

Seiya Kobatake

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203
papers

10,912
citations

49
h-index

99
g-index

221
ext. papers

11,790
ext. citations

5.9
avg, IF

6.43
L-index

#	Paper	IF	Citations
203	Photochromism of diarylethene molecules and crystals: memories, switches, and actuators. <i>Chemical Reviews</i> , 2014 , 114, 12174-277	68.1	1643
202	Rapid and reversible shape changes of molecular crystals on photoirradiation. <i>Nature</i> , 2007 , 446, 778-81	50.4	961
201	Reversible surface morphology changes of a photochromic diarylethene single crystal by photoirradiation. <i>Science</i> , 2001 , 291, 1769-72	33.3	516
200	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> , 2000 , 122, 4871-4876	16.4	428
199	Single-crystalline photochromism of diarylethenes: reactivity-structure relationship. <i>Chemical Communications</i> , 2002 , 2804-5	5.8	291
198	Mechanisms and Kinetics of Nitroxide-Controlled Free Radical Polymerization. <i>Macromolecules</i> , 1996 , 29, 6393-6398	5.5	276
197	Single-Crystalline Photochromism of Diarylethenes. <i>Bulletin of the Chemical Society of Japan</i> , 2004 , 77, 195-210	5.1	211
196	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> , 1999 , 121, 2380-2386	16.4	193
195	Photoinduced twisting of a photochromic diarylethene crystal. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 9320-2	16.4	190
194	Fatigue resistant properties of photochromic dithienylethenes: by-product formation. <i>Chemical Communications</i> , 1999 , 747-750	5.8	177
193	Photocyclization/Cycloreversion Quantum Yields of Diarylethenes in Single Crystals. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 209-214	2.8	158
192	Multicolor photochromism of two- and three-component diarylethene crystals. <i>Journal of the American Chemical Society</i> , 2003 , 125, 11080-7	16.4	157
191	Synthesis and photoisomerization of dithienylethene-bridged diporphyrins. <i>Journal of Organic Chemistry</i> , 2001 , 66, 3913-23	4.2	153
190	X-ray Crystallographic Study on Single-Crystalline Photochromism of Bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene. <i>Journal of the American Chemical Society</i> , 2000 , 122, 1589-1592	16.4	146
189	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> , 1999 , 121, 8450-8456	16.4	145
188	Reversible Diastereoselective Photocyclization of a Diarylethene in a Single-Crystalline Phase. <i>Journal of the American Chemical Society</i> , 2000 , 122, 9631-9637	16.4	129
187	Dithienylethenes with a novel photochromic performance. <i>Journal of Organic Chemistry</i> , 2002 , 67, 4574-8	4.2	128

186	Efficient photocyclization of dithienylethene dimer, trimer, and tetramer: quantum yield and reaction dynamics. <i>Journal of the American Chemical Society</i> , 2002 , 124, 2015-24	16.4	119
185	Fluorescence of Photochromic 1,2-Bis(3-methyl-2-thienyl)ethene. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 8372-8377	3.4	113
184	An ab Initio MO Study of the Photochromic Reaction of Dithienylethenes. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 7222-7227	2.8	111
183	Control of Photomechanical Crystal Twisting by Illumination Direction. <i>Journal of the American Chemical Society</i> , 2018 , 140, 4208-4212	16.4	103
182	Dynamics and mechanisms of the multiphoton gated photochromic reaction of diarylethene derivatives. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14764-72	16.4	100
181	8 Photochromism. <i>Annual Reports on the Progress of Chemistry Section C</i> , 2003 , 99, 277-313		99
180	Substituent effect on the photochromic reactivity of bis(2-thienyl)perfluorocyclopentenes. <i>Tetrahedron</i> , 2001 , 57, 4559-4565	2.4	96
179	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> , 2000 , 122, 12135-12141	16.4	96
178	Synthesis and photochromic reactivity of a diarylethene dimer linked by a phenyl group. <i>Tetrahedron</i> , 2003 , 59, 8359-8364	2.4	84
177	Crystal engineering of photochromic diarylethene single crystals. <i>Chemical Record</i> , 2004 , 4, 23-38	6.6	82
176	ESR spectroscopic studies of radical polymerization. <i>Progress in Polymer Science</i> , 1999 , 24, 565-630	29.6	76
175	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> , 2000 , 73, 2179-2184	5.1	72
174	Cyclization Reaction Dynamics of a Photochromic Diarylethene Derivative as Revealed by Femtosecond to Microsecond Time-Resolved Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4265-4272	3.8	69
173	Theoretical investigation on photochromic diarylethene: A short review. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2008 , 200, 10-18	4.7	69
172	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> , 2003 , 9, 621-7	4.8	69
171	Fatigue Mechanism of Photochromic 1,2-Bis(2,5-dimethyl-3-thienyl)perfluorocyclopentene. <i>Bulletin of the Chemical Society of Japan</i> , 2000 , 73, 2389-2394	5.1	67
170	Photochromic polymers bearing various diarylethene chromophores as the pendant: synthesis, optical properties, and multicolor photochromism. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17249		66
169	Radical polymerization, co-polymerization, and chain transfer of substituted acrylic esters. <i>Progress in Polymer Science</i> , 1994 , 19, 1089-1131	29.6	63

