Masahiro Teraguchi

List of Publications by Year
in descending order

96 papers	2,539 citations	218677 26 h-index	206112 48 g-index
98 all docs	98 docs citations	98 times ranked	1028 citing authors

#	Article	IF	Citations
1	Helix-Sense-Selective Polymerization of Phenylacetylene Having Two Hydroxy Groups Using a Chiral Catalytic System. Journal of the American Chemical Society, 2003, 125, 6346-6347.	13.7	317
2	Synthesis of functional Ï€-conjugated polymers from aromatic acetylenes. Polymer, 2006, 47, 4867-4892.	3.8	245
3	Synthesis and Properties of Polymers from Disubstituted Acetylenes with Chiral Pinanyl Groups. Macromolecules, 1999, 32, 79-85.	4.8	119
4	Poly(diphenylacetylene) Membranes with High Gas Permeability and Remarkable Chiral Memory. Macromolecules, 2002, 35, 1149-1151.	4.8	112
5	Top-Down Preparation of Self-Supporting Supramolecular Polymeric Membranes Using Highly Selective Photocyclic Aromatization of Cisâ€"Cisoid Helical Poly(phenylacetylene)s in the Membrane State. Journal of the American Chemical Society, 2013, 135, 602-605.	13.7	112
6	Enantioselective Permeation through Membranes of Chiral Helical Polymers Prepared by Depinanylsilylation of Poly(diphenylacetylene) with a High Content of the Pinanylsilyl Group. Macromolecules, 2003, 36, 9694-9697.	4.8	95
7	Synthesis of Chiral Helical Poly(hydroxyl-containing phenylacetylene) Membranes by in-Situ Depinanylsilylation and Their Enantioselective Permeabilities. Macromolecules, 2005, 38, 6367-6373.	4.8	84
8	Ladderlike Ferromagnetic Spin Coupling Network on a Ï€-Conjugated Pendant Polyradical. Journal of the American Chemical Society, 2003, 125, 3554-3557.	13.7	79
9	Assignment of Helical Sense for Poly(phenylacetylene) Bearing Achiral Galvinoxyl Chromophore Synthesized by Helix-Sense-Selective Polymerization. Macromolecules, 2005, 38, 9420-9426.	4.8	75
10	New Achiral Phenylacetylene Monomers Having an Oligosiloxanyl Group Most Suitable for Helix-Sense-Selective Polymerization and for Obtaining Good Optical Resolution Membrane Materials. Macromolecules, 2010, 43, 9268-9276.	4.8	59
11	Synthesis of chiral helical poly[p-(oligopinanylsiloxanyl)phenylacetylene]s and enantioselective permeability of their membranes. Journal of Polymer Science Part A, 2004, 42, 4502-4517.	2.3	58
12	Helix-Sense-Selective Polymerization of Achiral Phenylacetylenes with Two <i>N</i>-Alkylamide Groups to Generate the One-Handed Helical Polymers Stabilized by Intramolecular Hydrogen Bonds. ACS Macro Letters, 2012, 1, 1258-1261.	4.8	58
13	Helixâ€Senseâ€Selective Polymerization of Achiral Bis(hydroxymethyl)phenylacetylenes Bearing Alkyl Groups of Different Lengths. Macromolecular Chemistry and Physics, 2009, 210, 717-727.	2.2	55
14	Helix-Sense-Selective Polymerization of Achiral Phenylacetylenes and Unique Properties of the Resulting Cis-cisoidal Polymers. Polymer Reviews, 2017, 57, 89-118.	10.9	49
15	Two-Dimensional and Related Polymers: Concepts, Synthesis, and their Potential Application as Separation Membrane Materials. Polymer Reviews, 2015, 55, 57-89.	10.9	48
16	Synthesis of conjugated polymers with azobenzene moieties in the main chain. Journal of Polymer Science Part A, 2000, 38, 1057-1063.	2.3	44
17	Role of chiral amine cocatalysts in the helix-sense-selective polymerization of a phenylacetylene using a catalytic system. Polymer, 2004, 45, 8109-8114.	3.8	44
18	Synthesis and cation exchange properties of a new porous cation exchange resin having an open-celled monolith structure. Polymer, 2004, 45, 3-7.	3.8	43

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19	Helix-sense-selective Polymerization of a Phenylacetylene Bearing an Achiral and Bulky Galvinoxyl Moiety. Chemistry Letters, 2005, 34, 854-855.	1.3	40
