Tae-Lim Choi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

4,563 65 110 33 h-index g-index citations papers 118 6.04 9.6 5,192 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
110	Recent Advances in Diversity-Oriented Polymerization Using Cu-Catalyzed Multicomponent Reactions. <i>Macromolecular Rapid Communications</i> , 2021 , e2100642	4.8	O
109	Sugar-Based Polymers from d-Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release. <i>Angewandte Chemie</i> , 2021 , 133, 862-868	3.6	1
108	Titelbild: Sugar-Based Polymers from d-Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release (Angew. Chem. 2/2021). <i>Angewandte Chemie</i> , 2021 , 133, 521-	-5 2 5	
107	Semi-conducting 2D rectangles with tunable length via uniaxial living crystallization-driven self-assembly of homopolymer. <i>Nature Communications</i> , 2021 , 12, 2602	17.4	18
106	Constructing a Library of Doubly Grafted Polymers by a One-Shot Cu-Catalyzed Multicomponent Grafting Strategy. <i>Macromolecules</i> , 2021 , 54, 5539-5548	5.5	3
105	Influence of Grafting Density on Ultrasound-Induced Backbone and Arm Scission of Graft Copolymers. <i>Macromolecules</i> , 2021 , 54, 4219-4226	5.5	5
104	Mechanochemical Reactivity of Bottlebrush and Dendronized Polymers: Solid vs. Solution States. <i>Angewandte Chemie</i> , 2021 , 133, 18799-18807	3.6	О
103	Mechanochemical Reactivity of Bottlebrush and Dendronized Polymers: Solid vs. Solution States. Angewandte Chemie - International Edition, 2021 , 60, 18651-18659	16.4	7
102	Sugar-Based Polymers from d-Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 849-855	16.4	6
101	Direct formation of nano-objects via in situ self-assembly of conjugated polymers. <i>Polymer Chemistry</i> , 2021 , 12, 1393-1403	4.9	5
100	Multi-scale Structure and Dynamics of Dendronized Polymers with Varying Generations. <i>Macromolecules</i> , 2021 , 54, 235-248	5.5	5
99	The influence of polymer architecture in polymer mechanochemistry. <i>Chemical Communications</i> , 2021 , 57, 6465-6474	5.8	5
98	Universal Suzuki-Miyaura Catalyst-Transfer Polymerization for Precision Synthesis of Strong Donor/Acceptor-Based Conjugated Polymers and Their Sequence Engineering. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11180-11190	16.4	7
97	Powerful Direct C-H Amidation Polymerization Affords Single-Fluorophore-Based White-Light-Emitting Polysulfonamides by Fine-Tuning Hydrogen Bonds <i>Journal of the American Chemical Society</i> , 2021 ,	16.4	4
96	Ru-Catalyzed, -Selective Living Ring-Opening Metathesis Polymerization of Various Monomers, Including a Dendronized Macromonomer, and Implications to Enhanced Shear Stability. <i>Journal of the American Chemical Society</i> , 2020 , 142, 10438-10445	16.4	20
95	Iridium-Catalyzed Direct C-H Amidation Producing Multicolor Fluorescent Molecules Emitting Blue-to-Red Light and White Light. <i>Organic Letters</i> , 2020 , 22, 2935-2940	6.2	6
94	Synthesis of Conjugated Rod¶oil Block Copolymers by RuPhos Pd-Catalyzed Suzuki¶iyaura Catalyst-Transfer Polycondensation: Initiation from Coil-Type Polymers. <i>Macromolecules</i> , 2020 , 53, 549	7 <i>-</i> 5503	9

(2019-2020)

93	Mechanochemical Degradation of Brush Polymers: Kinetics of Ultrasound-Induced Backbone and Arm Scission. <i>Macromolecules</i> , 2020 , 53, 1623-1628	5.5	12
92	Synthesis of Conjugated Polyenynes with Alternating Six- and Five-Membered Rings via Eselective Cascade Metathesis and Metallotropy Polymerization. <i>ACS Macro Letters</i> , 2020 , 9, 339-343	6.6	3
