

Tatsuya Nishimura

List of Publications by Year in descending order

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83
papers

3,865
citations

159585

30
h-index

123424

61
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91
all docs

91
docs citations

91
times ranked

3716
citing authors

#	ARTICLE	IF	CITATIONS
1	An Acidic Matrix Protein, Pif, Is a Key Macromolecule for Nacre Formation. <i>Science</i> , 2009, 325, 1388-1390.	12.6	625
2	Detection and Amplification of Chirality by Helical Polymers. <i>Chemistry - A European Journal</i> , 2004, 10, 42-51.	3.3	535
3	Supramolecular Chirality of Thermotropic Liquid-Crystalline Folic Acid Derivatives. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 1969-1972.	13.8	181
4	Self-Organization of Oriented Calcium Carbonate/Polymer Composites: Effects of a Matrix Peptide Isolated from the Exoskeleton of a Crayfish. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2876-2879.	13.8	143
5	Biomimetic synthesis of functional organic/inorganic hybrid materials: organic molecular control of self-organization of hybrids. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 974-989.	2.8	139
6	Nanosegregated Amorphous Composites of Calcium Carbonate and an Organic Polymer. <i>Advanced Materials</i> , 2008, 20, 3633-3637.	21.0	119
7	Macromolecular Templating for the Formation of Inorganic-Organic Hybrid Structures. <i>MRS Bulletin</i> , 2010, 35, 127-132.	3.5	107
8	Macroscopically Ordered Polymer/CaCO ₃ Hybrids Prepared by Using a Liquid-Crystalline Template. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2800-2803.	13.8	89
9	Macromolecular Helicity Induction on a Poly(phenylacetylene) with C ₂ -Symmetric Chiral [60]Fullerene-Bisadducts. <i>Journal of the American Chemical Society</i> , 2004, 126, 11711-11717.	13.7	88
10	Use of Amorphous Calcium Carbonate for the Design of New Materials. <i>ChemPlusChem</i> , 2017, 82, 107-120.	2.8	85
11	Helix-Sense-Selective Synthesis of Right- and Left-Handed Helical Luminescent Poly(diphenylacetylene)s with Memory of the Macromolecular Helicity and Their Helical Structures. <i>Journal of the American Chemical Society</i> , 2020, 142, 7668-7682.	13.7	83
12	First Isolation and Characterization of Eight Regioisomers for [60]Fullerene-Benzyne Bisadducts. <i>Organic Letters</i> , 2001, 3, 1193-1196.	4.6	81
13	A Helical Array of Pendant Fullerenes on an Optically Active Polyphenylacetylene. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 3602-3604.	13.8	78
14	Stimuli-responsive hydroxyapatite liquid crystal with macroscopically controllable ordering and magneto-optical functions. <i>Nature Communications</i> , 2018, 9, 568.	12.8	74
15	Bioinspired stiff and flexible composites of nanocellulose-reinforced amorphous CaCO ₃ . <i>Materials Horizons</i> , 2014, 1, 321.	12.2	70
16	Formation of Helically Structured Chitin/CaCO ₃ Hybrids through an Approach Inspired by the Biomimetic Processes of Crustacean Cuticles. <i>Small</i> , 2015, 11, 5127-5133.	10.0	69
17	Spin Filtering Along Chiral Polymers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14671-14676.	13.8	64
18	Three-Dimensional Relief Structures of CaCO ₃ Crystal Assemblies Formed by Spontaneous Two-Step Crystal Growth on a Polymer Thin Film. <i>Crystal Growth and Design</i> , 2009, 9, 622-625.	3.0	57

