

Ryan M Young

List of Publications by Year in descending order

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129
papers

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81743

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times ranked

5213
citing authors

#	ARTICLE	IF	CITATIONS
1	Enabling singlet fission by controlling intramolecular charge transfer in π -stacked covalent terrylenediimide dimers. <i>Nature Chemistry</i> , 2016, 8, 1120-1125.	6.6	273
2	Supramolecular <i>Ex</i> plorations: <i>Ex</i> hibiting the <i>Ex</i> tent of <i>Ex</i> tended Cationic Cyclophanes. <i>Accounts of Chemical Research</i> , 2016, 49, 262-273.	7.6	193
3	Unified model for singlet fission within a non-conjugated covalent pentacene dimer. <i>Nature Communications</i> , 2017, 8, 15171.	5.8	176
4	Direct Observation of Ultrafast Excimer Formation in Covalent Perylenediimide Dimers Using Near-Infrared Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2588-2593.	2.1	168
5	Processing Strategies for an Organic Photovoltaic Module with over 10% Efficiency. <i>Joule</i> , 2020, 4, 189-206.	11.7	154
6	Mixed Electronic States in Molecular Dimers: Connecting Singlet Fission, Excimer Formation, and Symmetry-Breaking Charge Transfer. <i>Accounts of Chemical Research</i> , 2020, 53, 1957-1968.	7.6	153
7	Direct Observation of a Charge-Transfer State Preceding High-Yield Singlet Fission in Terrylenediimide Thin Films. <i>Journal of the American Chemical Society</i> , 2017, 139, 663-671.	6.6	149
8	Dynamics of Solvated Electrons in Clusters. <i>Chemical Reviews</i> , 2012, 112, 5553-5577.	23.0	138
9	Ultrafast Conformational Dynamics of Electron Transfer in ExBox^{4+} , Perylene. <i>Journal of Physical Chemistry A</i> , 2013, 117, 12438-12448.	1.1	137
10	Ultrafast Photoinduced Symmetry-Breaking Charge Separation and Electron Sharing in Perylenediimide Molecular Triangles. <i>Journal of the American Chemical Society</i> , 2015, 137, 13236-13239.	6.6	130
11	Energy Flow Dynamics within Cofacial and Slip-Stacked Perylene-3,4-dicarboximide Dimer Models of π -Aggregates. <i>Journal of the American Chemical Society</i> , 2014, 136, 14912-14923.	6.6	122
12	Relative Unidirectional Translation in an Artificial Molecular Assembly Fueled by Light. <i>Journal of the American Chemical Society</i> , 2013, 135, 18609-18620.	6.6	112
13	Excimer Formation and Symmetry-Breaking Charge Transfer in Cofacial Perylene Dimers. <i>Journal of Physical Chemistry A</i> , 2017, 121, 1607-1615.	1.1	108
14	Evidence for Charge-Transfer Mediation in the Primary Events of Singlet Fission in a Weakly Coupled Pentacene Dimer. <i>Chem</i> , 2018, 4, 1092-1111.	5.8	105
15	Hole-Transfer Dependence on Blend Morphology and Energy Level Alignment in Polymer: ITIC Photovoltaic Materials. <i>Advanced Materials</i> , 2018, 30, 1704263.	11.1	101
16	Singlet Fission in Covalent Terrylenediimide Dimers: Probing the Nature of the Multiexciton State Using Femtosecond Mid-Infrared Spectroscopy. <i>Journal of the American Chemical Society</i> , 2018, 140, 9184-9192.	6.6	101
17	Singlet Fission in 9,10-Bis(phenylethynyl)anthracene Thin Films. <i>Journal of the American Chemical Society</i> , 2018, 140, 15140-15144.	6.6	84
18	Photodriven quantum teleportation of an electron spin state in a covalent donor-acceptor radical system. <i>Nature Chemistry</i> , 2019, 11, 981-986.	6.6	83