91	Cascade polymerizations: recent developments in the formation of polymer repeat units by cascade reactions. <i>Chemical Science</i> , 2020 , 11, 4843-4854	9.4	14
90	RuPhos Pd Precatalyst and MIDA Boronate as an Effective Combination for the Precision Synthesis of Poly(3-hexylthiophene): Systematic Investigation of the Effects of Boronates, Halides, and Ligands. <i>Macromolecules</i> , 2020 , 53, 3306-3314	5.5	9
89	Synthesis of Well-Defined Poly(norbornene) Containing Carbon Nanodots by Controlled ROMP. Journal of Polymer Science, 2020 , 58, 48-51	2.4	2
88	Polymers producing hydrogen. <i>Nature Chemistry</i> , 2020 , 12, 1093-1095	17.6	2
87	Spectroscopy and excited state dynamics of nearly infinite polyenes. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 17867-17879	3.6	2
86	Rapid formation and real-time observation of micron-sized conjugated nanofibers with tunable lengths and widths in 20 minutes by living crystallization-driven self-assembly. <i>Chemical Science</i> , 2020 , 11, 8416-8424	9.4	20
85	Mechanochemical Degradation of Amorphous Polymers with Ball-Mill Grinding: Influence of the Glass Transition Temperature. <i>Macromolecules</i> , 2020 , 53, 7795-7802	5.5	15
84	Controlled Cyclopolymerization of 1,5-Hexadiynes to Give Narrow Band Gap Conjugated Polyacetylenes Containing Highly Strained Cyclobutenes. <i>Journal of the American Chemical Society</i> , 2020 , 142, 17140-17146	16.4	5
83	Tandem diaza-Cope rearrangement polymerization: turning intramolecular reaction into powerful polymerization to give enantiopure materials for Zn sensors. <i>Chemical Science</i> , 2020 , 12, 2404-2409	9.4	2
82	Synthesis of Functional Polyacetylenes via Cyclopolymerization of Diyne Monomers with Grubbs-type Catalysts. <i>Accounts of Chemical Research</i> , 2019 , 52, 994-1005	24.3	41
81	Living Polymerization Caught in the Act: Direct Observation of an Arrested Intermediate in Metathesis Polymerization. <i>Journal of the American Chemical Society</i> , 2019 , 141, 10039-10047	16.4	21
80	Conformation of Tunable Nanocylinders: Up to Sixth-Generation Dendronized Polymers via Graft-Through Approach by ROMP. <i>Macromolecules</i> , 2019 , 52, 3342-3350	5.5	24
79	Living Eselective cyclopolymerization using Ru dithiolate catalysts. <i>Chemical Science</i> , 2019 , 10, 8955-896	3 9.4	9
78	Controlled Living Cascade Polymerization To Make Fully Degradable Sugar-Based Polymers from d-Glucose and d-Galactose. <i>Journal of the American Chemical Society,</i> 2019 , 141, 12207-12211	16.4	33
77	Morphologically Tunable Square and Rectangular Nanosheets of a Simple Conjugated Homopolymer by Changing Solvents. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19138-19143	16.4	28
76	Multimechanophore Graft Polymers: Mechanochemical Reactions at BackboneArm Junctions. Macromolecules, 2019, 52, 9561-9568	5.5	22

75	A Rational Design of Highly Controlled Suzuki-Miyaura Catalyst-Transfer Polycondensation for Precision Synthesis of Polythiophenes and Their Block Copolymers: Marriage of Palladacycle Precatalysts with MIDA-Boronates. <i>Journal of the American Chemical Society</i> , 2018 , 140, 4335-4343	16.4	45
74	Unusual Superior Activity of the First Generation Grubbs Catalyst in Cascade Olefin Metathesis Polymerization. <i>ACS Macro Letters</i> , 2018 , 7, 531-535	6.6	5
73	Understanding the Origin of the Regioselectivity in Cyclopolymerizations of Diynes and How to Completely Switch It. <i>Journal of the American Chemical Society</i> , 2018 , 140, 834-841	16.4	19
