Kenji Urayama

List of Publications by Year
in descending order

177 papers	5,698 citations	71102 41 h-index	106344 65 g-index
179 all docs	179 docs citations	179 times ranked	4796 citing authors

#	Article	IF	Citations
1	Installing logic-gate responses to a variety of biological substances in supramolecular hydrogelâ€"enzyme hybrids. Nature Chemistry, 2014, 6, 511-518.	13.6	370
2	Shape selection of twist-nematic-elastomer ribbons. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6364-6368.	7.1	256
3	Self-assembly of metalâ€"organic polyhedra into supramolecular polymers with intrinsic microporosity. Nature Communications, 2018, 9, 2506.	12.8	152
4	An adaptive supramolecular hydrogel comprising self-sorting double nanofibre networks. Nature Nanotechnology, 2018, 13, 165-172.	31.5	151
5	Selected Issues in Liquid Crystal Elastomers and Gels. Macromolecules, 2007, 40, 2277-2288.	4.8	150
6	Damping Elastomer Based on Model Irregular Networks of End-Linked Poly(Dimethylsiloxane). Chemistry of Materials, 2004, 16, 173-178.	6.7	115
7	Deformation Coupled to Director Rotation in Swollen Nematic Elastomers under Electric Fields. Macromolecules, 2006, 39, 1943-1949.	4.8	112
8	Thermally Driven Giant Bending of Liquid Crystal Elastomer Films with Hybrid Alignment. Macromolecules, 2010, 43, 4362-4369.	4.8	107
9	Poisson's ratio of poly(vinyl alcohol) gels. Macromolecules, 1993, 26, 3092-3096.	4.8	98
10	Structureâ€"mechanical property correlations of model siloxane elastomers with controlled network topology. Polymer, 2009, 50, 347-356.	3.8	97
11	Pressureâ€Responsive Polymer Membranes of Slideâ€Ring Gels with Movable Crossâ€Links. Advanced Materials, 2013, 25, 4636-4640.	21.0	93
12	Poisson's ratio of polyacrylamide (PAAm) gels. Polymer Gels and Networks, 1996, 4, 1-5.	0.6	91
13	Polydomainâ^'Monodomain Transition of Randomly Disordered Nematic Elastomers with Different Cross-Linking Histories. Macromolecules, 2009, 42, 4084-4089.	4.8	90
14	Multiaxial Deformations of End-Linked Poly(dimethylsiloxane) Networks. 1. Phenomenological Approach to Strain Energy Density Function. Macromolecules, 2001, 34, 8252-8260.	4.8	82
15	Electrooptical Effects with Anisotropic Deformation in Nematic Gels. Macromolecules, 2005, 38, 3574-3576.	4.8	78
16	Dynamic Viscoelasticity of Poly(butyl acrylate) Elastomers Containing Dangling Chains with Controlled Lengths. Macromolecules, 2011, 44, 8829-8834.	4.8	78
17	Multiaxial Deformations of End-linked Poly(dimethylsiloxane) Networks. 2. Experimental Tests of Molecular Entanglement Models of Rubber Elasticity. Macromolecules, 2001, 34, 8261-8269.	4.8	70
18	Elastic modulus and equilibrium swelling of networks crosslinked by endâ€linking oligodimethylsiloxane at solution state. Journal of Chemical Physics, 1996, 105, 4833-4840.	3.0	66

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19	Dynamics of Electro-Opto-Mechanical Effects in Swollen Nematic Elastomers. Macromolecules, 2008, 41, 9389-9396.	4.8	63
20	A Coordinative Solubilizer Method to Fabricate Soft Porous Materials from Insoluble Metalâ€“Organic Polyhedra. Angewandte Chemie - International Edition, 2019, 58, 6347-6350.	13.8	62
21	Crossover of the concentration dependence of swelling and elastic properties for polysiloxane networks crosslinked in solution. Journal of Chemical Physics, 1996, 104, 3352-3359.	3.0	60
22	Electrically driven deformations of nematic gels. Physical Review E, 2005, 71, 051713.	2.1	60
