

# Garret M Miyake

## List of Publications by Year in descending order

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80  
papers

6,379  
citations

76196

40  
h-index

66788

78  
g-index

93  
all docs

93  
docs citations

93  
times ranked

4919  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization (O-ATRP): Precision Polymer Synthesis Using Organic Photoredox Catalysis. <i>Chemical Reviews</i> , 2022, 122, 1830-1874.	23.0	136
2	Rational Design of Photocatalysts for Controlled Polymerization: Effect of Structures on Photocatalytic Activities. <i>Chemical Reviews</i> , 2022, 122, 5476-5518.	23.0	106
3	Phenoxazine-sensitized CO <sub>2</sub> -to-CO Reduction with an Iron Porphyrin Catalyst: A Redox Properties-Catalytic Performance Study. <i>ChemPhotoChem</i> , 2022, 6, .	1.5	8
4	Effects of the Chalcogenide Identity in N-Aryl Phenochalcogenazine Photoredox Catalysts. <i>ChemCatChem</i> , 2022, 14, .	1.8	4
5	Removal of photoredox catalysts from polymers synthesized by organocatalyzed atom transfer radical polymerization. <i>Journal of Polymer Science</i> , 2022, 60, 2747-2755.	2.0	1
6	Structure-property relationships of core-substituted diaryl dihydrophenazine organic photoredox catalysts and their application in O-ATRP. <i>Polymer Chemistry</i> , 2021, 12, 6110-6122.	1.9	3
7	Synthesis, Characterization, and Reactivity of N-Alkyl Phenoxazines in Organocatalyzed Atom Transfer Radical Polymerization. <i>ACS Macro Letters</i> , 2021, 10, 453-459.	2.3	14
8	Interrogation of O-ATRP Activation Conducted by Singlet and Triplet Excited States of Phenoxazine Photocatalysts. <i>Journal of Physical Chemistry A</i> , 2021, 125, 3109-3121.	1.1	14
9	Radical Addition to N,N-Diaryl Dihydrophenazine Photoredox Catalysts and Implications in Photoinduced Organocatalyzed Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2021, 54, 4507-4516.	2.2	27
10	Radical Cations of Phenoxazine and Dihydrophenazine Photoredox Catalysts and Their Role as Deactivators in Organocatalyzed Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2021, 54, 4726-4738.	2.2	20
11	Mechanics, optics, and thermodynamics of water transport in chemically modified transparent wood composites. <i>Composites Science and Technology</i> , 2021, 208, 108737.	3.8	12
12	Carbon-Electrode-Mediated Electrochemical Synthesis of Hypervalent Iodine Reagents Using Water as the O-Atom Source. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10453-10467.	3.2	6
13	Mechanical evaluation of 3D printed biomimetic non-Euclidean saddle geometries mimicking the mantis shrimp. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 056002.	1.5	2
14	Unconventional Reactivity of Ethynylbenziodoxolone Reagents and Thiols: Scope and Mechanism. <i>Chemistry - A European Journal</i> , 2020, 26, 2386-2394.	1.7	28
15	Designing High-Triplet-Yield Phenothiazine Donor-Acceptor Complexes for Photoredox Catalysis. <i>Journal of Physical Chemistry A</i> , 2020, 124, 817-823.	1.1	29
16	Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3209-3217.	7.2	98
17	Solvent Effects and Side Reactions in Organocatalyzed Atom Transfer Radical Polymerization for Enabling the Controlled Polymerization of Acrylates Catalyzed by Diaryl Dihydrophenazines. <i>Macromolecules</i> , 2020, 53, 9208-9219.	2.2	24
18	Organocatalyzed Birch Reduction Driven by Visible Light. <i>Journal of the American Chemical Society</i> , 2020, 142, 13573-13581.	6.6	144

