Taka-Aki Asoh

List of Publications by Year
in descending order

127 papers	2,035 citations	236612 25 h-index	329751 37 g-index
129 all docs	129 docs citations	129 times ranked	2093 citing authors

#	Article	IF	Citations
1	Fabrication of chitin monoliths with controllable morphology by thermally induced phase separation of chemically modified chitin. Carbohydrate Polymers, 2022, 275, 118680.	5.1	10
2	Actuation of Hydrogel Architectures Prepared by Electrophoretic Adhesion of Thermoresponsive Microgels. Langmuir, 2022, 38, 5183-5187.	1.6	5
3	Stimuli-responsive composite hydrogels with three-dimensional stability prepared using oxidized cellulose nanofibers and chitosan. Carbohydrate Polymers, 2022, 278, 118907.	5.1	18
4	Freshwater-durable and marine-degradable cellulose nanofiber reinforced starch film. Cellulose, 2022, 29, 1667-1678.	2.4	12
5	Travelling Wave Generation of Wrinkles on the Hydrogel Surfaces. Macromolecular Rapid Communications, 2022, 43, e2100848.	2.0	3
6	Thermoresponsive Hydrogels Reinforced with Supramolecular Cellulose Filler. Chemistry Letters, 2022, 51, 145-148.	0.7	2
7	Design of Injectable Poly(Î³-glutamic acid)/Chondroitin Sulfate Hydrogels with Mineralization Ability. ACS Applied Bio Materials, 2022, 5, 1508-1518.	2.3	5
8	Cellulose Nanofiber Composite Polymeric Materials with Reversible and Movable Cross-links and Evaluation of their Mechanical Properties. ACS Applied Polymer Materials, 2022, 4, 403-412.	2.0	13
9	Composite hydrogels of bacterial cellulose and an ethylene-vinyl alcohol copolymer with tunable morphological anisotropy and mechanical properties. Materials Advances, 2022, 3, 5138-5150.	2.6	3
10	Facile Preparation of Porous Low Density Polyethylene Monolith for Efficient Oil/Water Separation. Bulletin of the Chemical Society of Japan, 2022, 95, 978-980.	2.0	4
11	rinkles Working at the Surface and Interface of the Gels. Membrane, 2022, 47, 130-136.	0.0	0
12	Robust Dual-Biomimetic Titanium Dioxide-Cellulose Monolith for Enrichment of Phosphopeptides. ACS Biomaterials Science and Engineering, 2022, 8, 2676-2683.	2.6	9
13	Facile Synthesis of Templated Activated Carbon from Cellulose Nanofibers and MgO Nanoparticles via Integrated Carbonization-activation Method as an Eco-friendly Supercapacitor. Electrochemistry, 2022, 90, 077004-077004.	0.6	1
14	Porosityâ€Induced Improvement in KOH Activation of Chitin Nanofiberâ€Based Porous Carbon Leading to Ultrahigh Specific Capacitance. ChemSusChem, 2022, 15, .	3.6	8
15	Degradation and drug release profile of degradable core-corona type particles under acidic condition for cancer treatment. Reactive and Functional Polymers, 2022, 177, 105321.	2.0	1
16	Oligoether grafting on cellulose microfibers for dispersion in poly(propylene glycol) and fabrication of reinforced polyurethane composite. Composites Science and Technology, 2021, 202, 108595.	3.8	12
17	Ultralight Bacterial Cellulose/Polypropylene-<i>graft</i>-Maleic Anhydride Composite Cryogel for Efficient Oil/Water Separation. Chemistry Letters, 2021, 50, 14-16.	0.7	7
18	Hierarchically porous TiO₂ monolith prepared using a cellulose monolith as a template. Materials Chemistry Frontiers, 2021, 5, 3877-3885.	3.2	10

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19	Hydrophobic and hydrophilic modification of hierarchically porous monolithic polyimide derivatives as functional liquid absorbers. Materials Advances, 2021, 2, 3560-3568.	2.6	6
20	Fused sphere carbon monoliths with honeycomb-like porosity from cellulose nanofibers for oil and water separation. RSC Advances, 2021, 11, 2202-2212.	1.7	7
