Garret M Miyake

List of Publications by Year
in descending order

80	6,379	76326	66911
papers	citations	40 h-index	78 g-index

93	93	93	4919
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Organocatalyzed atom transfer radical polymerization driven by visible light. Science, 2016, 352, 1082-1086.	12.6	649
2	Visible-Light-Promoted Câ€“S Cross-Coupling via Intermolecular Charge Transfer. Journal of the American Chemical Society, 2017, 139, 13616-13619.	13.7	347
3	Rapid self-assembly of brush block copolymers to photonic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14332-14336.	7.1	338
4	Organocatalyzed Atom Transfer Radical Polymerization Using N-Aryl Phenoxazines as Photoredox Catalysts. Journal of the American Chemical Society, 2016, 138, 11399-11407.	13.7	300
5	Perylene as an Organic Photocatalyst for the Radical Polymerization of Functionalized Vinyl Monomers through Oxidative Quenching with Alkyl Bromides and Visible Light. Macromolecules, 2014, 47, 8255-8261.	4.8	297
6	Synthesis of Isocyanate-Based Brush Block Copolymers and Their Rapid Self-Assembly to Infrared-Reflecting Photonic Crystals. Journal of the American Chemical Society, 2012, 134, 14249-14254.	13.7	216
7	Precisely Tunable Photonic Crystals From Rapidly Selfâ€Assembling Brush Block Copolymer Blends. Angewandte Chemie - International Edition, 2012, 51, 11246-11248.	13.8	207
8	Intramolecular Charge Transfer and Ion Pairing in N,N-Diaryl Dihydrophenazine Photoredox Catalysts for Efficient Organocatalyzed Atom Transfer Radical Polymerization. Journal of the American Chemical Society, 2017, 139, 348-355.	13.7	207
9	Structureâ€“Property Relationships for Tailoring Phenoxazines as Reducing Photoredox Catalysts. Journal of the American Chemical Society, 2018, 140, 5088-5101.	13.7	202
10	Strongly Reducing, Visibleâ€Light Organic Photoredox Catalysts as Sustainable Alternatives to Precious Metals. Chemistry - A European Journal, 2017, 23, 10962-10968.	3.3	196
11	Câ€“N Cross-Coupling via Photoexcitation of Nickelâ€“Amine Complexes. Journal of the American Chemical Society, 2018, 140, 7667-7673.	13.7	176
12	Structural Color for Additive Manufacturing: 3D-Printed Photonic Crystals from Block Copolymers. ACS Nano, 2017, 11, 3052-3058.	14.6	160
13	Visible-Light-Driven Conversion of CO₂ to CH₄ with an Organic Sensitizer and an Iron Porphyrin Catalyst. Journal of the American Chemical Society, 2018, 140, 17830-17834.	13.7	150
14	Organocatalyzed Birch Reduction Driven by Visible Light. Journal of the American Chemical Society, 2020, 142, 13573-13581.	13.7	144
15	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization (O-ATRP): Precision Polymer Synthesis Using Organic Photoredox Catalysis. Chemical Reviews, 2022, 122, 1830-1874.	47.7	136
16	Organocatalyzed Atom Transfer Radical Polymerization: Perspectives on Catalyst Design and Performance. Macromolecular Rapid Communications, 2017, 38, 1700040.	3.9	121
17	Energy Transfer to Ni-Amine Complexes in Dual Catalytic, Light-Driven Câ€“N Cross-Coupling Reactions. Journal of the American Chemical Society, 2019, 141, 19479-19486.	13.7	118
18	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization Using Continuous Flow. Macromolecules, 2017, 50, 2668-2674.	4.8	116

