# Hideyuki Otsuka

List of Publications by Year
in descending order



| 212 | 10,413 | 30047 | 39638 |
|---|---|---|---|
| papers | citations | 54 h-index | 94 g-index |

| 222 | 222 | 222 | 7201 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Selfâ€Healing of Covalently Crossâ€Linked Polymers by Reshuffling Thiuram Disulfide Moieties in Air under Visible Light. Advanced Materials, 2012, 24, 3975-3980. | 11.1 | 585 |
| 2 | Repeatable Photoinduced Selfâ€Healing of Covalently Crossâ€Linked Polymers through Reshuffling of Trithiocarbonate Units. Angewandte Chemie - International Edition, 2011, 50, 1660-1663. | 7.2 | 488 |
| 3 | Dynamic covalent polymers: Reorganizable polymers with dynamic covalent bonds. Progress in Polymer Science, 2009, 34, 581-604. | 11.8 | 458 |
| 4 | Selfâ€Healing of Chemical Gels Crossâ€Linked by Diarylbibenzofuranoneâ€Based Triggerâ€Free Dynamic Covalent Bonds at Room Temperature. Angewandte Chemie - International Edition, 2012, 51, 1138-1142. | 7.2 | 431 |
| 5 | Molecular Aggregation Structure and Surface Properties of Poly(fluoroalkyl acrylate) Thin Films. Macromolecules, 2005, 38, 5699-5705. | 2.2 | 301 |
| 6 | A dynamic covalent polymer driven by disulfidemetathesis under photoirradiation. Chemical Communications, 2010, 46, 1150-1152. | 2.2 | 275 |
| 7 | Macroscopic-Wetting Anisotropy on the Line-Patterned Surface of Fluoroalkylsilane Monolayers. Langmuir, 2005, 21, 911-918. | 1.6 | 237 |
| 8 | Polystyrene- and Poly(3-vinylpyridine)-Grafted Magnetite Nanoparticles Prepared through Surface-Initiated Nitroxide-Mediated Radical Polymerization. Macromolecules, 2004, 37, 2203-2209. | 2.2 | 209 |
| 9 | Mechanophores with a Reversible Radical System and Freezingâ€Induced Mechanochemistry in Polymer Solutions and Gels. Angewandte Chemie - International Edition, 2015, 54, 6168-6172. | 7.2 | 202 |
| 10 | Competition between Oxidation and Coordination in Cross-Linking of Polystyrene Copolymer Containing Catechol Groups. ACS Macro Letters, 2012, 1, 457-460. | 2.3 | 168 |
| 11 | A Thermodynamic Polymer Cross-Linking System Based on Radically Exchangeable Covalent Bonds. Macromolecules, 2006, 39, 2121-2125. | 2.2 | 167 |
| 12 | Reinvestigation of Calixarene-Based Artificial-Signaling Acetylcholine Receptors Useful in Neutral Aqueous (Water/Methanol) Solution. Journal of the American Chemical Society, 1996, 118, 755-758. | 6.6 | 159 |
| 13 | Polymer Scrambling:Â Macromolecular Radical Crossover Reaction between the Main Chains of Alkoxyamine-Based Dynamic Covalent Polymers. Journal of the American Chemical Society, 2003, 125, 4064-4065. | 6.6 | 147 |
| 14 | Mechanochromic Dynamic Covalent Elastomers: Quantitative Stress Evaluation and Autonomous Recovery. ACS Macro Letters, 2015, 4, 1307-1311. | 2.3 | 142 |
| 15 | Degradable epoxy resins prepared from diepoxide monomer with dynamic covalent disulfide linkage. Polymer, 2016, 82, 319-326. | 1.8 | 130 |
| 16 | Self-Healing of a Cross-Linked Polymer with Dynamic Covalent Linkages at Mild Temperature and Evaluation at Macroscopic and Molecular Levels. Macromolecules, 2015, 48, 5632-5639. | 2.2 | 125 |
| 17 | Polystyrene-Grafted Magnetite Nanoparticles Prepared through Surface-Initiated Nitroxyl-Mediated Radical Polymerization. Chemistry of Materials, 2003, 15, 3-5. | 3.2 | 122 |