21	Fabrication of a reusable bifunctional biomimetic Ti⁴⁺-phosphorylated cellulose monolith with a coral-like structure for enrichment of phosphorylated and glycosylated peptides. Green Chemistry, 2021, 23, 7674-7684.	4.6	18
22	Injectable poly(Î³-glutamic acid)-based biodegradable hydrogels with tunable gelation rate and mechanical strength. Journal of Materials Chemistry B, 2021, 9, 3584-3594.	2.9	9
23	Formation of Single Double-Layered Coacervate of Poly(<i>N,N</i>-diethylacrylamide) in Water by a Laser Tweezer. Langmuir, 2021, 37, 2874-2883.	1.6	7
24	Moleculeâ€Responsive Polymer Monolith as a Smart Gate Driven by Hostâ€“Guest Interaction with Morphology Restoration. Macromolecular Chemistry and Physics, 2021, 222, 2000392.	1.1	0
25	Facile preparation of multi-stimuli-responsive degradable hydrogels for protein loading and release. Journal of Controlled Release, 2021, 331, 1-6.	4.8	22
26	Effects of Acid-Anhydride-Modified Cellulose Nanofiber on Poly(Lactic Acid) Composite Films. Nanomaterials, 2021, 11, 753.	1.9	18
27	Poly(vinyl alcohol)-based composite film with Ag-immobilized TEMPO-oxidized nano-tea cellulose for improving photocatalytic performance. Journal of Materials Science, 2021, 56, 12224-12237.	1.7	2
28	Optically Transparent and Toughened Poly(methyl methacrylate) Composite Films with Acylated Cellulose Nanofibers. ACS Omega, 2021, 6, 10752-10758.	1.6	12
29	Efficient bacterial capture by amino-functionalized cellulose monolith. Journal of Porous Materials, 2021, 28, 1411-1419.	1.3	3
30	Fabrication of Inorganic Oxide Fiber Using a Cigarette Filter as a Template. ACS Omega, 2021, 6, 15374-15381.	1.6	5
31	Mechano-Responsive Hydrogels Driven by the Dissociation of a Hostâ€“Guest Complex. ACS Macro Letters, 2021, 10, 971-977.	2.3	11
32	Surface modification of poly(phenylene sulfide) using photoinitiated chlorine dioxide radical as an oxidant. Polymer Journal, 2021, 53, 1231-1239.	1.3	5
33	Surface oxidation of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) via photo-activated chlorine dioxide radical. Polymer Degradation and Stability, 2021, 191, 109661.	2.7	3
34	Facile Preparation of Hierarchically Porous Monolith with Optical Activity Based on Helical Substituted Polyacetylene via One-Step Synthesis for Enantioselective Crystallization. ACS Applied Materials & Interfaces, 2021, 13, 48020-48029.	4.0	5
35	Synergistic effect of hemiacetal crosslinking and crystallinity on wet strength of cellulose nanofiber-reinforced starch films. Food Hydrocolloids, 2021, 120, 106956.	5.6	19
36	Facile synthesis of a three-dimensional hydroxyapatite monolith for protein adsorption. Journal of Materials Chemistry B, 2021, 9, 9711-9719.	2.9	7

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37	A cellulose monolith supported metal/organic framework as a hierarchical porous material for a flow reaction. Chemical Communications, 2020, 56, 411-414.	2.2	21
38	Cellulose modified by citric acid reinforced polypropylene resin as fillers. Carbohydrate Polymers, 2020, 230, 115662.	5.1	49
39	Particle packing into loose networks for tough and sticky composite gels. Scientific Reports, 2020, 10, 17173.	1.6	3
40	Controlled preparation of interconnected 3D hierarchical porous carbons from bacterial cellulose-based composite monoliths for supercapacitors. Nanoscale, 2020, 12, 15261-15274.	2.8	29
41	Geometry Control of Wrinkle Structures Aligned on Hydrogel Surfaces. Langmuir, 2020, 36, 1467-1473.	1.6	15