20	Helix-Sense Tunability Induced by Achiral Diene Ligands in the Chiral Catalytic System for the Helix-Sense-Selective Polymerization of Achiral and Bulky Phenylacetylene Monomers. Macromolecules, 2007, 40, 7098-7102.	4.8	39
21	Enantioselective Permeability through Membranes from a Poly(substituted phenylacetylene) Having a Chiral Helical Backbone and Achiral Bidentate Ligands as Pendant Groups. Chemistry Letters, 2007, 36, 220-221.	1.3	37
22	Synthesis of One-Handed Helical Block Copoly(substituted acetylene)s Consisting of Dynamic <i>cis-transoidal</i> and Static <i>cis-cisoidal</i> Block: Chiral Teleinduction in Helix-Sense-Selective Polymerization Using a Chiral Living Polymer as an Initiator. ACS Macro Letters, 2016, 5, 1381-1385.	4.8	37
23	Pseudo helix-sense-selective polymerisation of achiral substituted acetylenes. Chemical Communications, 2012, 48, 4761.	4.1	34
24	Synthesis and properties of polyacetylenes with adamantyl groups. Journal of Polymer Science Part A, 1999, 37, 4546-4553.	2.3	32
25	Polymerization of diphenylacetylenes having very bulky silyl groups and polymer properties. Journal of Polymer Science Part A, 1998, 36, 2721-2725.	2.3	30
26	Copper(I) Iodide Accelerates Catalytic Activation in Rhodium Complex-catalyzed Helix-sense-selective Polymerization of Achiral Phenylacetylene Monomers. Chemistry Letters, 2008, 37, 390-391.	1.3	29
27	Gas permeability and hydrocarbon solubility of poly[1-phenyl-2-[p-(triisopropylsilyl)phenyl]acetylene]. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 1474-1484.	2.1	24
28	Flexible self-supporting supramolecular polymeric membranes consisting of 1,3,5-trisubstituted benzene derivatives synthesized by highly selective photocyclic aromatization of helical poly(phenylacetylene)s in the membrane state. Polymer, 2013, 54, 4431-4435.	3.8	20
29	Helix-sense-selective Polymerization of Substituted Acetylenes by Using an Isolated Rh Chiral Initiator with an Amino Acid Ligand. Chemistry Letters, 2013, 42, 430-432.	1.3	19
30	Synthesis and oxygen permeation of novel polymers of phenylacetylenes having two hydroxyl groups via different lengths of spacers. Polymer, 2015, 56, 199-206.	3.8	19
31	Gas permeability andn-butane solubility of poly(1-trimethylgermyl-1-propyne). Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2228-2236.	2.1	18
32	A poly(9,10-anthryleneethynylene)-based polyradical designed to be a ladder-like ferromagnetic spin coupling network. Polyhedron, 2003, 22, 1845-1850.	2.2	16
33	Enhanced Gas Permselectivity of Copoly(Hyperbranched Macromonomer) Synthesized by One-pot Simultaneous Copolymerization of Dimethylsilyl-containing Phenylacetylenes. Chemistry Letters, 2012, 41, 1462-1464.	1.3	15
34	Excellent oxygen permselectivity of fluorine-containing poly(trimethylsilyldiphenylacetylene)s prepared by direct alkylation of perfluorodecyl groups in membrane state. Polymer, 2013, 54, 2231-2234.	3.8	15
35	Helix-sense-selective Degradation of Poly[4-dodecyloxy-3,5-bis(hydroxymethyl)phenylacetylene] by Selective Photocyclic Aromatization (SCAT) Using Circularly Polarized Light (CPL). Chemistry Letters, 2014, 43, 1476-1477.	1.3	15
36	Synthesis and magnetic characterization of monodisperse oligo(9,10-anthryleneethynylene)-based polyradicals with two pendant stable phenoxyls in one anthracene skeleton. Polyhedron, 2005, 24, 2544-2549.	2.2	14

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37	Living-like helix-sense-selective polymerization of an achiral substituted acetylene having bulky substituents. Polymer, 2013, 54, 1729-1733.	3.8	14
38	Folding-Induced Through-Space Magnetic Interaction of Poly(1,3-phenyleneethynylene)-Based Polyradicals. Macromolecules, 2013, 46, 2583-2589.	4.8	14
39	Helix-sense-selective Polymerization of 3,5-Bis(hydroxymethyl)phenylacetylene Connected with a Rigid and Ï€-Conjugated Substituent. Chemistry Letters, 2013, 42, 1087-1089.	1.3	14