| 18 | Reorganization of polymer structures based on dynamic covalent chemistry: polymer reactions by dynamic covalent exchanges of alkoxyamine units. Polymer Journal, 2013, 45, 879-891. | 1.3 | 113 |

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| 19 | Synthesis and ion selectivity of conformers derived from hexahomotrioxacalix[3]arene. Journal of Organic Chemistry, 1993, 58, 5958-5963. | 1.7 | 106 |
| 20 | Multicolor Mechanochromism of a Polymer/Silica Composite with Dual Distinct Mechanophores. Journal of the American Chemical Society, 2019, 141, 1898-1902. | 6.6 | 105 |
| 21 | Thermal Reorganization and Molecular Weight Control of Dynamic Covalent Polymers Containing Alkoxyamines in Their Main Chains. Macromolecules, 2007, 40, 1429-1434. | 2.2 | 104 |
| 22 | Programmed Thermodynamic Formation and Structure Analysis of Star-like Nanogels with Core Cross-linked by Thermally Exchangeable Dynamic Covalent Bonds. Journal of the American Chemical Society, 2007, 129, 13298-13304. | 6.6 | 102 |
| 23 | Tribological Properties of Poly(methyl methacrylate) Brushes Prepared by Surface-Initiated Atom Transfer Radical Polymerization. Polymer Journal, 2005, 37, 767-775. | 1.3 | 99 |
| 24 | Perfluoropolyether-infused nano-texture: a versatile approach to omniphobic coatings with low hysteresis and high transparency. Chemical Communications, 2013, 49, 597-599. | 2.2 | 99 |
| 25 | Tetraarylsuccinonitriles as mechanochromophores to generate highly stable luminescent carbon-centered radicals. Chemical Communications, 2017, 53, 11885-11888. | 2.2 | 93 |
| 26 | Enhancing Mechanochemical Activation in the Bulk State by Designing Polymer Architectures. ACS Macro Letters, 2016, 5, 1124-1127. | 2.3 | 92 |
| 27 | Dynamic Formation of Graft Polymers via Radical Crossover Reaction of Alkoxyamines. Macromolecules, 2004, 37, 1696-1701. | 2.2 | 91 |
| 28 | A dynamic (reversible) covalent polymer: radical crossover behaviour of TEMPOâ€“containing poly(alkoxyamine ester)s. Chemical Communications, 2002, , 2838-2839. | 2.2 | 90 |
| 29 | Network Reorganization of Dynamic Covalent Polymer Gels with Exchangeable Diarylbibenzofuranone at Ambient Temperature. Journal of the American Chemical Society, 2014, 136, 11839-11845. | 6.6 | 90 |
| 30 | Polymerâ€“Inorganic Composites with Dynamic Covalent Mechanochromophore. Macromolecules, 2016, 49, 5903-5911. | 2.2 | 86 |
| 31 | Thermally Adjustable Dynamic Disulfide Linkages Mediated by Highly Airâ€Stable 2,2,6,6â€Tetramethylpiperidineâ€1â€sulfanyl (TEMPS) Radicals. Angewandte Chemie - International Edition, 2017, 56, 2016-2021. | 7.2 | 85 |
| 32 | Conformational isomerism in and binding properties to alkali-metals and an ammonium salt of O-alkylated homooxacalix[3]arenes.. Tetrahedron, 1993, 49, 9465-9478. | 1.0 | 83 |
| 33 | Thermally Healable and Reprocessable Bis(hindered amino)disulfide-Cross-Linked Polymethacrylate Networks. ACS Macro Letters, 2017, 6, 1280-1284. | 2.3 | 83 |
| 34 | Reversible Radical Ring-Crossover Polymerization of an Alkoxyamine-Containing Dynamic Covalent Macrocycle. Macromolecules, 2005, 38, 6316-6320. | 2.2 | 82 |
| 35 | Multicolor Mechanochromic Polymer Blends That Can Discriminate between Stretching and Grinding. ACS Macro Letters, 2018, 7, 556-560. | 2.3 | 82 |
