

Chad Risiko

List of Publications by Year in descending order

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161
papers

8,333
citations

38742

50
h-index

53230

85
g-index

170
all docs

170
docs citations

170
times ranked

9783
citing authors

#	ARTICLE	IF	CITATIONS
1	Design, Synthesis, and Characterization of Ladder-Type Molecules and Polymers. Air-Stable, Solution-Processable n -Channel and Ambipolar Semiconductors for Thin-Film Transistors via Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2009, 131, 5586-5608.	13.7	481
2	Synthesis, Characterization, and Transistor Response of Semiconducting Silole Polymers with Substantial Hole Mobility and Air Stability. <i>Experiment and Theory. Journal of the American Chemical Society</i> , 2008, 130, 7670-7685.	13.7	342
3	A quantum-chemical perspective into low optical-gap polymers for highly-efficient organic solar cells. <i>Chemical Science</i> , 2011, 2, 1200-1218.	7.4	241
4	Solution-Processed Organic Solar Cells with Power Conversion Efficiencies of 2.5% using Benzothiadiazole/Imide-Based Acceptors. <i>Chemistry of Materials</i> , 2011, 23, 5484-5490.	6.7	232
5	Transition from Tunneling to Hopping Transport in Long, Conjugated Oligo-imine Wires Connected to Metals. <i>Journal of the American Chemical Society</i> , 2010, 132, 4358-4368.	13.7	217
6	Noncovalent Intermolecular Interactions in Organic Electronic Materials: Implications for the Molecular Packing vs Electronic Properties of Acenes. <i>Chemistry of Materials</i> , 2016, 28, 3-16.	6.7	215
7	A molecular interaction "diffusion framework for predicting organic solar cell stability. <i>Nature Materials</i> , 2021, 20, 525-532.	27.5	212
8	Donor "Acceptor Copolymers of Relevance for Organic Photovoltaics: A Theoretical Investigation of the Impact of Chemical Structure Modifications on the Electronic and Optical Properties. <i>Macromolecules</i> , 2012, 45, 6405-6414.	4.8	203
9	High current density, long duration cycling of soluble organic active species for non-aqueous redox flow batteries. <i>Energy and Environmental Science</i> , 2016, 9, 3531-3543.	30.8	196
10	Controlled Conjugated Backbone Twisting for an Increased Open-Circuit Voltage while Having a High Short-Circuit Current in Poly(hexylthiophene) Derivatives. <i>Journal of the American Chemical Society</i> , 2012, 134, 5222-5232.	13.7	187
11	Electron Affinities of 1,1-Diaryl-2,3,4,5-tetraphenylsiloles: A Direct Measurements and Comparison with Experimental and Theoretical Estimates. <i>Journal of the American Chemical Society</i> , 2005, 127, 9021-9029.	13.7	155
12	Rubrene-Based Single-Crystal Organic Semiconductors: Synthesis, Electronic Structure, and Charge-Transport Properties. <i>Chemistry of Materials</i> , 2013, 25, 2254-2263.	6.7	141
13	Intervalence Transitions in the Mixed-Valence Monocations of Bis(triarylamines) Linked with Vinylene and Phenylene " Vinylene Bridges. <i>Journal of the American Chemical Society</i> , 2005, 127, 16900-16911.	13.7	135
14	Use of X-Ray Diffraction, Molecular Simulations, and Spectroscopy to Determine the Molecular Packing in a Polymer " Fullerene Bimolecular Crystal. <i>Advanced Materials</i> , 2012, 24, 6071-6079.	21.0	126
15	Synthetic Principles Directing Charge Transport in Low-Band-Gap Dithienosilole " Benzothiadiazole Copolymers. <i>Journal of the American Chemical Society</i> , 2012, 134, 8944-8957.	13.7	124
16	Heteroannulated acceptors based on benzothiadiazole. <i>Materials Horizons</i> , 2015, 2, 22-36.	12.2	123
17	Ring Substituents Mediate the Morphology of PBDTPD-PCBM Bulk-Heterojunction Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 2299-2306.	6.7	119
18	Impact of Molecular Packing on Electronic Polarization in Organic Crystals: The Case of Pentacene vs TIPS-Pentacene. <i>Journal of the American Chemical Society</i> , 2014, 136, 6421-6427.	13.7	113