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19	Guest and solvent modulated photo-driven charge separation and triplet generation in a perylene bisimide cyclophane. <i>Chemical Science</i> , 2016, 7, 5428-5434.	3.7	81
20	Quintet-triplet mixing determines the fate of the multiexciton state produced by singlet fission in a terylenediimide dimer at room temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 8178-8183.	3.3	73
21	Influence of Anion Delocalization on Electron Transfer in a Covalent Porphyrin Donor–Perylenediimide Dimer Acceptor System. <i>Journal of the American Chemical Society</i> , 2017, 139, 749-756.	6.6	68
22	Probing Distance Dependent Charge-Transfer Character in Excimers of Extended Viologen Cyclophanes Using Femtosecond Vibrational Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017, 139, 14265-14276.	6.6	68
23	Non-fullerene acceptors with direct and indirect hexa-fluorination afford >17% efficiency in polymer solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 645-659.	15.6	65
24	Energy and Electron Transfer Dynamics within a Series of Perylene Diimide/Cyclophane Systems. <i>Journal of the American Chemical Society</i> , 2015, 137, 15299-15307.	6.6	64
25	Photoinduced electron transfer from rylenediimide radical anions and dianions to Re(bpy)(CO) ₃ using red and near-infrared light. <i>Chemical Science</i> , 2017, 8, 3821-3831.	3.7	57
26	A Supramolecular Approach for Modulated Photoprotection, Lysosomal Delivery, and Photodynamic Activity of a Photosensitizer. <i>Journal of the American Chemical Society</i> , 2019, 141, 12296-12304.	6.6	57
27	An allosteric photoredox catalyst inspired by photosynthetic machinery. <i>Nature Communications</i> , 2015, 6, 6541.	5.8	54
28	Electron Hopping and Charge Separation within a Naphthalene-1,4:5,8-bis(dicarboximide) Chiral Covalent Organic Cage. <i>Journal of the American Chemical Society</i> , 2017, 139, 3348-3351.	6.6	53
29	Two-Dimensional Electronic Spectroscopy Reveals Excitation Energy-Dependent State Mixing during Singlet Fission in a Terylenediimide Dimer. <i>Journal of the American Chemical Society</i> , 2018, 140, 17907-17914.	6.6	52
30	Electron-catalysed molecular recognition. <i>Nature</i> , 2022, 603, 265-270.	13.7	51
31	Accelerating symmetry-breaking charge separation in a perylenediimide trimer through a vibronically coherent dimer intermediate. <i>Nature Chemistry</i> , 2022, 14, 786-793.	6.6	50
32	A Donor–Acceptor [2]Catenane for Visible Light Photocatalysis. <i>Journal of the American Chemical Society</i> , 2021, 143, 8000-8010.	6.6	47
33	Enhanced Photochemical Hydrogen Evolution from Fe ₄ S ₄ -Based Biomimetic Chalcogels Containing M ²⁺ (M = Pt, Zn, Co, Ni, Sn) Centers. <i>Journal of the American Chemical Society</i> , 2014, 136, 13371-13380.	6.6	46
34	Direct Observation of the Hole Carriers in DNA Photoinduced Charge Transport. <i>Journal of the American Chemical Society</i> , 2016, 138, 5491-5494.	6.6	45
35	Symmetry-Breaking Charge Separation in the Solid State: Tetra(phenoxy)perylenediimide Polycrystalline Films. <i>Journal of the American Chemical Society</i> , 2020, 142, 18243-18250.	6.6	44
36	Reversible Symmetry-Breaking Charge Separation in a Series of Perylenediimide Cyclophanes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 10408-10419.	1.5	44