| 36 | Changes in Network Structure of Chemical Gels Controlled by Solvent Quality through Photoinduced Radical Reshuffling Reactions of Trithiocarbonate Units. ACS Macro Letters, 2012, 1, 478-481. | 2.3 | 81 |

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| 37 | Synthesis of Vinylic Macromolecular Rotaxane Cross-Linkers Endowing Network Polymers with Toughness. ACS Macro Letters, 2015, 4, 598-601. | 2.3 | 76 |
| 38 | Repeatable mechanochemical activation of dynamic covalent bonds in thermoplastic elastomers. Chemical Communications, 2016, 52, 10482-10485. | 2.2 | 76 |
| 39 | Transparent polymer nanohybrid prepared by in situ synthesis of aluminosilicate nanofibers in poly(vinyl alcohol) solution. Soft Matter, 2005, 1, 372. | 1.2 | 75 |
| 40 | Mechanochromic Polymers That Turn Green Upon the Dissociation of Diarylbibenzothiophenonyl: The Missing Piece toward Rainbow Mechanochromism. Chemistry - A European Journal, 2018, 24, 3170-3173. | 1.7 | 75 |
| 41 | Preparation and properties of [poly(methyl methacrylate)/imogolite] hybrid via surface modification using phosphoric acid ester. Polymer, 2005, 46, 12386-12392. | 1.8 | 74 |
| 42 | Polystyrene-grafted titanium oxide nanoparticles prepared through surface-initiated nitroxide-mediated radical polymerization and their application to polymer hybrid thin films. Soft Matter, 2006, 2, 415. | 1.2 | 71 |
| 43 | Scrambling reaction between polymers prepared by step-growth and chain-growth polymerizations: macromolecular cross-metathesis between 1,4-polybutadiene and olefin-containing polyester. Chemical Communications, 2009, , 1073. | 2.2 | 70 |
| 44 | Application of imogolite clay nanotubes in organicâ€“inorganic nanohybrid materials. Journal of Materials Chemistry, 2012, 22, 11887. | 6.7 | 68 |
| 45 | Reorganizable Chemical Polymer Gels Based on Dynamic Covalent Exchange and Controlled Monomer Insertion. Macromolecules, 2009, 42, 8733-8738. | 2.2 | 67 |
| 46 | Precise surface structure control of inorganic solid and metal oxide nanoparticles through surface-initiated radical polymerization. Science and Technology of Advanced Materials, 2006, 7, 617-628. | 2.8 | 66 |
| 47 | Dependence of the Molecular Aggregation State of Octadecylsiloxane Monolayers on Preparation Methods. Langmuir, 2005, 21, 905-910. | 1.6 | 64 |
| 48 | Syntheses of All Possible O-Methylation Products Derivable from 5,11,17,23,29,35-Hexa-tert-butylcalix[6]arene-37,38,39,40,41,42-hexol. Journal of Organic Chemistry, 1994, 59, 1542-1547. | 1.7 | 62 |
| 49 | Intelligent Build-Up of Complementarily Reactive Diblock Copolymers via Dynamic Covalent Exchange toward Symmetrical and Miktoarm Star-like Nanogels. Macromolecules, 2010, 43, 1785-1791. | 2.2 | 62 |
| 50 | Segmented Polyurethane Elastomers with Mechanochromic and Selfâ€Strengthening Functions. Angewandte Chemie - International Edition, 2021, 60, 8406-8409. | 7.2 | 60 |
| 51 | The photoregulation of a mechanochemical polymer scission. Nature Communications, 2018, 9, 3504. | 5.8 | 59 |
| 52 | Freezing-Induced Mechanoluminescence of Polymer Gels. ACS Macro Letters, 2018, 7, 1087-1091. | 2.3 | 59 |
| 53 | Thermally Stable Radical-Type Mechanochromic Polymers Based on Difluorenylsuccinonitrile. ACS Macro Letters, 2018, 7, 1359-1363. | 2.3 | 57 |
