

Masahiro Teraguchi

List of Publications by Year in descending order

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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	Novel highly efficient <i>absolute</i> optical resolution method by serial combination of two asymmetric reactions from acetylene monomers having racemic substituents. <i>Chirality</i> , 2022, 34, 450-461.	2.6	5
2	Synthesis and oxygen permselectivity of multi-stranded graft copolymers. <i>Polymer</i> , 2022, 255, 125092.	3.8	0
3	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. <i>Polymer</i> , 2021, 228, 123857.	3.8	1
4	Improvement of oxygen permselectivity of a rigid helical polyphenylacetylene: Effect of flexible groups, degree of polymerization, composites, thickness, orientation, and network formation. <i>Polymer</i> , 2021, 228, 123900.	3.8	1
5	Macromolecular Design for Oxygen/Nitrogen Permselective Membranesâ€”Top-Performing Polymers in 2020â€”. <i>Polymers</i> , 2021, 13, 3012.	4.5	13
6	Synthesis and Oxygen Permeation of Novel Alternating Copolymers Containing Disiloxane and Imido Groups by Hydrosilylation Polyaddition. <i>Chemistry Letters</i> , 2021, 50, 1617-1619.	1.3	1
7	Synthesis, in-situ membrane preparation, and good gas permselectivity of insoluble poly(substituted) Tj ETQq1 1 0.784314 rgBT /Ove 122081.	3.8	4
8	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
9	Synthesis of Cis-Cisoid or Cis-Transoid Poly(Phenyl-Acetylene)s Having One or Two Carbamate Groups as Oxygen Permeation Membrane Materials. <i>Membranes</i> , 2020, 10, 199.	3.0	3
10	Synthesis of Well-Defined Chiral Oligopinanylsiloxane Graft Copoly(phenylacetylene)s Using the Macromonomer Method and Their Enantioselective Permeability. <i>ACS Applied Polymer Materials</i> , 2020, 2, 853-861.	4.4	8
11	New Synthetic Methods of Novel Nanoporous Polycondensates and Excellent Oxygen Permselectivity of Their Composite Membranes. <i>Nanomaterials</i> , 2019, 9, 859.	4.1	6
12	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. <i>Polymer</i> , 2019, 171, 45-49.	3.8	11
13	Helix-Sense-Selective Polymerization of Phenylacetylenes Having a Porphyrin and a Zinc-Porphyrin Group: One-Handed Helical Arrangement of Porphyrin Pendants. <i>Polymers</i> , 2019, 11, 274.	4.5	3
14	Helix-sense-selective Polymerization of 3,5-bis(hydroxymethyl)phenylacetylene Rigidly Bearing Galvinoxyl Residues and Their Chiroptical Properties. <i>Polymers</i> , 2019, 11, 1877.	4.5	4
15	Solvent-tuned dual emission of a helical poly[3,5-bis(hydroxymethyl)phenylacetylene] connected with a Î€-conjugated chromophore. <i>Polymer Journal</i> , 2018, 50, 533-537.	2.7	3
16	Synthesis and oxygen permeation of novel well-defined homopoly(phenylacetylene)s with different sizes and shapes of oligosiloxanyl side groups. <i>Journal of Membrane Science</i> , 2018, 561, 26-38.	8.2	13
17	Synthesis of Two Wellâ€”Defined Quadrupleâ€”Stranded Copolymers having Two Kinds of Backbones by Postpolymerization of a Helical Template Polymer. <i>Macromolecular Rapid Communications</i> , 2018, 39, 1700556.	3.9	3
18	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. <i>Polymer</i> , 2018, 156, 39-43.	3.8	13

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19	Synthesis and Ultrahigh Oxygen Permeability of Silicon-containing <i>cis-cisoidal</i> Poly(substituted phenylacetylene)s. <i>Chemistry Letters</i> , 2018, 47, 1314-1317.	1.3	8