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37	Solvent-Templated Folding of Perylene Bisimide Macrocycles into Coiled Double-String Ropes with Solvent-Sensitive Optical Signatures. <i>Journal of the American Chemical Society</i> , 2017, 139, 2014-2021.	6.6	43
38	Electrochemical Switching of a Fluorescent Molecular Rotor Embedded within a Bistable Rotaxane. <i>Journal of the American Chemical Society</i> , 2020, 142, 11835-11846.	6.6	43
39	Ultrafast Two-Electron Transfer in a CdS Quantum Dot-Extended-Viologen Cyclophane Complex. <i>Journal of the American Chemical Society</i> , 2016, 138, 6163-6170.	6.6	42
40	Intramolecular Energy and Electron Transfer within a Diazaperopyrenium-Based Cyclophane. <i>Journal of the American Chemical Society</i> , 2017, 139, 4107-4116.	6.6	42
41	Characterization of Excimer Relaxation via Femtosecond Shortwave- and Mid-Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2017, 121, 784-792.	1.1	42
42	Charge Transport across DNA-Based Three-Way Junctions. <i>Journal of the American Chemical Society</i> , 2015, 137, 5113-5122.	6.6	39
43	Electronic relaxation dynamics in large anionic water clusters: (H ₂ O) _n ⁻ and (D ₂ O) _n ⁻ (n=25-200). <i>Journal of Chemical Physics</i> , 2009, 131, 194302.	1.2	38
44	Combining Intra- and Intermolecular Charge Transfer with Polycationic Cyclophanes To Design 2D Tessellations. <i>Journal of the American Chemical Society</i> , 2019, 141, 18727-18739.	6.6	36
45	Electron Transfer and Multi-Electron Accumulation in ExBox ⁴⁺ . <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5371-5375.	7.2	35
46	Charge and Spin Transport in an Organic Molecular Square. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11971-11977.	7.2	35
47	Tracking Photoinduced Charge Separation in DNA: from Start to Finish. <i>Accounts of Chemical Research</i> , 2018, 51, 1746-1754.	7.6	34
48	Photon Upconversion in a Glowing Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2021, 143, 5053-5059.	6.6	34
49	Spin-Selective Photoreduction of a Stable Radical within a Covalent Donor-Acceptor-Radical Triad. <i>Journal of the American Chemical Society</i> , 2017, 139, 15660-15663.	6.6	33
50	Photovoltaic Blend Microstructure for High Efficiency Post-Fullerene Solar Cells. To Tilt or Not To Tilt?. <i>Journal of the American Chemical Society</i> , 2019, 141, 13410-13420.	6.6	33
51	Photogenerated Spin-Entangled Qubit (Radical) Pairs in DNA Hairpins: Observation of Spin Delocalization and Coherence. <i>Journal of the American Chemical Society</i> , 2019, 141, 2152-2160.	6.6	33
52	Solid-State Characterization and Photoinduced Intramolecular Electron Transfer in a Nanoconfined Octacationic Homo[2]Catenane. <i>Journal of the American Chemical Society</i> , 2014, 136, 10569-10572.	6.6	32
53	Influence of Vibronic Coupling on Ultrafast Singlet Fission in a Linear Terrylenediimide Dimer. <i>Journal of the American Chemical Society</i> , 2021, 143, 2049-2058.	6.6	32
54	Modulation of Electronics and Thermal Stabilities of Photochromic Phosphino-Aminoazobenzene Derivatives in Weak-Link Approach Coordination Complexes. <i>Journal of the American Chemical Society</i> , 2013, 135, 16988-16996.	6.6	31

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55	Host-Guest Complexation-Mediated Supramolecular Photon Upconversion. <i>Journal of the American Chemical Society</i> , 2020, 142, 16600-16609.	6.6	30
56	Covalent Radical Pairs as Spin Qubits: Influence of Rapid Electron Motion between Two Equivalent Sites on Spin Coherence. <i>Journal of the American Chemical Society</i> , 2018, 140, 13011-13021.	6.6	29
57	Symmetry-Breaking Charge Separation in a Nanoscale Terrylenediimide Guanine-Quadruplex Assembly. <i>Journal of the American Chemical Society</i> , 2019, 141, 17512-17516.	6.6	29
58	Cyclophane-Sustained Ultrastable Porphyrins. <i>Journal of the American Chemical Society</i> , 2020, 142, 8938-8945.	6.6	29
59	Chemically regulating Rh(<i>scp</i>)-Bodipy photoredox switches. <i>Chemical Communications</i> , 2014, 50, 6850-6852.	2.2	28
60	Efficient Charge Transport via DNA G-Quadruplexes. <i>Journal of the American Chemical Society</i> , 2017, 139, 1730-1733.	6.6	27
61	Time-resolved photoelectron imaging of large anionic methanol clusters: (Methanol) _n ⁻ (<i>n</i> = 145-535). <i>Journal of Chemical Physics</i> , 2007, 126, 244306.	1.2	26
62	Direct Measurement of Lattice Dynamics and Optical Phonon Excitation in Semiconductor Nanocrystals Using Femtosecond Stimulated Raman Spectroscopy. <i>Physical Review Letters</i> , 2013, 111, 107401.	2.9	26
63	Substituent Effects on Singlet Exciton Fission in Polycrystalline Thin Films of Cyano-Substituted Diaryltetracenes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21262-21271.	1.5	26
64	Influence of the heavy-atom effect on singlet fission: a study of platinum-bridged pentacene dimers. <i>Chemical Science</i> , 2019, 10, 11130-11140.	3.7	25
65	Photoinduced Charge and Energy Transfer within <i>meta</i> - and <i>para</i> -Linked Chlorophyll <i>a</i> -Perylene-3,4:9,10-bis(dicarboximide) Donor-Acceptor Dyads. <i>Journal of Physical Chemistry B</i> , 2016, 120, 756-765.	1.2	24
66	Photoinduced Electron Transfer and Solvation in Iodide-doped Acetonitrile Clusters. <i>Journal of Physical Chemistry B</i> , 2009, 113, 4031-4037.	1.2	23
67	Conformationally Gated Charge Transfer in DNA Three-Way Junctions. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2434-2438.	2.1	23
68	Supramolecular Porous Organic Nanocomposites for Heterogeneous Photocatalysis of a Sulfur Mustard Simulant. <i>Advanced Materials</i> , 2020, 32, e2001592.	11.1	23
69	Symmetry-Breaking Charge Separation in Phenylene-Bridged Perylenediimide Dimers. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7633-7643.	1.1	23
70	Fast photo-driven electron spin coherence transfer: the effect of electron-nuclear hyperfine coupling on coherence dephasing. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7962-7967.	2.7	22
71	Thermal effects on energetics and dynamics in water cluster anions (H ₂ O) _n ⁻ . <i>Journal of Chemical Physics</i> , 2012, 136, 094304.	1.2	21
72	Photoinduced Electron Transfer within a Zinc Porphyrin-Cyclobis(paraquat- <i>p</i> -phenylene) Donor-Acceptor Dyad. <i>Chemistry - A European Journal</i> , 2014, 20, 14690-14697.	1.7	21