42	Fluorescent labeling and image analysis of cellulosic fillers in biocomposites: Effect of added compatibilizer and correlation with physical properties. Composites Science and Technology, 2020, 198, 108277.	3.8	5
43	Surface modification of polycarbonate using the light-activated chlorine dioxide radical. Applied Surface Science, 2020, 530, 147202.	3.1	12
44	Facile Fabrication of a Flow Reactor from Natural Wood. Chemistry Letters, 2020, 49, 1232-1235.	0.7	4
45	Reinforcement of Microbial Thermoplastics by Grafting to Polystyrene with Propargyl-Terminated Poly(3-hydroxybutyrate-<i>co</i>-3-hydroxyhexanoate). ACS Applied Polymer Materials, 2020, 2, 3948-3956.	2.0	3
46	Improvement of Interfacial Adhesion between Poly(3-hydroxybutyrate-<i>co</i>-3-hydroxyhexanoate) and Silica Particles. Industrial & Engineering Chemistry Research, 2020, 59, 13595-13602.	1.8	8
47	Dimensionally Stable and Mechanically Adaptive Polyelectrolyte Hydrogel. Macromolecular Rapid Communications, 2020, 41, e2000406.	2.0	8
48	Microanalysis of Single Poly(<i>N</i>-isopropylacrylamide) Droplet Produced by an Optical Tweezer in Water: Isotacticity Dependence of Growth and Chemical Structure of the Droplet. Journal of Physical Chemistry B, 2020, 124, 8454-8463.	1.2	10
49	Supramolecular Biocomposite Hydrogels Formed by Cellulose and Hostâ€"Guest Polymers Assisted by Calcium Ion Complexes. Biomacromolecules, 2020, 21, 3936-3944.	2.6	14
50	Size-Controlled Preparation of Gold Nanoparticles Deposited on Surface-Fibrillated Cellulose Obtained by Citric Acid Modification. ACS Omega, 2020, 5, 33206-33213.	1.6	9
51	Electrophoretic Adhesion of Conductive Hydrogels. Macromolecular Rapid Communications, 2020, 41, 2000169.	2.0	8
52	Anisotropic Conductive Hydrogels with High Water Content. ACS Applied Materials & Interfaces, 2020, 12, 27518-27525.	4.0	46
53	Cellulose nanofiber reinforced starch membrane with high mechanical strength and durability in water. Carbohydrate Polymers, 2020, 238, 116203.	5.1	47
54	Dual roles of cellulose monolith in the continuous-flow generation and support of gold nanoparticles for green catalyst. Carbohydrate Polymers, 2020, 247, 116723.	5.1	14

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55	Superfast flow reactor derived from the used cigarette filter for the degradation of pollutants in water. Journal of Hazardous Materials, 2020, 400, 123303.	6.5	15
56	Cellulose modified by citric acid reinforced Poly(lactic acid) resin as fillers. Polymer Degradation and Stability, 2020, 175, 109118.	2.7	22
57	Osmotic squat actuation in stiffness adjustable bacterial cellulose composite hydrogels. Journal of Materials Chemistry B, 2020, 8, 2400-2409.	2.9	8
58	Citric Acid-Modified Cellulose-Based Tough and Self-Healable Composite Formed by Two Kinds of Noncovalent Bonding. ACS Applied Polymer Materials, 2020, 2, 2274-2283.	2.0	27
59	Enhancement of interfacial adhesion in immiscible polymer blend by using a graft copolymer synthesized from propargyl-terminated poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). European Polymer Journal, 2020, 130, 109662.	2.6	19
60	Composite hydrogels reinforced by cellulose-based supramolecular filler. Polymer Degradation and Stability, 2020, 177, 109157.	2.7	22
61	Hierarchical silica monolith prepared using cellulose monolith as template. Polymer Degradation and Stability, 2020, 177, 109164.	2.7	7
62	Effect of starch retrogradation on wet strength and durability of cellulose nanofiber reinforced starch film. Polymer Degradation and Stability, 2020, 177, 109165.	2.7	19
