Yoshihiro Sasaki

List of Publications by Citations

80 papers	1,935 citations	22 h-index	42 g-index
88 ext. papers	2,328 ext. citations	6 avg, IF	5.17 L-index

#	Paper	IF	Citations
80	Engineering hybrid exosomes by membrane fusion with liposomes. *Scientific Reports*, **2016**, 6, 21933	4.9	265
79	Nanogel engineering for new nanobiomaterials: from chaperoning engineering to biomedical applications. *Chemical Record*, **2010**, 10, 366-76	6.6	241
78	Molecular chaperone-like activity of hydrogel nanoparticles of hydrophobized pullulan: thermal stabilization with refolding of carbonic anhydrase B. *Bioconjugate Chemistry*, **1999**, 10, 321-4	6.3	137
77	Propagation and amplification of molecular information using a photoresponsive molecular switch. *Supramolecular Chemistry*, **2009**, 21, 284-291	1.8	93
76	Thermoresponsive controlled association of protein with a dynamic nanogel of hydrophobized polysaccharide and cyclodextrin: heat shock protein-like activity of artificial molecular chaperone. *Biomacromolecules*, **2005**, 6, 447-52	6.9	90
75	Glycan profiling analysis using evanescent-field fluorescence-assisted lectin array: Importance of sugar recognition for cellular uptake of exosomes from mesenchymal stem cells. *Biochemical and Biophysical Research Communications*, **2017**, 491, 701-707	3.4	77
74	Biotransporting Self-Assembled Nanofactories Using Polymer Vesicles with Molecular Permeability for Enzyme Prodrug Cancer Therapy. *Advanced Materials*, **2017**, 29, 1702406	24	69
73	Nanogel-Integrated pH-Responsive Composite Hydrogels for Controlled Drug Delivery. *ACS Biomaterials Science and Engineering*, **2017**, 3, 370-380	5.5	61
72	Nanogel tectonic porous gel loading biologics, nanocarriers, and cells for advanced scaffold. *Biomaterials*, **2015**, 37, 107-15	15.6	59
71	A hybrid hydrogel biomaterial by nanogel engineering: bottom-up design with nanogel and liposome building blocks to develop a multidrug delivery system. *Advanced Healthcare Materials*, **2012**, 1, 722-8	10.1	52
70	Nanocarrier-Integrated Microspheres: Nanogel Tectonic Engineering for Advanced Drug-Delivery Systems. *Advanced Materials*, **2015**, 27, 5080-8	24	43
69	Magnetically Guided Protein Transduction by Hybrid Nanogel Chaperones with Iron Oxide Nanoparticles. *Angewandte Chemie - International Edition*, **2016**, 55, 11377-81	16.4	41
68	Cyclodextrin-responsive nanogel as an artificial chaperone for horseradish peroxidase. *Colloid and Polymer Science*, **2011**, 289, 685-691	2.4	38
67	Self-assembled Nanogel Engineering for Advanced Biomedical Technology. *Chemistry Letters*, **2012**, 41, 202-208	1.7	36
66	Substrate-Sorting Nanoreactors Based on Permeable Peptide Polymer Vesicles and Hybrid Liposomes with Synthetic Macromolecular Channels. *Journal of the American Chemical Society*, **2020** , 142, 154-161	16.4	36
65	Nanogel hybrid assembly for exosome intracellular delivery: effects on endocytosis and fusion by exosome surface polymer engineering. *Biomaterials Science*, **2020**, 8, 619-630	7.4	32
64	Therapeutic effect of nanogel-based delivery of soluble FGFR2 with S252W mutation on craniosynostosis. *PLoS ONE*, **2014**, 9, e101693	3.7	27

