## Taka-Aki Asoh

## List of Publications by Year in descending order

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

#	Article	IF	CITATIONS
1	Fabrication of Temperatureâ€Responsive Bending Hydrogels with a Nanostructured Gradient. Advanced Materials, 2008, 20, 2080-2083.	11.1	167
2	Photo-switchable control of pH-responsive actuators via pH jump reaction. Soft Matter, 2012, 8, 2844.	1.2	116
3	Electrophoretic adhesion of stimuli-responsive hydrogels. Chemical Communications, 2010, 46, 7793.	2.2	53
4	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
5	Rapid self-healable poly(ethylene glycol) hydrogels formed by selective metal–phosphate interactions. Physical Chemistry Chemical Physics, 2013, 15, 10628.	1.3	50
6	Cellulose modified by citric acid reinforced polypropylene resin as fillers. Carbohydrate Polymers, 2020, 230, 115662.	5.1	49
7	Cellulose nanofiber reinforced starch membrane with high mechanical strength and durability in water. Carbohydrate Polymers, 2020, 238, 116203.	5.1	47
8	Anisotropic Conductive Hydrogels with High Water Content. ACS Applied Materials & Samp; Interfaces, 2020, 12, 27518-27525.	4.0	46
9	Fabrication of Surface-Modified Hydrogels with Polyion Complex for Controlled Release. Chemistry of Materials, 2010, 22, 2923-2929.	3.2	44
10	Ultrarapid Molecular Release from Poly(N-isopropylacrylamide) Hydrogels Perforated Using Silica Nanoparticle Networks. Macromolecular Chemistry and Physics, 2005, 206, 566-574.	1.1	40
11	Fabrication of Three-Dimensional Cell Constructs Using Temperature-Responsive Hydrogel. Tissue Engineering - Part A, 2010, 16, 2497-2504.	1.6	37
12	Rapid fabrication of reconstructible hydrogels by electrophoretic microbead adhesion. Chemical Communications, 2012, 48, 10019.	2.2	36
13	Electrophoretic adhesion of biodegradable hydrogels through the intermediary of oppositely charged polyelectrolytes. Soft Matter, 2012, 8, 1923-1927.	1.2	36
14	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
15	Fabrication of Selfâ€Healable Hydrogels through Sol–Gel Transition in Metalloâ€supramolecular Aqueous Solution by Aeration. Macromolecular Chemistry and Physics, 2013, 214, 2534-2539.	1.1	35
16	Controlled preparation of interconnected 3D hierarchical porous carbons from bacterial cellulose-based composite monoliths for supercapacitors. Nanoscale, 2020, 12, 15261-15274.	2.8	29
17	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
18	Hydrogel Adhesion with Wrinkle Formation by Spatial Control of Polymer Networks. Journal of Physical Chemistry B, 2016, 120, 5042-5046.	1.2	27

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19	Surface modification of cellulose nanofiber using acid anhydride for poly(lactic acid) reinforcement. Materials Today Communications, 2019, 21, 100587.	0.9	27
20	Polymer Surface Oxidation by Light-Activated Chlorine Dioxide Radical for Metal–Plastics Adhesion. ACS Applied Polymer Materials, 2019, 1, 3452-3458.	2.0	27
21	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
22	Anhydride-cured epoxy resin reinforcing with citric acid-modified cellulose. Polymer Degradation and Stability, 2020, 178, 109213.	2.7	27
23	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
24	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
25	Monolithic cellulose supported metal nanoparticles as green flow reactor with high catalytic efficiency. Carbohydrate Polymers, 2019, 214, 195-203.	5.1	26
26	Hydrogel logic gates using gradient semi-IPNs. Chemical Communications, 2009, , 3548.	2.2	25
27	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
28	Cellulose modified by citric acid reinforced Poly(lactic acid) resin as fillers. Polymer Degradation and Stability, 2020, 175, 109118.	2.7	22
29	Composite hydrogels reinforced by cellulose-based supramolecular filler. Polymer Degradation and Stability, 2020, 177, 109157.	2.7	22
30	Facile preparation of multi-stimuli-responsive degradable hydrogels for protein loading and release. Journal of Controlled Release, 2021, 331, 1-6.	4.8	22
31	Sea cucumber mimicking bacterial cellulose composite hydrogel with ionic strength-sensitive mechanical adaptivity. Chemical Communications, 2018, 54, 11320-11323.	2.2	21
32	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
33	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
34	Stabilization of electrophoretically adhered gel-interfaces to construct multi-layered hydrogels. RSC Advances, 2013, 3, 7947.	1.7	19
35	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
36	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