23	Tunable lasing in cholesteric liquid crystal elastomers with accurate measurements of strain. Scientific Reports, 2015, 5, 17739.	3.3	59
24	Stretching-Induced Director Rotation in Thin Films of Liquid Crystal Elastomers with Homeotropic Alignment. Macromolecules, 2007, 40, 7665-7670.	4.8	58
25	Biaxial strain testing of extremely soft polymer gels. Soft Matter, 2011, 7, 2632.	2.7	58
26	An experimentalist's view of the physics of rubber elasticity. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3440-3444.	2.1	55
27	Layer-Thinning Effects on Ferroelectricity and the Ferroelectric-to-Paraelectric Phase Transition of Vinylidene Fluorideâ^'Trifluoroethylene Copolymer Layers. Macromolecules, 2000, 33, 8269-8279.	4.8	53
28	Volume Phase Transition of Monodomain Nematic Polymer Networks in Isotropic Solvents Accompanied by Anisotropic Shape Variation. Macromolecules, 2005, 38, 3469-3474.	4.8	53
29	Extensive stretch of polysiloxane network chains with random- and super-coiled conformations. European Physical Journal B, 1998, 2, 75-78.	1.5	52
30	Post-assembly Fabrication of a Functional Multicomponent Supramolecular Hydrogel Based on a Self-Sorting Double Network. Journal of the American Chemical Society, 2019, 141, 4997-5004.	13.7	51
31	Structure and mechanical properties of poly(vinyl alcohol) gels swollen by various solvents. Polymer, 1992, 33, 2334-2339.	3.8	50
32	Piezoelectricity in Polar Supramolecular Materials. Angewandte Chemie - International Edition, 2000, 39, 1486-1489.	13.8	49
33	Volume Phase Transition of Liquid Crystalline Gels in a Nematic Solvent. Macromolecules, 2002, 35, 4567-4569.	4.8	49
34	Peculiar Nonlinear Elasticity of Polyrotaxane Gels with Movable Cross-Links Revealed by Multiaxial Stretching. Macromolecules, 2011, 44, 8661-8667.	4.8	49
35	Velocity transition in the crack growth dynamics of filled elastomers: Contributions of nonlinear viscoelasticity. Physical Review E, 2016, 93, 043001.	2.1	48
36	Protein-responsive protein release of supramolecular/polymer hydrogel composite integrating enzyme activation systems. Nature Communications, 2020, 11, 3859.	12.8	47

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37	Uniaxial elongation of deswollen polydimethylsiloxane networks with supercoiled structure. Polymer, 1997, 38, 955-962.	3.8	45
38	Novel features of the Mullins effect in filled elastomers revealed by stretching measurements in various geometries. Soft Matter, 2017, 13, 1966-1977.	2.7	45
39	Volume transition of nematic gels in nematogenic solvents. Journal of Chemical Physics, 2003, 118, 2903.	3.0	44
40	Shape and chirality transitions in off-axis twist nematic elastomer ribbons. Physical Review E, 2013, 88, 022502.	2.1	44
41	Optically driven diffusion and mechanical softening in azobenzene polymer layers. Applied Physics Letters, 2002, 81, 4715-4717.	3.3	43
42	Simultaneous Swelling and Stress Relaxation Behavior of Uniaxially Stretched Polymer Gels. Polymer Journal, 1993, 25, 929-937.	2.7	42
43	Elastic Properties of Well-Defined, High-Density Poly(methyl methacrylate) Brushes Studied by Electromechanical Interferometry. Macromolecules, 2002, 35, 9459-9465.	4.8	40
44	Anisotropic mechanical properties of thermoplastic elastomersin situ reinforced with thermotropic liquid-crystalline polymer fibers revealed by biaxial deformations. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 135-144.	2.1	40