168	Refractive Index Change of Dithienylethene in Bulk Amorphous Solid Phase. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, L1194-L1196	1.4	62
167	High-Convertible Photochromism of a Diarylethene Single Crystal Accompanying the Crystal Shape Deformation. <i>Crystal Growth and Design</i> , 2011 , 11, 1223-1229	3.5	61
166	Light-Controllable Surface Plasmon Resonance Absorption of Gold Nanoparticles Covered with Photochromic Diarylethene Polymers. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17359-17366	3.8	61
165	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> , 2001 , 77, 30-35	4	61
164	Multi-Colored Photochromic Crystals of Diarylethene Mixtures. <i>Advanced Materials</i> , 2002 , 14, 1027	24	60
163	Femtosecond Laser Photolysis Studies on Temperature Dependence of Cyclization and Cycloreversion Reactions of a Photochromic Diarylethene Derivative. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4862-4869	3.8	59
162	Extraordinarily High Thermal Stability of the Closed-ring Isomer of 1,2-Bis(5-methyl-2-phenylthiazol-4-yl)perfluorocyclopentene. <i>Chemistry Letters</i> , 2003 , 32, 892-893	1.7	59
161	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> , 2017 , 29, 7524-7532	9.6	58
160	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> , 2013 , 117, 20887-20892	3.8	58
159	Single-Crystalline Photochromism of a Diarylethene Dimer. <i>Bulletin of the Chemical Society of Japan</i> , 2004 , 77, 945-951	5.1	58
158	Photochromism and Optical Property of Gold Nanoparticles Covered with Low-Polydispersity Diarylethene Polymers. <i>Macromolecules</i> , 2008 , 41, 3995-4002	5.5	54
157	Photoreversible current ON/OFF switching by the photoinduced bending of gold-coated diarylethene crystals. <i>Chemical Communications</i> , 2015 , 51, 4421-4	5.8	52
156	Quantum yields and potential energy surfaces: a theoretical study. <i>Journal of Physical Organic Chemistry</i> , 2007 , 20, 821-829	2.1	52
155	Picosecond and femtosecond laser photolysis studies of a photochromic diarylethene derivative: multiphoton gated reaction. <i>Chemical Physics Letters</i> , 2003 , 371, 40-48	2.5	51
154	Acid-induced photochromic system switching of diarylethene derivatives between P- and T-types. <i>Chemical Communications</i> , 2007 , 1698-700	5.8	49
153	Extraordinarily Low Cycloreversion Quantum Yields of Photochromic Diarylethenes with Methoxy Substituents. <i>Chemistry Letters</i> , 2001 , 30, 618-619	1.7	49
152	Control of Molecular Weight and End Group of Polymer by Addition-Fragmentation Reaction with .ALPHA.-(Bromomethyl)acrylate and Allyl Bromide. <i>Polymer Journal</i> , 1992 , 24, 281-290	2.7	49
151	Synthesis and Photochromism of Diarylethenes with Isopropyl Groups at the Reactive Carbons and Long π -Conjugated Heteroaryl Groups. <i>Chemistry Letters</i> , 2003 , 32, 1078-1079	1.7	47