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19	Three-Dimensional Packing Structure and Electronic Properties of Biaxially Oriented Poly(2,5-bis(3-alkylthiophene-2-yl)thieno[3,2-b]thiophene) Films. <i>Journal of the American Chemical Society</i> , 2012, 134, 6177-6190.	13.7	108
20	Electronic Coupling in Tetraanisylarylenediamine Mixed-Valence Systems: The Interplay between Bridge Energy and Geometric Factors. <i>Journal of the American Chemical Society</i> , 2005, 127, 8508-8516.	13.7	107
21	Solution-Processed Molecular Bis(Naphthalene Diimide) Derivatives with High Electron Mobility. <i>Chemistry of Materials</i> , 2011, 23, 3408-3410.	6.7	106
22	A stable two-electron-donating phenothiazine for application in nonaqueous redox flow batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24371-24379.	10.3	105
23	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. <i>Journal of the American Chemical Society</i> , 2019, 141, 13867-13876.	13.7	104
24	Indacenodibenzothiophenes: synthesis, optoelectronic properties and materials applications of molecules with strong antiaromatic character. <i>Chemical Science</i> , 2016, 7, 5547-5558.	7.4	103
25	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 1208-1217.	19.5	97
26	25th Anniversary Article: Design of Polymethine Dyes for All-Optical Switching Applications: Guidance from Theoretical and Computational Studies. <i>Advanced Materials</i> , 2014, 26, 68-84.	21.0	97
27	High Charge-Carrier Mobility in an Amorphous Hexaazatrinaphthylene Derivative. <i>Journal of the American Chemical Society</i> , 2005, 127, 16358-16359.	13.7	95
28	Characterization of Charge-Carrier Transport in Semicrystalline Polymers: Electronic Couplings, Site Energies, and Charge-Carrier Dynamics in Poly(bithiophene-alt-thienothiophene) [PBTTT]. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1633-1640.	3.1	92
29	Intermixing at the Pentacene/Fullerene Bilayer Interface: A Molecular Dynamics Study. <i>Advanced Materials</i> , 2013, 25, 878-882.	21.0	92
30	Benzothiadiazole-Dithienopyrrole Donor-Acceptor-Donor and Donor-Acceptor-Triads: Synthesis and Optical, Electrochemical, and Charge-Transport Properties. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23149-23163.	3.1	90
31	Synthesis, Ionisation Potentials and Electron Affinities of Hexaazatrinaphthylene Derivatives. <i>Chemistry - A European Journal</i> , 2007, 13, 3537-3547.	3.3	88
32	Tuning the Optoelectronic Properties of Vinylene-Linked Donor-Acceptor Copolymers for Organic Photovoltaics. <i>Macromolecules</i> , 2010, 43, 6685-6698.	4.8	86
33	Isolation and Crystal Structures of Two Singlet Bis(Triarylamine) Dications with Nonquinoidal Geometries. <i>Journal of the American Chemical Society</i> , 2006, 128, 1812-1817.	13.7	78
34	To bend or not to bend are heteroatom interactions within conjugated molecules effective in dictating conformation and planarity?. <i>Materials Horizons</i> , 2016, 3, 333-339.	12.2	78
35	Bis(carbazolyl) derivatives of pyrene and tetrahydropyrene: synthesis, structures, optical properties, electrochemistry, and electroluminescence. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1638.	5.5	77
36	Crossover from band-like to thermally activated charge transport in organic transistors due to strain-induced traps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6739-E6748.	7.1	77