63	Anhydride-cured epoxy resin reinforcing with citric acid-modified cellulose. Polymer Degradation and Stability, 2020, 178, 109213.	2.7	27
64	Photooxidation of the ABS resin surface for electroless metal plating. Polymer, 2020, 200, 122592.	1.8	15
65	Palladium nanoparticle loaded Î²-cyclodextrin monolith as a flow reactor for concentration enrichment and conversion of pollutants based on molecular recognition. Chemical Communications, 2020, 56, 14408-14411.	2.2	12
66	Surface Oxidation of Polymer 3D Porous Structures Using Chlorine Dioxide Radical Gas. ACS Applied Polymer Materials, 2020, 2, 4964-4972.	2.0	0
67	Surface modification of cellulose nanofiber using acid anhydride for poly(lactic acid) reinforcement. Materials Today Communications, 2019, 21, 100587.	0.9	27
68	Preparation of thermoresponsive nanoparticles exhibiting biomolecule recognition ability via atom transfer radical dispersion polymerization. Colloids and Surfaces B: Biointerfaces, 2019, 183, 110370.	2.5	10
69	Removal of Cationic or Anionic Dyes from Water Using Ion Exchange Cellulose Monoliths as Adsorbents. Bulletin of the Chemical Society of Japan, 2019, 92, 1453-1461.	2.0	36
70	Fabrication of thermoresponsive degradable hydrogel made by radical polymerization of 2-methylene-1,3-dioxepane: Unique thermal coacervation in hydrogel. Polymer, 2019, 179, 121633.	1.8	22
71	Fabrication of compressible polyolefin monoliths and their applications. Journal of the Taiwan Institute of Chemical Engineers, 2019, 105, 166-170.	2.7	4
72	Polymer Surface Oxidation by Light-Activated Chlorine Dioxide Radical for Metalâ€“Plastics Adhesion. ACS Applied Polymer Materials, 2019, 1, 3452-3458.	2.0	27

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73	Facile fabrication of an elastics maleic anhydride-grafted polypropylene monolith for oil/water separation. Materials Today Communications, 2019, 21, 100654.	0.9	4
74	Hydrogel Adhesion by Wrinkling Films. Macromolecular Rapid Communications, 2019, 40, e1900434.	2.0	13
75	Monolithic cellulose supported metal nanoparticles as green flow reactor with high catalytic efficiency. Carbohydrate Polymers, 2019, 214, 195-203.	5.1	26
76	Electrophoretic fabrication of an active and selective wrinkle surface on hydrogels. Chemical Communications, 2019, 55, 4170-4173.	2.2	14
77	Cationic functionalization of cellulose monoliths using a urea-choline based deep eutectic solvent and their applications. Polymer Degradation and Stability, 2019, 160, 126-135.	2.7	21
78	Cyclodextrin cross-linked polymer monolith for efficient removal of environmental pollutants by flow-through method. Polymer Degradation and Stability, 2019, 160, 136-141.	2.7	11
79	Rapid uniaxial actuation of layered bacterial cellulose/poly(N-isopropylacrylamide) composite hydrogel with high mechanical strength. RSC Advances, 2018, 8, 12608-12613.	1.7	9
80	Facile Fabrication of Flexible Bacterial Cellulose/Silica Composite Aerogel for Oil/Water Separation. Bulletin of the Chemical Society of Japan, 2018, 91, 1138-1140.	2.0	26
81	Fabrication of Hybrid Capsules via CaCO₃ Crystallization on Degradable Coacervate Droplets. Langmuir, 2018, 34, 3981-3986.	1.6	13
82	Preparation of thermoâ€•and redoxâ€•responsive branched polymers composed of threeâ€•armed oligo(ethylene glycol). Journal of Polymer Science Part A, 2018, 56, 2623-2629.	2.5	3
83	Dynamics of the Phase Separation in a Thermoresponsive Polymer: Accelerated Phase Separation of Stereocontrolled Poly(N,N-diethylacrylamide) in Water. Langmuir, 2018, 34, 13690-13696.	1.6	11
