Hugo Bronstein

List of Publications by Year
in descending order

92 papers	7,841 citations	76326 40 h-index	54911 84 g-index
94 all docs	94 docs citations	94 times ranked	9746 citing authors

#	Article	IF	Citations
1	A solution-processable near-infrared thermally activated delayed fluorescent dye with a fused aromatic acceptor and aggregation induced emission behavior. Journal of Materials Chemistry C, 2022, 10, 4831-4836.	5.5	9
2	Electro-optical Ï€-radicals: design advances, applications and future perspectives. Journal of Materials Chemistry C, 2022, 10, 7368-7403.	5.5	21
3	Indolonaphthyridine: A Versatile Chromophore for Organic Electronics Inspired by Natural Indigo Dye. Accounts of Chemical Research, 2021, 54, 182-193.	15.6	19
4	Suppressing aggregation induced quenching in anthracene based conjugated polymers. Polymer Chemistry, 2021, 12, 1830-1836.	3.9	17
5	Excited state character of Cibalackrot-type compounds interpreted in terms of HÃ¼ckel-aromaticity: a rationale for singlet fission chromophore design. Chemical Science, 2021, 12, 6159-6171.	7.4	30
6	Synthesis of fully asymmetric diketopyrrolopyrrole derivatives. RSC Advances, 2021, 11, 5276-5283.	3.6	5
7	Macrocyclic Encapsulated Conjugated Polymers. Macromolecules, 2021, 54, 1083-1094.	4.8	22
8	Intrinsic photogeneration of long-lived charges in a donor-orthogonal acceptor conjugated polymer. Chemical Science, 2021, 12, 8165-8177.	7.4	3
9	Tyrian purple: an ancient natural dye for cross-conjugated n-type charge transport. Journal of Materials Chemistry C, 2021, 9, 4200-4205.	5.5	2
10	Transition-Metal-Free Homopolymerization of Pyrrolo[2,3-d:5,4-dâ€²]bisthiazoles via Nucleophilic Aromatic Substitution. ACS Applied Materials & Interfaces, 2021, 13, 41094-41101.	8.0	8
11	Molecular Encapsulation of Naphthalene Diimide (NDI) Based Ï€â€Conjugated Polymers: A Tool for Understanding Photoluminescence. Angewandte Chemie - International Edition, 2021, 60, 25005-25012.	13.8	18
12	Perspectives for next generation lithium-ion battery cathode materials. APL Materials, 2021, 9, .	5.1	44
13	Doubly Encapsulated Perylene Diimides: Effect of Molecular Encapsulation on Photophysical Properties. Journal of Organic Chemistry, 2020, 85, 207-214.	3.2	25
14	A novel low-bandgap pyridazine thiadiazole-based conjugated polymer with deep molecular orbital levels. Polymer Chemistry, 2020, 11, 581-585.	3.9	24
15	Manipulating molecules with strong coupling: harvesting triplet excitons in organic exciton microcavities. Chemical Science, 2020, 11, 343-354.	7.4	98
16	The role of chemical design in the performance of organic semiconductors. Nature Reviews Chemistry, 2020, 4, 66-77.	30.2	444
17	Suppressing Solid-State Quenching in Red-Emitting Conjugated Polymers. Chemistry of Materials, 2020, 32, 10140-10145.	6.7	23
18	Impact of Marginal Excitonâ€“Charge-Transfer State Offset on Charge Generation and Recombination in Polymer:Fullerene Solar Cells. ACS Energy Letters, 2019, 4, 2096-2103.	17.4	24

