## Seiya Kobatake

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/3126301/seiya-kobatake-publications-by-year.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 203
 10,912
 49
 99

 papers
 citations
 h-index
 g-index

 221
 11,790
 5.9
 6.43

 ext. papers
 ext. citations
 avg, IF
 L-index

| #   | Paper   | IF             | Citations |
|-----|---|----------------|-----------|
| 203 | Spatial distribution of single guest molecules along thickness of thin films of poly(2-hydroxyethyl acrylate) <i>Photochemical and Photobiological Sciences</i> , <b>2022</b> , 21, 175   | 4.2            | 1         |
| 202 | Photochromic behavior of diarylbenzene nanoparticles prepared by top-down and bottom-up approaches. <i>Materials Advances</i> , <b>2022</b> , 3, 1280-1285  | 3.3            | 0         |
| 201 | Correlating Reaction Dynamics and Size Change during the Photomechanical Transformation of 9-Methylanthracene Single Crystals. <i>Angewandte Chemie</i> , <b>2022</b> , 134, e202114089   | 3.6            |           |
| 200 | Correlating Reaction Dynamics and Size Change during the Photomechanical Transformation of 9-Methylanthracene Single Crystals. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> ,   | 16.4           | 3         |
| 199 | Light-Driven Rapid Peeling of Photochromic Diarylethene Single Crystals. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 3093-3099   | 3.5            | 10        |
| 198 | Photochromism <b>2021</b> , 263-281   |                |           |
| 197 | Fast T-Type Photochromic Crystals of Diarylbenzene. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 4588-4  | 15 <i>9:</i> & | 3         |
| 196 | Anisotropic bending and twisting behaviour of a twin crystal composed of a diarylethene. <i>CrystEngComm</i> , <b>2021</b> , 23, 5795-5800  | 3.3            | 1         |
| 195 | Photoreversible Birefringence Change of Diarylethene Single Crystals as Revealed by Change in Molecular Polarizability Anisotropy. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 4732-4741  | 2.8            | 5         |
| 194 | Nanosecond laser photothermal effect-triggered amplification of photochromic reactions in diarylethene nanoparticles. <i>Chemical Communications</i> , <b>2020</b> , 56, 7088-7091  | 5.8            | 7         |
| 193 | Geometrical Evolution and Formation of the Photoproduct in the Cycloreversion Reaction of a Diarylethene Derivative Probed by Vibrational Spectroscopy. <i>ChemPhysChem</i> , <b>2020</b> , 21, 1524-1530   | 3.2            | 3         |
| 192 | Mechanical Actuation and Patterning of Rewritable Crystalline Monomer-Polymer Heterostructures via Topochemical Polymerization in a Dual-Responsive Photochromic Organic Material. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2020</b> , 12, 16856-16863 | 9.5            | 14        |
| 191 | Synthesis and multicolor emission properties of polystyrene with difluoroboron avobenzone complexes at side chains. <i>Dyes and Pigments</i> , <b>2020</b> , 177, 108283  | 4.6            | 4         |
| 190 | A dominant factor of the cycloreversion reactivity of diarylethene derivatives as revealed by femtosecond time-resolved absorption spectroscopy. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 034301   | 3.9            | 8         |
| 189 | Improving photosensitivity without changing thermal reactivity in photochromic diarylbenzenes based on accurate prediction by DFT calculations. <i>Photochemical and Photobiological Sciences</i> , <b>2020</b> , 19, 644-653   | 4.2            | 4         |
| 188 | Photoresponsive Molecular Crystals for Light-Driven Photoactuators <b>2020</b> , 427-447  |                |           |
| 187 | Solid-State Fluorescence Switching Using Photochromic Diarylethenes <b>2020</b> , 299-323   |                |           |