20	Synthesis and oxygen permeability of novel graft copolymers consisting of a polyphenylacetylene backbone and long oligosiloxane grafts from phenylacetylene-type macromonomers. <i>Polymer</i> , 2018, 156, 66-70.	3.8	10
21	Chiral teletransmission in the <i>cis-cisoidal</i> sequence of copoly(substituted acetylene)s by multiple stage solvent exchange of the copolymer solution through a membrane. <i>Polymer</i> , 2018, 154, 253-257.	3.8	4
22	Dimesitylboryl-containing polydiphenylacetylene with a large Stokes shift, high fluorescence efficiency, and fluoride ion sensing ability. <i>Polymer</i> , 2018, 148, 310-315.	3.8	5
23	Ultrahigh oxygen permeability of chemically-modified membranes of novel (co)polyacetylenes having a photodegradative backbone and crosslinkable side chains. <i>Polymer</i> , 2018, 149, 117-123.	3.8	1
24	Synthesis of soluble oligosiloxane-end-capped hyperbranched polyazomethine and their application to CO ₂ /N ₂ separation membranes. <i>Designed Monomers and Polymers</i> , 2018, 21, 99-104.	1.6	5
25	Helix-Sense-Selective Polymerization of Achiral Phenylacetylenes and Unique Properties of the Resulting <i>Cis-cisoidal</i> Polymers. <i>Polymer Reviews</i> , 2017, 57, 89-118.	10.9	49
26	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. <i>Chemistry Letters</i> , 2017, 46, 401-404.	1.3	3
27	Comparative photophysical properties of poly(diphenylacetylene)s with different central atoms in side group. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 651, 42-47.	0.9	1
28	Transformer of Achiral Amounts to Chirality: Double Reversal of Enantioselectivity Using a Single Cocatalyst in Asymmetric Polymerization. <i>Macromolecules</i> , 2017, 50, 7468-7474.	4.8	10
29	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. <i>Macromolecules</i> , 2017, 50, 7121-7136.	4.8	11
30	Oxygen permselectivities through supramolecular polymer membranes prepared by highly selective photocyclic aromatization of <i>poly</i> (substituted acetylene). <i>Polymer</i> , 2017, 127, 232-235.	3.8	6
31	Fluorescence emission enhancement of poly(phenylacetylene) via thermal annealing. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 645, 50-57.	0.9	4
32	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. <i>ACS Macro Letters</i> , 2016, 5, 1381-1385.	4.8	37
33	Influence of a hydrodynamic environment on chain rigidity, liquid crystallinity, absorptivity, and photoluminescence of hydrogen-bonding-assisted helical poly(phenylacetylene). <i>RSC Advances</i> , 2016, 6, 36661-36666.	3.6	7
34	High Oxygen Permselectivity through a Membrane from Novel Soluble Imido-bridged Ladder Polysiloxane. <i>Chemistry Letters</i> , 2016, 45, 424-426.	1.3	5
35	Synthesis and oxygen permselectivity of copoly(substituted acetylene)s with bulky fused polycyclic aliphatic groups. <i>Polymer</i> , 2016, 99, 695-703.	3.8	3
36	Selective Polymerization of Dimethylsilylphenylacetylene and the Gas Permselectivity of the Resulting Polymer Membranes. <i>Chemistry Letters</i> , 2015, 44, 182-184.	1.3	5

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37	Helical Conformation Stability of Poly[3,5-bis(hydroxymethyl)phenylacetylene]s Depending on the Length of Their Rigid and Linear π -Conjugated Side Groups. <i>Chemistry Letters</i> , 2015, 44, 1413-1415.	1.3	7
38	Quantitative Introduction of Perfluoroalkyl Groups to Poly(diphenylacetylene) Membranes via Three-step Membrane Reaction Including Click Reaction and Their Gas Permeability. <i>Chemistry Letters</i> , 2015, 44, 1679-1681.	1.3	2
