Masaki Nakahata

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7370990/publications.pdf

Version: 2024-02-01

41 papers 5,318 citations

279487 23 h-index 276539 41 g-index

46 all docs 46 docs citations

46 times ranked

6002 citing authors

#	Article	IF	Citations
1	Development of phenol-grafted polyglucuronic acid and its application to extrusion-based bioprinting inks. Carbohydrate Polymers, 2022, 277, 118820.	5.1	10
2	Automated Microhand System for Measuring Cell Stiffness By Using Two Plate End-Effectors. IEEE Robotics and Automation Letters, 2022, 7, 2385-2390.	3.3	2
3	One-Step Synthesis of Gelatin-Conjugated Supramolecular Hydrogels for Dynamic Regulation of Adhesion Contact and Morphology of Myoblasts. ACS Applied Polymer Materials, 2022, 4, 2595-2603.	2.0	5
4	Modulation of Cell-Cycle Progression by Hydrogen Peroxide-Mediated Cross-Linking and Degradation of Cell-Adhesive Hydrogels. Cells, 2022, 11, 881.	1.8	11
5	A Bioâ€synthetic Hybrid Hydrogel Formed under Physiological Conditions Consisting of Mucin and a Synthetic Polymer Carrying Boronic Acid. Macromolecular Bioscience, 2022, 22, e2200055.	2.1	2
6	Visible Light-Curable Chitosan Ink for Extrusion-Based and Vat Polymerization-Based 3D Bioprintings. Polymers, 2021, 13, 1382.	2.0	14
7	Mechanical stimulation of single cells by reversible host-guest interactions in 3D microscaffolds. Science Advances, 2020, 6, .	4.7	61
8	Gelatin-Based Electrospun Fibers Insolubilized by Horseradish Peroxidase-Catalyzed Cross-Linking for Biomedical Applications. ACS Omega, 2020, 5, 21254-21259.	1.6	11
9	Stimuli-responsive hydrogels as a model of the dynamic cellular microenvironment. Polymer Journal, 2020, 52, 861-870.	1.3	55
10	Horseradish peroxidase-catalyzed hydrogelation consuming enzyme-produced hydrogen peroxide in the presence of reducing sugars. Soft Matter, 2019, 15, 2163-2169.	1.2	13
11	Relationships between Diffusion and Viscoelasticity of Associative Polymer Networks. Nihon Reoroji Gakkaishi, 2019, 47, 133-142.	0.2	9
12	Crossâ€Linking Building Blocks Using a "Boronate Bridge†to Build Functional Hybrid Materials. ChemNanoMat, 2019, 5, 141-151.	1.5	9
13	Dynamic Contact Guidance of Myoblasts by Feature Size and Reversible Switching of Substrate Topography: Orchestration of Cell Shape, Orientation, and Nematic Ordering of Actin Cytoskeletons. Langmuir, 2019, 35, 7538-7551.	1.6	24
14	Extrusion-Based Bioprinting through Glucose-Mediated Enzymatic Hydrogelation. International Journal of Bioprinting, 2019, 6, 250.	1.7	20
15	Visible Light-Induced Hydrogelation of an Alginate Derivative and Application to Stereolithographic Bioprinting Using a Visible Light Projector and Acid Red. Biomacromolecules, 2018, 19, 672-679.	2.6	63
16	Versatility of hydrogelation by dual-enzymatic reactions with oxidases and peroxidase. Biochemical Engineering Journal, 2018, 131, 1-8.	1.8	9
17	Linear viscoelastic studies on a transient network formed by host–guest interaction. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1109-1117.	2.4	13
18	Peroxidase-catalyzed microextrusion bioprinting of cell-laden hydrogel constructs in vaporized ppm-level hydrogen peroxide. Biofabrication, 2018, 10, 045007.	3.7	43

