Hideaki Hagihara

List of Publications by Year
in descending order

67	1,552	394421 19	330143 37
papers	citations	h-index	g-index

67	67	67	1343
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermal aging of acrylic-urethane network: Kinetic modeling and end-of-life criteria combined with mechanical properties. Progress in Organic Coatings, 2022, 163, 106654.	3.9	4
2	Molecular-scale deformation of glass-fiber-reinforced polypropylene probed by rheo-optical Fourier transform infrared imaging combined with a two-trace two-dimensional correlation technique. Polymer, 2022, 241, 124536.	3.8	5
3	In-situ infrared cure monitoring combined with two-trace two-dimensional (2T2D) correlation analysis to elucidate the matrixâ€“filler interaction of nanocomposites: Case of thermosetting urethane/silica nanospheres. Polymer Testing, 2022, 112, 107587.	4.8	3
4	Aging of polypropylene probed by near infrared spectroscopy. Journal of Near Infrared Spectroscopy, 2021, 29, 259-268.	1.5	2
5	Fourier Transform Infrared Imaging Analysis of Interactions Between Polypropylene Grafted with Maleic Anhydride and Silica Spheres Using Two-Trace Two-Dimensional Correlation Mapping. Applied Spectroscopy, 2021, 75, 947-956.	2.2	8
6	Role of moisture in photo-ageing -macromolecular architecture evolution of acrylic-urethane network. Polymer Testing, 2021, 96, 107123.	4.8	5
7	Three-way evolved gas analysis-mass spectrometry combined with principal component analysis (EGA-MS-PCA) to probe interfacial states between matrix and filler in poly(styrene-b-butadiene-b-styrene) (SBS) nanocomposites. Polymer Testing, 2021, 101, 107300.	4.8	5
8	Study of matrix-filler interaction of polypropylene/silica composite by combined infrared (IR) spectroscopic imaging and disrelation mapping. Composites Part A: Applied Science and Manufacturing, 2020, 128, 105658.	7.6	18
9	Challenges in prediction of significant structural changes during photochemical â€œdegelationâ€•of acrylic-urethane network. Polymer, 2020, 186, 122035.	3.8	10
10	Molecular-Scale Deformation of Polypropylene/Silica Composites Probed by Rheo-Optical Fourier-Transform Infrared (FTIR) Imaging Analysis Combined with Disrelation Mapping. Analytical Chemistry, 2020, 92, 12160-12167.	6.5	17
11	Insight into interfacial compatibilization of glass-fiber-reinforced polypropylene (PP) using maleic-anhydride modified PP employing infrared spectroscopic imaging. Composites Science and Technology, 2020, 199, 108379.	7.8	30
12	In Situ Fourier Transform Infrared Spectroscopic Imaging for Elucidating Variations in Chemical Structures of Polymer Composites at the Matrixâ€“Filler Interface during Reactive Processing. Macromolecules, 2020, 53, 10711-10717.	4.8	7
13	A study of molecular architectural dynamics of crosslinked urethane during photo-aging by two-dimensional infrared correlation spectroscopy. Polymer Degradation and Stability, 2020, 179, 109242.	5.8	7
14	Polypropylene-Based Nanocomposite with Enhanced Aging Stability by Surface Grafting of Silica Nanofillers with a Silane Coupling Agent Containing an Antioxidant. ACS Omega, 2020, 5, 12431-12439.	3.5	20
15	Accelerated aging-induced variation of polypropylene (PP) structure studied by two-dimensional (2D) small-angle X-ray scattering (SAXS) correlation spectroscopy. Journal of Molecular Structure, 2020, 1207, 127764.	3.6	8
16	Rheo-Optical Near-Infrared (NIR) Characterization of Hydroxyl-Functionalized Polypropylene (PPOH)-Mesoporous Silica Nanocomposites Using Two-Trace Two-Dimensional (2T2D) Correlation Analysis. Applied Spectroscopy, 2019, 73, 000370281986156.	2.2	8
17	Temperature dependence of structural alteration by ultraviolet irradiation in acrylic-urethane coatings studied by positron annihilation spectroscopy and solvent swelling behavior. Polymer Degradation and Stability, 2019, 162, 85-93.	5.8	11
18	Management of both toughness and stiffness of polypropylene nanocomposites using poly(5â€hexenâ€1â€olâ€coâ€propylene) and silica nanospheres. Polymers for Advanced Technologies, 2018, 29, 417-423.	3.2	9