39	Highly Efficient Helix-sense-selective Polymerization of an Achiral Phenylacetylene Having a Bulky Group. <i>Chemistry Letters</i> , 2015, 44, 1777-1779.	1.3	1
40	Synthesis of a Fluorine-Containing Cis-Cisoidal One-Handed Helical Polyphenylacetylene and Application of Highly Selective Photocyclic Aromatization Product on Oxygen Permselective Membrane. <i>Chirality</i> , 2015, 27, 459-463.	2.6	8
41	A Chiral Supramolecular Polymer Membrane with no Chiral Substituents by Highly Selective Photocyclic Aromatization of a One-Handed Helical <i>Cis</i> -Cisoidal Polyphenylacetylene. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 530-537.	2.2	14
42	Two-Dimensional and Related Polymers: Concepts, Synthesis, and their Potential Application as Separation Membrane Materials. <i>Polymer Reviews</i> , 2015, 55, 57-89.	10.9	48
43	Synthesis and oxygen permeation of novel polymers of phenylacetylenes having two hydroxyl groups via different lengths of spacers. <i>Polymer</i> , 2015, 56, 199-206.	3.8	19
44	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. <i>Kobunshi Ronbunshu</i> , 2014, 71, 372-381.	0.2	3
45	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. <i>Polymer</i> , 2014, 55, 1384-1396.	3.8	14
46	Synthesis of sequential poly(1,3-phenyleneethynylene)-based polyradicals and through-space antiferromagnetic interaction of their solid state. <i>Polymer</i> , 2014, 55, 1097-1102.	3.8	7
47	Helix-sense-selective Degradation of Poly[4-dodecyloxy-3,5-bis(hydroxymethyl)phenylacetylene] by Selective Photocyclic Aromatization (SCAT) Using Circularly Polarized Light (CPL). <i>Chemistry Letters</i> , 2014, 43, 1476-1477.	1.3	15
48	Synthesis of Two-dimensional Polymer for Molecular-sieve Membranes. <i>Membrane</i> , 2014, 39, 118-131.	0.0	0
49	Top-Down Preparation of Self-Supporting Supramolecular Polymeric Membranes Using Highly Selective Photocyclic Aromatization of <i>Cis</i> -Cisoid Helical Poly(phenylacetylene)s in the Membrane State. <i>Journal of the American Chemical Society</i> , 2013, 135, 602-605.	13.7	112
50	Living-like helix-sense-selective polymerization of an achiral substituted acetylene having bulky substituents. <i>Polymer</i> , 2013, 54, 1729-1733.	3.8	14
51	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. <i>Polymer</i> , 2013, 54, 4431-4435.	3.8	20
52	Folding-Induced Through-Space Magnetic Interaction of Poly(1,3-phenyleneethynylene)-Based Polyradicals. <i>Macromolecules</i> , 2013, 46, 2583-2589.	4.8	14
53	Excellent oxygen permselectivity of fluorine-containing poly(trimethylsilyldiphenylacetylene)s prepared by direct alkylation of perfluorodecyl groups in membrane state. <i>Polymer</i> , 2013, 54, 2231-2234.	3.8	15
54	Helix-sense-selective Polymerization of 3,5-Bis(hydroxymethyl)phenylacetylene Connected with a Rigid and π -Conjugated Substituent. <i>Chemistry Letters</i> , 2013, 42, 1087-1089.	1.3	14

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55	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. <i>Chemistry Letters</i> , 2013, 42, 1090-1092.	1.3	9
56	Helix-sense-selective Polymerization of Substituted Acetylenes by Using an Isolated Rh Chiral Initiator with an Amino Acid Ligand. <i>Chemistry Letters</i> , 2013, 42, 430-432.	1.3	19
57	Transformation from preformed racemic helical poly(phenylacetylene)s to the enantioenriched helical polymers by chiral solvation, followed by removal of the chiral solvents. <i>Polymer Journal</i> , 2012, 44, 327-333.	2.7	12