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37	Polymethine dyes for all-optical switching applications: a quantum-chemical characterization of counter-ion and aggregation effects on the third-order nonlinear optical response. <i>Chemical Science</i> , 2012, 3, 3103.	7.4	75
38	Distinguishing the Effects of Bond-Length Alternation versus Bond-Order Alternation on the Nonlinear Optical Properties of π -Conjugated Chromophores. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2158-2162.	4.6	75
39	Strain effects on the work function of an organic semiconductor. <i>Nature Communications</i> , 2016, 7, 10270.	12.8	74
40	Tuning Delocalization in the Radical Cations of 1,4-Bis[4-(diarylamino)styryl]benzenes, 2,5-Bis[4-(diarylamino)styryl]thiophenes, and 2,5-Bis[4-(diarylamino)styryl]pyrroles through Substituent Effects. <i>Journal of the American Chemical Society</i> , 2012, 134, 10146-10155.	13.7	72
41	n-type charge transport in heavily p-doped polymers. <i>Nature Materials</i> , 2021, 20, 518-524.	27.5	66
42	n-Doping of Organic Electronic Materials Using Air-Stable Organometallics: A Mechanistic Study of Reduction by Dimeric Sandwich Compounds. <i>Chemistry - A European Journal</i> , 2012, 18, 14760-14772.	3.3	64
43	Fullerene-Carbene Lewis Acid-Base Adducts. <i>Journal of the American Chemical Society</i> , 2011, 133, 12410-12413.	13.7	63
44	Understanding the Electronic Structure of Isoindigo in Conjugated Systems: A Combined Theoretical and Experimental Approach. <i>Macromolecules</i> , 2013, 46, 8832-8844.	4.8	63
45	Molecular-Scale Understanding of Cohesion and Fracture in P3HT:Fullerene Blends. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 9957-9964.	8.0	60
46	Polymethine materials with solid-state third-order optical susceptibilities suitable for all-optical signal-processing applications. <i>Materials Horizons</i> , 2014, 1, 577-581.	12.2	59
47	Entanglements in P3HT and their influence on thin-film mechanical properties: Insights from molecular dynamics simulations. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2015, 53, 934-942.	2.1	59
48	N-Substituted Phenothiazine Derivatives: How the Stability of the Neutral and Radical Cation Forms Affects Overcharge Performance in Lithium-Ion Batteries. <i>ChemPhysChem</i> , 2015, 16, 1179-1189.	2.1	59
49	Rubrene: The Interplay between Intramolecular and Intermolecular Interactions Determines the Planarization of Its Tetracene Core in the Solid State. <i>Journal of the American Chemical Society</i> , 2015, 137, 8775-8782.	13.7	56
50	A mixed-valence bis(diarylamino)stilbene: crystal structure and comparison of electronic coupling with biphenyl and tolane analogues. <i>Chemical Communications</i> , 2005, , 764-766.	4.1	51
51	On the Molecular Origin of Charge Separation at the Donor-Acceptor Interface. <i>Advanced Energy Materials</i> , 2018, 8, 1702232.	19.5	51
52	Electronic Polarization Effects upon Charge Injection in Oligoacene Molecular Crystals: Description via a Polarizable Force Field. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13853-13860.	3.1	50
53	Fabrication and characterization of metal-molecule-silicon devices. <i>Applied Physics Letters</i> , 2007, 91, 033508.	3.3	48
54	Near-Infrared-Absorbing Indolizine-Porphyrin Push-Pull Dye for Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 16474-16489.	8.0	48

