Toshiki Sawada

List of Publications by Year
in descending order

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85 papers	1,572 citations	279487 23 h-index	360668 35 g-index
88 all docs	88 docs citations	88 times ranked	1396 citing authors

#	Article	IF	Citations
1	Phosphorylase-catalyzed synthesis and self-assembled structures of cellulose oligomers in the presence of protein denaturants. Polymer Journal, 2022, 54, 561-569.	1.3	3
2	In-Paper Self-Assembly of Cellulose Oligomers for the Preparation of All-Cellulose Functional Paper. ACS Sustainable Chemistry and Engineering, 2021, 9, 5684-5692.	3.2	15
3	Structured liquids with interfacial robust assemblies of a nonionic crystalline surfactant. Journal of Colloid and Interface Science, 2021, 590, 487-494.	5.0	13
4	Enzyme-catalyzed propagation of cello-oligosaccharide chains from bifunctional oligomeric primers for the preparation of block co-oligomers and their crystalline assemblies. Polymer Journal, 2021, 53, 1133-1143.	1.3	9
5	Design of peptides with strong binding affinity to poly(methyl methacrylate) resin by use of molecular simulation-based materials informatics. Polymer Journal, 2021, 53, 1439-1449.	1.3	7
6	Control of parallel versus antiparallel molecular arrangements in crystalline assemblies of alkyl Î²-cellulosides. Journal of Colloid and Interface Science, 2021, 601, 505-516.	5.0	5
7	Identification of Water-Soluble Polymers through Discrimination of Multiple Optical Signals from a Single Peptide Sensor. ACS Applied Materials & Interfaces, 2021, 13, 55978-55987.	4.0	7
8	Filamentous virus-based membrane prepared by chemical cross-linking at liquid/liquid interface for a tailored molecular separation system. Journal of Membrane Science, 2020, 595, 117595.	4.1	1
9	Affinity Control of Monosaccharide Conjugated Peptides against Lectins with a Set of Amino Acid Substitutions on Î±-Helical Structures. Bioconjugate Chemistry, 2020, 31, 2533-2540.	1.8	2
10	Affinity-based thermoresponsive fluorescence switching of proteins conjugated with a polymer-binding peptide. Soft Matter, 2020, 16, 10096-10100.	1.2	2
11	Preparation of Biocomposite Soft Nanoparticles Composed of Poly(Propylene Oxide) and the Polymer-Binding Peptides. Processes, 2020, 8, 859.	1.3	1
12	pHâ€Triggered Selfâ€Assembly of Cellulose Oligomers with Gelatin into a Doubleâ€Network Hydrogel. Macromolecular Bioscience, 2020, 20, e2000187.	2.1	15
13	Controlled assembly of filamentous viruses into hierarchical nano- to microstructures at liquid/liquid interfaces. RSC Advances, 2020, 10, 26313-26318.	1.7	3
14	Discovery of Surfactant-Like Peptides from a Phage-Displayed Peptide Library. Viruses, 2020, 12, 1442.	1.5	5
15	Aqueous Suspensions of Cellulose Oligomer Nanoribbons for Growth and Natural Filtration-Based Separation of Cancer Spheroids. Langmuir, 2020, 36, 13890-13898.	1.6	9
16	Preparation and Dynamic Behavior of Protein-Polymer Complexes Formed with Polymer-Binding Peptides. Bulletin of the Chemical Society of Japan, 2020, 93, 790-793.	2.0	6
17	Neutralization-Induced Self-Assembly of Cellulose Oligomers into Antibiofouling Crystalline Nanoribbon Networks in Complex Mixtures. ACS Macro Letters, 2020, 9, 301-305.	2.3	17
18	Thermally conductive molecular assembly composed of an oligo(ethylene glycol)-modified filamentous virus with improved solubility and resistance to organic solvents. Polymer Journal, 2020, 52, 803-811.	1.3	4