### (2019-2020)

| 18 | Enhancement of coloring under ultraviolet irradiation in photochromic diarylbenzenes. <i>Tetrahedron Letters</i> , <b>2020</b> , 61, 151968  | 2             | 6  |  |
|----|--|---------------|----|--|
| 18 | Synthesis and fluorescence on/off switching of hyperbranched polymers having diarylethene at the branching point. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2020</b> , 390, 112341               | 4.7           | 6  |  |
| 18 | Photomechanical Behavior of Photochromic Diarylethene Crystals <b>2020</b> , 1-28  |               | 1  |  |
| 18 | Symmetry Breaking and Photomechanical Behavior of Photochromic Organic Crystals. <i>Symmetry</i> , <b>2020</b> , 12, 1478  | 2.7           | 3  |  |
| 18 | Geometrical Evolution and Formation of the Photoproduct in the Cycloreversion Reaction of a Diarylethene Derivative Probed by Vibrational Spectroscopy. <i>ChemPhysChem</i> , <b>2020</b> , 21, 1485                       | 3.2           |    |  |
| 18 | Photoluminescence On/Off Switching of a Single Colloidal Quantum Dot Using Photochromic Diarylethene. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 17423-17429  | 3.8           | 10 |  |
| 18 | Effects of Template and Molecular Nanostructure on the Performance of OrganicInorganic Photomechanical Actuator Membranes. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1902396                                | 15.6          | 4  |  |
| 17 | Photoluminescence ON/OFF Switching of CdSe/ZnS Core/Shell Quantum Dots Coated with Diarylethene Ligands. <i>Chemistry Letters</i> , <b>2019</b> , 48, 1394-1397  | 1.7           | 8  |  |
| 17 | 8 1,2-Diarylbenzene as fast T-type photochromic switch. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 2865-2  | 8 <b>7</b> .0 | 28 |  |
| 17 | Photoreversible Interference Color Modulation to Multicolor in Photochromic Molecular Crystals.  Bulletin of the Chemical Society of Japan, <b>2019</b> , 92, 1299-1304  | 5.1           | 6  |  |
| 17 | Photomechanical bending behavior of photochromic diarylethene crystals induced under polarized light. <i>CrystEngComm</i> , <b>2019</b> , 21, 2495-2501  | 3.3           | 14 |  |
| 17 | Efficient "turn-off" fluorescence photoswitching in a highly fluorescent diarylethene single crystal.  Chemical Communications, <b>2019</b> , 55, 5681-5684  | 5.8           | 12 |  |
| 17 | Crystallization-induced emission of 1,2-bis(3-methyl-5-(4-alkylphenyl)-2-thienyl)perfluorocyclopentenes: A mechanical and thermal recording system. <i>Dyes and Pigments</i> , <b>2019</b> , 160, 450-456                  | 4.6           | 3  |  |
| 17 | Molecular design for a write-by-light/erase-by-heat recording system using photochromic diarylethenes with thermal cycloreversion. <i>Tetrahedron</i> , <b>2019</b> , 75, 130487   | 2.4           | 3  |  |
| 17 | Plasmon Enhanced Optical Responses of Diarylethene Molecules Adsorbed on Gold Nanorods.  Chemistry Letters, <b>2019</b> , 48, 537-540  | 1.7           | 5  |  |
| 17 | Cyclization reaction dynamics of an inverse type diarylethene derivative as revealed by time-resolved absorption and fluorescence spectroscopies. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 8623-8632 | 3.6           | 8  |  |
| 17 | Tuning of Optical Properties and Thermal Cycloreversion Reactivity of Photochromic Diarylbenzene by Introducing Electron-Donating Substituents. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 31212-31218    | 3.8           | 12 |  |
| 16 | Hybrid OrganicIhorganic Photon-Powered Actuators Based on Aligned Diarylethene Nanocrystals.  Chemistry of Materials, <b>2019</b> , 31, 1016-1022  | 9.6           | 37 |  |

| 168 | Solid emission color tuning of polymers consisting of BODIPY and styrene in various ratios. <i>Dyes and Pigments</i> , <b>2019</b> , 161, 341-346   | 4.6                 | 3   |
|-----|---|---------------------|-----|
| 167 | Fluorescence On/Off Switching in Nanoparticles Consisting of Two Types of Diarylethenes. <i>ACS Omega</i> , <b>2018</b> , 3, 2374-2382  | 3.9                 | 6   |
| 166 | Control of Photomechanical Crystal Twisting by Illumination Direction. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 4208-4212   | 16.4                | 103 |
| 165 | Photomechanical motion of diarylethene molecular crystal nanowires. <i>Nanoscale</i> , <b>2018</b> , 10, 3393-3398  | 7.7                 | 21  |
| 164 | Solid-State Fluorescence Behavior Induced by Photochemical Ring-Opening Reaction of 1,2-Bis(3-methyl-5-phenyl-2-thienyl)perfluorocyclopentene. <i>Bulletin of the Chemical Society of Japan</i> , <b>2018</b> , 91, 153-157     | 5.1                 | 6   |
| 163 | Polymorphs of a diarylethene that exhibits strong emission and direct visualization of polymorphic phase transition process by fluorescence color change. <i>Dyes and Pigments</i> , <b>2017</b> , 139, 233-238                 | 4.6                 | 6   |
| 162 | Solvent effect of fluorescence on/off switching of diarylethene linked to excited-state intramolecular proton transfer fluorophore. <i>Research on Chemical Intermediates</i> , <b>2017</b> , 43, 5321-5336                     | 2.8                 | 3   |
| 161 | Fluorescence On/Off Switching in Polymers Bearing Diarylethene and Fluorene in Their Side Chains.<br>Journal of Physical Chemistry C, <b>2017</b> , 121, 6272-6281  | 3.8                 | 19  |
| 160 | Thiophene-S,S-dioxidized diarylethenes for light-starting irreversible thermosensors that can detect a rise in heat at low temperature. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6210-6215                    | 7.1                 | 4   |
| 159 | Wavelength-selective and high-contrast multicolour fluorescence photoswitching in a mixture of photochromic nanoparticles. <i>Chemical Communications</i> , <b>2017</b> , 53, 8268-8271   | 5.8                 | 28  |
| 158 | Synthesis and Optical Properties of Fluorescent Switchable Silica Nanoparticles Covered with Copolymers Consisting of Diarylethene and Fluorene Derivatives. <i>ChemistrySelect</i> , <b>2017</b> , 2, 5445-5452                | 1.8                 | 6   |
| 157 | Dependence of Photoinduced Bending Behavior of Diarylethene Crystals on Ultraviolet Irradiation Power. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 4819-4825   | 3.5                 | 26  |
| 156 | Mechanical Behavior of Molecular Crystals Induced by Combination of Photochromic Reaction and Reversible Single-Crystal-to-Single-Crystal Phase Transition. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7524-7532         | 9.6                 | 58  |
| 155 | Cycloreversion Reaction of a Diarylethene Derivative at Higher Excited States Attained by Two-Color, Two-Photon Femtosecond Pulsed Excitation. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 17159-17167 | 16.4                | 22  |
| 154 | Efficient Cycloreversion Reaction of a Diarylethene Derivative in Higher Excited States Attained by Off-Resonant Simultaneous Two-Photon Absorption. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 3272       | 2 <sup>6</sup> 3276 | 24  |
| 153 | Photochromic Bulk Materials <b>2016</b> , 281-360   |                     | 2   |
| 152 | Photochromic reaction behavior and thermal stability of thiophene-S,S-dioxidized diarylethenes having a benzofuryl group. <i>Tetrahedron</i> , <b>2016</b> , 72, 2364-2368  | 2.4                 | 5   |
| 151 | Solvent Polarity Dependence of Photochromic Reactions of a Diarylethene Derivative As Revealed by Steady-State and Transient Spectroscopies. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 1170-1177              | 3.8                 | 37  |