72	Polymer Self-Assembly into Unique Fractal Nanostructures in Solution by a One-Shot Synthetic Procedure. <i>Journal of the American Chemical Society</i> , 2018 , 140, 475-482	16.4	47
71	Living Light-Induced Crystallization-Driven Self-Assembly for Rapid Preparation of Semiconducting Nanofibers. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6088-6094	16.4	88
70	Superior Cascade Ring-Opening/Ring-Closing Metathesis Polymerization and Multiple Olefin Metathesis Polymerization: Enhancing the Driving Force for Successful Polymerization of Challenging Monomers. <i>Journal of the American Chemical Society</i> , 2018 , 140, 10536-10545	16.4	14
69	Toward Perfect Regiocontrol for Eselective Cyclopolymerization Using a Ru-Based Olefin Metathesis Catalyst. <i>Macromolecules</i> , 2018 , 51, 4564-4571	5.5	22
68	Swelling-induced pore generation in fluorinated polynorbornene block copolymer films. <i>Polymer Chemistry</i> , 2018 , 9, 3536-3542	4.9	10
67	Mechanochemical Degradation of Denpols: Synthesis and Ultrasound-Induced Chain Scission of Polyphenylene-Based Dendronized Polymers. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8599-	16 0 8	32
66	Living Metathesis and Metallotropy Polymerization Gives Conjugated Polyenynes from Multialkynes: How to Design Sequence-Specific Cascades for Polymers. <i>Journal of the American Chemical Society</i> , 2018 , 140, 16320-16329	16.4	9
65	Preparing Semiconducting Nanoribbons with Tunable Length and Width via Crystallization-Driven Self-Assembly of a Simple Conjugated Homopolymer. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17218-17225	16.4	20
64	Fast Living Polymerization of Challenging Aryl Isocyanides Using an Air-Stable Bisphosphine-Chelated Nickel(II) Initiator. <i>Macromolecules</i> , 2018 , 51, 7800-7806	5.5	9
63	Library of Fluorescent Polysulfonamides and Polyamide Synthesized by Iridium-Catalyzed Direct CH Amidation Polymerization. <i>Macromolecules</i> , 2018 , 51, 7476-7482	5.5	4
62	Direct Formation of Large-Area 2D Nanosheets from Fluorescent Semiconducting Homopolymer with Orthorhombic Crystalline Orientation. <i>Journal of the American Chemical Society</i> , 2017 , 139, 3082-30	164 1884	45
61	Successful Cyclopolymerization of 1,6-Heptadiynes Using First-Generation Grubbs Catalyst Twenty Years after Its Invention: Revealing a Comprehensive Picture of Cyclopolymerization Using Grubbs Catalysts. <i>Macromolecules</i> , 2017 , 50, 3153-3163	5.5	18
60	Spontaneous evolution of nanostructures by light-driven growth of micelles obtained from in situ nanoparticlization of conjugated polymers. <i>Journal of Polymer Science Part A</i> , 2017 , 55, 3058-3066	2.5	14
59	Seven-Membered Ring-Forming Cyclopolymerization of 1,8-Nonadiyne Derivatives Using Grubbs Catalysts: Rational Design of Monomers and Insights into the Mechanism for Olefin Metathesis Polymerizations. <i>Macromolecules</i> , 2017 , 50, 2724-2735	5.5	15
58	From Smart Denpols to Remote-Controllable Actuators: Hierarchical Superstructures of Azobenzene-Based Polynorbornenes. <i>Advanced Functional Materials</i> , 2017 , 27, 1606294	15.6	38

(2016-2017)

57	Formation via CII Activation to Give Fluorescent Polysulfonamides. <i>Angewandte Chemie</i> , 2017 , 129, 14666-14670	3.6	4	
56	Iridium-Catalyzed Direct C-H Amidation Polymerization: Step-Growth Polymerization by C-N Bond Formation via C-H Activation to Give Fluorescent Polysulfonamides. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14474-14478	16.4	14	