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19	Impacts of performing electrolysis during organocatalyzed atom transfer radical polymerization. <i>Polymer Chemistry</i> , 2020, 11, 4978-4985.	1.9	7
20	Organocatalyzed Photoredox Radical Ring-Opening Polymerization of Functionalized Vinylcyclopropanes. <i>Macromolecules</i> , 2020, 53, 8352-8359.	2.2	15
21	Impact of backbone composition on homopolymer dynamics and brush block copolymer self-assembly. <i>Polymer Chemistry</i> , 2020, 11, 7147-7158.	1.9	10
22	The effect of plasticizers on thermoplastic starch films developed from the indigenous Ethiopian tuber crop Anchote ( <i>Coccinia abyssinica</i> ) starch. <i>International Journal of Biological Macromolecules</i> , 2020, 155, 581-587.	3.6	61
23	Titelbild: Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers ( <i>Angew. Chem.</i> 8/2020). <i>Angewandte Chemie</i> , 2020, 132, 2937-2937.	1.6	0
24	Bromine Radical Catalysis by Energy Transfer Photosensitization. <i>ACS Catalysis</i> , 2020, 10, 2609-2614.	5.5	48
25	Scalable and Phosphine-Free Conversion of Alcohols to Carbon-Heteroatom Bonds through the Blue Light-Promoted Iodination Reaction. <i>Journal of Organic Chemistry</i> , 2020, 85, 3717-3727.	1.7	4
26	Dimethyl Dihydroacridines as Photocatalysts in Organocatalyzed Atom Transfer Radical Polymerization of Acrylate Monomers. <i>Angewandte Chemie</i> , 2020, 132, 3235-3243.	1.6	25
27	Comparison of physicochemical properties of indigenous Ethiopian tuber crop ( <i>Coccinia abyssinica</i> ) starch with commercially available potato and wheat starches. <i>International Journal of Biological Macromolecules</i> , 2019, 140, 43-48.	3.6	22
28	3D printing using powder melt extrusion. <i>Additive Manufacturing</i> , 2019, 29, 100811.	1.7	14
29	Optical Properties and Mechanical Modeling of Acetylated Transparent Wood Composite Laminates. <i>Materials</i> , 2019, 12, 2256.	1.3	17
30	Controlling Polymer Composition in Organocatalyzed Photoredox Radical Ring-Opening Polymerization of Vinylcyclopropanes. <i>Journal of the American Chemical Society</i> , 2019, 141, 13268-13277.	6.6	41
31	Energy Transfer to Ni-Amine Complexes in Dual Catalytic, Light-Driven C-N Cross-Coupling Reactions. <i>Journal of the American Chemical Society</i> , 2019, 141, 19479-19486.	6.6	118
32	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization Using Low ppm Catalyst Loading. <i>Macromolecules</i> , 2019, 52, 747-754.	2.2	65
33	Effects of Naphthyl Connectivity on the Photophysics of Compact Organic Charge-Transfer Photoredox Catalysts. <i>Journal of Physical Chemistry A</i> , 2019, 123, 4727-4736.	1.1	41
34	Impact of the Pendant Group on the Chain Conformation and Bulk Properties of Norbornene Imide-Based Polymers. <i>Macromolecules</i> , 2019, 52, 3426-3434.	2.2	20
35	Guiding the Design of Organic Photocatalyst for PET-RAFT Polymerization: Halogenated Xanthene Dyes. <i>Macromolecules</i> , 2019, 52, 236-248.	2.2	105
36	What happens in the dark? Assessing the temporal control of photo-mediated controlled radical polymerizations. <i>Journal of Polymer Science Part A</i> , 2019, 57, 268-273.	2.5	81