45	Strain energy density function of a near-ideal polymer network estimated by biaxial deformation of Tetra-PEG gel. Soft Matter, 2012, 8, 8217.	2.7	40
46	Hypercrosslinked Polymer Gels as a Synthetic Hybridization Platform for Designing Versatile Molecular Separators. Journal of the American Chemical Society, 2022, 144, 6861-6870.	13.7	40
47	Large electromechanical effect of isotropic-genesis polydomain nematic elastomers. Soft Matter, 2011, 7, 10585.	2.7	39
48	Crack-tip shape in the crack-growth rate transition of filled elastomers. Polymer, 2017, 108, 230-241.	3.8	39
49	Spatiotemporal Control of Supramolecular Polymerization and Gelation of Metalâ€"Organic Polyhedra. Journal of the American Chemical Society, 2021, 143, 3562-3570.	13.7	39
50	Viscoelastic Relaxation of Guest Linear Poly(dimethylsiloxane) in End-Linked Poly(dimethylsiloxane) Networks. Macromolecules, 2001, 34, 4513-4518.	4.8	38
51	Anomaly in Stretching-Induced Swelling of Slide-Ring Gels with Movable Cross-Links. Macromolecules, 2009, 42, 8485-8491.	4.8	38
52	Multiaxial deformations of end-linked poly(dimethylsiloxane) networks. III. Effect of entanglement density on strain-energy density function. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2780-2790.	2.1	37
53	Volume of polymer gels coupled to deformation. Soft Matter, 2012, 8, 8017.	2.7	36
54	Multiaxial deformations of end-linked poly(dimethylsiloxane) networks. 4. Further assessment of the slip-link model for chain-entanglement effect on rubber elasticity. Journal of Chemical Physics, 2003, 118, 5658-5664.	3.0	35

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55	Distinctive Characteristics of Internal Fracture in Tough Double Network Hydrogels Revealed by Various Modes of Stretching. Macromolecules, 2018, 51, 5245-5257.	4.8	35
56	Network Topologyâ€"Mechanical Properties Relationships of Model Elastomers. Polymer Journal, 2008, 40, 669-678.	2.7	34
57	The structure and properties of natural sheep casing and artificial films prepared from natural collagen with various crosslinking treatments. International Journal of Biological Macromolecules, 2019, 135, 959-968.	7.5	34
58	Rheological aspects of colloidal gels in thermoresponsive microgel suspensions: formation, structure, and linear and nonlinear viscoelasticity. Current Opinion in Colloid and Interface Science, 2019, 43, 113-124.	7.4	34
59	Nonâ€Thermoresponsive Decananoâ€sized Domains in Thermoresponsive Hydrogel Microspheres Revealed by Temperatureâ€Controlled Highâ€Speed Atomic Force Microscopy. Angewandte Chemie - International Edition, 2019, 58, 8809-8813.	13.8	33
60	Understanding the multiscale self-assembly of metalâ€"organic polyhedra towards functionally graded porous gels. Chemical Science, 2019, 10, 10833-10842.	7.4	33
61	Anisotropic Swelling and Phase Behavior of Monodomain Nematic Networks in Nematogenic Solvents. Macromolecules, 2005, 38, 5721-5728.	4.8	31
62	Rheological properties of suspensions of thermo-responsive poly(N-isopropylacrylamide) microgels undergoing volume phase transition. Polymer Journal, 2016, 48, 1079-1086.	2.7	31
63	Control of seed formation allows two distinct self-sorting patterns of supramolecular nanofibers. Nature Communications, 2020, 11, 4100.	12.8	31
64	Induced anisotropy by Mullins effect in filled elastomers subjected to stretching with various geometries. Polymer, 2017, 126, 29-39.	3.8	30