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55	Rational Functionalization of a C ₇₀ Buckybowl To Enable a C ₇₀ :Buckybowl Cocrystal for Organic Semiconductor Applications. <i>Journal of the American Chemical Society</i> , 2020, 142, 2460-2470.	13.7	48
56	Suppressing bias stress degradation in high performance solution processed organic transistors operating in air. <i>Nature Communications</i> , 2021, 12, 2352.	12.8	48
57	Understanding the effect of host structure of nitrogen doped ultrananocrystalline diamond electrode on electrochemical carbon dioxide reduction. <i>Carbon</i> , 2020, 157, 408-419.	10.3	46
58	Materials Scale Implications of Solvent and Temperature on [6,6]-Phenyl-C ₆₁ -butyric Acid Methyl Ester (PCBM): A Theoretical Perspective. <i>Advanced Functional Materials</i> , 2013, 23, 5800-5813.	14.9	43
59	Structure and Disorder in Squaraine-C ₆₀ Organic Solar Cells: A Theoretical Description of Molecular Packing and Electronic Coupling at the Donor-Acceptor Interface. <i>Advanced Functional Materials</i> , 2014, 24, 3790-3798.	14.9	43
60	Fluorenyl-substituted silole molecules: geometric, electronic, optical, and device properties. <i>Journal of Materials Chemistry</i> , 2008, 18, 3157.	6.7	41
61	Synthesis, experimental and theoretical characterization, and field-effect transistor properties of a new class of dibenzothiophene derivatives: From linear to cyclic architectures. <i>Journal of Materials Chemistry</i> , 2012, 22, 1313-1325.	6.7	41
62	Dimers of Nineteen-Electron Sandwich Compounds: Crystal and Electronic Structures, and Comparison of Reducing Strengths. <i>Chemistry - A European Journal</i> , 2014, 20, 15385-15394.	3.3	41
63	Organic Semiconductors Derived from Dinaphtho-Fused Indacenes: How Molecular Structure and Film Morphology Influence Thin-Film Transistor Performance. <i>Chemistry of Materials</i> , 2019, 31, 6962-6970.	6.7	41
64	Tuning the electronic and photophysical properties of heteroleptic iridium(III) phosphorescent emitters through ancillary ligand substitution: a theoretical perspective. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 6293.	2.8	40
65	Influence of Molecular Shape on Solid-State Packing in Disordered PC ₆₁ BM and PC ₇₁ BM Fullerenes. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3427-3433.	4.6	40
66	The fate of phenothiazine-based redox shuttles in lithium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 6905-6912.	2.8	40
67	Reactivity of an air-stable dihydrobenzimidazole n-dopant with organic semiconductor molecules. <i>CheM</i> , 2021, 7, 1050-1065.	11.7	40
68	Impact of Molecular Orientation and Packing Density on Electronic Polarization in the Bulk and at Surfaces of Organic Semiconductors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14053-14062.	8.0	39
69	Noncovalent Interactions and Impact of Charge Penetration Effects in Linear Oligoacene Dimers and Single Crystals. <i>Chemistry of Materials</i> , 2016, 28, 3990-4000.	6.7	37
70	Impact of the Nature of the Excited-State Transition Dipole Moments on the Third-Order Nonlinear Optical Response of Polymethine Dyes for All-Optical Switching Applications. <i>ACS Photonics</i> , 2014, 1, 261-269.	6.6	35
71	Structural dependence of the optical properties of narrow bandgap semiconductors with orthogonal donor-acceptor geometries. <i>Chemical Science</i> , 2013, 4, 1807.	7.4	34
72	Donor or Acceptor? How Selection of the Rylene Imide End Cap Impacts the Polarity of π -Conjugated Molecules for Organic Electronics. <i>ACS Applied Energy Materials</i> , 2018, 1, 4906-4916.	5.1	34