58	Enhanced Gas Permselectivity of Copoly(Hyperbranched Macromonomer) Synthesized by One-pot Simultaneous Copolymerization of Dimethylsilyl-containing Phenylacetylenes. <i>Chemistry Letters</i> , 2012, 41, 1462-1464.	1.3	15
59	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. <i>Chemistry Letters</i> , 2012, 41, 244-246.	1.3	8
60	Pseudo helix-sense-selective polymerisation of achiral substituted acetylenes. <i>Chemical Communications</i> , 2012, 48, 4761.	4.1	34
61	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. <i>ACS Macro Letters</i> , 2012, 1, 1258-1261.	4.8	58
62	Two modes of asymmetric polymerization of phenylacetylenes having an amino alcohol residue and two hydroxy groups. <i>Journal of Polymer Science Part A</i> , 2012, 50, 5134-5143.	2.3	10
63	New Achiral Phenylacetylene Monomers Having an Oligosiloxanyl Group Most Suitable for Helix-Sense-Selective Polymerization and for Obtaining Good Optical Resolution Membrane Materials. <i>Macromolecules</i> , 2010, 43, 9268-9276.	4.8	59
64	Phenyleneethynylene Macrocycle-Fused Phenylacetylene Monomers: Synthesis and Polymerization. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 22-36.	2.2	10
65	Helix-Sense-Selective Polymerization of Achiral Bis(hydroxymethyl)phenylacetylenes Bearing Alkyl Groups of Different Lengths. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 717-727.	2.2	55
66	Optically active helical structure and magnetic interaction of poly(phenylacetylene)-based polyradicals. <i>Polyhedron</i> , 2009, 28, 1927-1929.	2.2	13
67	Synthesis of an optically active poly(aryleneethynylene) bearing galvinoxyl residues and its chiroptical and magnetic properties. <i>Synthetic Metals</i> , 2009, 159, 864-867.	3.9	7
68	Copper(I) Iodide Accelerates Catalytic Activation in Rhodium Complex-catalyzed Helix-sense-selective Polymerization of Achiral Phenylacetylene Monomers. <i>Chemistry Letters</i> , 2008, 37, 390-391.	1.3	29
69	Enantioselective Permeability through Membranes from a Poly(substituted phenylacetylene) Having a Chiral Helical Backbone and Achiral Bidentate Ligands as Pendant Groups. <i>Chemistry Letters</i> , 2007, 36, 220-221.	1.3	37
70	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. <i>Macromolecules</i> , 2007, 40, 7098-7102.	4.8	39
71	Synthesis of functional π -conjugated polymers from aromatic acetylenes. <i>Polymer</i> , 2006, 47, 4867-4892.	3.8	245
72	Helix-sense-selective Polymerization of a Phenylacetylene Bearing an Achiral and Bulky Galvinoxyl Moiety. <i>Chemistry Letters</i> , 2005, 34, 854-855.	1.3	40

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73	Synthesis and magnetic characterization of monodisperse oligo(9,10-anthryleneethynylene)-based polyradicals with two pendant stable phenoxyls in one anthracene skeleton. <i>Polyhedron</i> , 2005, 24, 2544-2549.	2.2	14
74	Preparation of chiral polystyrene monoliths by utilizing W/O emulsion polymerization and their optical resolution ability. <i>Journal of Polymer Science Part A</i> , 2005, 43, 2348-2357.	2.3	9
75	Synthesis of Chiral Helical Poly(hydroxyl-containing phenylacetylene) Membranes by in-Situ Depinanylsilylation and Their Enantioselective Permeabilities. <i>Macromolecules</i> , 2005, 38, 6367-6373.	4.8	84