84	Sea cucumber mimicking bacterial cellulose composite hydrogel with ionic strength-sensitive mechanical adaptivity. Chemical Communications, 2018, 54, 11320-11323.	2.2	21
85	Facile Preparation of a Novel Transparent Composite Film Based on Bacterial Cellulose and Atactic Polypropylene. Bulletin of the Chemical Society of Japan, 2018, 91, 1537-1539.	2.0	4
86	Raman microspectroscopic study on an optically formed poly(N-isopropylacrylamide) rich microparticle: molecular weight dependence of a polymer concentration in the particle. , 2018, , .		1
87	Thermophoresis-assisted optical trapping of pyrene-labeled hydrophilic polymer chains. , 2018, , .		0
88	Demonstration of thermo-sensitive tetra-gel with implication for facile and versatile platform for a new class of smart gels. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1000-1009.	1.9	4
89	Rapid hydrogel repair utilizing microgel architectures. Materials Chemistry Frontiers, 2017, 1, 1594-1599.	3.2	4
90	Stimuli-Responsive Adhesion for 3D Fabrication of Hydrogels. , 2017, , 255-267.		0

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91	Facile preparation of degradable thermoresponsive polymers as biomaterials: Thermoresponsive polymers prepared by radical polymerization degrade to water-soluble oligomers. Polymer, 2017, 130, 68-73.	1.8	28
92	Interaction of bioactive compounds on capillary inner surfaces bearing a dense thermoresponsive polymer brush. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 900-912.	1.9	3
93	Hydrogel Adhesion with Wrinkle Formation by Spatial Control of Polymer Networks. Journal of Physical Chemistry B, 2016, 120, 5042-5046.	1.2	27
94	Rapid Phase Separation in Aqueous Solution of Temperatureâ€Sensitive Poly(<i>N</i>,<i>N</i>â€diethylacrylamide). Macromolecular Chemistry and Physics, 2016, 217, 2576-2583.	1.1	14
95	Effects of Syndiotacticity on the Dynamic and Static Phase Separation Properties of Poly(<i>N</i>-isopropylacrylamide) in Aqueous Solution. Journal of Physical Chemistry B, 2016, 120, 7724-7730.	1.2	16
96	Redox-responsive minimized fragmentation of three-armed oligo(ethylene glycol) gels for protein release. Colloids and Surfaces B: Biointerfaces, 2016, 146, 343-351.	2.5	6
97	Electrophoretic hydrogel adhesion for fabrication of three-dimensional materials. Polymer Journal, 2016, 48, 1095-1101.	1.3	15
98	Preparation of a thermoresponsive polymer grafted polystyrene monolithic capillary for the separation of bioactive compounds. Colloids and Surfaces B: Biointerfaces, 2016, 147, 408-415.	2.5	10
99	Macromol. Chem. Phys. 23/2016. Macromolecular Chemistry and Physics, 2016, 217, 2664-2664.	1.1	0
100	Releasing property from surface polyion complex gel. Journal of Applied Polymer Science, 2015, 132, .	1.3	0
101	Surface-Functionalized Biodegradable Nanoparticles Consisting of Amphiphilic Graft Polymers Prepared by Radical Copolymerization of 2-Methylene-1,3-Dioxepane and Macromonomers. Langmuir, 2015, 31, 6879-6885.	1.6	14
102	Adhesion of poly(vinyl alcohol) hydrogels by the electrophoretic manipulation of phenylboronic acid copolymers. Journal of Materials Chemistry B, 2015, 3, 6740-6745.	2.9	12
103	Fabrication of Hydrogel Constructs by Electrophoretic Adhesion of Hydrogels. Kobunshi Ronbunshu, 2014, 71, 400-407.	0.2	0
104	Transformable coreâ€"corona nanoparticles: Simultaneous change of core morphology and corona wettability in response to temperature. Colloids and Surfaces B: Biointerfaces, 2014, 123, 75-81.	2.5	5