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19	Degradation mechanism of carbon fiber-reinforced thermoplastics exposed to hot steam studied by chemical and structural analyses of nylon 6 matrix. Composites Part A: Applied Science and Manufacturing, 2018, 112, 126-133.	7.6	12
20	Structure-property relationships of polypropylene-based nanocomposites obtained by dispersing mesoporous silica into hydroxyl-functionalized polypropylene. Part 1: toughness, stiffness and transparency. Polymer Journal, 2018, 50, 1057-1065.	2.7	24
21	Structureâ^'property relationships of polypropylene-based nanocomposites obtained by dispersing mesoporous silica into hydroxyl-functionalized polypropylene. Part 2: Matrixâ^'filler interactions and pore filling of mesoporous silica characterized by evolved gas analysis. Polymer Journal, 2018, 50, 1067-1077.	2.7	14
22	Lamination-interface-dependent deacetylation of ethylene vinyl acetate encapsulant in crystalline Si photovoltaic modules evaluated by positron annihilation lifetime spectroscopy. Japanese Journal of Applied Physics, 2018, 57, 082301.	1.5	5
23	Reinforcement mechanism of functionalized polypropylene containing hydroxyl group nanocomposites studied by rheo-optical near-infrared spectroscopy. European Polymer Journal, 2017, 92, 86-96.	5.4	20
24	Highly Accelerated Aging Method for Poly(ethylene terephthalate) Film Using Xenon Lamp with Heating System. Journal of Polymers, 2016, 2016, 1-9.	0.9	16
25	Quick Preparation of Moisture-Saturated Carbon Fiber-Reinforced Plastics and Their Accelerated Ageing Tests Using Heat and Moisture. Polymers, 2016, 8, 242.	4.5	5
26	Degradation of encapsulants for photovoltaic modules made of ethylene vinyl acetate studied by positron annihilation lifetime spectroscopy. Japanese Journal of Applied Physics, 2016, 55, 102302.	1.5	5
27	Experimental and modeling approaches for the formation of hydroperoxide during the auto-oxidation of polymers: Thermal-oxidative degradation of polyethylene oxide. Chemical Physics Letters, 2016, 657, 83-89.	2.6	20
28	Highly ductile polypropylene-based nanocomposites by dispersing monodisperse silica nanospheres in functionalized polypropylene containing hydroxyl groups. Polymer, 2016, 99, 63-71.	3.8	17
29	Two-dimensional (2D) Chemiluminescence (CL) correlation spectroscopy for studying thermal oxidation of isotactic polypropylene (iPP). Journal of Molecular Structure, 2016, 1124, 238-243.	3.6	4
30	Fulleropyrrolidine Derivatives with Benzophenone Moiety as Electron Acceptors in Thermally Stable Organic Photovoltaic Devices. Chemistry Letters, 2015, 44, 527-529.	1.3	5
31	Depth profiling of the free-volume holes in cellulose triacetate hollow-fiber membranes for reverse osmosis by means of variable-energy positron annihilation lifetime spectroscopy. Desalination, 2014, 344, 86-89.	8.2	18
32	Free-volume hole size evaluated by positron annihilation lifetime spectroscopy in the amorphous part of poly(ethylene terephthalate) degraded by a weathering test. Polymer Degradation and Stability, 2014, 110, 389-394.	5.8	14
33	Comprehensive Study of Altered Amorphous Structure in Functionalized Polypropylenes Exhibiting High Tensile Strength. Macromolecules, 2013, 46, 4432-4437.	4.8	23
34	Analysis of chemiluminescence spectra in oxidative degradation of oleic acid. Chemical Physics Letters, 2013, 565, 138-142.	2.6	9
35	Synthesis of ethyleneâ€"styrene copolymer containing syndiotactic polystyrene sequence by trivalent titanium catalyst. Polymer Journal, 2012, 44, 147-154.	2.7	5
36	Highly thermostable and low birefringent norborneneâ€styrene copolymers with advanced optical properties: A potential plastic substrate for flexible displays. Journal of Polymer Science Part A, 2011, 49, 65-71.	2.3	28