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19	CaCO ₃ /chitin-whisker hybrids: formation of CaCO ₃ crystals in chitin-based liquid-crystalline suspension. <i>Polymer Journal</i> , 2010, 42, 583-586.	2.7	57
20	Highly selective and straightforward recovery of gold and platinum from acidic waste effluents using cellulose-based bio-adsorbent. <i>Journal of Hazardous Materials</i> , 2021, 410, 124569.	12.4	54
21	Effects of Peptides on CaCO ₃ Crystallization: Mineralization Properties of an Acidic Peptide Isolated from Exoskeleton of Crayfish and Its Derivatives. <i>Crystal Growth and Design</i> , 2008, 8, 4062-4065.	3.0	48
22	Aragonite Nanorods in Calcium Carbonate/Polymer Hybrids Formed through Self-Organization Processes from Amorphous Calcium Carbonate Solution. <i>Small</i> , 2014, 10, 1634-1641.	10.0	46
23	Helical springs as a color indicator for determining chirality and enantiomeric excess. <i>Science Advances</i> , 2021, 7, .	10.3	44
24	Selective synthesis and thin-film formation of γ -cobalt hydroxide through an approach inspired by biomineralization. <i>Journal of Materials Chemistry</i> , 2008, 18, 4140.	6.7	40
25	Calcium Carbonate/Polymer Thin-Film Hybrids: Induction of the Formation of Patterned Aragonite Crystals by Thermal Treatment of a Polymer Matrix. <i>Polymer Journal</i> , 2009, 41, 522-523.	2.7	38
26	Effects of Magnesium Ions and Water Molecules on the Structure of Amorphous Calcium Carbonate: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14849-14856.	2.6	38
27	Liquid-crystalline calcium carbonate: biomimetic synthesis and alignment of nanorod calcite. <i>Chemical Science</i> , 2015, 6, 6230-6234.	7.4	36
28	Selective recovery of silver and palladium from acidic waste solutions using dithiocarbamate-functionalized cellulose. <i>Chemical Engineering Journal</i> , 2021, 407, 127225.	12.7	36
29	Tuning the Stability of CaCO ₃ Crystals with Magnesium Ions for the Formation of Aragonite Thin Films on Organic Polymer Templates. <i>Chemistry - an Asian Journal</i> , 2013, 8, 3002-3009.	3.3	35
30	Facile and Versatile Synthesis of End-Functionalized Poly(phenylacetylene)s: A Multicomponent Catalytic System for Well-Controlled Living Polymerization of Phenylacetylenes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8670-8680.	13.8	33
31	Synthesis and property of helical poly(phenylacetylene)s bearing chiral ruthenium complexes and real space imaging of meso- and nanoscopic structures by atomic force microscopy. <i>Journal of Polymer Science Part A</i> , 2004, 42, 4621-4640.	2.3	31
32	Systematic Enantiomeric Separation of [60]Fullerene Bisadducts Possessing an Inherent Chiral Addition Pattern. <i>Journal of Organic Chemistry</i> , 2003, 68, 3251-3257.	3.2	27
33	A helical array of pendant fullerenes on a helical poly(phenylacetylene) induced by non-covalent chiral interactions Electronic Supplementary Information (ESI) available: Full synthetic and analytical details and UV-vis, CD, IR and NMR spectra of the copolymers. See http://www.rsc.org/suppdata/cc/b3/b312511d/ . <i>Chemical Communications</i> , 2004, . 646.	4.1	26
34	Crystallization of unidirectionally oriented fibrous calcium carbonate on thermo-responsive polymer brush matrices. <i>CrystEngComm</i> , 2010, 12, 2021.	2.6	26
35	Photoimaging of Self-Organized CaCO ₃ /Polymer Hybrid Films by Formation of Regular Relief and Flat Surface Morphologies. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 5856-5859.	13.8	26
36	Macromolecular templates for the development of organic/inorganic hybrid materials. <i>Polymer Journal</i> , 2015, 47, 235-243.	2.7	26