63	Construction of protein-crosslinked nanogels with vitamin B6 bearing polysaccharide. *Polymer Chemistry*, **2011**, 2, 1267	4.9	27
62	Comprehensive study of liposome-assisted synthesis of membrane proteins using a reconstituted cell-free translation system. *Scientific Reports*, **2015**, 5, 18025	4.9	27
61	Nanogel Tectonics for Tissue Engineering: Protein Delivery Systems with Nanogel Chaperones. *Advanced Healthcare Materials*, **2018**, 7, e1800729	10.1	27
60	Amphiphilic polysaccharide nanogels as artificial chaperones in cell-free protein synthesis. *Macromolecular Bioscience*, **2011**, 11, 814-20	5.5	25
59	Development of an artificial chaperone system based on cyclodextrin. *Current Pharmaceutical Biotechnology*, **2010**, 11, 300-5	2.6	23
58	Self-Assembled Polypeptide Nanogels with Enzymatically Transformable Surface as a Small Interfering RNA Delivery Platform. *Biomacromolecules*, **2017**, 18, 3913-3923	6.9	20
57	Development and Potential Theranostic Applications of a Self-Assembled Hybrid of Magnetic Nanoparticle Clusters with Polysaccharide Nanogels. *ChemPlusChem*, **2014**, 79, 1631-1637	2.8	20
56	Self-Assembled Nanogels of Cholesterol-Bearing Hydroxypropyl Cellulose: A Thermoresponsive Building Block for Nanogel Tectonic Materials. *Langmuir*, **2016**, 32, 12283-12289	4	20
55	Amphiphilic nanogel of enzymatically synthesized glycogen as an artificial molecular chaperone for effective protein refolding. *RSC Advances*, **2013**, 3, 25716	3.7	19
54	Antigen Delivery to Antigen-Presenting Cells for Adaptive Immune Response by Self-Assembled Anionic Polysaccharide Nanogel Vaccines. *Biomacromolecules*, **2020**, 21, 621-629	6.9	19
53	Intracellular delivery and passive tumor targeting of a self-assembled nanogel containing carborane clusters for boron neutron capture therapy. *Biochemical and Biophysical Research Communications*, **2017**, 483, 147-152	3.4	18
52	Magnetically Navigated Intracellular Delivery of Extracellular Vesicles Using Amphiphilic Nanogels. *Bioconjugate Chemistry*, **2019**, 30, 2150-2155	6.3	17
51	Shear flow-induced nanotubulation of surface-immobilized liposomes. *RSC Advances*, **2012**, 2, 2682	3.7	17
50	Polysaccharide nanogel□yclodextrin system as an artificial chaperone for in vitro protein synthesis of green fluorescent protein. *Polymer Journal*, **2010**, 42, 823-828	2.7	17
49	Thermoresponsive Polysaccharide Graft Polymer Vesicles with Tunable Size and Structural Memory. *Journal of the American Chemical Society*, **2020**, 142, 11784-11790	16.4	15
48	Exosome surface glycans reflect osteogenic differentiation of mesenchymal stem cells: Profiling by an evanescent field fluorescence-assisted lectin array system. *Scientific Reports*, **2019**, 9, 11497	4.9	15
47	Advanced Artificial Extracellular Matrices Using Amphiphilic Nanogel-Cross-Linked Thin Films To Anchor Adhesion Proteins and Cytokines. *ACS Biomaterials Science and Engineering*, **2016**, 2, 375-384	5.5	13
46	Protein nanogelation using vitamin B6-bearing pullulan: effect of zinc ions. *Polymer Journal*, **2015**, 47, 201-205	2.7	12