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19	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. Journal of the American Chemical Society, 2019, 141, 13867-13876.	13.7	104
20	Indacenodithiazole-Ladder-Type Bridged Di(thiophene)-Difluoro-Benzothiadiazole-Conjugated Copolymers as Ambipolar Organic Field-Effect Transistors. Chemistry of Materials, 2019, 31, 9488-9496.	6.7	25
21	A Simple Molecular Design Strategy for Delayed Fluorescence toward 1000 nm. Journal of the American Chemical Society, 2019, 141, 18390-18394.	13.7	137
22	Discerning Bulk and Interfacial Polarons in a Dual Electron Donor/Acceptor Polymer. Journal of Physical Chemistry Letters, 2019, 10, 3813-3819.	4.6	9
23	Solvent-dependent photophysics of a red-shifted, biocompatible coumarin photocage. Organic and Biomolecular Chemistry, 2019, 17, 6178-6183.	2.8	6
24	Highly Luminescent Encapsulated Narrow Bandgap Polymers Based on Diketopyrrolopyrrole. Journal of the American Chemical Society, 2018, 140, 1622-1626.	13.7	70
25	Effect of Interfacial Energetics on Charge Transfer from Lead Halide Perovskite to Organic Hole Conductors. Journal of Physical Chemistry C, 2018, 122, 1326-1332.	3.1	32
26	Energy-Transfer Pathways and Triplet Lifetime Manipulation in a Zinc Porphyrin/F8BT Hybrid Polymer. Journal of Physical Chemistry C, 2018, 122, 23950-23958.	3.1	5
27	Recent Progress in Highâ€Mobility Organic Transistors: A Reality Check. Advanced Materials, 2018, 30, e1801079.	21.0	498
28	Sequencing conjugated polymers by eye. Science Advances, 2018, 4, eaas9543.	10.3	35
29	Bithiazole: An Intriguing Electronâ€Ðeficient Building for Plastic Electronic Applications. Macromolecular Rapid Communications, 2017, 38, 1600610.	3.9	27
30	Enhanced sub-bandgap efficiency of a solid-state organic intermediate band solar cell using tripletâ€“triplet annihilation. Energy and Environmental Science, 2017, 10, 1465-1475.	30.8	54
31	Synthesis and Exciton Dynamics of Donor-Orthogonal Acceptor Conjugated Polymers: Reducing the Singletâ€“Triplet Energy Gap. Journal of the American Chemical Society, 2017, 139, 11073-11080.	13.7	95
32	Tunable Semiconducting Polymer Nanoparticles with INDT-Based Conjugated Polymers for Photoacoustic Molecular Imaging. Bioconjugate Chemistry, 2017, 28, 1734-1740.	3.6	26
33	Effect of Alkyl Chain Branching Point on 3D Crystallinity in High Nâ€Type Mobility Indolonaphthyridine Polymers. Advanced Functional Materials, 2017, 27, 1704069.	14.9	18
34	Ultra-fast spin-mixing in a diketopyrrolopyrrole monomer/fullerene blend charge transfer state. Journal of Materials Chemistry A, 2017, 5, 24335-24343.	10.3	21
35	Energetic Tuning in Spirocyclic Conjugated Polymers. Polymers, 2016, 8, 9.	4.5	7
36	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. Polymers, 2016, 8, 14.	4.5	111