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73	Substituent effects on energetics and crystal morphology modulate singlet fission in 9,10-bis(phenylethynyl)anthracenes. <i>Journal of Chemical Physics</i> , 2019, 151, 044501.	1.2	20
74	Charge-transfer biexciton annihilation in a donor-acceptor co-crystal yields high-energy long-lived charge carriers. <i>Chemical Science</i> , 2020, 11, 9532-9541.	3.7	20
75	Steric Interactions Impact Vibronic and Vibrational Coherences in Perylenediimide Cyclophanes. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7498-7504.	2.1	19
76	Choosing sides: unusual ultrafast charge transfer pathways in an asymmetric electron-accepting cyclophane that binds an electron donor. <i>Chemical Science</i> , 2019, 10, 4282-4292.	3.7	18
77	Mechanically interlocked pyrene-based photocatalysts. <i>Nature Catalysis</i> , 2022, 5, 524-533.	16.1	18
78	π-Stacking-Dependent Vibronic Couplings Drive Excited-State Dynamics in Perylenediimide Assemblies. <i>Journal of the American Chemical Society</i> , 2022, 144, 11386-11396.	6.6	18
79	Quantitative Determination of the Differential Raman Scattering Cross Sections of Glucose by Femtosecond Stimulated Raman Scattering. <i>Analytical Chemistry</i> , 2017, 89, 6931-6935.	3.2	16
80	Photoelectron imaging of tetrahydrofuran cluster anions (THF) _n ⁻ (1 ≤ n ≤ 100). <i>Journal of Chemical Physics</i> , 2010, 133, 154312.	1.2	15
81	Toward a Charged Homo[2]catenane Employing Diazaperopyrenium Homophilic Recognition. <i>Journal of the American Chemical Society</i> , 2018, 140, 6540-6544.	6.6	15
82	Charge-Transfer Character in Excimers of Perylenediimides Self-Assembled on Anodic Aluminum Oxide Membrane Walls. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4369-4377.	1.5	15
83	Temperature Tuning of Coherent Mixing between States Driving Singlet Fission in a Spiro-Fused Terrylenediimide Dimer. <i>Journal of Physical Chemistry B</i> , 2021, 125, 6945-6954.	1.2	15
84	Auger Heating and Thermal Dissipation in Zero-Dimensional CdSe Nanocrystals Examined Using Femtosecond Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4481-4487.	2.1	14
85	Dynamics of electron solvation in I ⁻ (CH ₃ OH) _n clusters (4 ≤ n ≤ 11). <i>Journal of Chemical Physics</i> , 2011, 134, 124311.	1.2	13
86	Cooperative Electronic and Structural Regulation in a Bioinspired Allosteric Photoredox Catalyst. <i>Inorganic Chemistry</i> , 2016, 55, 8301-8308.	1.9	13
87	Quantum Coherence Enhances Electron Transfer Rates to Two Equivalent Electron Acceptors. <i>Journal of the American Chemical Society</i> , 2019, 141, 12236-12239.	6.6	13
88	Transient Two-Dimensional Electronic Spectroscopy: Coherent Dynamics at Arbitrary Times along the Reaction Coordinate. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3509-3515.	2.1	12
89	Interaction of Photogenerated Spin Qubit Pairs with a Third Electron Spin in DNA Hairpins. <i>Journal of the American Chemical Society</i> , 2021, 143, 4625-4632.	6.6	12
90	Coupling between Harmonic Vibrations Influences Quantum Beating Signatures in Two-Dimensional Electronic Spectra. <i>Journal of Physical Chemistry C</i> , 2022, 126, 120-131.	1.5	12