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37	Synergistic effect of hemiacetal crosslinking and crystallinity on wet strength of cellulose nanofiber-reinforced starch films. Food Hydrocolloids, 2021, 120, 106956.	5.6	19
38	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
39	Fabrication of a reusable bifunctional biomimetic Ti <sup>4+</sup> -phosphorylated cellulose monolith with a coral-like structure for enrichment of phosphorylated and glycosylated peptides. Green Chemistry, 2021, 23, 7674-7684.	4.6	18
40	Effects of Acid-Anhydride-Modified Cellulose Nanofiber on Poly(Lactic Acid) Composite Films. Nanomaterials, 2021, 11, 753.	1.9	18
41	Stimuli-responsive composite hydrogels with three-dimensional stability prepared using oxidized cellulose nanofibers and chitosan. Carbohydrate Polymers, 2022, 278, 118907.	5.1	18
42	Effects of Syndiotacticity on the Dynamic and Static Phase Separation Properties of $Poly(\langle i\rangle N\langle i\rangle -isopropylacrylamide)$ in Aqueous Solution. Journal of Physical Chemistry B, 2016, 120, 7724-7730.	1.2	16
43	Electrophoretic hydrogel adhesion for fabrication of three-dimensional materials. Polymer Journal, 2016, 48, 1095-1101.	1.3	15
44	Geometry Control of Wrinkle Structures Aligned on Hydrogel Surfaces. Langmuir, 2020, 36, 1467-1473.	1.6	15
45	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
46	Photooxidation of the ABS resin surface for electroless metal plating. Polymer, 2020, 200, 122592.	1.8	15
47	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
48	Rapid Phase Separation in Aqueous Solution of Temperatureâ€Sensitive Poly( <i>N</i> , <i>N</i> ,6i+Adiethylacrylamide). Macromolecular Chemistry and Physics, 2016, 217, 2576-2583.	1.1	14
49	Electrophoretic fabrication of an active and selective wrinkle surface on hydrogels. Chemical Communications, 2019, 55, 4170-4173.	2.2	14
50	Supramolecular Biocomposite Hydrogels Formed by Cellulose and Host–Guest Polymers Assisted by Calcium Ion Complexes. Biomacromolecules, 2020, 21, 3936-3944.	2.6	14
51	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
52	Fabrication of Hybrid Capsules via CaCO <sub>3</sub> Crystallization on Degradable Coacervate Droplets. Langmuir, 2018, 34, 3981-3986.	1.6	13
53	Hydrogel Adhesion by Wrinkling Films. Macromolecular Rapid Communications, 2019, 40, e1900434.	2.0	13
54	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

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55	Thermoresponsive Nanospheres with a Regulated Diameter and Well-Defined Corona Layer. Langmuir, 2013, 29, 15770-15777.	1.6	12
56	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
57	Surface modification of polycarbonate using the light-activated chlorine dioxide radical. Applied Surface Science, 2020, 530, 147202.	3.1	12
58	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
59	Optically Transparent and Toughened Poly(methyl methacrylate) Composite Films with Acylated Cellulose Nanofibers. ACS Omega, 2021, 6, 10752-10758.	1.6	12
60	Palladium nanoparticle loaded $\hat{l}^2$ -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
61	Freshwater-durable and marine-degradable cellulose nanofiber reinforced starch film. Cellulose, 2022, 29, 1667-1678.	2.4	12
62	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
63	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
64	Mechano-Responsive Hydrogels Driven by the Dissociation of a Host–Guest Complex. ACS Macro Letters, 2021, 10, 971-977.	2.3	11
65	Water-Driven Thermoresponsive Peptohelical Cushion. Macromolecules, 2006, 39, 2298-2305.	2.2	10
66	Alternating-current electrophoretic adhesion of biodegradable hydrogel utilizing intermediate polymers. Colloids and Surfaces B: Biointerfaces, 2014, 123, 742-746.	2.5	10
67	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
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	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
70	Hierarchically porous TiO <sub>2</sub> monolith prepared using a cellulose monolith as a template. Materials Chemistry Frontiers, 2021, 5, 3877-3885.	3.2	10
71	Fabrication of chitin monoliths with controllable morphology by thermally induced phase separation of chemically modified chitin. Carbohydrate Polymers, 2022, 275, 118680.	5.1	10
72	Design of core–shell gel beads for timeâ€programmed protein release. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1345-1352.	2.1	9

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73	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
74	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
75	Injectable poly( $\hat{I}^3$ -glutamic acid)-based biodegradable hydrogels with tunable gelation rate and mechanical strength. Journal of Materials Chemistry B, 2021, 9, 3584-3594.	2.9	9
76	Robust Dual-Biomimetic Titanium Dioxide-Cellulose Monolith for Enrichment of Phosphopeptides. ACS Biomaterials Science and Engineering, 2022, 8, 2676-2683.	2.6	9
77	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
78	Dimensionally Stable and Mechanically Adaptive Polyelectrolyte Hydrogel. Macromolecular Rapid Communications, 2020, 41, e2000406.	2.0	8
79	Electrophoretic Adhesion of Conductive Hydrogels. Macromolecular Rapid Communications, 2020, 41, 2000169.	2.0	8
80	Osmotic squat actuation in stiffness adjustable bacterial cellulose composite hydrogels. Journal of Materials Chemistry B, 2020, 8, 2400-2409.	2.9	8
81	Porosityâ€Induced Improvement in KOH Activation of Chitin Nanofiberâ€Based Porous Carbon Leading to Ultrahigh Specific Capacitance. ChemSusChem, 2022, 15, .	3.6	8
82	Hierarchical silica monolith prepared using cellulose monolith as template. Polymer Degradation and Stability, 2020, 177, 109164.	2.7	7
83	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
84	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
85	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
86	Facile synthesis of a three-dimensional hydroxyapatite monolith for protein adsorption. Journal of Materials Chemistry B, 2021, 9, 9711-9719.	2.9	7
87	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
88	Hydrophobic and hydrophilic modification of hierarchically porous monolithic polyimide derivatives as functional liquid absorbers. Materials Advances, 2021, 2, 3560-3568.	2.6	6
89	Transformable core–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
90	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