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37	Additive effects of alkylaluminium compounds on propylene-1,3-butadiene copolymerization using isospecific zirconocene catalysts. Journal of Organometallic Chemistry, 2010, 695, 1694-1699.	1.8	9
38	Polystyrene with half-titanocene/MAO catalysts: Influence of 2,6-diisopropylphenol. Applied Catalysis A: General, 2009, 360, 126-129.	4.3	3
39	Unexpected Mechanical Properties of Functionalized Polypropylene: Tensile Test, Charpy Impact Tensile Test, DSC, and WAXD Analysis of Poly(5-hexen-1-ol-co-propylene). Macromolecules, 2009, 42, 2321-2323.	4.8	22
40	Precise control of microstructure of functionalized polypropylene synthesized by the ansaâ€zirconocene/ MAO catalysts. Journal of Polymer Science Part A, 2008, 46, 1738-1748.	2.3	33
41	A new approach for controlling birefringent property of cyclic olefin copolymers. Journal of Polymer Science Part A, 2008, 46, 7395-7400.	2.3	13
42	Local Packing Disorders in a Polymer Crystal by Two Dimensional Solid-State NMR. Macromolecules, 2007, 40, 6789-6792.	4.8	14
43	Microstructure and Thermal Property of Isotactic Poly(3-methyl-1-butene) Obtained Using theC2-Symmetrical Zirconocene/MAO Catalyst System. Macromolecules, 2007, 40, 1763-1766.	4.8	12
44	Copolymerization of propylene with 1,3â€butadiene using isospecific zirconocene catalysts. Journal of Polymer Science Part A, 2007, 45, 5731-5740.	2.3	17
45	Microstructural Analysis of Insoluble Polyolefins by Melt-State13C NMR at Very High Temperatures. Macromolecules, 2007, 40, 3505-3509.	4.8	10
46	A New Approach to Styrenic Thermoplastic Elastomers:Â Synthesis and Characterization of Crystalline Styreneâ˜Butadieneâ˜Styrene Triblock Copolymersâ€. Macromolecules, 2006, 39, 171-176.	4.8	61
47	Stereospecific polymerization of propylene with group 4 ansa-fluorenylamidodimethyl complexes. Journal of Organometallic Chemistry, 2006, 691, 193-201.	1.8	42
48	Copolymerization of ethylene or propylene with ?-olefins containing hydroxyl groups with zirconocene/methylaluminoxane catalyst. Journal of Polymer Science Part A, 2004, 42, 52-58.	2.3	50
49	Copolymerization of 3-buten-1-ol and propylene with an isospecific zirconocene/methylaluminoxane catalyst. Journal of Polymer Science Part A, 2004, 42, 5600-5607.	2.3	25
50	Copolymerization of Propylene and Polar Allyl Monomer with Zirconocene/Methylaluminoxane Catalyst:Â Catalytic Synthesis of Amino-Terminated Isotactic Polypropylene. Macromolecules, 2004, 37, 5145-5148.	4.8	56
51	Recent Developments in Transition Metal-Catalyzed Polymerization I. Polymerization of Olefins by Tebbe-Type Ti(III) Complex/Methylaluminoxane Catalyst.. Kobunshi Ronbunshu, 2002, 59, 250-252.	0.2	1
52	Alternating Copolymerization of Ethylene and 5-Hexen-1-ol with [Ethylene(1-indenyl)(9-fluorenyl)]-zirconium Dichloride/Methylaluminoxane as the Catalyst. Macromolecular Rapid Communications, 2001, 22, 353-357.	3.9	48
53	Development of novel MgCl2 supported catalyst with trivalent titanocene complex of CP2TiCl2AlCl2 for propylene polymerization. Journal of Polymer Science Part A, 2000, 38, 3355-3359.	2.3	2
54	Additive effects of trialkylaluminum on propene polymerization with (t-BuNSiMe2Flu)TiMe2-based catalysts. Applied Catalysis A: General, 2000, 200, 145-152.	4.3	21

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55	Development of novel MgCl2 supported catalyst with trivalent titanocene complex of CP2TiCl2AlCl2 for propylene polymerization. Journal of Polymer Science Part A, 2000, 38, 3355-3359.	2.3	0
56	Direct evidence of the second-order dependence of propagation rate on propene concentration in living polymerization with the [t-BuNSiMe2Flu]TiMe2/B(C6F5)3 catalyst. Macromolecular Rapid Communications, 1999, 20, 200-202.	3.9	8
57	Kinetic Features of Living Polymerization of Propene with the [t-BuNSiMe2Flu]TiMe2/B(C6F5)3 Catalyst. , 1999, , 264-273.		5
58	Polymerization of methyl methacrylate with non-bridged zirconocene catalysts. Macromolecular Chemistry and Physics, 1998, 199, 1573-1579.	2.2	28
59	Stereospecificity of propene polymerization with achiral titanocene-based catalysts. Macromolecular Chemistry and Physics, 1998, 199, 2439-2444.	2.2	10
60	Living Polymerization of Propene and 1-Hexene with the [t-BuNSiMe2Flu]TiMe2/B(C6F5)3 Catalyst. Macromolecules, 1998, 31, 3184-3188.	4.8	128
61	Additive Effects of Lewis Bases on Propene Polymerization over MgCl2-Supported TiCl4 Catalysts Combined with Cp2TiMe2. Polymer Journal, 1997, 29, 224-229.	2.7	4
62	Novelty of Vinylidene-Terminated Polypropylene Prepared by a MgCl2-Supported TiCl4 Catalyst Combined with AlEt3 as Cocatalyst. Macromolecules, 1997, 30, 5997-6000.	4.8	18
63	Syndiospecific Polymerization of Propene with [t-BuNSiMe2Flu]TiMe2-Based Catalysts by Chain-End Controlled Mechanism. Macromolecules, 1997, 30, 4783-4785.	4.8	43
64	Control of molecular weight distribution of isotactic polypropylene obtained by a MgCl2-supported TiCl4 catalyst. Polymer, 1997, 38, 6409-6411.	3.8	7
65	Quantitative self-assembly of a [2]catenane from two preformed molecular rings. Nature, 1994, 367, 720-723.	27.8	440
66	Effect of Hydrophilicity of the Sidechains on the Amorphous Structure of Polypropylene Derivatives Studied by Positronium Lifetime Measurements. Materials Science Forum, 0, 733, 159-162.	0.3	1
67	Amorphous polyamide m â€xylylenediamineâ€adipic acidâ€isophthalic acid copolymer (MXD6I) : Evaluation of oxygen barrier property and free volume in high humidity condition. Polymers for Advanced Technologies, 0, , .	3.2	0