150	Multiphoton-gated cycloreversion reactions of photochromic diarylethene derivatives with low reaction yields upon one-photon visible excitation. <i>Photochemical and Photobiological Sciences</i> , 2010 , 9, 172-80	4.2	46
149	Photoinduced Twisting of a Photochromic Diarylethene Crystal. <i>Angewandte Chemie</i> , 2013 , 125, 9490-9498	3.8	45
148	Laser Multiphoton-Gated Photochromic Reaction of a Fulgide Derivative. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2730-2737	3.8	45
147	Large geometrical structure changes of photochromic diarylethenes upon photoirradiation. <i>Tetrahedron Letters</i> , 2004 , 45, 1155-1158	2	44
146	Rotational Isomerization of Dithienylethenes: A Study on the Mechanism Determining Quantum Yield of Cyclization Reaction. <i>Journal of Physical Chemistry A</i> , 2003 , 107, 4982-4988	2.8	43
145	Photochromic properties of diarylethene derivatives having chryso[b]thiophene rings. <i>Tetrahedron</i> , 2004 , 60, 9863-9869	2.4	41
144	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> , 2001 , 66, 6164-6168	4.2	41
143	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)perfluorocyclopentene. <i>Photochemical and Photobiological Sciences</i> , 2014 , 13, 764-9	4.6	39
142	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> , 2009 , 11, 2640-8	3.6	39
141	Enhanced One-Photon Cycloreversion Reaction of Diarylethenes near Individual Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4564-4570	3.8	38
140	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> , 2016 , 120, 1170-1177	3.8	37
139	Dynamics of Cyclization, Cycloreversion, and Multiphoton-Gated Reaction of a Photochromic Diarylethene Derivative in Crystalline Phase. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11150-11157	3.8	37
138	Hybrid Organic/Inorganic Photon-Powered Actuators Based on Aligned Diarylethene Nanocrystals. <i>Chemistry of Materials</i> , 2019 , 31, 1016-1022	9.6	37
137	Correlation between Steric Substituent Constants and Thermal Cycloreversion Reactivity of Diarylethene Closed-Ring Isomers. <i>Bulletin of the Chemical Society of Japan</i> , 2011 , 84, 141-147	5.1	36
136	Conformational control of photochromic reactivity in a diarylethene single crystal. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 2148-51	16.4	36
135	Photochromism of Diarylethenes Having Isopropyl Groups at the Reactive Carbons. Thermal Cycloreversion of the Closed-Ring Isomers. <i>Chemistry Letters</i> , 2000 , 29, 1340-1341	1.7	35
134	Radical polymerization and copolymerization of methyl α -(2-carbomethoxyethyl)acrylate, a dimer of methyl acrylate, as a polymerizable β -substituted acrylate. <i>Journal of Polymer Science Part A</i> , 1996 , 34, 95-108	2.5	35
133	Efficient Photocycloreversion Reaction of Diarylethenes by Introduction of Cyano Substituents to the Reactive Carbons. <i>Chemistry Letters</i> , 2003 , 32, 858-859	1.7	34