55	Cascade Polymerization via Controlled Tandem Olefin Metathesis/Metallotropic 1,3-Shift Reactions for the Synthesis of Fully Conjugated Polyenynes. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11309-11312	16.4	28	
54	Dimensionally controlled water-dispersible amplifying fluorescent polymer nanoparticles for selective detection of charge-neutral analytes. <i>Polymer Chemistry</i> , 2017 , 8, 7507-7514	4.9	21	
53	A stereoregular Edicyanodistyrylbenzene (EDCS)-based conjugated polymer for high-performance organic solar cells with small energy loss and high quantum efficiency. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 16681-16688	13	20	
52	Highly Eselective Cyclopolymerization of 1,6-Heptadiynes and Ring-Closing Enyne Metathesis Reaction Using Grubbs Z-Selective Catalyst: Unprecedented Regioselectivity for Ru-Based Catalysts. <i>Journal of the American Chemical Society</i> , 2016 , 138, 11227-33	16.4	26	
51	Mechanistic Investigations on the Competition between the Cyclopolymerization and [2 + 2 + 2] Cycloaddition of 1,6-Heptadiyne Derivatives Using Second-Generation Grubbs Catalysts. <i>Macromolecules</i> , 2016 , 49, 6240-6250	5.5	17	
50	Importance of choosing the right polymerization method for in situ preparation of semiconducting nanoparticles from the P3HT block copolymer. <i>Polymer Chemistry</i> , 2016 , 7, 7135-7141	4.9	14	
49	Binaphthyl-incorporated Etonjugated polymer/gold nanoparticle hybrids: a facile size- and shape-tailored synthesis. <i>RSC Advances</i> , 2016 , 6, 107994-107999	3.7	3	
48	Versatile Tandem Ring-Opening/Ring-Closing Metathesis Polymerization: Strategies for Successful Polymerization of Challenging Monomers and Their Mechanistic Studies. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2244-51	16.4	35	
47	Preparing DNA-mimicking multi-line nanocaterpillars via in situ nanoparticlisation of fully conjugated polymers. <i>Polymer Chemistry</i> , 2016 , 7, 1422-1428	4.9	15	
46	A one-pot synthesis of polysulfane-bearing block copolymer nanoparticles with tunable size and refractive index. <i>Chemical Communications</i> , 2016 , 52, 2485-8	5.8	20	
45	Diversity-Oriented Polymerization: One-Shot Synthesis of Library of Graft and Dendronized Polymers by Cu-Catalyzed Multicomponent Polymerization. <i>Journal of the American Chemical Society</i> , 2016 , 138, 8612-22	16.4	52	
44	Designing Thermally Stable Conjugated Polymers with Balanced Ambipolar Field-Effect Mobilities by Incorporating Cyanovinylene Linker Unit. <i>Macromolecules</i> , 2016 , 49, 2985-2992	5.5	25	
43	Structure and Dynamics of Dendronized Polymer Solutions: Gaussian Coil or Macromolecular Rod?. <i>Macromolecules</i> , 2016 , 49, 2731-2740	5.5	30	
42	Synthesis of Functional Block Copolymers Carrying One Poly(p-phenylenevinylene) and One Nonconjugated Block in a Facile One-Pot Procedure. <i>Macromolecules</i> , 2016 , 49, 2085-2095	5.5	12	
41	Conformational Analysis of Oxygen-Induced Higher Ordered Structure of A, B-Alternating Poly(arylene vinylene) Copolymers by Solid-State NMR and Molecular Dynamics Simulations. <i>Macromolecules</i> , 2016 , 49, 3061-3069	5.5	8	
40	Hierarchical superstructures of norbornene-based polymers depending on dendronized side-chains. <i>Polymer Chemistry</i> , 2016 , 7, 5304-5311	4.9	19	