| 54 | Synthesis and NMR Spectroscopic Studies of Bridged and Capped Calix[6]arenes: High-Yield Syntheses of Unimolecular Caged Compounds from Calix[6]arene. Journal of Organic Chemistry, 1995, 60, 4862-4867. | 1.7 | 55 |

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| 55 | Definitive Evidence for Inhibition of Calix[6]arene Ring Inversion Obtained from a 1,3-Xylenyl-Bridged Chiral Calix[6]arene. Journal of the American Chemical Society, 1996, 118, 4271-4275. | 6.6 | 55 |
| 56 | Poly(methyl methacrylate) grafted imogolite nanotubes prepared through surface-initiated ARGET ATRP. Chemical Communications, 2011, 47, 5813. | 2.2 | 54 |
| 57 | A â€œnon-stickyâ€•superhydrophobic surface prepared by self-assembly of fluoroalkyl phosphonic acid on a hierarchically micro/nanostructured alumina gel film. Chemical Communications, 2012, 48, 6824. | 2.2 | 54 |
| 58 | Preparation of Novel Polymer Hybrids from Imogolite Nanofiber. Polymer Journal, 2007, 39, 1-15. | 1.3 | 52 |
| 59 | Surface Modification of Aluminosilicate Nanofiber â€œImogoliteâ€• Chemistry Letters, 2001, 30, 1162-1163. | 0.7 | 50 |
| 60 | Crystallization-induced mechanofluorescence for visualization of polymer crystallization. Nature Communications, 2021, 12, 126. | 5.8 | 50 |
| 61 | Structure and Dewetting Behavior of Polyhedral Oligomeric Silsesquioxane-Filled Polystyrene Thin Films. Langmuir, 2007, 23, 902-907. | 1.6 | 48 |
| 62 | Control of Dispersion State of Silsesquioxane Nanofillers for Stabilization of Polystyrene Thin Films. Langmuir, 2008, 24, 5766-5772. | 1.6 | 48 |
| 63 | Fusion of Different Crosslinked Polymers Based on Dynamic Disulfide Exchange. Angewandte Chemie - International Edition, 2020, 59, 4294-4298. | 7.2 | 48 |
| 64 | Internally Modified Halloysite Nanotubes as Inorganic Nanocontainers for a Flame Retardant. Chemistry Letters, 2013, 42, 121-123. | 0.7 | 46 |
| 65 | Imogolite Reinforced Nanocomposites: Multifaceted Green Materials. Materials, 2010, 3, 1709-1745. | 1.3 | 44 |
| 66 | Synthesis of rotaxane cross-linked polymers with supramolecular cross-linkers based on Î³-CD and PTHF macromonomers: The effect of the macromonomer structure on the polymer properties. Polymer, 2017, 128, 392-396. | 1.8 | 44 |
| 67 | Reorganizable and stimuli-responsive polymers based on dynamic carbonâ€“carbon linkages in diarylbibenzofuranones. Polymer, 2018, 137, 395-413. | 1.8 | 43 |
| 68 | Poly(hemiacetal ester)s:Â New Class of Polymers with Thermally Dissociative Units in the Main Chain. Macromolecules, 1999, 32, 9059-9061. | 2.2 | 42 |
| 69 | Reversible cross-linking of hydrophilic dynamic covalent polymers with radically exchangeable alkoxyamines in aqueous media. Polymer Chemistry, 2011, 2, 2021. | 1.9 | 42 |
| 70 | Mechanochromic dendrimers: the relationship between primary structure and mechanochromic properties in the bulk. Chemical Communications, 2019, 55, 6831-6834. | 2.2 | 39 |
| 71 | Molecular Design of a Calix[6]arene-Based Super-Uranophile with C3Symmetry. High UO22+Selectivity in Solvent Extraction. Chemistry Letters, 1993, 22, 829-832. | 0.7 | 37 |
| 72 | Syntheses of all poasible calix[6]arene derivatives with MeO- and ROCOCH2O- substituents and their metal binding properties. Tetrahedron, 1995, 51, 8757-8770. | 1.0 | 37 |

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| 73 | Rational approach to star-like nanogels with different arm lengths: formation by dynamic covalent exchange and their imaging. Chemical Communications, 2009, , 689-691. | 2.2 | 37 |