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37	Effect of molecular weight on the vibronic structure of a diketopyrrolopyrrole polymer. Proceedings of SPIE, 2016, , .	0.8	0
38	Nature-Inspired Conjugated Molecules for Future Organic Solar Cell Materials. , 2016, , .		0
39	On the application of the tolerance factor to inorganic and hybrid halide perovskites: a revised system. Chemical Science, 2016, 7, 4548-4556.	7.4	757
40	Exploring the origin of high optical absorption in conjugated polymers. Nature Materials, 2016, 15, 746-753.	27.5	314
41	Transient absorption spectroscopy of ultra-low band gap polymers for organic electronic applications. Proceedings of SPIE, 2016, , .	0.8	0
42	Probing the chemical structure of monolayer covalent-organic frameworks grown via Schiff-base condensation reactions. Chemical Communications, 2016, 52, 9941-9944.	4.1	78
43	Spatial Electron-hole Separation in a One Dimensional Hybrid Organicâ€“Inorganic Lead Iodide. Scientific Reports, 2016, 6, 20626.	3.3	25
44	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.	6.7	52
45	Hybrid Organicâ€“Inorganic Coordination Complexes as Tunable Optical Response Materials. Inorganic Chemistry, 2016, 55, 3393-3400.	4.0	31
46	Highly red-shifted NIR emission from a novel anthracene conjugated polymer backbone containing Pt(<scp>ii</scp>) porphyrins. Polymer Chemistry, 2016, 7, 722-730.	3.9	18
47	Operational electrochemical stability of thiophene-thiazole copolymers probed by resonant Raman spectroscopy. Journal of Chemical Physics, 2015, 142, 244904.	3.0	14
48	Conjugated Polymerâ€“Porphyrin Complexes for Organic Electronics. ChemPhysChem, 2015, 16, 1223-1230.	2.1	10
49	A Nature-Inspired Conjugated Polymer for High Performance Transistors and Solar Cells. Macromolecules, 2015, 48, 5148-5154.	4.8	48
50	Synthesis and Exciton Dynamics of Triplet Sensitized Conjugated Polymers. Journal of the American Chemical Society, 2015, 137, 10383-10390.	13.7	41
51	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.	3.1	22
52	Deep-red electrophosphorescence from a platinum(II)â€“porphyrin complex copolymerised with polyfluorene for efficient energy transfer and triplet harvesting. Journal of Organic Semiconductors, 2015, 3, 1-7.	1.2	6
53	Scalable route to CH₃NH₃PbI₃ perovskite thin films by aerosol assisted chemical vapour deposition. Journal of Materials Chemistry A, 2015, 3, 9071-9073.	10.3	75
54	Benzocarborano[2,1-b:3,4-bâ€²]dithiophene Containing Conjugated Polymers: Synthesis, Characterization, and Optoelectronic Properties. Macromolecules, 2014, 47, 89-96.	4.8	19

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55	Morphological Stability and Performance of Polymerâ€“Fullerene Solar Cells under Thermal Stress: The Impact of Photoinduced PC₆₀BM Oligomerization. ACS Nano, 2014, 8, 1297-1308.	14.6	122
56	Polaron stability in semiconducting polymer neat films. Chemical Communications, 2014, 50, 14425-14428.	4.1	14
57	Polythiophenes with vinylene linked ortho, meta and para-carborane sidechains. Polymer Chemistry, 2014, 5, 6190-6199.	3.9	23
58	Power conversion efficiency enhancement in diketopyrrolopyrrole based solar cells through polymer fractionation. Journal of Materials Chemistry C, 2014, 2, 8593-8598.	5.5	14
59	Thieno[3,2â€b]thiophene Flanked Isoindigo Polymers for High Performance Ambipolar OFET Applications. Advanced Functional Materials, 2014, 24, 7109-7115.	14.9	58
60	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.	10.3	25
61	Bis-lactam-based donor polymers for organic solar cells: Evolution by design. Thin Solid Films, 2014, 560, 82-85.	1.8	3
62	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.	14.9	71
63	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.	4.8	67
64	Molecular origin of high field-effect mobility in an indacenodithiopheneâ€“benzothiadiazole copolymer. Nature Communications, 2013, 4, 2238.	12.8	456
65	Photocurrent Enhancement from Diketopyrrolopyrrole Polymer Solar Cells through Alkyl-Chain Branching Point Manipulation. Journal of the American Chemical Society, 2013, 135, 11537-11540.	13.7	258
66	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.	6.7	55
67	Effect of Fluorination on the Properties of a Donorâ€“Acceptor Copolymer for Use in Photovoltaic Cells and Transistors. Chemistry of Materials, 2013, 25, 277-285.	6.7	218
68	Correlating triplet yield, singlet oxygen generation and photochemical stability in polymer/fullerene blend films. Chemical Communications, 2013, 49, 1291.	4.1	136
69	The Influence of Polymer Purification on Photovoltaic Device Performance of a Series of Indacenodithiophene Donor Polymers. Advanced Materials, 2013, 25, 2029-2034.	21.0	129
70	Alkyl side-chain branching point effects in thieno[3,4-c]pyrrole-4,6-dione copolymers. Journal of Organic Semiconductors, 2013, 1, 30-35.	1.2	7
71	Thieno[3,2â€b]thiopheneâ€diketopyrrolopyrrole Containing Polymers for Inverted Solar Cells Devices with High Short Circuit Currents. Advanced Functional Materials, 2013, 23, 5647-5654.	14.9	78
72	Constructing Regioregular Star Poly(3-hexylthiophene) via Externally Initiated Kumada Catalyst-Transfer Polycondensation. ACS Macro Letters, 2012, 1, 392-395.	4.8	65