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73	Mono- and Dicarbonyl-Bridged Tricyclic Heterocyclic Acceptors: Synthesis and Electronic Properties. <i>Journal of Organic Chemistry</i> , 2011, 76, 2660-2671.	3.2	33
74	nâ€Dopants Based on Dimers of Benzimidazoline Radicals: Structures and Mechanism of Redox Reactions. <i>Chemistry - A European Journal</i> , 2015, 21, 10878-10885.	3.3	31
75	An unsymmetrical non-fullerene acceptor: synthesis via direct heteroarylation, self-assembly, and utility as a low energy absorber in organic photovoltaic cells. <i>Chemical Communications</i> , 2017, 53, 10168-10171.	4.1	31
76	Theory-Driven Insight into the Crystal Packing of Trialkylsilylethynyl Pentacenes. <i>Chemistry of Materials</i> , 2017, 29, 2502-2512.	6.7	30
77	Polarization Energies at Organicâ€Organic Interfaces: Impact on the Charge Separation Barrier at Donorâ€Acceptor Interfaces in Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15524-15534.	8.0	29
78	Presence of Short Intermolecular Contacts Screens for Kinetic Stability in Packing Polymorphs. <i>Journal of the American Chemical Society</i> , 2018, 140, 7519-7525.	13.7	29
79	Chemical Stabilities of the Lowest Triplet State in Aryl Sulfones and Aryl Phosphine Oxides Relevant to OLED Applications. <i>Chemistry of Materials</i> , 2019, 31, 1507-1519.	6.7	29
80	Packing and Disorder in Substituted Fullerenes. <i>Journal of Physical Chemistry C</i> , 2016, 120, 17242-17250.	3.1	28
81	On the impact of isomer structure and packing disorder in thienoacene organic semiconductors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4040-4048.	5.5	28
82	Effect of Solvent Additives on the Solution Aggregation of Phenyl-C ₆₁ -Butyl Acid Methyl Ester (PCBM). <i>Chemistry of Materials</i> , 2015, 27, 8261-8272.	6.7	26
83	Substrate-Induced Variations of Molecular Packing, Dynamics, and Intermolecular Electronic Couplings in Pentacene Monolayers on the Amorphous Silica Dielectric. <i>ACS Nano</i> , 2014, 8, 690-700.	14.6	25
84	Interplay of alternative conjugated pathways and steric interactions on the electronic and optical properties of donorâ€acceptor conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8873-8879.	5.5	25
85	An anionic organic mixed-valence system with a remarkably well-resolved vibrational structure in its intervalence band. <i>Chemical Communications</i> , 2003, , 194-195.	4.1	24
86	Trends in Electron-Vibration and Electronic Interactions in Bis(dimethylamino) Mixed-Valence Systems: A Joint Experimental and Theoretical Investigation. <i>Journal of Physical Chemistry C</i> , 2008, 112, 7959-7967.	3.1	24
87	Synthesis and characterization of naphthalene diimide/diethynylbenzene copolymers. <i>Polymer</i> , 2012, 53, 1072-1078.	3.8	24
88	Overcharge protection of lithium-ion batteries above 4 V with a perfluorinated phenothiazine derivative. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5410-5414.	10.3	24
89	Impact of Atomistic Substitution on Thin-Film Structure and Charge Transport in a Germanyl-ethynyl Functionalized Pentacene. <i>Chemistry of Materials</i> , 2019, 31, 6615-6623.	6.7	24
90	Acid dyeing for green solvent processing of solvent resistant semiconducting organic thin films. <i>Materials Horizons</i> , 2020, 7, 2959-2969.	12.2	24