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37	Hydroxyapatite formation on oxidized cellulose nanofibers in a solution mimicking body fluid. <i>Polymer Journal</i> , 2015, 47, 158-163.	2.7	25
38	CaCO ₃ /Chitin hybrids: recombinant acidic peptides based on a peptide extracted from the exoskeleton of a crayfish controls the structures of the hybrids. <i>Faraday Discussions</i> , 2012, 159, 483.	3.2	22
39	Rapid and topotactic transformation from octacalcium phosphate to hydroxyapatite (HAP): a new approach to self-organization of free-standing thin-film HAP-based nanohybrids. <i>CrystEngComm</i> , 2016, 18, 8388-8395.	2.6	21
40	Bioinspired Environmentally Friendly Amorphous CaCO ₃ -Based Transparent Composites Comprising Cellulose Nanofibers. <i>ACS Omega</i> , 2018, 3, 12722-12729.	3.5	21
41	Comparative evaluation of dithiocarbamate-modified cellulose and commercial resins for recovery of precious metals from aqueous matrices. <i>Journal of Hazardous Materials</i> , 2021, 418, 126308.	12.4	21
42	Helical Arrays of Pendant Fullerenes on Optically Active Poly(phenylacetylene)s. <i>Chemistry - A European Journal</i> , 2005, 11, 1181-1190.	3.3	20
43	Morphology tuning in the formation of vaterite crystal thin films with thermoresponsive poly(N-isopropylacrylamide) brush matrices. <i>CrystEngComm</i> , 2014, 16, 3540-3547.	2.6	19
44	Synthesis of Stereoregular Telechelic Poly(phenylacetylene)s: Facile Terminal Chain-End Functionalization of Poly(phenylacetylene)s by Terminative Coupling with Acrylates and Acrylamides in Rhodium-Catalyzed Living Polymerization of Phenylacetylenes. <i>Journal of the American Chemical Society</i> , 2021, 143, 3604-3612.	13.7	18
45	Revisiting the Polymerization of Diphenylacetylenes with Tungsten(VI) Chloride and Tetraphenyltin: An Alternative Mechanism by a Metathesis Catalytic System. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14772-14780.	13.8	17
46	Chirality induction on achiral N-methyl aromatic amide oligomers bearing terminal carboxy groups with chiral amines. <i>Chirality</i> , 2004, 16, S12-S22.	2.6	16
47	Biomimetic Preparation of Zinc Hydroxide Carbonate/Polymer Hybrids and Their Conversion into Zinc Oxide Thin-Film Photocatalysts. <i>Chemistry - A European Journal</i> , 2016, 22, 7094-7101.	3.3	16
48	Understanding the Polymerization of Diphenylacetylenes with Tantalum(V) Chloride and Cocatalysts: Production of Cyclic Poly(diphenylacetylene)s by Low-Valent Tantalum Species Generated in Situ. <i>Journal of the American Chemical Society</i> , 2021, 143, 16136-16146.	13.7	16
49	Preparation of Thin-film Hydroxyapatite/Polymer Hybrids. <i>Chemistry Letters</i> , 2011, 40, 458-460.	1.3	15
50	Biomimetic approach to the development of hybrid materials: preparation of patterned polymer/strontium carbonate thin films using thermoresponsive polymer brush matrices. <i>Polymer Journal</i> , 2014, 46, 499-504.	2.7	13
51	A Helical Array of Pendant Fullerenes on an Optically Active Polyphenylacetylene. <i>Angewandte Chemie</i> , 2002, 114, 3754-3756.	2.0	12
52	Supramolecular effects on formation of CaCO ₃ thin films on a polymer matrix. <i>CrystEngComm</i> , 2014, 16, 1496-1501.	2.6	12
53	Heterogeneous growth of calcite at aragonite {001}- and vaterite {001}-melt interfaces: A molecular dynamics simulation study. <i>Journal of Crystal Growth</i> , 2016, 450, 148-159.	1.5	12
54	Liquid-Crystalline Biomacromolecular Templates for the Formation of Oriented Thin-Film Hybrids Composed of Ordered Chitin and Alkaline-Earth Carbonate. <i>Chemistry - an Asian Journal</i> , 2015, 10, 2356-2360.	3.3	10