65	Low-temperature behavior of deswollen poly(dimethylsiloxane) networks. Polymer, 2000, 41, 3273-3278.	3.8	28
66	A simple feature of yielding behavior of highly dense suspensions of soft micro-hydrogel particles. Soft Matter, 2014, 10, 9486-9495.	2.7	28
67	Slow dynamics of shape recovery of disordered nematic elastomers. Physical Review E, 2006, 74, 041709.	2.1	27
68	Mechanical properties of tetra-PEG gels with supercoiled network structure. Journal of Chemical Physics, 2014, 140, 074902.	3.0	27
69	Thermal response of cholesteric liquid crystal elastomers. Physical Review E, 2015, 92, 022501.	2.1	27
70	Comparison of model prediction with experiment for concentration-dependent modulus of poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.6	26
71	Phototriggered Spatially Controlled Out-of-Equilibrium Patterns of Peptide Nanofibers in a Self-Sorting Double Network Hydrogel. Journal of the American Chemical Society, 2021, 143, 19532-19541.	13.7	26
72	Thermotropic liquid-crystalline copolyester/thermoplastic elastomerin situ composites. I. Rheology, morphology, and mechanical properties of extruded strands. Journal of Applied Polymer Science, 2003, 89, 2676-2685.	2.6	25

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73	Volume Transition of Liquid Crystalline Gels in Isotropic Solvents. Macromolecules, 2003, 36, 6229-6234.	4.8	25
74	Influence of Structural Characteristics on Stretching-Driven Swelling of Polyrotaxane Gels with Movable Cross Links. Macromolecules, 2012, 45, 6733-6740.	4.8	25
75	Critical behavior of the intrinsic viscosity of poly(vinylalcohol) solutions near the gelation point. Journal of Chemical Physics, 1990, 93, 7310-7313.	3.0	24
76	Nonuniform and Uniform Deformations of Stretched Nematic Elastomers. Macromolecules, 2013, 46, 5223-5231.	4.8	24
77	Electrical Actuation of Cholesteric Liquid Crystal Gels. ACS Macro Letters, 2014, 3, 813-818.	4.8	24
78	A Multiaxial Theory of Double Network Hydrogels. Macromolecules, 2019, 52, 5937-5947.	4.8	24
79	Multiscale structural control of linked metalâ€“organic polyhedra gel by aging-induced linkage-reorganization. Chemical Science, 2021, 12, 12556-12563.	7.4	24
80	Strain energy function of swollen polybutadiene elastomers studied by general biaxial strain testing. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 721-728.	2.1	23
81	Strain-Rate-Dependent Poissonâ€™s Ratio and Stress of Polymer Gels in Solvents Revealed by Ultraslow Stretching. Macromolecules, 2011, 44, 3000-3006.	4.8	23
82	Beads-on-String-Shaped Poly(azomethine) Applicable for Solution Processing of Bilayer Devices Using a Same Solvent. ACS Macro Letters, 2018, 7, 641-645.	4.8	23
83	Probing the in-plane liquid-like behavior of liquid crystal elastomers. Science Advances, 2021, 7, .	10.3	23
84	SAXS study on poly(dimethylsiloxane) networks with controlled distributions of chain lengths between crosslinks. Polymer, 1998, 39, 3827-3833.	3.8	22
85	Markedly compressible behaviors of gellan hydrogels in a constrained geometry at ultraslow strain rates. Polymer, 2008, 49, 3295-3300.	3.8	21
86	Highly Transparent and Tough Filler Composite Elastomer Inspired by the Cornea. , 2020, 2, 325-330.		21
87	New aspects of nonlinear elasticity of polymer gels and elastomers revealed by stretching experiments in various geometries. Polymer International, 2017, 66, 195-206.	3.1	20
88	Elastic and Flow Properties of Densely Packed Binary Microgel Mixtures with Size and Stiffness Disparities. Macromolecules, 2018, 51, 9901-9914.	4.8	20