132	Absorption Spectra of Colored Isomer of Diarylethene in Single Crystals. <i>Chemistry Letters</i> , 2002 , 31, 1224-1225	1.7	34
131	Dependence of photoinduced bending behavior of diarylethene crystals on irradiation wavelength of ultraviolet light. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 27300-5	3.6	33
130	The irreversible thermo-bleaching function of a photochromic diarylethene having trimethylsilyl groups. <i>New Journal of Chemistry</i> , 2009 , 33, 1362	3.6	33
129	Absolute asymmetric photocyclization in chiral diarylethene co-crystals with octafluoronaphthalene. <i>Chemical Communications</i> , 2008 , 335-7	5.8	33
128	Synthesis of photochromic diarylethene polymers for a write-by-light/erase-by-heat recording system. <i>Tetrahedron</i> , 2008 , 64, 7611-7618	2.4	33
127	Block Copolymer Synthesis by Styrene Polymerization Initiated with Nitroxy-Functionalized Polybutadiene. <i>Macromolecules</i> , 1998 , 31, 3735-3739	5.5	33
126	Diastereoselective cyclization of a dithienylethene switch through single crystal confinement. <i>Organic and Biomolecular Chemistry</i> , 2006 , 4, 1002-6	3.9	32
125	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> , 2012 , 14, 4898-905	3.6	29
124	Ultrafast laser spectroscopic study on photochromic cycloreversion dynamics in fulgide derivatives: one-photon and multiphoton-gated reactions. <i>New Journal of Chemistry</i> , 2009 , 33, 1409	3.6	29
123	Wavelength-selective and high-contrast multicolour fluorescence photoswitching in a mixture of photochromic nanoparticles. <i>Chemical Communications</i> , 2017 , 53, 8268-8271	5.8	28
122	1,2-Diarylbenzene as fast T-type photochromic switch. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 2865-2870	2.4	28
121	Quantitative Evaluation of Photoinduced Bending Speed of Diarylethene Crystals. <i>Crystals</i> , 2015 , 5, 551-561	5.6	28
120	Photoinduced micropatterning by polymorphic crystallization of a photochromic diarylethene in a polymer film. <i>Chemical Communications</i> , 2010 , 46, 3723-5	5.8	28
119	Picosecond laser photolysis study of cycloreversion reaction of a diarylethene derivative in polycrystals: Multiphoton-gated reaction. <i>Chemical Physics Letters</i> , 2007 , 437, 243-247	2.5	28
118	Morphology, wettability and photomicropatterning of superhydrophobic surface with high adhesive force by crystal growth of a photochromic diarylethene. <i>Chemical Science</i> , 2012 , 3, 1445	9.4	27
117	Solvent effect on photochromism of a dithienylperfluorocyclopentene having diethylamino group. <i>Tetrahedron</i> , 2009 , 65, 6104-6108	2.4	27
116	Single-Crystalline Photochromism of Diarylethene Mixtures. <i>Bulletin of the Chemical Society of Japan</i> , 2002 , 75, 167-173	5.1	27
115	Dependence of Photoinduced Bending Behavior of Diarylethene Crystals on Ultraviolet Irradiation Power. <i>Crystal Growth and Design</i> , 2017 , 17, 4819-4825	3.5	26