39	Preference of Ruthenium-Based Metathesis Catalysts toward Z- and E-Alkenes as a Guide for Selective Reactions to Alkene Stereoisomers. <i>Journal of Organic Chemistry</i> , 2016 , 81, 7591-6	4.2	9
38	Perpendicularly Oriented Block Copolymer Thin Films Induced by Neutral Star Copolymer Nanoparticles. <i>ACS Macro Letters</i> , 2015 , 4, 133-137	6.6	17
37	Simple Preparation of Various Nanostructures via in Situ Nanoparticlization of Polyacetylene Blocklike Copolymers by One-Shot Polymerization. <i>Macromolecules</i> , 2015 , 48, 1390-1397	5.5	45
36	Multiple Olefin Metathesis Polymerization That Combines All Three Olefin Metathesis Transformations: Ring-Opening, Ring-Closing, and Cross Metathesis. <i>Journal of the American</i> Chemical Society, 2015 , 137, 9262-5	16.4	49
35	Materials science. Building supermicelles from simple polymers. <i>Science</i> , 2015 , 347, 1310-1	33.3	8
34	Reactivity Studies of Alkoxy-Substituted [2.2]Paracyclophane-1,9-dienes and Specific Coordination of the Monomer Repeating Unit during ROMP. <i>Macromolecules</i> , 2015 , 48, 7435-7445	5.5	22
33	Controlled cyclopolymerization of 4,5-disubstituted 1,7-octadiynes and its application to the synthesis of a dendronized polymer using Grubbs catalyst. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 274-279	2.5	19
32	One-pot preparation of 3D nano- and microaggregates via in situ nanoparticlization of polyacetylene diblock copolymers produced by ROMP. <i>Macromolecular Rapid Communications</i> , 2015 , 36, 1069-74	4.8	23
31	Living Polymerization of Monomers Containing endo-Tricyclo[4.2.2.02,5]deca-3,9-diene Using Second Generation Grubbs and Hoveydallrubbs Catalysts: Approach to Synthesis of Well-Defined Star Polymers. <i>Macromolecules</i> , 2014 , 47, 1351-1359	5.5	31
30	One-pot synthesis of nanocaterpillar structures via in situ nanoparticlization of fully conjugated poly(p-phenylene)-block-polythiophene. <i>Chemical Communications</i> , 2014 , 50, 7945-8	5.8	27
29	Preparation of defect-free nanocaterpillars via in situ nanoparticlisation of a well-defined polyacetylene block copolymer. <i>RSC Advances</i> , 2014 , 4, 49180-49185	3.7	19
28	Preparation of a Library of Poly(-sulfonylimidates) by Cu-Catalyzed Multicomponent Polymerization <i>ACS Macro Letters</i> , 2014 , 3, 791-794	6.6	62
27	Strategies to enhance cyclopolymerization using third-generation Grubbs catalyst. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10508-14	16.4	76
26	N-Containing 1,7-Octadiyne Derivatives for Living Cyclopolymerization Using Grubbs Catalysts <i>ACS Macro Letters</i> , 2014 , 3, 795-798	6.6	16
25	Controlled Ring-Opening Metathesis Polymerization of a Monomer Containing Terminal Alkyne and Its Versatile Postpolymerization Functionalization via Click Reaction. <i>Macromolecules</i> , 2014 , 47, 4525-4	5 2 9	15
24	Magnetically recyclable Pd-Fe3O4 heterodimer nanocrystals for the synthesis of conjugated polymers via suzuki polycondensation: Toward green chemistry. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 1525-1528	2.5	10
23	Tandem ring-opening/ring-closing metathesis polymerization: relationship between monomer structure and reactivity. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10769-75	16.4	50
22	Synthesis of Dendronized Polymers via Macromonomer Approach by Living ROMP and Their Characterization: From Rod-Like Homopolymers to Block and Gradient Copolymers. Macromolecules, 2013, 46, 5905-5914	5.5	63

(2003-2013)

21	Coil-to-Rod Transition of Conjugated Polymers Prepared by Cyclopolymerization of 1,6-Heptadiynes. <i>ACS Macro Letters</i> , 2013 , 2, 780-784	6.6	39