45	Proteoliposome Engineering with Cell-Free Membrane Protein Synthesis: Control of Membrane Protein Sorting into Liposomes by Chaperoning Systems. *Advanced Science*, **2018**, 5, 1800524	13.6	12
44	Self-assembled nanogel of cholesterol-bearing xyloglucan as a drug delivery nanocarrier. *Journal of Biomaterials Science, Polymer Edition*, **2017**, 28, 1183-1198	3.5	11
43	Nanoscopic Structural Investigation of Physically Cross-Linked Nanogels Formed from Self-Associating Polymers. *Journal of Physical Chemistry B*, **2016**, 120, 11996-12002	3.4	11
42	Sequential Coating of Insulin Secreting Beta Cells within Multilayers of Polysaccharide Nanogels. *Macromolecular Bioscience*, **2018**, 18, e1800001	5.5	11
41	Supramacromolecular injectable hydrogels by crystallization-driven self-assembly of carbohydrate-conjugated poly(2-isopropyloxazoline)s for biomedical applications. *Journal of Materials Chemistry B*, **2019**, 7, 6362-6369	7.3	11
40	Intrinsically permeable polymer vesicles based on carbohydrate-conjugated poly(2-oxazoline)s synthesized using a carbohydrate-based initiator system. *Polymer Chemistry*, **2019**, 10, 691-697	4.9	10
39	Templated nucleation of hybrid iron oxide nanoparticles on polysaccharide nanogels. *Colloid and Polymer Science*, **2013**, 291, 1375-1380	2.4	9
38	Structural effects and lymphocyte activation properties of self-assembled polysaccharide nanogels for effective antigen delivery. *Scientific Reports*, **2018**, 8, 16464	4.9	9
37	Artificial chaperone polysaccharide nanogels for protein delivery: a thermodynamic study of protein-nanogel interactions using fluorescence correlation spectroscopy. *Current Drug Discovery Technologies*, **2011**, 8, 308-13	1.5	8
36	Crosslinked nanogel-based porous hydrogel as a functional scaffold for tongue muscle regeneration. *Journal of Biomaterials Science, Polymer Edition*, **2020**, 31, 1254-1271	3.5	8
35	Nanogel Engineering by Associating Polymers for Biomedical Applications **2012**, 187-208		7
34	Enveloped artificial viral capsids self-assembled from anionic annulus peptide and cationic lipid bilayer. *Chemical Communications*, **2020**, 56, 7092-7095	5.8	6
33	Synergistic anti-tumor efficacy by combination therapy of a self-assembled nanogel vaccine with an immune checkpoint anti-PD-1 antibody.. *RSC Advances*, **2020**, 10, 8074-8079	3.7	6
32	Templated Formation of Hydroxyapatite Nanoparticles from Self-Assembled Nanogels Containing Tricarboxylate Groups. *Polymers*, **2012**, 4, 1056-1064	4.5	6
31	Design and synthesis of PEGylated amphiphilic block oligomers as membrane anchors for stable binding to lipid bilayer membranes. *Polymer Journal*, **2018**, 50, 787-797	2.7	5
30	Self-assembled Nanogels of Carborane-bearing Polysaccharides for Boron Neutron Capture Therapy. *Chemistry Letters*, **2017**, 46, 513-515	1.7	4
29	Amphiphilic Poly[poly(ethylene glycol) methacrylate]s with OH Groups in the PEG Side Chains for Controlling Solution/Rheological Properties and toward Bioapplication.. *ACS Applied Bio Materials*, **2019**, 2, 1920-1930	4.1	4
28	Development of a Novel Tetravalent Synthetic Peptide That Binds to Phosphatidic Acid. *PLoS ONE*, **2015**, 10, e0131668	3.7	4