40	Facile synthesis of five 2D surface modifiers by highly selective photocyclic aromatization and efficient enhancement of oxygen permselectivities of three polymer membranes by surface modification using a small amount of the 2D surface modifiers. Polymer, 2014, 55, 1384-1396.	3.8	14
41	A Chiral Supramolecular Polymer Membrane with no Chiral Substituents by Highly Selective Photocyclic Aromatization of a Oneâ€Handed Helical <i>Cis</i>â€<i>cisoidal</i> Polyphenylacetylene. Macromolecular Chemistry and Physics, 2015, 216, 530-537.	2.2	14
42	Optically active helical structure and magnetic interaction of poly(phenylacetylene)-based polyradicals. Polyhedron, 2009, 28, 1927-1929.	2.2	13
43	Synthesis and oxygen permeation of novel well-defined homopoly(phenylacetylene)s with different sizes and shapes of oligosiloxanyl side groups. Journal of Membrane Science, 2018, 561, 26-38.	8.2	13
44	Enhanced performances of enantioselective permeation through one-handed helical polymer membranes by enantioselective imine exchange reaction with permeants and by partially decomposed reaction of the membrane. Polymer, 2018, 156, 39-43.	3.8	13
45	Macromolecular Design for Oxygen/Nitrogen Permselective Membranesâ€"Top-Performing Polymers in 2020â€". Polymers, 2021, 13, 3012.	4.5	13
46	Transformation from preformed racemic helical poly(phenylacetylene)s to the enantioenriched helical polymers by chiral solvation, followed by removal of the chiral solvents. Polymer Journal, 2012, 44, 327-333.	2.7	12
47	Subnanoporous Highly Oxygen Permselective Membranes from Poly(conjugated hyperbranched) Tj ETQq1 1 0.784314 rgBT /Overlock 1,3-Bis(silyl)phenylacetylene Using a Single Rh Catalytic System: Control of Their Structures and Permselectivities. Macromolecules, 2017, 50, 7121-7136.	4.8	11
48	Simultaneous improvement of permeability and selectivity in enantioselective permeation through solid chiral membranes from a newly synthesized one-handed helical polyphenylacetylene with aldehyde pendant groups by enantioselective reaction. Polymer, 2019, 171, 45-49.	3.8	11
49	Phenyleneethynylene Macrocycleâ€Fused Phenylacetylene Monomers: Synthesis and Polymerization. Macromolecular Chemistry and Physics, 2009, 210, 22-36.	2.2	10
50	Two modes of asymmetric polymerization of phenylacetylenes having an <scp>L</scp>â€amino alcohol residue and two hydroxy groups. Journal of Polymer Science Part A, 2012, 50, 5134-5143.	2.3	10
51	Transformer of Achiral Amounts to Chirality: Double Reversal of Enantioselectivity Using a Single Cocatalyst in Asymmetric Polymerization. Macromolecules, 2017, 50, 7468-7474.	4.8	10
52	Synthesis and oxygen permeability of novel graft copolymers consisting of a polyphenylacetylene backbone and long oligosiloxane grafts from phenylacetylene-type macromonomers. Polymer, 2018, 156, 66-70.	3.8	10
53	Preparation of chiral polystyrene monoliths by utilizing W/O emulsion polymerization and their optical resolution ability. Journal of Polymer Science Part A, 2005, 43, 2348-2357.	2.3	9
54	Facile Synthesis of an Amphiphilic 1,3,5-Trisubstituted Benzene as a Novel Surface Modifier by Selective Photocyclic Aromatization and Efficient Improvement of Oxygen Permselectivity by the Addition of the Surface Modifier. Chemistry Letters, 2013, 42, 1090-1092.	1.3	9

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55	Chiral Teleinduction in Asymmetric Polymerization of 3,5-Bis(hydroxymethyl)phenylacetylene Having a Chiral Group via a Very Long and Rigid Spacer at 4-Position. Chemistry Letters, 2012, 41, 244-246.	1.3	8
56	Synthesis of a Fluorineâ€Containing Cisâ€Cisoidal Oneâ€Handed Helical Polyphenylacetylene and Application of Highly Selective Photocyclic Aromatization Product on Oxygen Permselective Membrane. Chirality, 2015, 27, 459-463.	2.6	8