| 74 | Metal-induced conformational changes in calix[n]arenes can change the exchange interaction between Nâ€“OÂ· radicals. Journal of the Chemical Society Chemical Communications, 1995, , 2121-2122. | 2.0 | 36 |
| 75 | Visualization and Quantitative Evaluation of Toughening Polymer Networks by a Sacrificial Dynamic Cross-Linker with Mechanochromic Properties. ACS Macro Letters, 2020, 9, 1108-1113. | 2.3 | 36 |
| 76 | (Inorganic Nanofiber/Enzyme) Hybrid Hydrogel: Preparation, Characterization, and Enzymatic Activity of Imogolite/Pepsin Conjugate. Chemistry Letters, 2006, 35, 194-195. | 0.7 | 35 |
| 77 | Synthesis of polyethylene/polyester copolymers through main chain exchange reactions via olefin metathesis. Polymer, 2014, 55, 6245-6251. | 1.8 | 35 |
| 78 | Preparation of a novel (polymer/inorganic nanofiber) composite through surface modification of natural aluminosilicate nanofiber. Journal of Adhesion, 2002, 78, 591-602. | 1.8 | 34 |
| 79 | Molecular Aggregation Structure of Poly(fluoroalkyl acrylate) Thin Films Evaluated by Synchrotron-sourced Grazing-incidence X-ray Diffraction. Chemistry Letters, 2005, 34, 1024-1025. | 0.7 | 34 |
| 80 | Insertion Metathesis Depolymerization of Aromatic Disulfide-containing Dynamic Covalent Polymers under Weak Intensity Photoirradiation. Chemistry Letters, 2013, 42, 1346-1348. | 0.7 | 34 |
| 81 | Metathesis-driven scrambling reactions between polybutadiene or naturally occurring polyisoprene and olefin-containing polyurethane. Polymer, 2015, 78, 145-153. | 1.8 | 34 |
| 82 | A Diarylacetonitrile as a Molecular Probe for the Detection of Polymeric Mechanoradicals in the Bulk State through a Radical Chainâ€Transfer Mechanism. Angewandte Chemie - International Edition, 2021, 60, 2680-2683. | 7.2 | 34 |
| 83 | Immobilization of the Ring Inversion Motion in Calix[6]arene by a Cap with C3-Symmetry. Chemistry Letters, 1994, 23, 1251-1254. | 0.7 | 33 |
| 84 | Polyurethane Macroinitiator for Controlled Monomer Insertion of Styrene. Macromolecules, 2003, 36, 1494-1499. | 2.2 | 32 |
| 85 | Introducing static cross-linking points into dynamic covalent polymer gels that display freezing-induced mechanofluorescence: enhanced force transmission efficiency and stability. Polymer Chemistry, 2019, 10, 2636-2640. | 1.9 | 32 |
| 86 | A Guiding Principle for Strengthening Crosslinked Polymers: Synthesis and Application of Mobilityâ€Controlling Rotaxane Crosslinkers. Angewandte Chemie - International Edition, 2019, 58, 2765-2768. | 7.2 | 32 |
| 87 | Dynamic covalent polymer brushes: reversible surface modification of reactive polymer brushes with alkoxyamine-based dynamic covalent bonds. Polymer Chemistry, 2012, 3, 3077. | 1.9 | 31 |
| 88 | Preparation and Characterization of Imogolite/DNA Hybrid Hydrogels. Biomacromolecules, 2012, 13, 276-281. | 2.6 | 31 |
| 89 | Structural effects of catechol-containing polystyrene gels based on a dual cross-linking approach. Soft Matter, 2013, 9, 1967-1974. | 1.2 | 31 |
| 90 | A Strategy toward Cyclic Topologies Based on the Dynamic Behavior of a Bis(hindered amino)disulfide Linker. Angewandte Chemie - International Edition, 2020, 59, 4269-4273. | 7.2 | 31 |