27	Switching of the enzymatic activity synchronized with signal recognition by an artificial DNA receptor on a liposomal membrane. *Organic and Biomolecular Chemistry*, **2011**, 9, 2397-402	3.9	4
26	Assessment of Surface Glycan Diversity on Extracellular Vesicles by Lectin Microarray and Glycoengineering Strategies for Drug Delivery Applications.. *Small Methods*, **2022**, 6, e2100785	12.8	4
25	Magnetically Guided Protein Transduction by Hybrid Nanogel Chaperones with Iron Oxide Nanoparticles. *Angewandte Chemie*, **2016**, 128, 11549-11553	3.6	4
24	The improvement of calvarial bone healing by durable nanogel-crosslinked materials. *Journal of Biomaterials Science, Polymer Edition*, **2018**, 29, 1876-1894	3.5	4
23	Preparation of engineered extracellular vesicles with full-length functional PD-1 membrane proteins by baculovirus expression system. *Biochemical and Biophysical Research Communications*, **2020**, 526, 967-972	3.4	3
22	Specific delivery of transport vesicles mediated by complementary recognition of DNA signals with membrane-bound oligonucleotide lipids. *Supramolecular Chemistry*, **2011**, 23, 218-225	1.8	3
21	Construction of Hybrid Cell Spheroids Using Cell-Sized Cross-Linked Nanogel Microspheres as an Artificial Extracellular Matrix.. *ACS Applied Bio Materials*, **2021**, 4, 7848-7855	4.1	3
20	Preparation of cationic proteoliposomes using cell-free membrane protein synthesis: the chaperoning effect of cationic liposomes.. *RSC Advances*, **2020**, 10, 28741-28745	3.7	3
19	Nanogelation and Thermal Stabilization of Enzyme by Vitamin B-Bearing Polysaccharide as Biocrosslinker. *ACS Biomaterials Science and Engineering*, **2019**, 5, 5752-5758	5.5	2
18	Manipulating the Morphology of Amphiphilic Graft-Copolymer Assemblies by Adjusting the Flexibility of the Main Chain. *Macromolecules*, **2021**, 54, 7003-7009	5.5	2
17	Development and single-particle analysis of hybrid extracellular vesicles fused with liposomes using viral fusogenic proteins.. *FEBS Open Bio*, **2022**,	2.7	2
16	Cancer Therapy: Biotransporting Self-Assembled Nanofactories Using Polymer Vesicles with Molecular Permeability for Enzyme Prodrug Cancer Therapy (Adv. Mater. 36/2017). *Advanced Materials*, **2017**, 29,	24	1
15	Biocatalytic Hybrid Films Self-Assembled from Carbohydrate Block Copolymers and Polysaccharides for Enzyme Prodrug Therapy.. *ACS Applied Bio Materials*, **2020**, 3, 8865-8871	4.1	1
14	Aerobic oxidation of thioglycol catalysed by metallophthalocyanine in an organic-inorganic hybrid vesicle erasome *Inorganic Chemistry Communication*, **2020**, 115, 107866	3.1	1
13	Magnetically Navigated Protein Transduction In Vivo using Iron Oxide-Nanogel Chaperone Hybrid. *Advanced Healthcare Materials*, **2021**, 10, e2001988	10.1	1
12	Thermoresponsive Carbohydrate--Polypeptoid Polymer Vesicles with Selective Solute Permeability and Permeable Factors for Solutes. *Biomacromolecules*, **2021**, 22, 3099-3106	6.9	1
11	Formation and Function of Nanogels by Self-Assembly of Associating Graft Copolymers. *Kobunshi Ronbunshu*, **2016**, 73, 166-174	0	1
10	Design and function of smart biomembrane nanohybrids for biomedical applications: review. *Polymer Journal*, **2021**, 53, 587-592	2.7	1

9	Membrane Protein Sorting: Proteoliposome Engineering with Cell-Free Membrane Protein Synthesis: Control of Membrane Protein Sorting into Liposomes by Chaperoning Systems (Adv. Sci. 10/2018). *Advanced Science*, **2018**, 5, 1870062	13.6	1
8	Embedding a membrane protein into an enveloped artificial viral replica.. *RSC Chemical Biology*, **2022**, 3, 231-241	3	0
7	Fusogenic Hybrid Extracellular Vesicles with PD-1 Membrane Proteins for the Cytosolic Delivery of Cargos. *Cancers*, **2022**, 14, 2635	6.6	0
6	Protein transduction reagents. *Drug Delivery System*, **2016**, 31, 242-244	0	
5	High Hydrostatic Pressurized Lipoplex Enhances Transfection Efficiency In Vitro. *Advanced Biomedical Engineering*, **2013**, 2, 80-83	0.7	
4	Improvement of antisense oligonucleotides delivery using high hydrostatic pressurized lipoplex. *Materials Research Society Symposia Proceedings*, **2013**, 1498, 3-8		
3	Development of Lectin-immobilized Spongy Monoliths for Sub-classification of Exosome. *Bunseki Kagaku*, **2020**, 69, 731-735	0.2	
2	Assessment of Surface Glycan Diversity on Extracellular Vesicles by Lectin Microarray and Glycoengineering Strategies for Drug Delivery Applications (Small Methods 2/2022). *Small Methods*, **2022**, 6, 2270015	12.8	
1	Immunological response of polysaccharide nanogel-incorporating PEG hydrogels in an diabetic model.. *Journal of Biomaterials Science, Polymer Edition*, **2022**, 1-17	3.5	