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55	Facile and Versatile Synthesis of End-Functionalized Poly(phenylacetylene)s: A Multicomponent Catalytic System for Well-Controlled Living Polymerization of Phenylacetylenes. <i>Angewandte Chemie</i> , 2020, 132, 8748-8758.	2.0	10
56	Rhodium(I) Complexes Bearing an Aryl-Substituted 1,3,5-Hexatriene Chain: Catalysts for Living Polymerization of Phenylacetylene and Potential Helical Chirality of 1,3,5-Hexatrienes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22201-22206.	13.8	10
57	Visualisation of helical structures of poly(diphenylacetylene)s bearing chiral amide pendants by atomic force microscopy. <i>Chemical Communications</i> , 2021, 57, 12266-12269.	4.1	10
58	One-dimensional supramolecular hybrids: self-assembled nanofibrous materials based on a sugar gelator and calcite developed along an unusual axis. <i>CrystEngComm</i> , 2017, 19, 1580-1584.	2.6	9
59	Speciation analysis of inorganic selenium in wastewater using a highly selective cellulose-based adsorbent via liquid electrode plasma optical emission spectrometry. <i>Journal of Hazardous Materials</i> , 2022, 424, 127250.	12.4	9
60	Organic/inorganic fusion materials: cyclodextrin-based polymer/CaCO ₃ hybrids incorporating dye molecules through host-guest interactions. <i>Polymer Journal</i> , 2015, 47, 122-127.	2.7	8
61	Spin Filtering Along Chiral Polymers. <i>Angewandte Chemie</i> , 2020, 132, 14779-14784.	2.0	8
62	Well-Controlled Living Polymerization of Phenylacetylenes in Water: Synthesis of Water-Soluble Stereoregular Telechelic Poly(phenylacetylene)s. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	8
63	Dithiocarbamate-modified cellulose-based sorbents with high storage stability for selective removal of arsenite and hazardous heavy metals. <i>RSC Advances</i> , 2020, 10, 30238-30244.	3.6	7
64	Periodic Surface-Ring Pattern Formation for Hydroxyapatite Thin Films Formed by Biomineralization-Inspired Processes. <i>Langmuir</i> , 2017, 33, 10077-10083.	3.5	6
65	Cross-linked dithiocarbamate-modified cellulose with enhanced thermal stability and dispersibility as a sorbent for arsenite removal. <i>Chemosphere</i> , 2022, 307, 135671.	8.2	6
66	Formation of Rectangular Plate-like MnOOH and Sheet-like MnOOH by Slow Diffusion of Ammonia Vapor. <i>Chemistry Letters</i> , 2013, 42, 341-343.	1.3	5
67	Rhodium(I) Complexes Bearing an Aryl-Substituted 1,3,5-Hexatriene Chain: Catalysts for Living Polymerization of Phenylacetylene and Potential Helical Chirality of 1,3,5-Hexatrienes. <i>Angewandte Chemie</i> , 2021, 133, 22375-22380.	2.0	5
68	Well-Controlled Living Polymerization of N -Propargylamides and Their Derivatives by Rhodium Catalysis. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	5
69	Chitin: Formation of Helically Structured Chitin/CaCO ₃ Hybrids through an Approach Inspired by the Biomineralization Processes of Crustacean Cuticles (Small 38/2015). <i>Small</i> , 2015, 11, 5126-5126.	10.0	3
70	Revisiting the Polymerization of Diphenylacetylenes with Tungsten(VI) Chloride and Tetraphenyltin: An Alternative Mechanism by a Metathesis Catalytic System. <i>Angewandte Chemie</i> , 2020, 132, 14882-14890.	2.0	3
71	Synthesis of Pentaarylcyclobutenylrhodium(I) Complexes and Their Reactivity and Initiation Mechanism in Polymerization of Monosubstituted Acetylenes. <i>Organometallics</i> , 2022, 41, 472-479.	2.3	1
72	Well-Controlled Living Polymerization of N -Propargylamides and Their Derivatives by Rhodium Catalysis. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	1

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73	Bioinspired macromolecular templates for crystallographic orientation control of ZnO thin films through zinc hydroxide carbonate. <i>Polymer Journal</i> , 0, , .	2.7	1
74	Detection and Amplification of Chirality by Helical Polymers. <i>ChemInform</i> , 2004, 35, no.	0.0	0
75	Synthesis of Functional Hybrid Materials through Approaches Inspired by Biomineralization. <i>Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2010, 57, 495-499.	0.2	0
76	Frontispiece: Biomineralization-Inspired Preparation of Zinc Hydroxide Carbonate/Polymer Hybrids and Their Conversion into Zinc Oxide Thin-Film Photocatalysts. <i>Chemistry - A European Journal</i> , 2016, 22, .	3.3	0
77	Frontispiece: Revisiting the Polymerization of Diphenylacetylenes with Tungsten(VI) Chloride and Tetraphenyltin: An Alternative Mechanism by a Metathesis Catalytic System. <i>Angewandte Chemie - International Edition</i> , 2020, 59, .	13.8	0
78	Frontispiz: Revisiting the Polymerization of Diphenylacetylenes with Tungsten(VI) Chloride and Tetraphenyltin: An Alternative Mechanism by a Metathesis Catalytic System. <i>Angewandte Chemie</i> , 2020, 132, .	2.0	0
79	Design and Synthesis of Organic/Inorganic Hybrid Materials Inspired by Biomineralization: Morphology Control of Calcium Carbonate Thin Films using Polymers and Mg ²⁺ Ions. <i>Oleoscience</i> , 2014, 14, 417-423.	0.0	0
80	Titelbild: Wellâ€Controlled Living Polymerization of <i>N</i> -Propargylamides and Their Derivatives by Rhodium Catalysis (<i>Angew. Chem.</i> 17/2022). <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0
81	Wellâ€Controlled Living Polymerization of Phenylacetylenes in Water: Synthesis of Waterâ€Soluble Stereoregular Telechelic Poly(phenylacetylene)s. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0
82	Frontispiece: Wellâ€Controlled Living Polymerization of Phenylacetylenes in Water: Synthesis of Waterâ€Soluble Stereoregular Telechelic Poly(phenylacetylene)s. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	0
83	Frontispiz: Wellâ€Controlled Living Polymerization of Phenylacetylenes in Water: Synthesis of Waterâ€Soluble Stereoregular Telechelic Poly(phenylacetylene)s. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0