#### (2013-2016)

| 150 | Strategy for Molecular Design of Photochromic Diarylethenes Having Thermal Functionality. <i>Chemical Record</i> , <b>2016</b> , 16, 2005-15  | 6.6                           | 23      |
|-----|---|-------------------------------|---------|
| 149 | Photoinduced Rapid and Explosive Fragmentation of Diarylethene Crystals Having Urethane<br>Bonding. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 4889-4892   | 9.6                           | 25      |
| 148 | Photoinduced stepwise bending behavior of photochromic diarylethene crystals. <i>CrystEngComm</i> , <b>2016</b> , 18, 7236-7240   | 3.3                           | 17      |
| 147 | Optical properties and solvatofluorochromism of fluorene derivatives bearing S,S-dioxidized thiophene. <i>Photochemical and Photobiological Sciences</i> , <b>2016</b> , 15, 1254-1263  | 4.2                           | 13      |
| 146 | Polymorphic Crystallization and Thermodynamic Phase Transition between the Polymorphs of a Photochromic Diarylethene. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 2017-2023  | 3.5                           | 8       |
| 145 | Restricted diffusion of guest molecules in polymer thin films on solid substrates as revealed by three-dimensional single-molecule tracking. <i>Chemical Communications</i> , <b>2015</b> , 51, 13756-9   | 5.8                           | 12      |
| 144 | Dependence of photoinduced bending behavior of diarylethene crystals on irradiation wavelength of ultraviolet light. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 27300-5   | 3.6                           | 33      |
| 143 | Synthesis and optical properties of gold nanoparticle networks cross-linked with chain-length-controlled polymers. <i>RSC Advances</i> , <b>2015</b> , 5, 34704-34708   | 3.7                           | 2       |
| 142 | Photoinduced Mechanical Motion of Photochromic Crystalline Materials <b>2015</b> , 533-547  |                               | 3       |
| 141 | Synthesis and characterization of amphiphilic silica nanoparticles covered by block copolymers branching photochromic diarylethene moieties on side chain. <i>Dyes and Pigments</i> , <b>2015</b> , 114, 166-174  | 4.6                           | 12      |
| 140 | Quantitative Evaluation of Photoinduced Bending Speed of Diarylethene Crystals. <i>Crystals</i> , <b>2015</b> , 5, 557  | I- <b>5</b> .6 <sub>9</sub> 1 | 28      |
| 139 | Photoreversible current ON/OFF switching by the photoinduced bending of gold-coated diarylethene crystals. <i>Chemical Communications</i> , <b>2015</b> , 51, 4421-4  | 5.8                           | 52      |
| 138 | Crystal thickness dependence of the photoinduced crystal bending of 1-(5-methyl-2-(4-(p-vinylbenzoyloxymethyl)phenyl)-4-thiazolyl)-2-(5-methyl-2-phenyl-4-thiazolyl)perfluction <i>Photochemical and Photobiological Sciences</i> , <b>2014</b> , 13, 764-9 | σ <b>ρε</b> ycl               | openten |
| 137 | Alkyl substituent effects in photochemical and thermal reactions of photochromic thiophene-S,S-dioxidized diarylethenes. <i>New Journal of Chemistry</i> , <b>2014</b> , 38, 933-941  | 3.6                           | 20      |
| 136 | Photochromism of diarylethene molecules and crystals: memories, switches, and actuators. <i>Chemical Reviews</i> , <b>2014</b> , 114, 12174-277   | 68.1                          | 1643    |
| 135 | Thermodynamic phase transition through crystal-to-crystal process of photochromic 1,2-bis(5-phenyl-2-propyl-3-thienyl)perfluorocyclopentene. <i>Chemistry - an Asian Journal</i> , <b>2014</b> , 9, 289-93  | <sub>3</sub> 4·5              | 5       |
| 134 | Thermal bleaching reactions of photochromic diarylethenes with thiophene-S,S-dioxide for a light-starting irreversible thermosensor. <i>Chemical Communications</i> , <b>2013</b> , 49, 2362-4  | 5.8                           | 25      |
| 133 | Systematic study on the thermal cycloreversion reactivity of diarylethenes with alkoxy and alkyl groups at the reactive carbons. <i>Research on Chemical Intermediates</i> , <b>2013</b> , 39, 279-289  | 2.8                           | 8       |