89	Composite Elastomer Exhibiting a Stress-Dependent Color Change and High Toughness Prepared by Self-Assembly of Silica Particles in a Polymer Network. ACS Applied Polymer Materials, 2020, 2, 4078-4089.	4.4	20
90	Influence of cross-linking density on volume phase transition of liquid crystalline gels in a nematogenic solvent. Journal of Chemical Physics, 2003, 118, 9854-9860.	3.0	19

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91	Role of network nematicity in swelling and phase equilibria of polymer networks in nematic solvents. Polymer, 2004, 45, 5127-5135.	3.8	19
92	Switching shapes of nematic elastomers with various director configurations. Reactive and Functional Polymers, 2013, 73, 885-890.	4.1	19
93	Applicability of a particularly simple model to nonlinear elasticity of slide-ring gels with movable cross-links as revealed by unequal biaxial deformation. Journal of Chemical Physics, 2014, 141, 134906.	3.0	19
94	Strain-Driven Swelling and Accompanying Stress Reduction in Polymer Gels under Biaxial Stretching. Macromolecules, 2015, 48, 3622-3628.	4.8	19
95	Memory and Development of Textures of Polydomain Nematic Elastomers. Macromolecular Chemistry and Physics, 2012, 213, 1907-1912.	2.2	18
96	GPC Analysis of Polymer Network Formation: 1. Bifunctional Siloxane Monomer/Crosslinker System. Bulletin of the Chemical Society of Japan, 1996, 69, 565-574.	3.2	17
97	Multiaxial Deformations of End-linked Poly(dimethylsiloxane) Networks 5. Revisit to Mooney-Rivlin Approach to Strain Energy Density Function. Nihon Reoroji Gakkaishi, 2003, 31, 213-217.	1.0	17
98	Nonlinear stress relaxation of carbon blackâ€filled rubber vulcanizates under various types of deformation. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1380-1387.	2.1	17
99	Concentration dependence of the dynamics of microgel suspensions investigated by dynamic light scattering. Soft Matter, 2019, 15, 5390-5399.	2.7	17
100	A Coordinative Solubilizer Method to Fabricate Soft Porous Materials from Insoluble Metalâ€"Organic Polyhedra. Angewandte Chemie, 2019, 131, 6413-6416.	2.0	17
101	Damage cross-effect and anisotropy in tough double network hydrogels revealed by biaxial stretching. Soft Matter, 2019, 15, 3719-3732.	2.7	17
102	Crack-Tip Strain Field in Supershear Crack of Elastomers. ACS Macro Letters, 2020, 9, 762-768.	4.8	17
103	Critical behavior of the specific viscosity of poly(vinyl alcohol) solutions near the gelation threshold. Chemical Physics Letters, 1990, 174, 259-262.	2.6	16
104	Stress-strain behavior of segmented polyurethaneureas under pure shear deformation. Rheologica Acta, 1996, 35, 288-295.	2.4	16
105	Swelling and Shrinking Dynamics of Nematic Elastomers Having Global Director Orientation. Macromolecules, 2006, 39, 8511-8516.	4.8	16
106	Pure shear deformation of physical and chemical gels of poly(vinyl alcohol). Polymer, 2006, 47, 6868-6873.	3.8	16
107	Viscoelasticity of dense suspensions of thermosensitive microgel mixtures undergoing colloidal gelation. Soft Matter, 2018, 14, 1596-1607.	2.7	16
108	Osmotic Poissonâ€™s Ratio and Equilibrium Stress of Poly(acrylamide) Gels. Polymer Journal, 1996, 28, 1012-1013.	2.7	15

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109	Swelling behaviour of poly(butadiene) gels in liquid crystal solvents. Liquid Crystals, 2000, 27, 795-800.	2.2	15