57	Synthesis and Ultrahigh Oxygen Permeability of Silicon-containing <i>cis</i>-<i>cisoidal</i> Poly(substituted phenylacetylene)s. Chemistry Letters, 2018, 47, 1314-1317.	1.3	8
58	Synthesis and Permselectivity of a <i>Soluble</i> Two-Dimensional Macromolecular Sheet by Solidâ€"Solid Interfacial Polycondensation Followed by Chemical Exfoliation. , 2020, 2, 1121-1128.		8
59	Synthesis of Well-Defined Chiral Oligopinanylsiloxane Graft Copoly(phenylacetylene)s Using the Macromonomer Method and Their Enantioselective Permeability. ACS Applied Polymer Materials, 2020, 2, 853-861.	4.4	8
60	Entropy Effect on Physical Displacement of Redox Molecules in a Nafion Film as Studied by Double Potential-Step Chronoabsorptometry. Journal of Physical Chemistry B, 2003, 107, 12662-12667.	2.6	7
61	Synthesis of an optically active poly(aryleneethynylene) bearing galvinoxyl residues and its chiroptical and magnetic properties. Synthetic Metals, 2009, 159, 864-867.	3.9	7
62	Synthesis of sequential poly(1,3-phenyleneethynylene)-based polyradicals and through-space antiferromagnetic interaction of their solid state. Polymer, 2014, 55, 1097-1102.	3.8	7
63	Helical Conformation Stability of Poly[3,5-bis(hydroxymethyl)phenylacetylene]s Depending on the Length of Their Rigid and Linear Ï€-Conjugated Side Groups. Chemistry Letters, 2015, 44, 1413-1415.	1.3	7
64	Influence of a hydrodynamic environment on chain rigidity, liquid crystallinity, absorptivity, and photoluminescence of hydrogen-bonding-assisted helical poly(phenylacetylene). RSC Advances, 2016, 6, 36661-36666.	3.6	7
65	SYNTHESIS AND PROPERTIES OF POLYACETYLENES HAVING SUBSTITUTED AZOBENZENE PENDANT GROUPS. Journal of Macromolecular Science - Pure and Applied Chemistry, 2002, 39, 901-913.	2.2	6
66	Oxygen permselectivities through supramolecular polymer membranes prepared by highly selective photocyclic aromatization ofÂpoly(substituted acetylene). Polymer, 2017, 127, 232-235.	3.8	6
67	New Synthetic Methods of Novel Nanoporous Polycondensates and Excellent Oxygen Permselectivity of Their Composite Membranes. Nanomaterials, 2019, 9, 859.	4.1	6
68	Synthesis and Gas Permeability of Poly(diphenylacetylenes) with Substituents. ACS Symposium Series, 1999, , 28-37.	0.5	5
69	Selective Polymerization of Dimethylsilylphenylacetylene and the Gas Permselectivity of the Resulting Polymer Membranes. Chemistry Letters, 2015, 44, 182-184.	1.3	5
70	High Oxygen Permselectivity through a Membrane from Novel Soluble Imido-bridged Ladder Polysiloxane. Chemistry Letters, 2016, 45, 424-426.	1.3	5
71	Dimesitylboryl-containing polydiphenylacetylene with a large Stokes shift, high fluorescence efficiency, and fluoride ion sensing ability. Polymer, 2018, 148, 310-315.	3.8	5
72	Synthesis of soluble oligsiloxane-end-capped hyperbranched polyazomethine and their application to CO2/N2 separation membranes. Designed Monomers and Polymers, 2018, 21, 99-104.	1.6	5

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73	Novel highly efficient <i>absolute</i> optical resolution method by serial combination of two asymmetric reactions from acetylene monomers having racemic substituents. Chirality, 2022, 34, 450-461.	2.6	5
74	Fluorescence emission enhancement of poly(phenylacetylene) via thermal annealing. Molecular Crystals and Liquid Crystals, 2017, 645, 50-57.	0.9	4
75	Chiral teletransmission in the cis-cisoidal sequence of copoly(substituted acetylene)s by multiple stage solvent exchange of the copolymer solution through a membrane. Polymer, 2018, 154, 253-257.	3.8	4
76	Helix-sense-selective Polymerization of 3,5-bis(hydroxymethyl)phenylacetylene Rigidly Bearing Galvinoxyl Residues and Their Chiroptical Properties. Polymers, 2019, 11, 1877.	4.5	4