76	Assignment of Helical Sense for Poly(phenylacetylene) Bearing Achiral Galvinoxyl Chromophore Synthesized by Helix-Sense-Selective Polymerization. <i>Macromolecules</i> , 2005, 38, 9420-9426.	4.8	75
77	Role of chiral amine cocatalysts in the helix-sense-selective polymerization of a phenylacetylene using a catalytic system. <i>Polymer</i> , 2004, 45, 8109-8114.	3.8	44
78	Synthesis of chiral helical poly[p-(oligopinanylsiloxanyl)phenylacetylene]s and enantioselective permeability of their membranes. <i>Journal of Polymer Science Part A</i> , 2004, 42, 4502-4517.	2.3	58
79	Synthesis and cation exchange properties of a new porous cation exchange resin having an open-celled monolith structure. <i>Polymer</i> , 2004, 45, 3-7.	3.8	43
80	A poly(9,10-anthryleneethynylene)-based polyradical designed to be a ladder-like ferromagnetic spin coupling network. <i>Polyhedron</i> , 2003, 22, 1845-1850.	2.2	16
81	Enantioselective Permeation through Membranes of Chiral Helical Polymers Prepared by Depinanylsilylation of Poly(diphenylacetylene) with a High Content of the Pinanylsilyl Group. <i>Macromolecules</i> , 2003, 36, 9694-9697.	4.8	95
82	Entropy Effect on Physical Displacement of Redox Molecules in a Nafion Film as Studied by Double Potential-Step Chronoabsorptometry. <i>Journal of Physical Chemistry B</i> , 2003, 107, 12662-12667.	2.6	7
83	Helix-Sense-Selective Polymerization of Phenylacetylene Having Two Hydroxy Groups Using a Chiral Catalytic System. <i>Journal of the American Chemical Society</i> , 2003, 125, 6346-6347.	13.7	317
84	Ladderlike Ferromagnetic Spin Coupling Network on a π -Conjugated Pendant Polyradical. <i>Journal of the American Chemical Society</i> , 2003, 125, 3554-3557.	13.7	79
85	Poly(diphenylacetylene) Membranes with High Gas Permeability and Remarkable Chiral Memory. <i>Macromolecules</i> , 2002, 35, 1149-1151.	4.8	112
86	SYNTHESIS AND PROPERTIES OF POLYACETYLENES HAVING SUBSTITUTED AZOBENZENE PENDANT GROUPS. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2002, 39, 901-913.	2.2	6
87	Gas permeability and n-butane solubility of poly(1-trimethylgermyl-1-propyne). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002, 40, 2228-2236.	2.1	18
88	SYNTHESIS AND PROPERTIES OF COPOLYMERS FROM 1-[3,5-BIS(TRIMETHYLSILYL)PHENYL]-2-PHENYLACETYLENE. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2000, 37, 1173-1184.	2.2	3
89	Gas permeability and hydrocarbon solubility of poly[1-phenyl-2-[p-(triisopropylsilyl)phenyl]acetylene]. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 1474-1484.	2.1	24
90	Synthesis of conjugated polymers with azobenzene moieties in the main chain. <i>Journal of Polymer Science Part A</i> , 2000, 38, 1057-1063.	2.3	44

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91	Synthesis and properties of copolymers from diphenylacetylene having a hexaphenylbenzene moiety. Polymer Bulletin, 2000, 44, 255-260.	3.3	3
92	Synthesis and Gas Permeability of Poly(diphenylacetylenes) with Substituents. ACS Symposium Series, 1999, , 28-37.	0.5	5
93	Synthesis and properties of polyacetylenes with adamantyl groups. Journal of Polymer Science Part A, 1999, 37, 4546-4553.	2.3	32
94	Synthesis and Properties of Polymers from Disubstituted Acetylenes with Chiral Pinanyl Groups. Macromolecules, 1999, 32, 79-85.	4.8	119
95	Polymerization of diphenylacetylenes having very bulky silyl groups and polymer properties. Journal of Polymer Science Part A, 1998, 36, 2721-2725.	2.3	30
96	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