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> , 2010 , 10, 3203-3210	3.5	26
113	Single-crystalline photochromism of diarylethene dimers bridged by a spiro structure. <i>Journal of Physical Organic Chemistry</i> , 2007 , 20, 960-967	2.1	26
112	Thermal bleaching reactions of photochromic diarylethenes with thiophene-S,S-dioxide for a light-starting irreversible thermosensor. <i>Chemical Communications</i> , 2013 , 49, 2362-4	5.8	25
111	Synthesis of Nitroxy-Functionalized Polybutadiene by Anionic Polymerization Using a Nitroxy-Functionalized Terminator. <i>Macromolecules</i> , 1997 , 30, 4238-4240	5.5	25
110	Aryl-Perfluoroaryl Interaction in Photochromic Diarylethene Crystals. <i>Crystal Growth and Design</i> , 2003 , 3, 847-854	3.5	25
109	Photoinduced Rapid and Explosive Fragmentation of Diarylethene Crystals Having Urethane Bonding. <i>Chemistry of Materials</i> , 2016 , 28, 4889-4892	9.6	25
108	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> , 2017 , 8, 3272-3276	6.4	24
107	Photochromism of diarylethenes in nanolayers of a single crystal. <i>Photochemical and Photobiological Sciences</i> , 2003 , 2, 1088-94	4.2	24
106	Synthesis of Nitroxide-Functionalized Polybutadiene Using Halogen-Containing Benzyloxyamine as Terminators for Anionic Polymerization. <i>Macromolecules</i> , 1999 , 32, 10-13	5.5	24
105	Preparation of poly(methyl methacrylate) macromonomer by radical polymerization in the presence of methyl (bromomethyl)acrylate and copolymerization of the resultant macromonomer. <i>Polymer Bulletin</i> , 1991 , 25, 423-430	2.4	24
104	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> , 1993 , 31, 263-270	2.4	24
103	Photochromism of Diarylethene-functionalized Polystyrene with High Conversion in a Solid-state Polymer Film. <i>Chemistry Letters</i> , 2006 , 35, 628-629	1.7	23
102	Severely Hindered Propagation and Termination Allowing Radical Polymerization of .alpha.-Substituted Acrylate Bearing a Bis(carbomethoxy)ethyl Group. <i>Macromolecules</i> , 1995 , 28, 4047-4054	5.5	23
101	Strategy for Molecular Design of Photochromic Diarylethenes Having Thermal Functionality. <i>Chemical Record</i> , 2016 , 16, 2005-15	6.6	23
100	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> , 2017 , 139, 17159-17167	16.4	22
99	Direct observation of change in the molecular structure of benzyl (Z,Z)-muconate during photoisomerization in the solid state. <i>Chemical Communications</i> , 2008 , 55-7	5.8	22
98	Reduction Reaction to Thiol Group of Dithiobenzoate End Group in Polystyrene Polymerized by Reversible Addition-Fragmentation Chain Transfer. <i>Chemistry Letters</i> , 2008 , 37, 630-631	1.7	22
97	Photomechanical motion of diarylethene molecular crystal nanowires. <i>Nanoscale</i> , 2018 , 10, 3393-3398	7.7	21

96	Alkyl substituent effects in photochemical and thermal reactions of photochromic thiophene-S,S-dioxidized diarylethenes. <i>New Journal of Chemistry</i> , 2014 , 38, 933-941	3.6	20
95	Theoretical study on novel quantum yields of dithienylethenes cyclization reactions in crystals. <i>Computational and Theoretical Chemistry</i> , 2003 , 625, 227-234		20
94	Polymerization and copolymerization of methyl 2-(chloromethyl)acrylate in competition with addition-fragmentation. <i>Macromolecules</i> , 1993 , 26, 5099-5104	5.5	20
93	Fluorescence On/Off Switching in Polymers Bearing Diarylethene and Fluorene in Their Side Chains. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 6272-6281	3.8	19
92	Nitroxide-mediated styrene polymerization initiated by an oxoamminium chloride. <i>Journal of Polymer Science Part A</i> , 1998 , 36, 2555-2561	2.5	18
91	Radiation-Induced Coloration of Photochromic Dithienylethene Derivatives. <i>Bulletin of the Chemical Society of Japan</i> , 1999 , 72, 1139-1142	5.1	18
90	Synthesis of methyl methacrylate/styrene copolymer bearing a carbomethoxyallyl end group with limited molecular weight by addition-fragmentation reaction of methyl α -(bromomethyl)-acrylate. <i>Macromolecular Chemistry and Physics</i> , 1994 , 195, 581-590	2.6	18
89	Enhanced photocycloreversion reaction of diarylethene polymers attached to gold nanoparticles in the solid state. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 221, 256-260	4.7	17
88	Photo-induced reversible topographical changes of photochromic dithienylethene microcrystalline surfaces. <i>New Journal of Chemistry</i> , 2009 , 33, 1324	3.6	17
87	Photochromism of a diarylethene charge-transfer complex: photochemical control of intermolecular charge-transfer interaction. <i>Chemical Communications</i> , 2006 , 2656-8	5.8	17
86	Thermal Cycloreversion Reaction of a Photochromic Dithienylperfluorocyclopentene with tert-Butoxy Substituents at the Reactive Carbons. <i>Chemistry Letters</i> , 2002 , 31, 572-573	1.7	17
85	Photoinduced stepwise bending behavior of photochromic diarylethene crystals. <i>CrystEngComm</i> , 2016 , 18, 7236-7240	3.3	17
84	Photoswitching of an alcohol-sensitive photochromic diarylethene. <i>Tetrahedron Letters</i> , 2011 , 52, 1905-1908		16
83	Multiphoton-gated photochromic reaction of diarylethene derivatives in PMMA solid film. <i>Journal of Physical Organic Chemistry</i> , 2007 , 20, 953-959	2.1	16
82	Control of Cycloreversion Quantum Yields of Diarylethenes by Introduction of Substituents at the Reactive Carbons. <i>Molecular Crystals and Liquid Crystals</i> , 2005 , 431, 451-454	0.5	16
81	Facile preparation of gold nanoparticle with diarylethene polymers by disodium malate and its photoreversible optical properties. <i>Dyes and Pigments</i> , 2012 , 92, 847-853	4.6	15
80	Two-photon photochromism of two simple chromene derivatives. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 150, 131-141	4.7	15
79	Photomechanical bending behavior of photochromic diarylethene crystals induced under polarized light. <i>CrystEngComm</i> , 2019 , 21, 2495-2501	3.3	14