110	Periodic Surface Undulation in Cholesteric Liquid Crystal Elastomers. Macromolecules, 2016, 49, 9561-9567.	4.8	15
111	Effect of stretching angle on the stress plateau behavior of main-chain liquid crystal elastomers. Soft Matter, 2021, 17, 3128-3136.	2.7	15
112	Theoretical studies on the stress relaxation of polymer gels under uniaxial elongation. Polymer Gels and Networks, 1994, 2, 59-64.	0.6	14
113	Thermotropic liquid-crystalline copolyester (Rodrun LC3000)/thermoplastic elastomer (SEBS)in situ composites: II. Mechanical properties and morphology of monofilaments in comparison with extruded strands. Journal of Applied Polymer Science, 2003, 90, 518-524.	2.6	14
114	Multiaxial Stress Relaxation of Dual-Cross-Link Poly(vinyl alcohol) Hydrogels. ACS Macro Letters, 2020, 9, 1-6.	4.8	14
115	GPR91 antagonist and TGF-Î² inhibitor suppressed collagen production of high glucose and succinate induced HSC activation. Biochemical and Biophysical Research Communications, 2020, 530, 362-366.	2.1	14
116	Phase behavior of a nematic liquid crystal in polybutadiene networks. Chemical Physics Letters, 1998, 287, 342-346.	2.6	13
117	Probing the cross-effect of strains in non-linear elasticity of nearly regular polymer networks by pure shear deformation. Journal of Chemical Physics, 2015, 142, 174908.	3.0	13
118	Preparation of Copolymeric Gels Composed of Polydimethylsiloxane and Polyethylene Oxide Network Chains and Their Specific Characteristics. Bulletin of the Chemical Society of Japan, 1998, 71, 961-971.	3.2	12
119	Investigations of ferroelectric-to-paraelectric phase transition of vinylidenefluoride trifluoroethylene copolymer thin films by electromechanical interferometry. Journal of Applied Physics, 1999, 86, 6367-6375.	2.5	12
120	Small angle x-ray scattering study on role of trapped entanglements in structure of swollen end-linked poly(dimethylsiloxane) networks. Journal of Chemical Physics, 2000, 112, 9105-9111.	3.0	12
121	Supramolecular organogel formation behaviors of beads-on-string shaped poly(azomethine)s dependent on POSS structures in the main chains. Polymer Chemistry, 2021, 12, 3169-3176.	3.9	12
122	Critical Behavior of Modulus of Poly(vinylalcohol) Gels near the Gelation Point. Journal of the Physical Society of Japan, 1990, 59, 2598-2599.	1.6	11
123	GPC analysis of polymer network formation. Polymer Bulletin, 1997, 38, 461-468.	3.3	11
124	Kinetics of Volume Phase Transition in Nematic Gels Coupled with Nematicâˆ'Isotropic Phase Transition. Macromolecules, 2004, 37, 6161-6169.	4.8	11
125	Static and Dynamic Swelling Properties of Poly(N-isopropylacrylamide) Gels in the Swollen State. Polymer Journal, 2005, 37, 694-699.	2.7	11
126	Kinetics of shrinking of polymer gels induced by ultracentrifugal fields. Journal of Chemical Physics, 2005, 122, 024906.	3.0	11

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127	Pronounced effects of cross-linker geometries on the orientation coupling between dangling mesogens and network backbones in side-chain type liquid crystal elastomers. Polymer, 2015, 61, 29-35.	3.8	11
128	Universal relation between crack-growth dynamics and viscoelasticity in glass-rubber transition for filled elastomers. Polymer, 2019, 179, 121651.	3.8	11
129	Electrically driven director-rotation of swollen nematic elastomers as revealed by polarized Fourier transform infrared spectroscopy. Physical Review E, 2009, 79, 051702.	2.1	10