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73	On the Energetic Dependence of Charge Separation in Low-Band-Gap Polymer/Fullerene Blends. Journal of the American Chemical Society, 2012, 134, 18189-18192.	13.7	180
74	Electronic structure tuning of new fused thieno[3,2-b]thieno bisthiophene based polymers via alkyl chain and Group IV heteroatom modulation. Proceedings of SPIE, 2012, , .	0.8	0
75	A Systematic Approach to the Design Optimization of Lightâ€Absorbing Indenofluorene Polymers for Organic Photovoltaics. Advanced Energy Materials, 2012, 2, 260-265.	19.5	48
76	Design of Semiconducting Indacenodithiophene Polymers for High Performance Transistors and Solar Cells. Accounts of Chemical Research, 2012, 45, 714-722.	15.6	256
77	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. Macromolecules, 2011, 44, 6649-6652.	4.8	165
78	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. Chemistry of Materials, 2011, 23, 768-770.	6.7	126
79	Thieno[3,2-b]thiopheneâ€'Diketopyrrolopyrrole-Containing Polymers for High-Performance Organic Field-Effect Transistors and Organic Photovoltaic Devices. Journal of the American Chemical Society, 2011, 133, 3272-3275.	13.7	854
80	Synthesis of a Novel Fused Thiopheneâ€thieno[3,2â€b]thiopheneâ€thiophene Donor Monomer and Coâ€polymer for Use in OPV and OFETs. Macromolecular Rapid Communications, 2011, 32, 1664-1668.	3.9	41
81	Pressure-Induced Delocalization of Photoexcited States in a Semiconducting Polymer. Physical Review Letters, 2010, 105, 195501.	7.8	22
82	Charge Recombination and Exciton Annihilation Reactions in Conjugated Polymer Blends. Journal of the American Chemical Society, 2010, 132, 328-335.	13.7	65
83	The Effects of Binding Ligand Variation on the Nickel Catalyzed Externally Initiated Polymerization of 2â€Bromoâ€3â€hexylâ€5â€iodothiophene. Macromolecular Chemistry and Physics, 2009, 210, 1966-1972.	2.2	46
84	Synthesis of fluoroâ€substituted siloleâ€containing conjugated materials. Journal of Polymer Science Part A, 2009, 47, 5116-5125.	2.3	17
85	Externally Initiated Regioregular P3HT with Controlled Molecular Weight and Narrow Polydispersity. Journal of the American Chemical Society, 2009, 131, 12894-12895.	13.7	255
86	Investigation into the Phosphorescence of a Series of Regioisomeric Iridium(III) Complexes. Organometallics, 2008, 27, 2980-2989.	2.3	38
87	Charge Recombination in Organic Photovoltaic Devices with High Open-Circuit Voltages. Journal of the American Chemical Society, 2008, 130, 13653-13658.	13.7	204
88	Identification of Oxidation Products of Squalene in Solution and in Latent Fingerprints by ESI-MS and LC/APCI-MS. Analytical Chemistry, 2007, 79, 2650-2657.	6.5	97
89	Molecular Encapsulation of Naphthalene Diimide (NDI) Based Ï€â€Conjugated Polymers: A Tool for Understanding Photoluminescence. Angewandte Chemie, 0, , .	2.0	2
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