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91	Benzo[1,2-b:6,5-b'â€²]dithiophene(dithiazole)-4,5-dione derivatives: synthesis, electronic properties, crystal packing and charge transport. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1467.	5.5	23
92	Charge Delocalization through Benzene, Naphthalene, and Anthracene Bridges in π -Conjugated Oligomers: An Experimental and Quantum Chemical Study. <i>Journal of Physical Chemistry B</i> , 2013, 117, 6304-6317.	2.6	23
93	Noncovalent Close Contacts in Fluorinated Thiophene-Phenylene-Thiophene Conjugated Units: Understanding the Nature and Dominance of O-H versus S-H and O-F Interactions with Respect to the Control of Polymer Conformation. <i>Chemistry of Materials</i> , 2019, 31, 7070-7079.	6.7	23
94	OCELOT: An infrastructure for data-driven research to discover and design crystalline organic semiconductors. <i>Journal of Chemical Physics</i> , 2021, 154, 174705.	3.0	23
95	Structure-processing-property correlations in solution-processed, small-molecule, organic solar cells. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5250.	5.5	22
96	Bond Ellipticity Alternation: An Accurate Descriptor of the Nonlinear Optical Properties of π -Conjugated Chromophores. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1377-1383.	4.6	22
97	Even-Odd Alkyl Chain-Length Alternation Regulates Oligothiophene Crystal Structure. <i>Chemistry of Materials</i> , 2019, 31, 6900-6907.	6.7	22
98	Computationally aided design of a high-performance organic semiconductor: the development of a universal crystal engineering core. <i>Chemical Science</i> , 2019, 10, 10543-10549.	7.4	22
99	Experimental and Theoretical Identification of Valence Energy Levels and Interface Dipole Trends for a Family of (Oligo)Phenylene-ethynylene thiols Adsorbed on Gold. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13215-13225.	3.1	21
100	Nonlinear Optical Properties of $X(C_6H_5)_4$ ($X = B, C$). <i>Journal of the American Chemical Society</i> , 2015, 137, 9635-9642.	13.7	21
101	Delimited Polyacenes: Edge Topology as a Tool To Modulate Carbon Nanoribbon Structure, Conjugation, and Mobility. <i>Chemistry of Materials</i> , 2018, 30, 947-957.	6.7	21
102	Impact of Bulk Aggregation on the Electronic Structure of Streptocyanines: Implications for the Solid-State Nonlinear Optical Properties and All-Optical Switching Applications. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23575-23585.	3.1	20
103	Characterizing the Polymer:Fullerene Intermolecular Interactions. <i>Chemistry of Materials</i> , 2016, 28, 1446-1452.	6.7	20
104	Comparative studies of the geometric and electronic properties of 1,1-disubstituted-2,3,4,5-tetraphenylsiloles and 1,1,2,2-tetramethyl-3,4,5,6-tetraphenyl-1,2-disila-3,5-cyclohexadiene. <i>Journal of Materials Chemistry</i> , 2006, 16, 3814-3822.	6.7	19
105	Mixed-Valence Cations of Di(carbazol-9-yl) Biphenyl, Tetrahydropyrene, and Pyrene Derivatives. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3156-3166.	3.1	19
106	Effect of Bulky Substituents on Thiopyrylium Polymethine Aggregation in the Solid State: A Theoretical Evaluation of the Implications for All-Optical Switching Applications. <i>Chemistry of Materials</i> , 2014, 26, 6439-6447.	6.7	18
107	Positional Effects from f -Bonded Platinum(II) on Intersystem Crossing Rates in Perylene diimide Complexes: Synthesis, Structures, and Photophysical Properties. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13848-13862.	3.1	18
108	Bromination of the benzothioxanthene Bloc: toward new π -conjugated systems for organic electronic applications. <i>Journal of Materials Chemistry C</i> , 2018, 6, 761-766.	5.5	18

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109	Impact of rotamer diversity on the self-assembly of nearly isostructural molecular semiconductors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 383-394.	10.3	18
110	Triperylene[3,3,3]propellane triimides: achieving a new generation of quasi-D _{3h} symmetric nanostructures in organic electronics. <i>Chemical Science</i> , 2019, 10, 4951-4958.	7.4	18
111	Dynamics, Miscibility, and Morphology in Polymer:Molecule Blends: The Impact of Chemical Functionality. <i>Chemistry of Materials</i> , 2015, 27, 7643-7651.	6.7	17
112	Bis(tercarbazole) pyrene and tetrahydropyrene derivatives: photophysical and electrochemical properties, theoretical modeling, and OLEDs. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5009-5018.	5.5	16
113	The Solution is the Solution: Data-Driven Elucidation of Solution-to-Device Feature Transfer for π -Conjugated Polymer Semiconductors. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3613-3620.	8.0	16
114	Molecular modulation of Schottky barrier height in metal-molecule-silicon diodes: Capacitance and simulation results. <i>Journal of Applied Physics</i> , 2010, 107, 024505.	2.5	15
115	Lowering Electrocatalytic CO ₂ Reduction Overpotential Using N-Annulated Perylene Diimide Rhenium Bipyridine Dyads with Variable Tether Length. <i>Journal of the American Chemical Society</i> , 2021, 143, 16849-16864.	13.7	15
116	Unusual Electronic Structure of the Donor-Acceptor Cocrystal Formed by Dithieno[3,2- <i>a</i> :2' <i>a</i> ' ² ,3' <i>a</i> ' ² - <i>c</i>]phenazine and 7,7,8,8-Tetracyanoquinodimethane. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4510-4515.	4.6	15
117	Small Optical Gap Molecules and Polymers: Using Theory to Design More Efficient Materials for Organic Photovoltaics. <i>Topics in Current Chemistry</i> , 2013, 352, 1-38.	4.0	14
118	Mapping the configuration dependence of electronic coupling in organic semiconductors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3825-3832.	5.5	13
119	Nitration of benzothioxanthene: towards a new class of dyes with versatile photophysical properties. <i>New Journal of Chemistry</i> , 2020, 44, 900-905.	2.8	12
120	Unveiling the structural, electronic, and optical effects of carbon-doping on multi-layer anatase TiO ₂ (1 0 1) and the impact on photocatalysis. <i>Applied Surface Science</i> , 2022, 586, 152641.	6.1	12
121	Enhancing CO ₂ absorption for post-combustion carbon capture via zinc-based biomimetic catalysts in industrially relevant amine solutions. <i>International Journal of Greenhouse Gas Control</i> , 2019, 85, 156-165.	4.6	11
122	Evolution of Chain Dynamics and Oxidation States with Increasing Chain Length for a Donor-Acceptor-Conjugated Oligomer Series. <i>Macromolecules</i> , 2021, 54, 8207-8219.	4.8	11
123	Beyond the Hammett Effect: Using Strain to Alter the Landscape of Electrochemical Potentials. <i>ChemPhysChem</i> , 2017, 18, 2142-2146.	2.1	10
124	Assessment of Front-Substituted Zwitterionic Cyanine Polymethines for All-Optical Switching Applications. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14166-14175.	3.1	10
125	Noncovalent Interactions in Organic Electronic Materials. , 2017, , 277-302.		10
126	Deconstructing the behavior of donor-acceptor copolymers in solution & the melt: the case of PTB7. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7802-7813.	2.8	10