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19	Rational Design of Photocatalysts for Controlled Polymerization: Effect of Structures on Photocatalytic Activities. Chemical Reviews, 2022, 122, 5476-5518.	47.7	106
20	Guiding the Design of Organic Photocatalyst for PET-RAFT Polymerization: Halogenated Xanthene Dyes. Macromolecules, 2019, 52, 236-248.	4.8	105
21	Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers. Angewandte Chemie - International Edition, 2020, 59, 3209-3217.	13.8	98
22	Exploiting Charge-Transfer States for Maximizing Intersystem Crossing Yields in Organic Photoredox Catalysts. Journal of the American Chemical Society, 2018, 140, 4778-4781.	13.7	97
23	Living Polymerization of Naturally Renewable Butyrolactone-Based Vinylidene Monomers by Ambiphilic Silicon Propagators. Macromolecules, 2010, 43, 4902-4908.	4.8	92
24	What happens in the dark? Assessing the temporal control of photoâ€mediated controlled radical polymerizations. Journal of Polymer Science Part A, 2019, 57, 268-273.	2.3	81
25	Impact of Light Intensity on Control in Photoinduced Organocatalyzed Atom Transfer Radical Polymerization. Macromolecules, 2017, 50, 4616-4622.	4.8	79
26	Highly Ordered Dielectric Mirrors via the Self-Assembly of Dendronized Block Copolymers. Journal of the American Chemical Society, 2013, 135, 15609-15616.	13.7	77
27	N,N-Diaryl Dihydrophenazines as Photoredox Catalysts for PET-RAFT and Sequential PET-RAFT/O-ATRP. ACS Macro Letters, 2018, 7, 662-666.	4.8	73
28	Cinchona Alkaloids as Stereoselective Organocatalysts for the Partial Kinetic Resolution Polymerization of rac-Lactide. Macromolecules, 2011, 44, 4116-4124.	4.8	70
29	Photoinduced Controlled Radical Polymerizations Performed in Flow: Methods, Products, and Opportunities. Chemistry of Materials, 2018, 30, 3931-3942.	6.7	69
30	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization Using Low ppm Catalyst Loading. Macromolecules, 2019, 52, 747-754.	4.8	65
31	Light-Driven Intermolecular Charge Transfer Induced Reactivity of Ethynylbenziodoxol(on)e and Phenols. Journal of the American Chemical Society, 2018, 140, 12829-12835.	13.7	61
32	The effect of plasticizers on thermoplastic starch films developed from the indigenous Ethiopian tuber crop Anchote (Coccinia abyssinica) starch. International Journal of Biological Macromolecules, 2020, 155, 581-587.	7.5	61
33	Solvent effects on the intramolecular charge transfer character of N,Nâ€diaryl dihydrophenazine catalysts for organocatalyzed atom transfer radical polymerization. Journal of Polymer Science Part A, 2017, 55, 3017-3027.	2.3	56
34	Asymmetric Coordination Polymerization of Acrylamides by Enantiomeric Metallocenium Ester Enolate Catalysts. Journal of the American Chemical Society, 2007, 129, 6724-6725.	13.7	53
35	Coordination polymerization of renewable butyrolactone-based vinyl monomers by lanthanide and early metal catalysts. Dalton Transactions, 2010, 39, 6710.	3.3	53
36	Metallocene-Mediated Asymmetric Coordination Polymerization of Polar Vinyl Monomers to Optically Active, Stereoregular Polymers. Macromolecules, 2008, 41, 3405-3416.	4.8	50