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37	Phenothiazines, Dihydrophenazines, and Phenoxazines: Sustainable Alternatives to Precious-Metal-Based Photoredox Catalysts. <i>Aldrichimica Acta</i> , 2019, 52, 7-21.	4.0	17
38	Structure-Property Relationships for Tailoring Phenoxazines as Reducing Photoredox Catalysts. <i>Journal of the American Chemical Society</i> , 2018, 140, 5088-5101.	6.6	202
39	Arm-first synthesis of star polymers with polywedge arms using ring-opening metathesis polymerization and bifunctional crosslinkers. <i>Journal of Polymer Science Part A</i> , 2018, 56, 732-740.	2.5	9
40	Exploiting Charge-Transfer States for Maximizing Intersystem Crossing Yields in Organic Photoredox Catalysts. <i>Journal of the American Chemical Society</i> , 2018, 140, 4778-4781.	6.6	97
41	Synthesis of star polymers using organocatalyzed atom transfer radical polymerization through a core-first approach. <i>Polymer Chemistry</i> , 2018, 9, 1658-1665.	1.9	37
42	Visible-Light-Driven Conversion of CO <sub>2</sub> to CH <sub>4</sub> with an Organic Sensitizer and an Iron Porphyrin Catalyst. <i>Journal of the American Chemical Society</i> , 2018, 140, 17830-17834.	6.6	150
43	Light-Driven Intermolecular Charge Transfer Induced Reactivity of Ethynylbenziodoxol(on)e and Phenols. <i>Journal of the American Chemical Society</i> , 2018, 140, 12829-12835.	6.6	61
44	C-N Cross-Coupling via Photoexcitation of Nickel-Amine Complexes. <i>Journal of the American Chemical Society</i> , 2018, 140, 7667-7673.	6.6	176
45	<i>N,N</i> -Diaryl Dihydrophenazines as Photoredox Catalysts for PET-RAFT and Sequential PET-RAFT/O-ATRP. <i>ACS Macro Letters</i> , 2018, 7, 662-666.	2.3	73
46	Photoinduced Controlled Radical Polymerizations Performed in Flow: Methods, Products, and Opportunities. <i>Chemistry of Materials</i> , 2018, 30, 3931-3942.	3.2	69
47	Organocatalyzed Atom Transfer Radical Polymerization Catalyzed by Core Modified <i>N</i> -Aryl Phenoxazines Performed under Air. <i>ACS Macro Letters</i> , 2018, 7, 1016-1021.	2.3	45
48	Transition-Metal-Free, Visible-Light-Promoted C-S Cross-Coupling through Intermolecular Charge Transfer. <i>Synlett</i> , 2018, 29, 2449-2455.	1.0	15
49	Structural Color for Additive Manufacturing: 3D-Printed Photonic Crystals from Block Copolymers. <i>ACS Nano</i> , 2017, 11, 3052-3058.	7.3	160
50	Photochemical Synthesis of Oligomeric Amphiphiles from Alkyl Oxoacids in Aqueous Environments. <i>Journal of the American Chemical Society</i> , 2017, 139, 6946-6959.	6.6	26
51	Impact of Light Intensity on Control in Photoinduced Organocatalyzed Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2017, 50, 4616-4622.	2.2	79
52	Organocatalyzed Atom Transfer Radical Polymerization: Perspectives on Catalyst Design and Performance. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700040.	2.0	121
53	Solvent effects on the intramolecular charge transfer character of <i>N,N</i> -diaryl dihydrophenazine catalysts for organocatalyzed atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3017-3027.	2.5	56
54	Photoinduced Organocatalyzed Atom Transfer Radical Polymerization Using Continuous Flow. <i>Macromolecules</i> , 2017, 50, 2668-2674.	2.2	116