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91	Fabrication of Inorganic Oxide Fiber Using a Cigarette Filter as a Template. ACS Omega, 2021, 6, 15374-15381.	1.6	5
92	Surface modification of poly(phenylene sulfide) using photoinitiated chlorine dioxide radical as an oxidant. Polymer Journal, 2021, 53, 1231-1239.	1.3	5
93	Facile Preparation of Hierarchically Porous Monolith with Optical Activity Based on Helical Substituted Polyacetylene via One-Step Synthesis for Enantioselective Crystallization. ACS Applied Materials & December 1988 (2011), 13, 48020-48029.	4.0	5
94	Actuation of Hydrogel Architectures Prepared by Electrophoretic Adhesion of Thermoresponsive Microgels. Langmuir, 2022, 38, 5183-5187.	1.6	5
95	Design of Injectable Poly( $\hat{l}^3$ -glutamic acid)/Chondroitin Sulfate Hydrogels with Mineralization Ability. ACS Applied Bio Materials, 2022, 5, 1508-1518.	2.3	5
96	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
97	Rapid hydrogel repair utilizing microgel architectures. Materials Chemistry Frontiers, 2017, 1, 1594-1599.	3.2	4
98	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
99	Fabrication of compressible polyolefin monoliths and their applications. Journal of the Taiwan Institute of Chemical Engineers, 2019, 105, 166-170.	2.7	4
100	Facile fabrication of an elastics maleic anhydride-grafted polypropylene monolith for oil/water separation. Materials Today Communications, 2019, 21, 100654.	0.9	4
101	Facile Fabrication of a Flow Reactor from Natural Wood. Chemistry Letters, 2020, 49, 1232-1235.	0.7	4
102	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
103	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
104	Preparation of thermo―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
105	Particle packing into loose networks for tough and sticky composite gels. Scientific Reports, 2020, 10, 17173.	1.6	3
106	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
107	Efficient bacterial capture by amino-functionalized cellulose monolith. Journal of Porous Materials, 2021, 28, 1411-1419.	1.3	3
108	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

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109	Travelling Wave Generation of Wrinkles on the Hydrogel Surfaces. Macromolecular Rapid Communications, 2022, 43, e2100848.	2.0	3
110	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
111	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
112	Thermoresponsive Hydrogels Reinforced with Supramolecular Cellulose Filler. Chemistry Letters, 2022, 51, 145-148.	0.7	2
113	Raman microspectroscopic study on an optically formed poly(N-isopropylacrylamide) rich microparticle: molecular weight dependence of a polymer concentration in the particle. , 2018, , .		1
114	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
115	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
116	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
117	Back Cover: Macromol. Biosci. 11/2006. Macromolecular Bioscience, 2006, 6, 968-968.	2.1	0
118	Fabrication of Hydrogel Constructs by Electrophoretic Adhesion of Hydrogels. Kobunshi Ronbunshu, 2014, 71, 400-407.	0.2	0
119	Reversible Electrophoretic Adhesion of Hydrogels and Fabrication of Three-dimensional Materials. Nippon Gomu Kyokaishi, 2014, 87, 231-235.	0.0	0
120	Releasing property from surface polyion complex gel. Journal of Applied Polymer Science, 2015, 132, .	1.3	0
121	Macromol. Chem. Phys. 23/2016. Macromolecular Chemistry and Physics, 2016, 217, 2664-2664.	1.1	0
122	Stimuli-Responsive Adhesion for 3D Fabrication of Hydrogels. , 2017, , 255-267.		0
123	Moleculeâ€Responsive Polymer Monolith as a Smart Gate Driven by Host–Guest Interaction with Morphology Restoration. Macromolecular Chemistry and Physics, 2021, 222, 2000392.	1.1	0
124	Citric acid functionalized cellulose monolith for continuousâ€flow removal of cationic dye in water. Nano Select, 0, , .	1.9	0
125	Thermophoresis-assisted optical trapping of pyrene-labeled hydrophilic polymer chains. , 2018, , .		0
126	Surface Oxidation of Polymer 3D Porous Structures Using Chlorine Dioxide Radical Gas. ACS Applied Polymer Materials, 2020, 2, 4964-4972.	2.0	0

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127	rinkles Working at the Surface and Interface of the Gels. Membrane, 2022, 47, 130-136.	0.0	0