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| 91 | Preparation and properties of PVC/PMMA-g-imogolite nanohybrid via surface-initiated radical polymerization. Polymer, 2011, 52, 5543-5550. | 1.8 | 30 |
| 92 | Enhancement of the stimuli-responsiveness and photo-stability of dynamic diselenide bonds and diselenide-containing polymers by neighboring aromatic groups. Polymer, 2018, 154, 281-290. | 1.8 | 30 |
| 93 | Mechanochemical Reactions of Bis(9-methylphenyl-9-fluorenyl) Peroxides and Their Applications in Cross-Linked Polymers. Journal of the American Chemical Society, 2021, 143, 17744-17750. | 6.6 | 30 |
| 94 | Synthesis of well-defined poly(styrene)-b-poly(p-tert-butoxystyrene) multiblock copolymer from poly(alkoxyamine) macroinitiator. Polymer, 2003, 44, 7095-7101. | 1.8 | 29 |
| 95 | Characterization of Novel Biodegradable Segmented Polyurethanes Prepared from Amino-Acid Based Diisocyanate. Macromolecular Symposia, 2005, 224, 207-218. | 0.4 | 28 |
| 96 | Solvent-Controlled Formation of Star-like Nanogels via Dynamic Covalent Exchange of PSt-b-PMMA Diblock Copolymers with Alkoxyamine Units in the Side Chain. Macromolecules, 2010, 43, 5470-5473. | 2.2 | 28 |
| 97 | Programmed Formation of Nanogels via a Radical Crossover Reaction of Complementarily Reactive Diblock Copolymers. Chemistry Letters, 2007, 36, 774-775. | 0.7 | 27 |
| 98 | Guest inclusion properties of calix[6]arene-based unimolecular cage compounds. On their high Cs+ and Ag+ selectivity and very slow metal exchange rates. Tetrahedron, 1998, 54, 423-446. | 1.0 | 26 |
| 99 | Facile synthesis of multiblock copolymers composed of poly(tetramethylene oxide) and polystyrene using living free-radical polymerization macroinitiator. Polymer, 2006, 47, 3784-3791. | 1.8 | 26 |
| 100 | Mesh-size control and functionalization of reorganizable chemical gels by monomer insertion into their cross-linking points. Polymer Chemistry, 2011, 2, 957. | 1.9 | 26 |
| 101 | Enhancement of Mechanophore Activation in Mechanochromic Dendrimers by Functionalization of Their Surface. Macromolecules, 2021, 54, 1725-1731. | 2.2 | 25 |
| 102 | Functionalization of amine-cured epoxy resins by boronic acids based on dynamic dioxazaborocane formation. Polymer Chemistry, 2020, 11, 5356-5364. | 1.9 | 23 |
| 103 | Diarylbiindolinones as Substituentâ€Tunable Mechanochromophores and Their Application in Mechanochromic Polymers. Macromolecular Rapid Communications, 2020, 41, 1900460. | 2.0 | 22 |
| 104 | Polymer-Network Toughening and Highly Sensitive Mechanochromism via a Dynamic Covalent Mechanophore and a Multinetwork Strategy. Macromolecules, 2022, 55, 5795-5802. | 2.2 | 22 |
| 105 | Influence of the addition of silsesquioxane on the dewetting behavior of polystyrene thin film. Composite Interfaces, 2004, 11, 297-306. | 1.3 | 20 |
| 106 | Surface Modification of Individual Imogolite Nanotubes with Alkyl Phosphate from an Aqueous Solution. Chemistry Letters, 2011, 40, 159-161. | 0.7 | 20 |
| 107 | Surface functionalization of aluminosilicate nanotubes with organic molecules. Beilstein Journal of Nanotechnology, 2012, 3, 82-100. | 1.5 | 20 |
| 108 | Preparation and characterization of polycarbonate nanocomposites based on surface-modified halloysite nanotubes. Polymer Journal, 2014, 46, 307-312. | 1.3 | 20 |