77	Synthesis, in-situ membrane preparation, and good gas permselectivity of insoluble poly(substituted) Tj ETQq1 1 0.784314 rgBT /Overlo 122081.	3.8	4
78	SYNTHESIS AND PROPERTIES OF COPOLYMERS FROM 1-[3,5-BIS(TRIMETHYLSILYL)PHENYL]-2-PHENYLACETYLENE. Journal of Macromolecular Science - Pure and Applied Chemistry, 2000, 37, 1173-1184.	2.2	3
79	Synthesis and properties of copolymers from diphenylacetylene having a hexaphenylbenzene moiety. Polymer Bulletin, 2000, 44, 255-260.	3.3	3
80	Helix-Sense-Selective Polymerization of Novel Substituted Acetylenes Having a Rigid Planar Imino-Linked Substituent and Quantitative Polymer Reactions in the Optically Active Polymer Membranes. Kobunshi Ronbunshu, 2014, 71, 372-381.	0.2	3
81	Synthesis and oxygen permselectivity of copoly(substituted acetylene)s with bulky fused polycyclic aliphatic groups. Polymer, 2016, 99, 695-703.	3.8	3
82	Oxygen Permselectivities of Novel Multi-bridged Copolymers Synthesized by Imine Metathesis between N-Imines and C-Imines in the Pendant Groups of Two Poly(substituted acetylene)s. Chemistry Letters, 2017, 46, 401-404.	1.3	3
83	Solvent-tuned dual emission of a helical poly[3,5-bis(hydroxymethyl)phenylacetylene] connected with a Ï€-conjugated chromophore. Polymer Journal, 2018, 50, 533-537.	2.7	3
84	Synthesis of Two Wellâ€Defined Quadrupleâ€Stranded Copolymers having Two Kinds of Backbones by Postpolymerization of a Helical Template Polymer. Macromolecular Rapid Communications, 2018, 39, 1700556.	3.9	3
85	Helix-Sense-Selective Polymerization of Phenylacetylenes Having a Porphyrin and a Zinc-Porphyrin Group: One-Handed Helical Arrangement of Porphyrin Pendants. Polymers, 2019, 11, 274.	4.5	3
86	Synthesis of Cis-Cisoid or Cis-Transoid Poly(Phenyl-Acetylene)s Having One or Two Carbamate Groups as Oxygen Permeation Membrane Materials. Membranes, 2020, 10, 199.	3.0	3
87	Photoluminescence, Electroluminescence, Lasing and Novel Characteristics in Photonic Crystal, Synthetic Opal, of Conducting Polymers, Polyacetylene Derivatives. Molecular Crystals and Liquid Crystals, 1998, 322, 253-262.	0.3	2
88	Quantitative Introduction of Perfluoroalkyl Groups to Poly(diphenylacetylene) Membranes via Three-step Membrane Reaction Including Click Reaction and Their Gas Permeability. Chemistry Letters, 2015, 44, 1679-1681.	1.3	2
89	Highly Efficient Helix-sense-selective Polymerization of an Achiral Phenylacetylene Having a Bulky Group. Chemistry Letters, 2015, 44, 1777-1779.	1.3	1
90	Comparative photophysical properties of poly(diphenylacetylene)s with different central atoms in side group. Molecular Crystals and Liquid Crystals, 2017, 651, 42-47.	0.9	1

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91	Ultrahigh oxygen permeability of chemically-modified membranes of novel (co)polyacetylenes having a photodegradative backbone and crosslinkable side chains. Polymer, 2018, 149, 117-123.	3.8	1
92	Improved oxygen permeation of a multi-stranded network two-dimensional polymer synthesized by three-step polymerizations of a novel monomer bearing three different polymerizable groups followed by photoexfoliation. Polymer, 2021, 228, 123857.	3.8	1
93	Improvement of oxygen permselectivity of a rigid helical polyphenylacetylene: Effect of flexible groups, degree of polymerization, composites, thickness, orientation, and network formation. Polymer, 2021, 228, 123900.	3.8	1
94	Synthesis and Oxygen Permeation of Novel Alternating Copolymers Containing Disiloxane and Imido Groups by Hydrosilylation Polyaddition. Chemistry Letters, 2021, 50, 1617-1619.	1.3	1
95	Synthesis of Two-dimensional Polymer for Molecular-sieve Membranes. Membrane, 2014, 39, 118-131.	0.0	0
96	Synthesis and oxygen permselectivity of multi-stranded graft copolymers. Polymer, 2022, 255, 125092.	3.8	0