#	Article	IF	CITATIONS
19	Mechanical Properties of Supramolecular Polymeric Materials Formed by Cyclodextrins as Host Molecules and Cationic Alkyl Guest Molecules on the Polymer Side Chain. Macromolecules, 2018, 51, 6318-6326.	2.2	34
20	Cytocompatible Enzymatic Hydrogelation Mediated by Glucose and Cysteine Residues. ACS Macro Letters, 2017, 6, 485-488.	2.3	18
21	Multifunctional Stimuli-Responsive Supramolecular Materials with Stretching, Coloring, and Self-Healing Properties Functionalized via Host–Guest Interactions. Macromolecules, 2017, 50, 4144-4150.	2.2	96
22	Supramolecular Materials Cross-Linked by Host–Guest Inclusion Complexes: The Effect of Side Chain Molecules on Mechanical Properties. Macromolecules, 2017, 50, 3254-3261.	2.2	72
23	Horseradish Peroxidase Catalyzed Hydrogelation for Biomedical, Biopharmaceutical, and Biofabrication Applications. Chemistry - an Asian Journal, 2017, 12, 3098-3109.	1.7	52
24	Dynamic Mechano-Regulation of Myoblast Cells on Supramolecular Hydrogels Cross-Linked by Reversible Host-Guest Interactions. Scientific Reports, 2017, 7, 7660.	1.6	46
25	Naphthalimide–coumarin conjugate: ratiometric fluorescent receptor for self-calibrating quantification of cyanide anions in cells. RSC Advances, 2017, 7, 32304-32309.	1.7	17
26	Supramolecular Polymeric Materials Containing Cyclodextrins. Chemical and Pharmaceutical Bulletin, 2017, 65, 330-335.	0.6	29
27	Highly Flexible, Tough, and Selfâ€Healing Supramolecular Polymeric Materials Using Host–Guest Interaction. Macromolecular Rapid Communications, 2016, 37, 86-92.	2.0	207
28	Self-Healing Materials Formed by Cross-Linked Polyrotaxanes with Reversible Bonds. CheM, 2016, 1, 766-775.	5.8	121
29	Formation of Redox-Responsive Supramolecular Polymeric Materials Based on Host-Guest Interaction at Polymer Side Chain. Kobunshi Ronbunshu, 2015, 72, 573-581.	0.2	0
30	Selfâ∈Healing, Expansionâ∈"Contraction, and Shapeâ∈Memory Properties of a Preorganized Supramolecular Hydrogel through Hostâ∈"Guest Interactions. Angewandte Chemie - International Edition, 2015, 54, 8984-8987.	7.2	454
31	Macroscopic Selfâ€Assembly Based on Complementary Interactions between Nucleobase Pairs. Chemistry - A European Journal, 2015, 21, 2770-2774.	1.7	26
32	Supramolecular Adhesives to Hard Surfaces: Adhesion Between Host Hydrogels and Guest Glass Substrates Through Molecular Recognition. Macromolecular Rapid Communications, 2014, 35, 1646-1652.	2.0	64
33	Redoxâ€Responsive Macroscopic Gel Assembly Based on Discrete Dual Interactions. Angewandte Chemie - International Edition, 2014, 53, 3617-3621.	7.2	115
34	pH- and Sugar-Responsive Gel Assemblies Based on Boronate–Catechol Interactions. ACS Macro Letters, 2014, 3, 337-340.	2.3	82
35	Supramolecular Polymeric Materials via Cyclodextrin–Guest Interactions. Accounts of Chemical Research, 2014, 47, 2128-2140.	7.6	751
36	Stimuli-responsive Supramolecular Gel Actuators. Journal of the Japan Society for Precision Engineering, 2014, 80, 722-726.	0.0	0

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#	Article	IF	CITATIONS
37	Redoxâ€Generated Mechanical Motion of a Supramolecular Polymeric Actuator Based on Host–Guest Interactions. Angewandte Chemie - International Edition, 2013, 52, 5731-5735.	7.2	199
38	Preorganized Hydrogel: Selfâ€Healing Properties of Supramolecular Hydrogels Formed by Polymerization of Host–Guestâ€Monomers that Contain Cyclodextrins and Hydrophobic Guest Groups. Advanced Materials, 2013, 25, 2849-2853.	11.1	540
39	Expansion–contraction of photoresponsive artificial muscle regulated by host–guest interactions. Nature Communications, 2012, 3, 1270.	5.8	622
40	Redox-responsive self-healing materials formed from host–guest polymers. Nature Communications, 2011, 2, 511.	5.8	1,207
41	Time–strain inseparability in multiaxial stress relaxation of supramolecular gels formed <i>via</i> host–guest interactions. Soft Matter, 0, , .	1.2	2