| 132 | Photoinduced twisting of a photochromic diarylethene crystal. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 9320-2  | 16.4 | 190 |
|-----|--|------|-----|
| 131 | Thermo- and photoresponsive reversible changes in localized surface plasmon resonance of gold nanoparticles covered by poly(N-isopropylacrylamide) with photochromic diarylethene end group. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2013</b> , 252, 37-45 | 4.7  | 12  |
| 130 | Crystal Thickness Dependence of Photoinduced Crystal Bending of 1,2-Bis(2-methyl-5-(4-(1-naphthoyloxymethyl)phenyl)-3-thienyl)perfluorocyclopentene. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 20887-20892   | 3.8  | 58  |
| 129 | Photoinduced Twisting of a Photochromic Diarylethene Crystal. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 9490-94  | 49.8 | 45  |
| 128 | Facile preparation of gold nanoparticle with diarylethene polymers by disodium malate and its photoreversible optical properties. <i>Dyes and Pigments</i> , <b>2012</b> , 92, 847-853   | 4.6  | 15  |
| 127 | Plasmonic enhancement of gold nanoparticles on photocycloreversion reaction of diarylethene derivatives depending on particle size, distance from the particle surface, and irradiation wavelength. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 4898-905            | 3.6  | 29  |
| 126 | Morphology, wettability and photomicropatterning of superhydrophobic surface with high adhesive force by crystal growth of a photochromic diarylethene. <i>Chemical Science</i> , <b>2012</b> , 3, 1445  | 9.4  | 27  |
| 125 | Plasmonic enhancement of a photocycloreversion reaction of a diarylethene derivative using individually dispersed silver nanoparticles. <i>ChemPhysChem</i> , <b>2012</b> , 13, 3616-21  | 3.2  | 12  |
| 124 | Femtosecond Laser Photolysis Studies on Temperature Dependence of Cyclization and Cycloreversion Reactions of a Photochromic Diarylethene Derivative. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 4862-4869  | 3.8  | 59  |
| 123 | Photochromic polymers bearing various diarylethene chromophores as the pendant: synthesis, optical properties, and multicolor photochromism. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 17249   |      | 66  |
| 122 | Photochromism of a Diarylethene with Methoxymethyl Groups at Reactive Carbons: Thermal Irreversible Reaction of the Closed-ring Isomer. <i>Chemistry Letters</i> , <b>2011</b> , 40, 93-95   | 1.7  | 10  |
| 121 | Correlation between Steric Substituent Constants and Thermal Cycloreversion Reactivity of Diarylethene Closed-Ring Isomers. <i>Bulletin of the Chemical Society of Japan</i> , <b>2011</b> , 84, 141-147   | 5.1  | 36  |
| 120 | Control of surface wettability and photomicropatterning with a polymorphic diarylethene crystal upon photoirradiation. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 9825-31   | 4.8  | 13  |
| 119 | Enhanced One-Photon Cycloreversion Reaction of Diarylethenes near Individual Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 4564-4570   | 3.8  | 38  |
| 118 | Cyclization Reaction Dynamics of a Photochromic Diarylethene Derivative as Revealed by Femtosecond to Microsecond Time-Resolved Spectroscopy. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 4265-4272  | 3.8  | 69  |
| 117 | High-Convertible Photochromism of a Diarylethene Single Crystal Accompanying the Crystal Shape Deformation. <i>Crystal Growth and Design</i> , <b>2011</b> , 11, 1223-1229   | 3.5  | 61  |
| 116 | Enhanced photocycloreversion reaction of diarylethene polymers attached to gold nanoparticles in the solid state. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2011</b> , 221, 256-260  | 4.7  | 17  |
| 115 | Photoswitching of an alcohol-sensitive photochromic diarylethene. <i>Tetrahedron Letters</i> , <b>2011</b> , 52, 1905-   | 1908 | 16  |

#### (2008-2010)

| 114 | Crystal Phase Transition and Solid-State Photoisomerization of Benzyl (Z,Z)-Muconate Polymorphs Studied by Direct Observation of Crystal Structure Change. <i>Crystal Growth and Design</i> , <b>2010</b> , 10, 3203-                          | 32 <sup>3</sup> 10 | 26 |  |
|-----|--|--------------------|----|--|
| 113 | Multiphoton-gated cycloreversion reactions of photochromic diarylethene derivatives with low reaction yields upon one-photon visible excitation. <i>Photochemical and Photobiological Sciences</i> , <b>2010</b> , 9, 172-80                   | 4.2                | 46 |  |
| 112 | Photoinduced micropatterning by polymorphic crystallization of a photochromic diarylethene in a polymer film. <i>Chemical Communications</i> , <b>2010</b> , 46, 3723-5  | 5.8                | 28 |  |
| 111 | Fabrication and Photochromism of High-density Diarylethene Monolayer Immobilized on a Quartz-glass Substrate. <i>Chemistry Letters</i> , <b>2010</b> , 39, 638-639   | 1.7                | 5  |  |
| 110 | Solvent effect on photochromism of a dithienylperfluorocyclopentene having diethylamino group. <i>Tetrahedron</i> , <b>2009</b> , 65, 6104-6108  | 2.4                | 27 |  |
| 109 | Light-Controllable Surface Plasmon Resonance Absorption of Gold Nanoparticles Covered with Photochromic Diarylethene Polymers. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 17359-17366   | 3.8                | 61 |  |
| 108 | One- and multi-photon cycloreversion reaction dynamics of diarylethene derivative with asymmetrical structure, as revealed by ultrafast laser spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 2640-8              | 3.6                | 39 |  |
| 107 | Ultrafast laser spectroscopic study on photochromic cycloreversion dynamics in fulgide derivatives: one-photon and multiphoton-gated reactions. <i>New Journal of Chemistry</i> , <b>2009</b> , 33, 1409                                       | 3.6                | 29 |  |
| 106 | The irreversible thermo-bleaching function of a photochromic diarylethene having trimethylsilyl groups. <i>New Journal of Chemistry</i> , <b>2009</b> , 33, 1362   | 3.6                | 33 |  |
| 105 | Photo-induced reversible topographical changes of photochromic dithienylethene microcrystalline surfaces. <i>New Journal of Chemistry</i> , <b>2009</b> , 33, 1324   | 3.6                | 17 |  |
| 104 | Unusual Photochromic Behavior of C3-Methoxy-Substituted Bis(2-thienyl)perfluorocyclopentene. <i>Bulletin of the Chemical Society of Japan</i> , <b>2009</b> , 82, 1441-1446  | 5.1                | 8  |  |
| 103 | Direct observation of change in the molecular structure of benzyl (Z,Z)-muconate during photoisomerization in the solid state. <i>Chemical Communications</i> , <b>2008</b> , 55-7   | 5.8                | 22 |  |
| 102 | Absolute asymmetric photocyclization in chiral diarylethene co-crystals with octafluoronaphthalene. <i>Chemical Communications</i> , <b>2008</b> , 335-7   | 5.8                | 33 |  |
| 101 | Dynamics of Cyclization, Cycloreversion, and Multiphoton-Gated Reaction of a Photochromic Diarylethene Derivative in Crystalline Phase. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 11150-11157                                | 3.8                | 37 |  |
| 100 | Photochromism and Optical Property of Gold Nanoparticles Covered with Low-Polydispersity Diarylethene Polymers. <i>Macromolecules</i> , <b>2008</b> , 41, 3995-4002  | 5.5                | 54 |  |
| 99  | Reduction Reaction to Thiol Group of Dithiobenzoate End Group in Polystyrene Polymerized by Reversible Addition Bragmentation Chain Transfer. <i>Chemistry Letters</i> , <b>2008</b> , 37, 630-631   | 1.7                | 22 |  |
| 98  | Theoretical investigation on photochromic diarylethene: A short review. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2008</b> , 200, 10-18  | 4.7                | 69 |  |
| 97  | Raman spectroscopic study on isomers of photochromic 1,2-bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene in crystal and stability of the closed-ring forms in the open-ring forms. <i>Chemical Physics Letters</i> , <b>2008</b> , 454, 42-48 | 2.5                | 11 |  |