78	Mechanical Actuation and Patterning of Rewritable Crystalline Monomer-Polymer Heterostructures via Topochemical Polymerization in a Dual-Responsive Photochromic Organic Material. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 16856-16863	9.5	14
77	Control of surface wettability and photomicro patterning with a polymorphic diarylethene crystal upon photoirradiation. <i>Chemistry - A European Journal</i> , 2011 , 17, 9825-31	4.8	13
76	Photochromism of Furylfulgide in a Single-crystalline Phase. <i>Chemistry Letters</i> , 2004 , 33, 904-905	1.7	13
75	Rate constants for elementary reactions of the radical polymerization of methyl 2-(benzyloxymethyl)acrylate as polymerizable acrylate bearing large substituents. <i>Macromolecular Chemistry and Physics</i> , 1994 , 195, 933-942	2.6	13
74	Optical properties and solvatofluorochromism of fluorene derivatives bearing S,S-dioxidized thiophene. <i>Photochemical and Photobiological Sciences</i> , 2016 , 15, 1254-1263	4.2	13
73	Efficient "turn-off" fluorescence photoswitching in a highly fluorescent diarylethene single crystal. <i>Chemical Communications</i> , 2019 , 55, 5681-5684	5.8	12
72	Restricted diffusion of guest molecules in polymer thin films on solid substrates as revealed by three-dimensional single-molecule tracking. <i>Chemical Communications</i> , 2015 , 51, 13756-9	5.8	12
71	Synthesis and characterization of amphiphilic silica nanoparticles covered by block copolymers branching photochromic diarylethene moieties on side chain. <i>Dyes and Pigments</i> , 2015 , 114, 166-174	4.6	12
70	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> , 2013 , 252, 37-45	4.7	12
69	Plasmonic enhancement of a photocycloreversion reaction of a diarylethene derivative using individually dispersed silver nanoparticles. <i>ChemPhysChem</i> , 2012 , 13, 3616-21	3.2	12
68	Radical polymerization of a trimer of methyl acrylate as polymerizable β -substituted acrylate. <i>Macromolecular Chemistry and Physics</i> , 1997 , 198, 2825-2837	2.6	12
67	Sterically Hindered Elementary Reactions in Radical Polymerization of α -Ethylacrylic Esters as Studied by ESR Spectroscopy. <i>Polymer Journal</i> , 1996 , 28, 535-542	2.7	12
66	Tuning of Optical Properties and Thermal Cycloreversion Reactivity of Photochromic Diarylbenzene by Introducing Electron-Donating Substituents. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 31212-31218	3.8	12
65	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> , 2008 , 454, 42-48	2.5	11
64	Photochromism of a Diarylethene with Methoxymethyl Groups at Reactive Carbons: Thermal Irreversible Reaction of the Closed-ring Isomer. <i>Chemistry Letters</i> , 2011 , 40, 93-95	1.7	10
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