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109	Auger recombination dynamics in clusters. <i>Chemical Physics</i> , 2008, 350, 69-74.	0.9	6
110	Photo-initiated multi-step electron transfer in donor-acceptor systems using a novel bi-functionalized perylene chromophore. <i>Chemical Physics Letters</i> , 2015, 629, 23-28.	1.2	6
111	Metalated Porphyrin Stable Free Radicals: Exploration of Electron Spin Communication and Dynamics. <i>Journal of Physical Chemistry A</i> , 2020, 124, 6168-6176.	1.1	6
112	Charge Transfer and Spin Dynamics in a Zinc Porphyrin Donor Covalently Linked to One or Two Naphthalenediimide Acceptors. <i>Journal of Physical Chemistry A</i> , 2021, 125, 825-834.	1.1	6
113	Twisted π -A Type Acceptors with Thermally Activated Delayed Crystallization Behavior for Efficient Nonfullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 0, , 2103957.	10.2	6
114	Two-Photon Absorption in Electron Donor-Acceptor Dyads and Triads Using Classical and Entangled Photons: Potential Systems for Photon-to-Spin Quantum Transduction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6334-6343.	1.5	6
115	Charge Separation and Recombination Pathways in Diblock DNA Hairpins. <i>Journal of Physical Chemistry B</i> , 2019, 123, 1545-1553.	1.2	5
116	Photoinduced electron transfer from zinc <i>meso</i> -tetraphenylporphyrin to a one-dimensional perylenediimide aggregate: Probing anion delocalization effects. <i>Journal of Porphyrins and Phthalocyanines</i> , 2020, 24, 143-152.	0.4	5
117	Structure and Dynamics of Electron Injection and Charge Recombination in i-Motif DNA Conjugates. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8058-8068.	1.2	4
118	Direct Observation of the Photoreduction Products of Mn(NDI-bpy)(CO) ₃ X CO ₂ Reduction Catalysts Using Femtosecond Transient IR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6416-6426.	1.5	4
119	Excited-State Dynamics of Perylene-Based Chromophore Assemblies on Nanoporous Anodic Aluminum Oxide Membranes. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14843-14853.	1.5	4
120	Singlet fission in core-linked terrylenediimide dimers. <i>Journal of Chemical Physics</i> , 2020, 153, 244306.	1.2	4
121	Solvent independent symmetry-breaking charge separation in terrylenediimide guanine-quadruplex nanoparticles. <i>Journal of Chemical Physics</i> , 2020, 153, 204302.	1.2	4
122	Auger recombination and excited state relaxation dynamics in Hg ⁿ⁺ (n=9-20) anion clusters. <i>Journal of Chemical Physics</i> , 2009, 130, 231103.	1.2	3
123	Dynamics of Charge Injection and Charge Recombination in DNA Mini-Hairpins. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7042-7047.	1.2	3
124	Fluorescent excimers and exciplexes of the purine base derivative 8-phenylethynyl-guanine in DNA hairpins. <i>Faraday Discussions</i> , 2018, 207, 217-232.	1.6	3
125	Excimer Diffusivity in 9,10-Bis(phenylethynyl)anthracene Assemblies on Anodic Aluminum Oxide Membranes. <i>Journal of Physical Chemistry C</i> , 2021, 125, 24498-24504.	1.5	3
126	Photophysics of Zinc 2,11,20,29-Tetra- <i>tert</i> -butyl-2,3-Naphthalocyanine: Aggregation-Induced S ₂ Emission and Rapid Intersystem Crossing in the Solid State. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11680-11689.	1.5	1

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127	Electronic Interactions of Michler's Ketone with <scp>DNA</scp> Bases in Synthetic Hairpins. Photochemistry and Photobiology, 2015, 91, 739-747.	1.3	0
128	Hole transport in DNA hairpins via base mismatches and strand crossings: Efficiency and dynamics. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 331, 160-164.	2.0	0
129	Design principles for efficient singlet fission in anthracene-based organic semiconductors. , 2019, , .		0