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37	Synthesis of helical poly(phenylacetylene)s bearing cinchona alkaloid pendants and their application to asymmetric organocatalysis. Journal of Polymer Science Part A, 2011, 49, 5192-5198.	2.3	49
38	Bromine Radical Catalysis by Energy Transfer Photosensitization. ACS Catalysis, 2020, 10, 2609-2614.	11.2	48
39	Organocatalyzed Atom Transfer Radical Polymerization Catalyzed by Core Modified N-Aryl Phenoxazines Performed under Air. ACS Macro Letters, 2018, 7, 1016-1021.	4.8	45
40	Controlling Polymer Composition in Organocatalyzed Photoredox Radical Ring-Opening Polymerization of Vinylcyclopropanes. Journal of the American Chemical Society, 2019, 141, 13268-13277.	13.7	41
41	Effects of Naphthyl Connectivity on the Photophysics of Compact Organic Charge-Transfer Photoredox Catalysts. Journal of Physical Chemistry A, 2019, 123, 4727-4736.	2.5	41
42	Effect of Polymer Tacticity on the Performance of Poly(N,N-dialkylacrylamide)s as Kinetic Hydrate Inhibitors. Energy & Fuels, 2010, 24, 2554-2562.	5.1	39
43	Synthesis of star polymers using organocatalyzed atom transfer radical polymerization through a core-first approach. Polymer Chemistry, 2018, 9, 1658-1665.	3.9	37
44	Synthesis of highly syndiotactic polymers by discrete catalysts or initiators. Polymer Chemistry, 2011, 2, 2462.	3.9	33
45	Synthesis and Reactivity of a Zwitterionic Palladium Allyl Complex Supported by a Perchlorinated Carboranyl Phosphine. Inorganic Chemistry, 2015, 54, 5142-5144.	4.0	32
46	Stereocomplex Formation of Densely Grafted Brush Polymers. ACS Macro Letters, 2014, 3, 26-29.	4.8	30
47	Designing High-Triplet-Yield Phenothiazine Donorâ€“Acceptor Complexes for Photoredox Catalysis. Journal of Physical Chemistry A, 2020, 124, 817-823.	2.5	29
48	Unconventional Reactivity of Ethynylbenziodoxolone Reagents and Thiols: Scope and Mechanism. Chemistry - A European Journal, 2020, 26, 2386-2394.	3.3	28
49	Radical Addition to N,N-Diaryl Dihydrophenazine Photoredox Catalysts and Implications in Photoinduced Organocatalyzed Atom Transfer Radical Polymerization. Macromolecules, 2021, 54, 4507-4516.	4.8	27
50	Photochemical Synthesis of Oligomeric Amphiphiles from Alkyl Oxoacids in Aqueous Environments. Journal of the American Chemical Society, 2017, 139, 6946-6959.	13.7	26
51	Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers. Angewandte Chemie, 2020, 132, 3235-3243.	2.0	25
52	Solvent Effects and Side Reactions in Organocatalyzed Atom Transfer Radical Polymerization for Enabling the Controlled Polymerization of Acrylates Catalyzed by Diaryl Dihydrophenazines. Macromolecules, 2020, 53, 9208-9219.	4.8	24
53	Stereospecific Polymerization of Chiral Oxazolidinone-Functionalized Alkenes. Macromolecules, 2010, 43, 7504-7514.	4.8	22
54	Polymerizability of Exoâ€methyleneâ€lactide toward vinyl addition and ring opening. Journal of Polymer Science Part A, 2015, 53, 1523-1532.	2.3	22