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19	Confined Reduced Graphene Oxides as a Platform for DNA Sensing in Solutions Crowded with Biomolecules. ACS Applied Bio Materials, 2020, 3, 3210-3216.	2.3	8
20	Development of Surface Modification Methods Based on Specific Affinities of Polymerâ€“binding Peptides. Membrane, 2020, 45, 100-107.	0.0	0
21	Biocatalytic oligomerization-induced self-assembly of crystalline cellulose oligomers into nanoribbon networks assisted by organic solvents. Beilstein Journal of Nanotechnology, 2019, 10, 1778-1788.	1.5	14
22	Mechanically robust crystalline monolayer assemblies of oligosaccharide-based amphiphiles on water surfaces. Chemical Communications, 2019, 55, 11346-11349.	2.2	7
23	Temperature-Directed Assembly of Crystalline Cellulose Oligomers into Kinetically Trapped Structures during Biocatalytic Synthesis. Langmuir, 2019, 35, 7026-7034.	1.6	19
24	Templated Synthesis of Gold Nanoparticles on Surface-Aminated 2D Cellulose Assemblies. Bulletin of the Chemical Society of Japan, 2019, 92, 982-988.	2.0	25
25	Affinity-Based Functionalization of Biomedically Utilized Micelles Composed of Triblock Copolymers through Polymer-Binding Peptides. ACS Biomaterials Science and Engineering, 2019, 5, 5714-5720.	2.6	4
26	Assembly of reduced graphene oxides into a three-dimensional porous structure <i>via</i> confinement within robust cellulose oligomer networks. RSC Advances, 2019, 9, 38848-38854.	1.7	7
27	Filamentous Virus-based Assembly: Their Oriented Structures and Thermal Diffusivity. Scientific Reports, 2018, 8, 5412.	1.6	10
28	Filamentous Viruses as Building Blocks for Hierarchical Self-Assembly toward Functional Soft Materials. Bulletin of the Chemical Society of Japan, 2018, 91, 455-466.	2.0	50
29	Nanoribbon network formation of enzymatically synthesized cellulose oligomers through dispersion stabilization of precursor particles. Polymer Journal, 2018, 50, 799-804.	1.3	14
30	Enzyme-Catalyzed Bottom-Up Synthesis of Mechanically and Physicochemically Stable Cellulose Hydrogels for Spatial Immobilization of Functional Colloidal Particles. Biomacromolecules, 2018, 19, 1269-1275.	2.6	32
31	High Thermal Diffusivity in Thermally Treated Filamentous Virus-Based Assemblies with a Smectic Liquid Crystalline Orientation. Viruses, 2018, 10, 608.	1.5	4
32	Macromolecular crowding for materials-directed controlled self-assembly. Journal of Materials Chemistry B, 2018, 6, 6344-6359.	2.9	34
33	Bioinspired structural transition of synthetic polymers through biomolecular ligand binding. Chemical Communications, 2018, 54, 12006-12009.	2.2	8
34	Synthetic Multifunctional Graphene Composites with Reshaping and Selfâ€Healing Features via a Facile Biomineralizationâ€Inspired Process. Advanced Materials, 2018, 30, e1803004.	11.1	55
35	Antigen-Antibody Interaction-Based Self-Healing Capability of Hybrid Hydrogels Composed of Genetically Engineered Filamentous Viruses and Gold Nanoparticles. Protein and Peptide Letters, 2018, 25, 64-67.	0.4	3
36	Graphene: Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomineralization-Inspired Process (Adv. Mater. 34/2018). Advanced Materials, 2018, 30, 1870253.	11.1	1