130	Nonlinear stress-strain behavior of elastomer foams investigated by various types of deformation. Polymer, 2016, 83, 190-198.	3.8	10
131	Peculiar extensibility of swollen statistical hydrogels with structural nanoheterogeneities. Polymer, 2017, 115, 28-36.	3.8	9
132	Anisotropic stress-softening effect on fast dynamic crack in filler-reinforced elastomers. Mechanics of Materials, 2021, 155, 103786.	3.2	9
133	Stress relaxation and creep of polymer gels in solvent under uniaxial and biaxial deformations. Rheologica Acta, 1994, 33, 89-98.	2.4	8
134	Steady flow properties of a mixed solvent through a poly(N-isopropylacrylamide) gel. Journal of Membrane Science, 2007, 305, 325-331.	8.2	8
135	Stimulusâ€"Responsive Nematic Gels. Macromolecular Symposia, 2010, 291-292, 89-94.	0.7	8
136	Thermal bending coupled with volume change in liquid crystal gels. Soft Matter, 2017, 13, 4341-4348.	2.7	8
137	Criteria for colloidal gelation of thermo-sensitive poly(N-isopropylacrylamide) based microgels. Journal of Colloid and Interface Science, 2020, 568, 165-175.	9.4	8
138	Nonlinear Elasticity of Ultrasoft Near-Critical Gels with Extremely Sparse Network Structures Revealed by Biaxial Stretching. Macromolecules, 2021, 54, 2353-2365.	4.8	8
139	Investigating Multiaxial Mullins Effect of Carbon-Black-Reinforced Elastomers Using Electrical Resistivity Measurements. ACS Applied Polymer Materials, 2022, 4, 1139-1149.	4.4	8
140	Control of Extrinsic Porosities in Linked Metalâ€"Organic Polyhedra Gels by Imparting Coordination-Driven Self-Assembly with Electrostatic Repulsion. ACS Applied Materials & Interfaces, 2022, 14, 23660-23668.	8.0	8
141	Time Dependent Poissonâ€™s Ratio of Polymer Gels in Solvent. Polymer Journal, 1994, 26, 225-227.	2.7	7
142	Biaxial Loading Effects on Strain Energy Release Rate and Crack-Tip Strain Field in Elastic Hydrogels. Macromolecules, 2021, 54, 4792-4801.	4.8	7
143	Equilibrium Swelling and Elastic Modulus of End-linked Poly(dimethylsiloxane) Networks in Theta Solvent. Nihon Reoroji Gakkaishi, 1997, 25, 195-196.	1.0	7
144	Formation process of end-linked networks by gel permeation chromatography. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 3689-3693.	1.7	6

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145	Thermal and i.r.-dichroic properties of side-chain type liquid-crystalline elastomers. Polymer, 1997, 38, 3229-3235.	3.8	6
146	Nonturbid Fast Temperature-Responsive Hydrogels with Homogeneous Three-Dimensional Networks by Two Types of Star Polymer Synthesis Methods. Macromolecules, 2021, 54, 5750-5764.	4.8	6
147	Mechanical Properties of Homogeneous Polymer Networks Prepared by Star Polymer Synthesis Methods. Macromolecules, 2021, 54, 10468-10476.	4.8	6
148	Controlled Sequential Assembly of Metalâ€"Organic Polyhedra into Colloidal Gels with High Chemical Complexity. Small Structures, 2022, 3, .	12.0	6
149	Structure and viscoelastic properties of segmented polyurethane blends. Journal of Applied Polymer Science, 1996, 59, 1563-1568.	2.6	5
150	Dynamic Swelling Properties of a Poly(N-isopropylacrylamide) Gel Measured by a Magnetic Force-Driven Rheometer. Polymer Journal, 2003, 35, 819-822.	2.7	5
151	Biaxial Tensile Behavior of Rubber Vulcanizates: I. Silica and Gum Stocks. Rubber Chemistry and Technology, 2004, 77, 611-623.	1.2	5
152	Compression of poly(vinyl alcohol) gels by ultracentrifugal forces. Polymer, 2005, 46, 12607-12611.	3.8	5