105	Alternating-current electrophoretic adhesion of biodegradable hydrogel utilizing intermediate polymers. Colloids and Surfaces B: Biointerfaces, 2014, 123, 742-746.	2.5	10
106	Reversible Electrophoretic Adhesion of Hydrogels and Fabrication of Three-dimensional Materials. Nippon Gomu Kyokaishi, 2014, 87, 231-235.	0.0	0
107	Rapid self-healable poly(ethylene glycol) hydrogels formed by selective metalâ€"phosphate interactions. Physical Chemistry Chemical Physics, 2013, 15, 10628.	1.3	50
108	Fabrication of Selfâ€Healable Hydrogels through Solâ€"Gel Transition in Metalloâ€supramolecular Aqueous Solution by Aeration. Macromolecular Chemistry and Physics, 2013, 214, 2534-2539.	1.1	35

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109	Stabilization of electrophoretically adhered gel-interfaces to construct multi-layered hydrogels. RSC Advances, 2013, 3, 7947.	1.7	19
110	Thermoresponsive Nanospheres with a Regulated Diameter and Well-Defined Corona Layer. Langmuir, 2013, 29, 15770-15777.	1.6	12
111	Design of coreâ€"shell gel beads for timeâ€programmed protein release. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1345-1352.	2.1	9
112	Rapid fabrication of reconstructible hydrogels by electrophoretic microbead adhesion. Chemical Communications, 2012, 48, 10019.	2.2	36
113	Electrophoretic adhesion of biodegradable hydrogels through the intermediary of oppositely charged polyelectrolytes. Soft Matter, 2012, 8, 1923-1927.	1.2	36
114	Photo-switchable control of pH-responsive actuators via pH jump reaction. Soft Matter, 2012, 8, 2844.	1.2	116
115	Fabrication of Three-Dimensional Cell Constructs Using Temperature-Responsive Hydrogel. Tissue Engineering - Part A, 2010, 16, 2497-2504.	1.6	37
116	Fabrication of Surface-Modified Hydrogels with Polyion Complex for Controlled Release. Chemistry of Materials, 2010, 22, 2923-2929.	3.2	44
117	Electrophoretic adhesion of stimuli-responsive hydrogels. Chemical Communications, 2010, 46, 7793.	2.2	53
118	Novel polyion complex with interpenetrating polymer network of poly(acrylic acid) and partially protected poly(vinylamine) using N-vinylacetamide and N-vinylformamide. Polymer, 2009, 50, 3503-3507.	1.8	18
119	Hydrogel logic gates using gradient semi-IPNs. Chemical Communications, 2009, , 3548.	2.2	25
120	Fabrication of Temperatureâ€Responsive Bending Hydrogels with a Nanostructured Gradient. Advanced Materials, 2008, 20, 2080-2083.	11.1	167
121	Water-Driven Thermoresponsive Peptohelical Cushion. Macromolecules, 2006, 39, 2298-2305.	2.2	10
122	Rapid deswelling of semi-IPNs with nanosized tracts in response to pH and temperature. Journal of Controlled Release, 2006, 110, 387-394.	4.8	50
123	Rapid and Precise Release from Nano-Tracted Poly(N-isopropylacrylamide) Hydrogels Containing Linear Poly(acrylic acid). Macromolecular Bioscience, 2006, 6, 959-965.	2.1	26
124	Back Cover: Macromol. Biosci. 11/2006. Macromolecular Bioscience, 2006, 6, 968-968.	2.1	0
125	Ultrarapid Molecular Release from Poly(N-isopropylacrylamide) Hydrogels Perforated Using Silica Nanoparticle Networks. Macromolecular Chemistry and Physics, 2005, 206, 566-574.	1.1	40
126	Citric acid functionalized cellulose monolith for continuousâ€flow removal of cationic dye in water. Nano Select, 0, , .	1.9	0

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127	Facile Fabrication of Hierarchically Porous Boronic Acid Group-Functionalized Monoliths With Optical Activity for Recognizing Glucose With Different Conformation. Frontiers in Chemistry, 0, 10, .	1.8	1