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127	Modification of the LiFePO ₄ (010) Surface Due to Exposure to Atmospheric Gases. ACS Applied Materials & Interfaces, 2021, 13, 29034-29040.	8.0	10
128	Steric Manipulation as a Mechanism for Tuning the Reduction and Oxidation Potentials of Phenothiazines. Journal of Physical Chemistry A, 2021, 125, 272-278.	2.5	9
129	Geometric and Chelation Influences on the Electronic Structure and Optical Properties of Tetra(carboxylic acid)phenyleneethynylene Dyes. Journal of Physical Chemistry A, 2008, 112, 4202-4208.	2.5	8
130	Intrinsic Properties of Two Benzodithiophene-Based Donor-Acceptor Copolymers Used in Organic Solar Cells: A Quantum-Chemical Approach. Journal of Physical Chemistry A, 2016, 120, 1051-1064.	2.5	8
131	Effect of Halogenation on the Energetics of Pure and Mixed Phases in Model Organic Semiconductors Composed of Anthradithiophene Derivatives and C ₆₀ . Journal of Physical Chemistry C, 2018, 122, 4757-4767.	3.1	8
132	Organometallic hydride-transfer agents as reductants for organic semiconductor molecules. Inorganica Chimica Acta, 2019, 489, 67-77.	2.4	8
133	Genetic Algorithms and Machine Learning for Predicting Surface Composition, Structure, and Chemistry: A Historical Perspective and Assessment. Chemistry of Materials, 2021, 33, 6589-6615.	6.7	8
134	What is special about silicon in functionalised organic semiconductors?. Materials Advances, 2021, 2, 5415-5421.	5.4	8
135	Reconsidering the Roles of Noncovalent Intramolecular π -Locks in π -Conjugated Molecules. Chemistry of Materials, 2021, 33, 9139-9151.	6.7	8
136	Dimers of Nineteen-Electron Sandwich Compounds: An Electrochemical Study of the Kinetics of Their Formation. Organometallics, 2015, 34, 3706-3712.	2.3	7
137	Oxidation Pathways Involving a Sulfide-Endcapped Donor-Acceptor-Donor π -Conjugated Molecule and Antimony(V) Chloride. Journal of Physical Chemistry B, 2019, 123, 3866-3874.	2.6	7
138	The impact of symmetric modes on intramolecular electron transfer: A semi-classical approach. Chemical Physics, 2006, 326, 107-114.	1.9	6
139	Theoretical description of the geometric and electronic structures of organic-organic interfaces in organic solar cells: a brief review. Science China Chemistry, 2014, 57, 1330-1339.	8.2	6
140	Solvent-Molecule Interactions Govern Crystal-Habit Selection in Naphthalene Tetracarboxylic Diimides. Chemistry of Materials, 2019, 31, 9691-9698.	6.7	6
141	Determination of the Free Energies of Mixing of Organic Solutions through a Combined Molecular Dynamics and Bayesian Statistics Approach. Journal of Chemical Information and Modeling, 2020, 60, 1424-1431.	5.4	6
142	Thermomechanical enhancement of $\langle \text{DPP}^{\text{4T}} \rangle$ through purposeful $\langle \text{I}^{\text{conjugation}} \rangle$ disruption. Journal of Polymer Science, 2022, 60, 559-568.	3.8	5
143	Magnetic ordering in a vanadium-organic coordination polymer using a pyrrolo[2,3- <i>cd</i> :5,4- <i>cd'</i> : π^2]bis(thiazole)-based ligand. RSC Advances, 2018, 8, 36223-36232.	3.6	4
144	Exploring thermal transitions in anthradithiophene-based organic semiconductors to reveal structure-packing relationships. Journal of Materials Chemistry C, 2018, 6, 10924-10934.	5.5	4