20	Faster cyclopolymerisation of 4,4-disubstituted 1,7-octadiynes through an enhanced Thorpelhgold effect. <i>Polymer Chemistry</i> , 2013 , 4, 4676	4.9	19
19	Cu-catalyzed multicomponent polymerization to synthesize a library of poly(N-sulfonylamidines). <i>Journal of the American Chemical Society</i> , 2013 , 135, 3760-3	16.4	126
18	Nanostar and nanonetwork crystals fabricated by in situ nanoparticlization of fully conjugated polythiophene diblock copolymers. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17695-8	16.4	65
17	Brush Polymers Containing Semiconducting Polyene Backbones: Graft-Through Synthesis via Cyclopolymerization and Conformational Analysis on the Coil-to-Rod Transition. <i>ACS Macro Letters</i> , 2012 , 1, 1098-1102	6.6	52
16	Synthesis of Rod-Like Dendronized Polymers Containing G4 and G5 Ester Dendrons via Macromonomer Approach by Living ROMP <i>ACS Macro Letters</i> , 2012 , 1, 445-448	6.6	54
15	One-pot in situ fabrication of stable nanocaterpillars directly from polyacetylene diblock copolymers synthesized by mild ring-opening metathesis polymerization. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14291-4	16.4	87
14	Cyclopolymerization To Synthesize Conjugated Polymers Containing MeldrumS Acid as a Precursor for Ketene Functionality. <i>ACS Macro Letters</i> , 2012 , 1, 1090-1093	6.6	55
13	Controlled cyclopolymerisation of 1,7-octadiyne derivatives using Grubbs catalyst. <i>Chemical Science</i> , 2012 , 3, 761-765	9.4	36
12	Fast tandem ring-opening/ring-closing metathesis polymerization from a monomer containing cyclohexene and terminal alkyne. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7270-3	16.4	65
11	Accelerated ring-opening metathesis polymerization of a secondary amide of 1-cyclobutene by hydrogen-bonding interaction. <i>Organic Letters</i> , 2011 , 13, 3908-11	6.2	15
10	Ultrafast cyclopolymerization for polyene synthesis: living polymerization to dendronized polymers. <i>Journal of the American Chemical Society</i> , 2011 , 133, 11904-7	16.4	120
9	Synthesis of dendronized diblock copolymers via ring-opening metathesis polymerization and their visualization using atomic force microscopy. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9619-2	276.4	75
8	A dendronized polymer is a single-molecule glass. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 6535-43	3.4	27
7	Doubly-dendronized linear polymers. Chemical Communications, 2005, 5169-71	5.8	83
6	A general model for selectivity in olefin cross metathesis. <i>Journal of the American Chemical Society</i> , 2003 , 125, 11360-70	16.4	1263
5	Controlled Living Ring-Opening-Metathesis Polymerization by a Fast-Initiating Ruthenium Catalyst. <i>Angewandte Chemie</i> , 2003 , 115, 1785-1788	3.6	72
4	Controlled living ring-opening-metathesis polymerization by a fast-initiating ruthenium catalyst. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 1743-6	16.4	343

3	Synthesis of A,B-alternating copolymers by ring-opening-insertion-metathesis polymerization. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 3839-41	16.4	98
2	Ruthenium-Catalyzed Olefin Cross Metathesis of Styrenes as an Alternative to the Heck and Cross-Coupling Reactions. <i>Advanced Synthesis and Catalysis</i> , 2002 , 344, 634	5.6	61
1	Tandem ring-closing metathesis reaction with a ruthenium catalyst containing a N-heterocyclic ligand. Chemical Communications, 2001, 2648-2649	5.8	59