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37	Enzymatic Synthesis of Cellulose Oligomer Hydrogels Composed of Crystalline Nanoribbon Networks under Macromolecular Crowding Conditions. ACS Macro Letters, 2017, 6, 165-170.	2.3	45
38	Effect of solution viscosity on the production of nanoribbon network hydrogels composed of enzymatically synthesized cellulose oligomers under macromolecular crowding conditions. Polymer Journal, 2017, 49, 575-581.	1.3	24
39	Enzymatic synthesis and protein adsorption properties of crystalline nanoribbons composed of cellulose oligomer derivatives with primary amino groups. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 925-938.	1.9	28
40	Peptides as Smart Biomolecular Tools: Utilization of Their Molecular Recognition for Materials Engineering. ACS Symposium Series, 2017, , 31-48.	0.5	2
41	Self-Assembly of Cellulose Oligomers into Nanoribbon Network Structures Based on Kinetic Control of Enzymatic Oligomerization. Langmuir, 2017, 33, 13415-13422.	1.6	35
42	A Bottom-Up Synthesis of Vinyl-Cellulose Nanosheets and Their Nanocomposite Hydrogels with Enhanced Strength. Biomacromolecules, 2017, 18, 4196-4205.	2.6	37
43	Filamentous virus-based soft materials based on controlled assembly through liquid crystalline formation. Polymer Journal, 2017, 49, 639-647.	1.3	22
44	Controlled release of antibody proteins from liquid crystalline hydrogels composed of genetically engineered filamentous viruses. Materials Chemistry Frontiers, 2017, 1, 146-151.	3.2	16
45	Alcoholysis-Assisted Exfoliation of Boron Nitride Nanosheets from Hexagonal Boron Nitride. Transactions of the Materials Research Society of Japan, 2017, 42, 135-138.	0.2	2
46	Development of Nano- and Bio-Materials Using Nanofibers Fabricated from Self-Assembling Peptides. Kobunshi Ronbunshu, 2017, 74, 162-171.	0.2	2
47	Characterization of Liquid Crystalline Properties of Filamentous Viruses Conjugated with Photo-Responsive Molecules. Kobunshi Ronbunshu, 2017, 74, 203-207.	0.2	0
48	Construction of Soft Materials Composed of Filamentous Virus. Journal of Fiber Science and Technology, 2017, 73, P-308-P-311.	0.0	0
49	Surface functionalization of polymer substrates with hydroxyapatite using polymer-binding peptides. Journal of Materials Chemistry B, 2016, 4, 3651-3659.	2.9	15
50	Selective Rare Earth Recovery Employing Filamentous Viruses with Chemically Conjugated Peptides. ChemistrySelect, 2016, 1, 2712-2716.	0.7	14
51	Multidimensional Self-Assembled Structures of Alkylated Cellulose Oligomers Synthesized via in Vitro Enzymatic Reactions. Langmuir, 2016, 32, 10120-10125.	1.6	36
52	Enzymatic Synthesis of Oligo(ethylene glycol)-Bearing Cellulose Oligomers for in Situ Formation of Hydrogels with Crystalline Nanoribbon Network Structures. Langmuir, 2016, 32, 12520-12526.	1.6	40
53	Hydrolytic activities of artificial nanocellulose synthesized via phosphorylase-catalyzed enzymatic reactions. Polymer Journal, 2016, 48, 539-544.	1.3	52
54	Affinity-based thermoresponsive precipitation of proteins modified with polymer-binding peptides. Chemical Communications, 2016, 52, 5670-5673.	2.2	18