#	ARTICLE	IF	CITATIONS
145	A Genetic Algorithmic Approach to Determine the Structure of Li ⁺ Al Layered Double Hydroxides. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 4845-4855.	5.4	4
146	Synthesis and electronic properties of a linearly fused anthracene dimer. <i>Tetrahedron Letters</i> , 2020, 61, 152182.	1.4	4
147	Biotinylation as a tool to enhance the uptake of small molecules in Gram-negative bacteria. <i>PLoS ONE</i> , 2021, 16, e0260023.	2.5	4
148	Parallel and Perpendicular Packing in Mixed-Stack Cocrystals of Trimeric Perfluoro- <i>ortho</i> -phenylene Mercury and Benzo[1,2- <i>b</i> :6,5- <i>b'</i>]-dithiophene-4,5-dione Derivatives. <i>Crystal Growth and Design</i> , 2016, 16, 2190-2200.	3.0	3
149	Synthesis, structures, and reactivity of isomers of [RuCp*(1,4-(Me ₂ N)2C ₆ H ₄)] ₂ . <i>Dalton Transactions</i> , 2021, 50, 13020-13030.	3.3	3
150	Nanoribbons or weakly connected acenes? The influence of pyrene insertion on linearly extended ring systems. <i>Journal of Materials Chemistry C</i> , 2021, 9, 16929-16934.	5.5	3
151	Challenges in Information-Mining the Materials Literature: A Case Study and Perspective. <i>Chemistry of Materials</i> , 2022, 34, 4821-4827.	6.7	3
152	The role of crystal packing on the optical response of trialkyltetraethynyl acenes. <i>Journal of Chemical Physics</i> , 2022, 157, .	3.0	3
153	Healing contact. <i>Nature Materials</i> , 2013, 12, 1084-1085.	27.5	2
154	Work function reduction by a redox-active organometallic sandwich complex. <i>Organic Electronics</i> , 2016, 37, 263-270.	2.6	2
155	Festschrift in Honor of Prof. Jean-Luc Brédas on His 65th Birthday. <i>Chemistry of Materials</i> , 2019, 31, 6307-6308.	6.7	2
156	Understanding the Relationships Among Molecular Structure, Excited-State Properties, and Polarizabilities of π -Conjugated Chromophores. <i>Materials and Energy</i> , 2016, , 393-419.	0.1	1
157	Computational characterization of charge transport resiliency in molecular solids. <i>Molecular Systems Design and Engineering</i> , 2022, 7, 651-660.	3.4	1
158	Barrier height modulation and dipole moments in metal-molecule-silicon diodes. , 2007, , .		0
159	Group 14 effects in alkynyl acene small molecule semiconductors. , 2021, , .		0
160	Following the crystal growth of anthradithiophenes through atomistic molecular dynamics simulations and graph characterization. <i>Molecular Systems Design and Engineering</i> , 0, , .	3.4	0
161	Combined Computational and Experimental Approach to Determine and Understand the Solubility of Phenothiazines as Redoxmers. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1679-1679.	0.0	0