| 96 | Synthesis of photochromic diarylethene polymers for a write-by-light/erase-by-heat recording system. <i>Tetrahedron</i> , <b>2008</b> , 64, 7611-7618   | 2.4               | 33  |
|----|---|-------------------|-----|
| 95 | Laser Multiphoton-Gated Photochromic Reaction of a Fulgide Derivative. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 2730-2737  | 3.8               | 45  |
| 94 | Picosecond laser photolysis study of cycloreversion reaction of a diarylethene derivative in polycrystals: Multiphoton-gated reaction. <i>Chemical Physics Letters</i> , <b>2007</b> , 437, 243-247 | 2.5               | 28  |
| 93 | Multiphoton-gated photochromic reaction of diarylethene derivatives in PMMA solid film. <i>Journal of Physical Organic Chemistry</i> , <b>2007</b> , 20, 953-959                                    | 2.1               | 16  |
| 92 | Single-crystalline photochromism of diarylethene dimers bridged by a spiro structure. <i>Journal of Physical Organic Chemistry</i> , <b>2007</b> , 20, 960-967                                      | 2.1               | 26  |
| 91 | Quantum yields and potential energy surfaces: a theoretical study. <i>Journal of Physical Organic Chemistry</i> , <b>2007</b> , 20, 821-829   | 2.1               | 52  |
| 90 | Rapid and reversible shape changes of molecular crystals on photoirradiation. <i>Nature</i> , <b>2007</b> , 446, 778-8  | 150.4             | 961 |
| 89 | Photostimulated Crystal Lattice Change Induced by the Photochemical Ring-Opening Reaction of Diarylethene Molecules. <i>Bulletin of the Chemical Society of Japan</i> , <b>2007</b> , 80, 365-370   | 5.1               | 6   |
| 88 | Acid-induced photochromic system switching of diarylethene derivatives between P- and T-types. <i>Chemical Communications</i> , <b>2007</b> , 1698-700  | 5.8               | 49  |
| 87 | Reversible Shape Changes of Photochromic Molecular Crystals upon Photoirradiation. <i>Nihon Kessho Gakkaishi</i> , <b>2007</b> , 49, 238-243  | О                 | 1   |
| 86 | Photochromism of a diarylethene charge-transfer complex: photochemical control of intermolecular charge-transfer interaction. <i>Chemical Communications</i> , <b>2006</b> , 2656-8                 | 5.8               | 17  |
| 85 | Diastereoselective cyclization of a dithienylethene switch through single crystal confinement. <i>Organic and Biomolecular Chemistry</i> , <b>2006</b> , 4, 1002-6                                  | 3.9               | 32  |
| 84 | Photochromism of Diarylethene-functionalized Polystyrene with High Conversion in a Solid-state Polymer Film. <i>Chemistry Letters</i> , <b>2006</b> , 35, 628-629                                   | 1.7               | 23  |
| 83 | Excited State Energy Migration and Photochromic Reaction in 1,2-Bis(2,4-dimethyl-3-thienyl)perfluorocyclopentene Single Crystal. <i>Chemistry Letters</i> , <b>2006</b> , 35, 102-10                | )3 <sup>1.7</sup> | 3   |
| 82 | Higher-order multiphoton imaging by femtosecond near-infrared laser microscope system. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2006</b> , 183, 261-266                  | 4.7               | 9   |
| 81 | Control of Cycloreversion Quantum Yields of Diarylethenes by Introduction of Substituents at the Reactive Carbons. <i>Molecular Crystals and Liquid Crystals</i> , <b>2005</b> , 431, 451-454       | 0.5               | 16  |
| 80 | Conformational control of photochromic reactivity in a diarylethene single crystal. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 2148-51                                    | 16.4              | 36  |
| 79 | Conformational Control of Photochromic Reactivity in a Diarylethene Single Crystal. <i>Angewandte Chemie</i> , <b>2005</b> , 117, 2186-2189   | 3.6               | 9   |