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55	Intramolecular Charge Transfer and Ion Pairing in <i>N,N</i> -Diaryl Dihydrophenazine Photoredox Catalysts for Efficient Organocatalyzed Atom Transfer Radical Polymerization. <i>Journal of the American Chemical Society</i> , 2017, 139, 348-355.	6.6	207
56	Visible-Light-Promoted C–S Cross-Coupling via Intermolecular Charge Transfer. <i>Journal of the American Chemical Society</i> , 2017, 139, 13616-13619.	6.6	347
57	Polymers and Light. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700327.	2.0	17
58	Frontispiece: Strongly Reducing, Visible-Light Organic Photoredox Catalysts as Sustainable Alternatives to Precious Metals. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	1
59	Strongly Reducing, Visible-Light Organic Photoredox Catalysts as Sustainable Alternatives to Precious Metals. <i>Chemistry - A European Journal</i> , 2017, 23, 10962-10968.	1.7	196
60	Organocatalyzed atom transfer radical polymerization driven by visible light. <i>Science</i> , 2016, 352, 1082-1086.	6.0	649
61	Organocatalyzed Atom Transfer Radical Polymerization Using <i>N</i> -Aryl Phenoxazines as Photoredox Catalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 11399-11407.	6.6	300
62	Atom Transfer Radical Polymerization of Functionalized Vinyl Monomers Using Perylene as a Visible Light Photocatalyst. <i>Journal of Visualized Experiments</i> , 2016, , e53571.	0.2	7
63	Synthesis and Reactivity of a Zwitterionic Palladium Allyl Complex Supported by a Perchlorinated Carboranyl Phosphine. <i>Inorganic Chemistry</i> , 2015, 54, 5142-5144.	1.9	32
64	Polymerizability of <i>Exo</i> -methylene-lactide toward vinyl addition and ring opening. <i>Journal of Polymer Science Part A</i> , 2015, 53, 1523-1532.	2.5	22
65	Stereocomplex Formation of Densely Grafted Brush Polymers. <i>ACS Macro Letters</i> , 2014, 3, 26-29.	2.3	30
66	Perylene as an Organic Photocatalyst for the Radical Polymerization of Functionalized Vinyl Monomers through Oxidative Quenching with Alkyl Bromides and Visible Light. <i>Macromolecules</i> , 2014, 47, 8255-8261.	2.2	297
67	Highly Ordered Dielectric Mirrors via the Self-Assembly of Dendronized Block Copolymers. <i>Journal of the American Chemical Society</i> , 2013, 135, 15609-15616.	6.6	77
68	Rapid self-assembly of brush block copolymers to photonic crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14332-14336.	3.3	338
69	Precisely Tunable Photonic Crystals From Rapidly Self-Assembling Brush Block Copolymer Blends. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11246-11248.	7.2	207
70	Synthesis of Isocyanate-Based Brush Block Copolymers and Their Rapid Self-Assembly to Infrared-Reflecting Photonic Crystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 14249-14254.	6.6	216
71	Cinchona Alkaloids as Stereoselective Organocatalysts for the Partial Kinetic Resolution Polymerization of <i>rac</i> -Lactide. <i>Macromolecules</i> , 2011, 44, 4116-4124.	2.2	70
72	Synthesis of highly syndiotactic polymers by discrete catalysts or initiators. <i>Polymer Chemistry</i> , 2011, 2, 2462.	1.9	33

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73	Synthesis of helical poly(phenylacetylene)s bearing cinchona alkaloid pendants and their application to asymmetric organocatalysis. <i>Journal of Polymer Science Part A</i> , 2011, 49, 5192-5198.	2.5	49
74	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 ( <i>Angew. Chem. Int. Ed.</i> 52/2010). <i>Angewandte Chemie - International Edition</i> , 2010, 49, 10016-10016.	7.2	0
75	Effect of Polymer Tacticity on the Performance of Poly( <i>N,N</i> -dialkylacrylamide)s as Kinetic Hydrate Inhibitors. <i>Energy &amp; Fuels</i> , 2010, 24, 2554-2562.	2.5	39
76	Stereospecific Polymerization of Chiral Oxazolidinone-Functionalized Alkenes. <i>Macromolecules</i> , 2010, 43, 7504-7514.	2.2	22
77	Living Polymerization of Naturally Renewable Butyrolactone-Based Vinylidene Monomers by Ambiphilic Silicon Propagators. <i>Macromolecules</i> , 2010, 43, 4902-4908.	2.2	92
78	Coordination polymerization of renewable butyrolactone-based vinyl monomers by lanthanide and early metal catalysts. <i>Dalton Transactions</i> , 2010, 39, 6710.	1.6	53
79	Metallocene-Mediated Asymmetric Coordination Polymerization of Polar Vinyl Monomers to Optically Active, Stereoregular Polymers. <i>Macromolecules</i> , 2008, 41, 3405-3416.	2.2	50
80	Asymmetric Coordination Polymerization of Acrylamides by Enantiomeric Metallocenium Ester Enolate Catalysts. <i>Journal of the American Chemical Society</i> , 2007, 129, 6724-6725.	6.6	53