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| 109 | Self-Strengthening of Cross-Linked Elastomers via the Use of Dynamic Covalent Macrocyclic Mechanophores. ACS Macro Letters, 2021, 10, 558-563. | 2.3 | 20 |
| 110 | Thermal Degradation Behavior of Polystyrene/Magadiite Nanocomposites Prepared by Surface-initiated Nitroxide-Mediated Radical Polymerization. Polymer Journal, 2009, 41, 555-561. | 1.3 | 19 |
| 111 | Preparation of hybrid films of aluminosilicate nanofiber and conjugated polymer. Synthetic Metals, 2009, 159, 885-888. | 2.1 | 19 |
| 112 | Mechanofluorescent polymer/silsesquioxane composites based on tetraarylsuccinonitrile. Materials Chemistry Frontiers, 2019, 3, 2681-2685. | 3.2 | 19 |
| 113 | Visualization of the Necking Initiation and Propagation Processes during Uniaxial Tensile Deformation of Crystalline Polymer Films via the Generation of Fluorescent Radicals. ACS Macro Letters, 2021, 10, 623-627. | 2.3 | 19 |
| 114 | Thermodynamic studies of slow metal exchange processes in ionophoric calix[n]arenes with a capsule-like closed cavity. Tetrahedron Letters, 1997, 38, 421-424. | 0.7 | 18 |
| 115 | Macro- and nanotribological properties of organosilane monolayers prepared by a chemical vapor adsorption method on silicon substrates. Tribology Letters, 2005, 19, 3-8. | 1.2 | 18 |
| 116 | Dewetting Inhibition and Interfacial Structures of Silsesquioxane-terminated Polystyrene Thin Films. Polymer Journal, 2007, 39, 1247-1252. | 1.3 | 18 |
| 117 | Reversibly Crosslinked Polymeric Micelles Formed by Autonomously Exchangeable Dynamic Covalent Bonds. Chemistry Letters, 2013, 42, 377-379. | 0.7 | 18 |
| 118 | Fabrication and characterization of multi-component organosilane nanofilms. Composite Interfaces, 2003, 10, 489-504. | 1.3 | 17 |
| 119 | â€œSubstitutableâ€•Polymer Brushes: Reactive Poly(methacrylate) Brushes with Exchangeable Alkoxyamine Units in the Side Chain. Chemistry Letters, 2010, 39, 1209-1211. | 0.7 | 17 |
| 120 | Thermal dissociation behavior of polymers with hemiacetal ester moieties in the side chain: The effect of structure on dissociation temperature. Journal of Polymer Science Part A, 1999, 37, 4478-4482. | 2.5 | 16 |
| 121 | Fine-tuning of thermal dissociation temperature using copolymers with hemiacetal ester moieties in the side chain: effect of comonomer on dissociation temperature. Reactive and Functional Polymers, 2001, 46, 293-298. | 2.0 | 16 |
| 122 | Use of Bis(2,2,6,6-tetramethylpiperidin-1-yl)trisulfide as a Dynamic Covalent Bond for Thermally Healable Cross-Linked Polymer Networks. ACS Applied Polymer Materials, 2020, 2, 4054-4061. | 2.0 | 16 |
| 123 | Rational Entry to Cyclic Polymers via Thermally Induced Radical Ring-Expansion Polymerization of Macrocycles with One Bis(hindered amino)disulfide Linkage. Macromolecules, 2020, 53, 4670-4677. | 2.2 | 16 |
| 124 | Visualization of the slide-ring effect: a study on movable cross-linking points using mechanochromism. Chemical Communications, 2020, 56, 3361-3364. | 2.2 | 16 |
| 125 | Polystyrene Functionalized with Diarylacetonitrile for the Visualization of Mechanoradicals and Improved Thermal Stability. ACS Macro Letters, 2021, 10, 744-748. | 2.3 | 16 |
| 126 | Fabrication of Three-component Micropatterned Organosilane Monolayer by a Stepwise Photolithography Process. Chemistry Letters, 2002, 31, 1196-1197. | 0.7 | 15 |