#### (2003-2005)

| 78 | Crystal Engineering of Photochromic Diarylethene Derivatives by Aryl-perfluoroaryl Interaction. <i>Molecular Crystals and Liquid Crystals</i> , <b>2005</b> , 431, 529-534                            | 0.5  | 4   |
|----|---|------|-----|
| 77 | Nanolayered Structures in Photochromic Crystal of 1,2-Bis(2-methyl-5-p-methoxyphenyl-3-thienyl)perfluorocyclopentene. <i>Molecular Crystals and Liquid Crystals</i> , <b>2005</b> , 431, 523-527      | 0.5  | 4   |
| 76 | Photochromic properties of diarylethene derivatives having chryso[b]thiophene rings. <i>Tetrahedron</i> , <b>2004</b> , 60, 9863-9869   | 2.4  | 41  |
| 75 | Crystal engineering of photochromic diarylethene single crystals. <i>Chemical Record</i> , <b>2004</b> , 4, 23-38   | 6.6  | 82  |
| 74 | Large geometrical structure changes of photochromic diarylethenes upon photoirradiation. <i>Tetrahedron Letters</i> , <b>2004</b> , 45, 1155-1158   | 2    | 44  |
| 73 | Dynamics and mechanisms of the multiphoton gated photochromic reaction of diarylethene derivatives. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 14764-72                     | 16.4 | 100 |
| 72 | Single-Crystalline Photochromism of a Diarylethene Dimer. <i>Bulletin of the Chemical Society of Japan</i> , <b>2004</b> , 77, 945-951  | 5.1  | 58  |
| 71 | Single-Crystalline Photochromism of Diarylethenes. <i>Bulletin of the Chemical Society of Japan</i> , <b>2004</b> , 77, 195-210   | 5.1  | 211 |
| 70 | Photochromism of Furylfulgide in a Single-crystalline Phase. <i>Chemistry Letters</i> , <b>2004</b> , 33, 904-905   | 1.7  | 13  |
| 69 | Efficient Photocycloreversion Reaction of Diarylethenes by Introduction of Cyano Subsutituents to the Reactive Carbons. <i>Chemistry Letters</i> , <b>2003</b> , 32, 858-859                          | 1.7  | 34  |
| 68 | Extraordinarily High Thermal Stability of the Closed-ring Isomer of 1,2-Bis(5-methyl-2-phenylthiazol-4-yl)perfluorocyclopentene. <i>Chemistry Letters</i> , <b>2003</b> , 32, 892-893                 | 1.7  | 59  |
| 67 | Synthesis and Photochromism of Diarylethenes with Isopropyl Groups at the Reactive Carbons and Long Econjugated Heteroaryl Groups. <i>Chemistry Letters</i> , <b>2003</b> , 32, 1078-1079             | 1.7  | 47  |
| 66 | Copolymerization of methyl E(chloromethy1) acrylate with styrene accompanied by addition-fragmentation chain transfer. <i>Polymer Bulletin</i> , <b>2003</b> , 49, 305-312                            | 2.4  | 4   |
| 65 | Polymorphism of 1,2-Bis(2-methyl-5-p-methoxyphenyl-3-thienyl)perfluorocyclopentene and Photochromic Reactivity of the Single Crystals. <i>Chemistry - A European Journal</i> , <b>2003</b> , 9, 621-7 | 4.8  | 69  |
| 64 | Picosecond and femtosecond laser photolysis studies of a photochromic diarylethene derivative: multiphoton gated reaction. <i>Chemical Physics Letters</i> , <b>2003</b> , 371, 40-48                 | 2.5  | 51  |
| 63 | Synthesis and photochromic reactivity of a diarylethene dimer linked by a phenyl group. <i>Tetrahedron</i> , <b>2003</b> , 59, 8359-8364  | 2.4  | 84  |
| 62 | Theoretical study on novel quantum yields of dithienylethenes cyclization reactions in crystals. <i>Computational and Theoretical Chemistry</i> , <b>2003</b> , 625, 227-234                          |      | 20  |
| 61 | Multicolor photochromism of two- and three-component diarylethene crystals. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 11080-7  | 16.4 | 157 |

| 60 | Aryl <b>P</b> erfluoroaryl Interaction in Photochromic Diarylethene Crystals. <i>Crystal Growth and Design</i> , <b>2003</b> , 3, 847-854   | 3.5   | 25  |
|----|---|-------|-----|
| 59 | Fluorescence of Photochromic 1,2-Bis(3-methyl-2-thienyl)ethene. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 8372-8377   | 3.4   | 113 |
| 58 | Rotational Isomerization of Dithienylethenes: A Study on the Mechanism Determining Quantum Yield of Cyclization Reaction. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 4982-4988   | 2.8   | 43  |
| 57 | Photochromism of diarylethenes in nanolayers of a single crystal. <i>Photochemical and Photobiological Sciences</i> , <b>2003</b> , 2, 1088-94  | 4.2   | 24  |
| 56 | 8 Photochromism. <i>Annual Reports on the Progress of Chemistry Section C</i> , <b>2003</b> , 99, 277-313   |       | 99  |
| 55 | Multi-Colored Photochromic Crystals of Diarylethene Mixtures. Advanced Materials, 2002, 14, 1027  | 24    | 60  |
| 54 | Two-photon photochromism of two simple chromene derivatives. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2002</b> , 150, 131-141  | 4.7   | 15  |
| 53 | Absorption Spectra of Colored Isomer of Diarylethene in Single Crystals. <i>Chemistry Letters</i> , <b>2002</b> , 31, 1224-1225   | 1.7   | 34  |
| 52 | Single-Crystalline Photochromism of Diarylethene Mixtures. <i>Bulletin of the Chemical Society of Japan</i> , <b>2002</b> , 75, 167-173   | 5.1   | 27  |
| 51 | Thermal Cycloreversion Reaction of a Photochromic Dithienylperfluorocyclopentene withtert-Butoxy Substituents at the Reactive Carbons. <i>Chemistry Letters</i> , <b>2002</b> , 31, 572-573   | 1.7   | 17  |
| 50 | Dithienylethenes with a novel photochromic performance. <i>Journal of Organic Chemistry</i> , <b>2002</b> , 67, 4574  | -84.2 | 128 |
| 49 | An ab Initio MO Study of the Photochromic Reaction of Dithienylethenes. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 7222-7227   | 2.8   | 111 |
| 48 | Efficient photocyclization of dithienylethene dimer, trimer, and tetramer: quantum yield and reaction dynamics. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 2015-24  | 16.4  | 119 |
| 47 | Photocyclization/Cycloreversion Quantum Yields of Diarylethenes in Single Crystals. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 209-214   | 2.8   | 158 |
| 46 | Single-crystalline photochromism of diarylethenes: reactivity-structure relationship. <i>Chemical Communications</i> , <b>2002</b> , 2804-5   | 5.8   | 291 |
| 45 | Frontiers in Crystal Chemistry: Prediction of Structures and Properties. Part 2. Solid-State Properties and Reactions Predicted from Crystal Structures. Photochromism in a Crystalline Phase <i>Nihon Kessho Gakkaishi</i> , <b>2002</b> , 44, 61-64 | Ο     |     |
| 44 | Three-dimensional erasable optical memory using a photochromic diarylethene single crystal as the recording medium. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , <b>2001</b> , 77, 30-35                      | 4     | 61  |
| 43 | Extraordinarily Low Cycloreversion Quantum Yields of Photochromic Diarylethenes with Methoxy Substituents. <i>Chemistry Letters</i> , <b>2001</b> , 30, 618-619   | 1.7   | 49  |