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55	Comparison of physicochemical properties of indigenous Ethiopian tuber crop (Coccinia abyssinica) starch with commercially available potato and wheat starches. International Journal of Biological Macromolecules, 2019, 140, 43-48.	7.5	22
56	Impact of the Pendant Group on the Chain Conformation and Bulk Properties of Norbornene Imide-Based Polymers. Macromolecules, 2019, 52, 3426-3434.	4.8	20
57	Radical Cations of Phenoxazine and Dihydrophenazine Photoredox Catalysts and Their Role as Deactivators in Organocatalyzed Atom Transfer Radical Polymerization. Macromolecules, 2021, 54, 4726-4738.	4.8	20
58	Polymers and Light. Macromolecular Rapid Communications, 2017, 38, 1700327.	3.9	17
59	Optical Properties and Mechanical Modeling of Acetylated Transparent Wood Composite Laminates. Materials, 2019, 12, 2256.	2.9	17
60	Phenothiazines, Dihydrophenazines, and Phenoxazines: Sustainable Alternatives to Precious-Metal-Based Photoredox Catalysts. Aldrichimica Acta, 2019, 52, 7-21.	4.0	17
61	Transition-Metal-Free, Visible-Light-Promoted Câ€“S Cross-Coupling through Intermolecular Charge Transfer. Synlett, 2018, 29, 2449-2455.	1.8	15
62	Organocatalyzed Photoredox Radical Ring-Opening Polymerization of Functionalized Vinylcyclopropanes. Macromolecules, 2020, 53, 8352-8359.	4.8	15
63	3D printing using powder melt extrusion. Additive Manufacturing, 2019, 29, 100811.	3.0	14
64	Synthesis, Characterization, and Reactivity of N-Alkyl Phenoxazines in Organocatalyzed Atom Transfer Radical Polymerization. ACS Macro Letters, 2021, 10, 453-459.	4.8	14
65	Interrogation of O-ATRP Activation Conducted by Singlet and Triplet Excited States of Phenoxazine Photocatalysts. Journal of Physical Chemistry A, 2021, 125, 3109-3121.	2.5	14
66	Mechanics, optics, and thermodynamics of water transport in chemically modified transparent wood composites. Composites Science and Technology, 2021, 208, 108737.	7.8	12
67	Impact of backbone composition on homopolymer dynamics and brush block copolymer self-assembly. Polymer Chemistry, 2020, 11, 7147-7158.	3.9	10
68	Armâ€first synthesis of star polymers with polywedge arms using ringâ€opening metathesis polymerization and bifunctional crosslinkers. Journal of Polymer Science Part A, 2018, 56, 732-740.	2.3	9
69	Phenoxazineâ€Sensitized CO₂â€toâ€CO Reduction with an Iron Porphyrin Catalyst: A Redox Propertiesâ€Catalytic Performance Study. ChemPhotoChem, 2022, 6, .	3.0	8
70	Atom Transfer Radical Polymerization of Functionalized Vinyl Monomers Using Perylene as a Visible Light Photocatalyst. Journal of Visualized Experiments, 2016, , e53571.	0.3	7
71	Impacts of performing electrolysis during organocatalyzed atom transfer radical polymerization. Polymer Chemistry, 2020, 11, 4978-4985.	3.9	7
72	Carbon-Electrode-Mediated Electrochemical Synthesis of Hypervalent Iodine Reagents Using Water as the O-Atom Source. ACS Sustainable Chemistry and Engineering, 2021, 9, 10453-10467.	6.7	6

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73	Scalable and Phosphine-Free Conversion of Alcohols to Carbonâ€“Heteroatom Bonds through the Blue Light-Promoted Iodination Reaction. Journal of Organic Chemistry, 2020, 85, 3717-3727.	3.2	4
74	Effects of the Chalcogenide Identity in Nâ€Aryl Phenochalcogenazine Photoredox Catalysts. ChemCatChem, 2022, 14, .	3.7	4
75	Structureâ€“property relationships of core-substituted diaryl dihydrophenazine organic photoredox catalysts and their application in O-ATRP. Polymer Chemistry, 2021, 12, 6110-6122.	3.9	3
76	Mechanical evaluation of 3D printed biomimetic non-Euclidean saddle geometries mimicking the mantis shrimp. Bioinspiration and Biomimetics, 2021, 16, 056002.	2.9	2
77	Frontispiece: Strongly Reducing, Visibleâ€Light Organic Photoredox Catalysts as Sustainable Alternatives to Precious Metals. Chemistry - A European Journal, 2017, 23, .	3.3	1
78	Removal of photoredox catalysts from polymers synthesized by organocatalyzed atom transfer radical polymerization. Journal of Polymer Science, 2022, 60, 2747-2755.	3.8	1
79	Inside Cover: Alane-Based Classical and Frustrated Lewis Pairs in Polymer Synthesis: Rapid Polymerization of MMA and Naturally Renewable Methylene Butyrolactones into High-Molecular-Weight Polymers (Angew. Chem. Int. Ed. 52/2010). Angewandte Chemie - International Edition, 2010, 49, 10016-10016.	13.8	0
80	Titelbild: Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers (Angew. Chem. 8/2020). Angewandte Chemie, 2020, 132, 2937-2937.	2.0	0