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| 128 | Arm-replaceable star-like nanogels: arm detachment and arm exchange reactions by dynamic covalent exchanges of alkoxyamine units. Polymer Journal, 2010, 42, 860-867. | 1.3 | 15 |
| 129 | Mechanophore activation enhanced by hydrogen bonding of diarylurea motifs: An efficient supramolecular forceâ€transducing system. Aggregate, 2021, 2, e50. | 5.2 | 15 |
| 130 | Stabilization of Polystyrene Thin Films against Dewetting by Silsesquioxane-terminated Polystyrene Additives. Chemistry Letters, 2006, 35, 1098-1099. | 0.7 | 14 |
| 131 | Molecular Aggregation State and Electrical Properties of Terthiophenes/Imogolite Nanohybrids. Bulletin of the Chemical Society of Japan, 2011, 84, 893-902. | 2.0 | 14 |
| 132 | Preparation of novel polyimide hybrid materials by multi-layered charge-transfer complex formation. Polymer Journal, 2013, 45, 839-844. | 1.3 | 14 |
| 133 | Reversible cross-linking reactions of alkoxyamine-appended polymers under bulk conditions for transition between flow and rubber-like states. Polymer, 2014, 55, 1474-1480. | 1.8 | 14 |
| 134 | Triggered Structural Control of Dynamic Covalent Aromatic Polyamides: Effects of Thermal Reorganization Behavior in Solution and Solid States. Macromolecules, 2016, 49, 2153-2161. | 2.2 | 14 |
| 135 | Modification of amine-cured epoxy resins by boronic acids based on their reactivity with intrinsic diethanolamine units. Chemical Communications, 2018, 54, 12930-12933. | 2.2 | 14 |
| 136 | Energy Dissipation and Mechanoresponsive Color Evaluation of a Poly(n-hexyl Methacrylate) Soft Material Enhanced by a Mechanochromic Cross-Linker with Dynamic Covalent Bonds. Macromolecules, 2020, 53, 9313-9324. | 2.2 | 14 |
| 137 | Polybutadiene rubbers with urethane linkages prepared by a dynamic covalent approach for tire applications. Polymer, 2020, 202, 122700. | 1.8 | 14 |
| 138 | Non-symmetric mechanophores prepared from radical-type symmetric mechanophores: bespoke mechanofunctional polymers. Chemical Communications, 2021, 57, 2899-2902. | 2.2 | 14 |
| 139 | Preparation and characterization of cross-linked Î²-cyclodextrin polymer/Fe3O4 composite nanoparticles with core-shell structures. Chinese Chemical Letters, 2011, 22, 217-220. | 4.8 | 13 |
| 140 | Segmented Polyurethane Elastomers with Mechanochromic and Selfâ€Strengthening Functions. Angewandte Chemie, 2021, 133, 8487-8490. | 1.6 | 13 |
| 141 | Mechanical Performance and Visual Fracture Warning Function of Mechanochromic Stimuli-Recovery Polymer Networks. Macromolecules, 2021, 54, 8664-8674. | 2.2 | 13 |
| 142 | Rational model for chiral recognition in a silica-based chiral column: chiral recognition ofN-(3,5-dinitrobenzoyl)phenylglycine-terminated alkylsilane monolayer by 2,2,2-trifluoro-1-(9-anthryl)ethanol derivatives by chemical force microscopy. Journal of Physical Organic Chemistry, 2005, 18, 957-961. | 0.9 | 12 |
| 143 | Analysis of Molecular Aggregation States in Pentacene Thin Films Prepared from Soluble Precursor. Chemistry Letters, 2006, 35, 1162-1163. | 0.7 | 12 |
| 144 | Radical crossover reactions of a dynamic covalent polymer brush for reversible hydrophilicity control. Polymer, 2014, 55, 4586-4592. | 1.8 | 12 |

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