153	Preparation and Electrochemical Properties of Alginate Sulfate Electrolyte Membranes. Kobunshi Ronbunshu, 2008, 65, 295-300.	0.2	5
154	Proton Conductivity and Methanol Permeability of Cellulose Sulfate Membranes. Kobunshi Ronbunshu, 2009, 66, 130-135.	0.2	5
155	Accurate control of laser emission from cholesteric liquid crystal elastomers. Molecular Crystals and Liquid Crystals, 2017, 647, 216-222.	0.9	5
156	Pronounced effects of the densities of threaded rings on the strain-dependent Poisson's ratio of polyrotaxane gels with movable cross-links. Soft Matter, 2018, 14, 2808-2815.	2.7	5
157	Marked Sensitivity of Ultimate Elongation to Loading Axiality in Polyrotaxane Gels with Largely Slidable Cross Links. ACS Macro Letters, 2022, 11, 362-367.	4.8	5
158	Loading effect on swelling of nematic elastomers. Journal of Chemical Physics, 2007, 127, 144908.	3.0	4
159	Nonâ€Thermoresponsive Decananoâ€sized Domains in Thermoresponsive Hydrogel Microspheres Revealed by Temperatureâ€Controlled Highâ€Speed Atomic Force Microscopy. Angewandte Chemie, 2019, 131, 8901-8905.	2.0	4
160	Supersoft elasticity and slow dynamics of isotropic-genesis polydomain liquid crystal elastomers investigated by loading- and strain-rate-controlled tests. Physical Review E, 2020, 102, 012701.	2.1	4
161	Studies on Mechanical and Physicochemical Properties of Polymer Gels. Nihon Reoroji Gakkaishi, 2005, 33, 257-265.	1.0	4
162	Creep Behavior of Poly(N-isopropylacrylamide) Gels in the Collapsed State. Polymer Journal, 2006, 38, 970-975.	2.7	3

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163	Strain energy function of an uncross-linked butadiene rubber estimated from planar extension. Rheologica Acta, 2008, 47, 1015-1021.	2.4	3
164	Two-step yielding behavior of densely packed microgel mixtures with chemically dissimilar surfaces and largely different sizes. Soft Matter, 2020, 16, 7400-7413.	2.7	3
165	Dynamic glass transition dramatically accelerates crack propagation in rubberlike solids. Physical Review Materials, 2021, 5, .	2.4	3
166	Dynamic Viscoelasticity for Nylon6 During Isothermal Crystallization. Zairyo/Journal of the Society of Materials Science, Japan, 2005, 54, 56-59.	0.2	3
167	Physics of Liquid Crystals. , 2014, , 301-356.		2
168	Linear Dynamic Viscoelasticity of Dual Cross-Link Poly(Vinyl Alcohol) Hydrogel with Determined Borate Ion Concentration. Gels, 2021, 7, 71.	4.5	2
169	Dynamic Viscoelasticity of Poly(butylene terephthalate) during Isothermal Crystallization. Zairyo/Journal of the Society of Materials Science, Japan, 2008, 57, 1236-1239.	0.2	2
170	Dynamic Viscoelastic Properties of Crystalline Polymer Blends - Effect of the Viscosity of Domain Phase -. Nihon Reoroji Gakkaishi, 2004, 32, 215-219.	1.0	1
171	Electro-optical effect coupled with macroscopic deformation of swollen nematic elastomers. Proceedings of SPIE, 2007, , .	0.8	0
172	Dynamics of Stimulus Response of Swollen Nematic Elastomers. Progress of Theoretical Physics Supplement, 2008, 175, 103-109.	0.1	0
173	Temperature-Responsive Bending of Nematic Elastomers with Hybrid Molecular Alignment. Molecular Crystals and Liquid Crystals, 2011, 549, 106-112.	0.9	0
174	Heterogeneous Viscoelasticity under Uniaxial Elongation of Isoprene Rubber Vulcanizate Investigated by Nanorheological Atomic Force Microscope and Dynamic Mechanical Analysis. Nihon Reoroji Gakkaishi, 2020, 48, 85-90.	1.0	0
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