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55	Affinity-based release of polymer-binding peptides from hydrogels with the target segments of peptides. Chemical Communications, 2016, 52, 2241-2244.	2.2	19
56	Bioinspired Functional Polymers. Journal of Fiber Science and Technology, 2016, 72, P-335-P-336.	0.0	0
57	Polymer-binding Peptides as Dispersants for the Preparation of Polymer Nanoparticles: Application of Peptides to Structurally Similar Non-target Polymers. Chemistry Letters, 2015, 44, 831-833.	0.7	2
58	Dispersion and Functionalization of Boron Nitride Nanotubes in Aqueous Solution. Nippon Gomu Kyokaishi, 2015, 88, 447-453.	0.0	0
59	Enzymatic synthesis and post-functionalization of two-dimensional crystalline cellulose oligomers with surface-reactive groups. Chemical Communications, 2015, 51, 12525-12528.	2.2	58
60	Preparation and characterization of hybrid hydrogels composed of physically cross-linked gelatin and liquid-crystalline filamentous viruses. Polymer Bulletin, 2015, 72, 1487-1496.	1.7	12
61	Sonication-assisted alcoholysis of boron nitride nanotubes for their sidewalls chemical peeling. Chemical Communications, 2015, 51, 7104-7107.	2.2	55
62	Difference in Protein Adsorption Onto Polymer Films With or Without Thermal Annealing. Journal of Nanoscience and Nanotechnology, 2014, 14, 3106-3111.	0.9	4
63	Regular assembly of filamentous viruses and gold nanoparticles by specific interactions and subsequent chemical crosslinking. Polymer Journal, 2014, 46, 511-515.	1.3	14
64	Hybrid Hydrogels Composed of Regularly Assembled Filamentous Viruses and Gold Nanoparticles. ACS Macro Letters, 2014, 3, 341-345.	2.3	27
65	Aqueous Dispersion of Carbon Nanotubes Using Self-aggregating Peptides. Chemistry Letters, 2014, 43, 102-104.	0.7	1
66	Dispersion of Boron Nitride Nanotubes in Aqueous Solution by Simple Aromatic Molecules. Journal of Nanoscience and Nanotechnology, 2014, 14, 3028-3033.	0.9	15
67	Immobilization of highly oriented filamentous viruses onto polymer substrates. Journal of Materials Chemistry B, 2013, 1, 149-152.	2.9	16
68	Hydrolytic Activities of Crystalline Cellulose Nanofibers. Biomacromolecules, 2013, 14, 613-617.	2.6	37
69	Self-assembled peptides on polymer surfaces: towards morphology-dependent surface functionalization. Soft Matter, 2013, 9, 3469.	1.2	13
70	Screening of peptides recognizing simple polycyclic aromatic hydrocarbons. Chemical Communications, 2013, 49, 5088.	2.2	21
71	Noncovalent functionalization of boron nitride nanotubes using water-soluble synthetic polymers and the subsequent preparation of superhydrophobic surfaces. Polymer Journal, 2013, 45, 567-570.	1.3	17
72	Peptides as New Smart Bionanomaterials: Molecularâ€Recognition and Selfâ€Assembly Capabilities. Chemical Record, 2013, 13, 172-186.	2.9	40

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73	Chirality-specific hydrolysis of amino acid substrates by cellulose nanofibers. Chemical Communications, 2013, 49, 8827.	2.2	21
74	Cell-adhesive hydrogels composed of peptide nanofibers responsive to biological ions. Polymer Journal, 2012, 44, 651-657.	1.3	40
75	Dense surface functionalization using peptides that recognize differences in organized structures of self-assembling nanomaterials. Molecular BioSystems, 2012, 8, 1264.	2.9	22
76	Conjugated polymer nanoparticles hybridized with the peptide aptamer. Chemical Communications, 2011, 47, 7707.	2.2	10
77	Specific interfaces between synthetic polymers and biologically identified peptides. Journal of Materials Chemistry, 2011, 21, 10252.	6.7	41
78	A novel Î²-loop scaffold of phage-displayed peptides for highly specific affinities. Molecular BioSystems, 2011, 7, 2558.	2.9	8
79	Nucleotide-assisted decoration of boron nitride nanotubes with semiconductor quantum dots endows valuable visible-light emission in aqueous solution. Soft Matter, 2011, 7, 8753.	1.2	14
80	Detection of Kinase Activity Using a Synthetic System of Gold Nanoparticles in HEPES Buffer. Chemistry Letters, 2011, 40, 142-143.	0.7	3
81	A Novel Peptide Array Using a Phage Display System for Protein Detection. Chemistry Letters, 2011, 40, 508-509.	0.7	6
82	Affinity-Based Screening of Peptides Recognizing Assembly States of Self-Assembling Peptide Nanomaterials. Journal of the American Chemical Society, 2009, 131, 14434-14441.	6.6	38
83	Highly Specific Affinities of Short Peptides against Synthetic Polymers. Langmuir, 2007, 23, 11127-11133.	1.6	52
84	Peptide Motifs That Recognize Differences in Polymer-Film Surfaces. Angewandte Chemie - International Edition, 2007, 46, 723-726.	7.2	63
85	A Peptide Motif Recognizing a Polymer Stereoregularity. Journal of the American Chemical Society, 2005, 127, 13780-13781.	6.6	86