2	23
57	Pressure-Induced Delocalization of Photoexcited States in a Semiconducting Polymer. <i>Physical Review Letters</i> , 2010, 105, 195501.	2.9	22
58	Role of Polymer Fractionation in Energetic Losses and Charge Carrier Lifetimes of Polymer: Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19668-19673.	1.5	22
59	Macrocyclic Encapsulated Conjugated Polymers. <i>Macromolecules</i> , 2021, 54, 1083-1094.	2.2	22
60	Ultra-fast spin-mixing in a diketopyrrolopyrrole monomer/fullerene blend charge transfer state. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24335-24343.	5.2	21
61	Electro-optical $\dot{\text{I}}$ -radicals: design advances, applications and future perspectives. <i>Journal of Materials Chemistry C</i> , 2022, 10, 7368-7403.	2.7	21
62	Benzocarborano[2,1- <i>b</i> :3,4- <i>b'</i> ]-dithiophene Containing Conjugated Polymers: Synthesis, Characterization, and Optoelectronic Properties. <i>Macromolecules</i> , 2014, 47, 89-96.	2.2	19
63	Indolonaphthyridine: A Versatile Chromophore for Organic Electronics Inspired by Natural Indigo Dye. <i>Accounts of Chemical Research</i> , 2021, 54, 182-193.	7.6	19
64	Highly red-shifted NIR emission from a novel anthracene conjugated polymer backbone containing Pt( <i>sc</i> ) porphyrins. <i>Polymer Chemistry</i> , 2016, 7, 722-730.	1.9	18
65	Effect of Alkyl Chain Branching Point on 3D Crystallinity in High $\text{N}^+$ -type Mobility Indolonaphthyridine Polymers. <i>Advanced Functional Materials</i> , 2017, 27, 1704069.	7.8	18
66	Molecular Encapsulation of Naphthalene Diimide (NDI) Based $\dot{\text{I}}$ -Conjugated Polymers: A Tool for Understanding Photoluminescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25005-25012.	7.2	18
67	Synthesis of fluoro-substituted silole-containing conjugated materials. <i>Journal of Polymer Science Part A</i> , 2009, 47, 5116-5125.	2.5	17
68	Suppressing aggregation induced quenching in anthracene based conjugated polymers. <i>Polymer Chemistry</i> , 2021, 12, 1830-1836.	1.9	17
69	Polaron stability in semiconducting polymer neat films. <i>Chemical Communications</i> , 2014, 50, 14425-14428.	2.2	14
70	Power conversion efficiency enhancement in diketopyrrolopyrrole based solar cells through polymer fractionation. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8593-8598.	2.7	14
71	Operational electrochemical stability of thiophene-thiazole copolymers probed by resonant Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2015, 142, 244904.	1.2	14
72	Conjugated Polymer-Porphyrin Complexes for Organic Electronics. <i>ChemPhysChem</i> , 2015, 16, 1223-1230.	1.0	10

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73	Discerning Bulk and Interfacial Polarons in a Dual Electron Donor/Acceptor Polymer. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3813-3819.	2.1	9
74	A solution-processable near-infrared thermally activated delayed fluorescent dye with a fused aromatic acceptor and aggregation induced emission behavior. <i>Journal of Materials Chemistry C</i> , 2022, 10, 4831-4836.	2.7	9
75	Transition-Metal-Free Homopolymerization of Pyrrolo[2,3- <i>d</i> :5,4- <i>d'</i> ]-bisthiazoles via Nucleophilic Aromatic Substitution. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 41094-41101.	4.0	8
76	Alkyl side-chain branching point effects in thieno[3,4- <i>c</i> ]pyrrole-4,6-dione copolymers. <i>Journal of Organic Semiconductors</i> , 2013, 1, 30-35.	1.2	7
77	Energetic Tuning in Spirocyclic Conjugated Polymers. <i>Polymers</i> , 2016, 8, 9.	2.0	7
78	Deep-red electrophosphorescence from a platinum(II)-porphyrin complex copolymerised with polyfluorene for efficient energy transfer and triplet harvesting. <i>Journal of Organic Semiconductors</i> , 2015, 3, 1-7.	1.2	6
79	Solvent-dependent photophysics of a red-shifted, biocompatible coumarin photocage. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 6178-6183.	1.5	6
80	Energy-Transfer Pathways and Triplet Lifetime Manipulation in a Zinc Porphyrin/F8BT Hybrid Polymer. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23950-23958.	1.5	5
81	Synthesis of fully asymmetric diketopyrrolopyrrole derivatives. <i>RSC Advances</i> , 2021, 11, 5276-5283.	1.7	5
82	Bis-lactam-based donor polymers for organic solar cells: Evolution by design. <i>Thin Solid Films</i> , 2014, 560, 82-85.	0.8	3
83	Intrinsic photogeneration of long-lived charges in a donor-orthogonal acceptor conjugated polymer. <i>Chemical Science</i> , 2021, 12, 8165-8177.	3.7	3
84	Tyrian purple: an ancient natural dye for cross-conjugated n-type charge transport. <i>Journal of Materials Chemistry C</i> , 2021, 9, 4200-4205.	2.7	2
85	Molecular Encapsulation of Naphthalene Diimide (NDI) Based Conjugated Polymers: A Tool for Understanding Photoluminescence. <i>Angewandte Chemie</i> , 0, , .	1.6	2
86	Electronic structure tuning of new fused thieno[3,2- <i>b</i> ]thieno bithiophene based polymers via alkyl chain and Group IV heteroatom modulation. <i>Proceedings of SPIE</i> , 2012, , .	0.8	0
87	Effect of molecular weight on the vibronic structure of a diketopyrrolopyrrole polymer. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
88	Nature-Inspired Conjugated Molecules for Future Organic Solar Cell Materials. , 2016, , .		0
89	Transient absorption spectroscopy of ultra-low band gap polymers for organic electronic applications. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
90	Ultra-low band gap polymers for organic electronic applications. , 0, , .		0

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91	Donor and Acceptor Character in a Cross-Conjugated Polymer: a Transient Absorption Spectroscopy Study. , 0, , .		0
92	Illuminating Charge-Transfer at the Absorber/Hole Transport Material Interface in Perovskite Solar Cells. , 0, , .		0