| 42 | Substituent effect on the photochromic reactivity of bis(2-thienyl)perfluorocyclopentenes. <i>Tetrahedron</i> , <b>2001</b> , 57, 4559-4565   | 2.4                           | 96  |
|----|---|-------------------------------|-----|
| 41 | Synthesis and photoisomerization of dithienylethene-bridged diporphyrins. <i>Journal of Organic Chemistry</i> , <b>2001</b> , 66, 3913-23   | 4.2                           | 153 |
| 40 | Reversible surface morphology changes of a photochromic diarylethene single crystal by photoirradiation. <i>Science</i> , <b>2001</b> , 291, 1769-72  | 33.3                          | 516 |
| 39 | Crystal structure-reactivity correlation in single-crystalline photochromism of 1,2-bis(2-methyl-5-phenyl-3-thienyl)perfluorocyclopentene. <i>Journal of Organic Chemistry</i> , <b>2001</b> , 66, 616  | 4 <sup>4</sup> 8 <sup>2</sup> | 41  |
| 38 | X-Ray Crystallographic Study on Single-Crystalline Photochromism of 1,2-Bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene. <i>Bulletin of the Chemical Society of Japan</i> , <b>2000</b> , 73, 2179-2184  | 5.1                           | 72  |
| 37 | Fatigue Mechanism of Photochromic 1,2-Bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene. <i>Bulletin of the Chemical Society of Japan</i> , <b>2000</b> , 73, 2389-2394  | 5.1                           | 67  |
| 36 | Photochromism of Diarylethenes Having Isopropyl Groups at the Reactive Carbons. Thermal Cycloreversion of the Closed-Ring Isomers. <i>Chemistry Letters</i> , <b>2000</b> , 29, 1340-1341   | 1.7                           | 35  |
| 35 | Photochromism of Diarylethenes in Single-Crystalline Phases. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 344, 185-190   |                               | 5   |
| 34 | Photochromism of 1,2-Bis(2-methyl-5-phenyl-3-thienyl)perfluorocyclopentene in a Single-Crystalline Phase. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 4871-4876  | 16.4                          | 428 |
| 33 | Reversible Diastereoselective Photocyclization of a Diarylethene in a Single-Crystalline Phase. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 9631-9637  | 16.4                          | 129 |
| 32 | Photochromic Reactions of Diarylethenes with Isopropyl Groups. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 345, 9-14  |                               | 4   |
| 31 | X-ray Crystallographic Study on Single-Crystalline Photochromism of Bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 1589-1592  | 16.4                          | 146 |
| 30 | Photochromism of 1,2-Bis(2-ethyl-5-phenyl-3-thienyl)perfluorocyclopentene in a Single-Crystalline Phase. Conrotatory Thermal Cycloreversion of the Closed-Ring Isomer. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 12135-12141 | 16.4                          | 96  |
| 29 | Refractive Index Change of Dithienylethene in Bulk Amorphous Solid Phase. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L1194-L1196  | 1.4                           | 62  |
| 28 | Fatigue resistant properties of photochromic dithienylethenes: by-product formation. <i>Chemical Communications</i> , <b>1999</b> , 747-750   | 5.8                           | 177 |
| 27 | ESR spectroscopic studies of radical polymerization. <i>Progress in Polymer Science</i> , <b>1999</b> , 24, 565-630   | 29.6                          | 76  |
| 26 | Photochromism of 1,2-Bis(2,5-dimethyl-3-thienyl)perfluoro- cyclopentene in a Single Crystalline Phase. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 2380-2386   | 16.4                          | 193 |
| 25 | Synthesis of Nitroxide-Functionalized Polybutadiene Using Halogen-Containing Benzyloxyamine as Terminators for Anionic Polymerization. <i>Macromolecules</i> , <b>1999</b> , 32, 10-13  | 5.5                           | 24  |

| 24 | Photochromism of 1,2-Bis(2-methyl-6-nitro-1-benzothiophen-3-yl)perfluorocyclopentene in a Single-Crystalline Phase: Dichroism of the Closed-Ring Form Isomer. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 8450-8456                         | 16.4           | 145 |
|----|--|----------------|-----|
| 23 | Radiation-Induced Coloration of Photochromic Dithienylethene Derivatives. <i>Bulletin of the Chemical Society of Japan</i> , <b>1999</b> , 72, 1139-1142   | 5.1            | 18  |
| 22 | Nitroxide-mediated styrene polymerization initiated by an oxoaminium chloride. <i>Journal of Polymer Science Part A</i> , <b>1998</b> , 36, 2555-2561  | 2.5            | 18  |
| 21 | Block Copolymer Synthesis by Styrene Polymerization Initiated with Nitroxy-Functionalized Polybutadiene. <i>Macromolecules</i> , <b>1998</b> , 31, 3735-3739   | 5.5            | 33  |
| 20 | Synthesis of Nitroxy-Functionalized Polybutadiene by Anionic Polymerization Using a Nitroxy-Functionalized Terminator. <i>Macromolecules</i> , <b>1997</b> , 30, 4238-4240   | 5.5            | 25  |
| 19 | Radical polymerization of a trimer of methyl acrylate as polymerizable Bubstituted acrylate. <i>Macromolecular Chemistry and Physics</i> , <b>1997</b> , 198, 2825-2837  | 2.6            | 12  |
| 18 | Mechanisms and Kinetics of Nitroxide-Controlled Free Radical Polymerization. <i>Macromolecules</i> , <b>1996</b> , 29, 6393-6398   | 5.5            | 276 |
| 17 | Sterically Hindered Elementary Reactions in Radical Polymerization of Æthylacrylic Esters as Studied by ESR Spectroscopy. <i>Polymer Journal</i> , <b>1996</b> , 28, 535-542   | 2.7            | 12  |
| 16 | Preparation and polymerization behavior of 2-[2,2,2-tris-(alkoxycarbonyl)ethyl]acrylic ester as a sterically congested monomer. <i>Macromolecular Chemistry and Physics</i> , <b>1996</b> , 197, 901-910   | 2.6            | 6   |
| 15 | Radical polymerization and copolymerization of methyl (2-carbomethoxyethyl)acrylate, a dimer of methyl acrylate, as a polymerizable bubstituted acrylate. <i>Journal of Polymer Science Part A</i> , <b>1996</b> , 34, 95-108  | 2.5            | 35  |
| 14 | Radical polymerization and copolymerization of methyl 2-(acyloxymethyl)acrylate as hindered 2-substituted acrylate. <i>Polymer</i> , <b>1995</b> , 36, 413-419   | 3.9            | 10  |
| 13 | Severely Hindered Propagation and Termination Allowing Radical Polymerization of .alphaSubstituted Acrylate Bearing a Bis(carbomethoxy)ethyl Group. <i>Macromolecules</i> , <b>1995</b> , 28, 4047-4   | 4 <i>6</i> 554 | 23  |
| 12 | Synthesis of methyl methacrylate/styrene copolymer bearing a carbomethoxyallyl end group with limited molecular weight by addition-fragmentation reaction of methyl (bromomethyl)-acrylate. <i>Macromolecular Chemistry and Physics</i> , <b>1994</b> , 195, 581-590 | 2.6            | 18  |
| 11 | Rate constants for elementary reactions of the radical polymerization of methyl 2-(benzyloxymethyl)acrylate as polymerizable acrylate bearing large substitutents. <i>Macromolecular Chemistry and Physics</i> , <b>1994</b> , 195, 933-942                          | 2.6            | 13  |
| 10 | Synthesis and radical polymerization of multi-functional acrylic ester bearing a 2,2-bis(alkoxycarbonyl)ethyl group as 2-substituent. <i>Macromolecular Rapid Communications</i> , <b>1994</b> , 15, 145-150   | 4.8            | 6   |
| 9  | Radical polymerization, co-polymerization, and chain transfer of   | 29.6           | 63  |
| 8  | Polymerization and copolymerization of methyl 2-(chloromethyl)acrylate in competition with addition-fragmentation. <i>Macromolecules</i> , <b>1993</b> , 26, 5099-5104   | 5.5            | 20  |
| 7  | Introduction of 2-methoxycarbonylallyl end group by copolymerization of methyl<br>Exphenoxymethyl)acrylate accompanying with addition-fragmentation reaction. <i>Journal of Polymer Science Part A</i> , <b>1993</b> , 31, 1551-1559                                 | 2.5            | 9   |

#### LIST OF PUBLICATIONS

| 6 | Polymerization of 2-(substituted methyl)acrylate bearing Emethoxyoligoethyleneoxy groups as side chains to new low Tg polymer. <i>Journal of Polymer Science Part A</i> , <b>1993</b> , 31, 3433-3438                     | 2.5 | 9  |
|---|---|-----|----|
| 5 | Preparation of polymer with controlled molecular weight up to high conversion using methyl 2-bromomethylacrylate as a chain transfer agent in radical polymerization. <i>Polymer Bulletin</i> , <b>1993</b> , 31, 263-270 | 2.4 | 24 |
| 4 | Control of Molecular Weight and End Group of Polymer by Addition-Fragmentation Reaction with .ALPHA(Bromomethyl)acrylate and Allyl Bromide <i>Polymer Journal</i> , <b>1992</b> , 24, 281-290                             | 2.7 | 49 |
|   |   |     |    |
| 3 | Dependence of ESR spectra of poly(fumaric ester) radicals on temperature and ester alkyl group. <i>Polymer Bulletin</i> , <b>1992</b> , 29, 225-232   | 2.4 | 5  |
| 2 |   | 2.4 | 24 |