

Shinji Sakai

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

142
papers

3,648
citations

34
h-index

51
g-index

158
ext. papers

4,052
ext. citations

5.5
avg, IF

5.51
L-index

#	Paper	IF	Citations
142	Automated Microhand System for Measuring Cell Stiffness By Using Two Plate End-Effectors. <i>IEEE Robotics and Automation Letters</i> , 2022 , 7, 2385-2390	4.2	0
141	Collagen and nano-hydroxyapatite interactions in alginate-based microcapsule provide an appropriate osteogenic microenvironment for modular bone tissue formation. <i>Carbohydrate Polymers</i> , 2022 , 277, 118807	10.3	7
140	Development of phenol-grafted polyglucuronic acid and its application to extrusion-based bioprinting inks. <i>Carbohydrate Polymers</i> , 2022 , 277, 118820	10.3	4
139	An assessment of ultrasound transmission gel as trial bioink by pneumatic extrusion-based 3D bio-printer. <i>Transactions of the JSME (in Japanese)</i> , 2022 , 88, 21-00151-21-00151	0.2	
138	A bio-synthetic hybrid hydrogel formed under physiological conditions consisting of mucin and a synthetic polymer carrying boronic acid.. <i>Macromolecular Bioscience</i> , 2022 , e2200055	5.5	0
137	Gelatin nanofiber mats with Lipofectamine/plasmid DNA complexes for in vitro genome editing.. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022 , 216, 112561	6	0
136	Influence of Hydrogen Peroxide-Mediated Cross-Linking and Degradation on Cell-Adhesive Gelatin Hydrogels.. <i>ACS Applied Bio Materials</i> , 2021 , 4, 4184-4190	4.1	1
135	Visible Light-Curable Chitosan Ink for Extrusion-Based and Vat Polymerization-Based 3D Bioprintings. <i>Polymers</i> , 2021 , 13,	4.5	4
134	Extrusion-Based Bioprinting through Glucose-Mediated Enzymatic Hydrogelation. <i>International Journal of Bioprinting</i> , 2020 , 6, 250	6.2	13
133	Silk fibroin nanofibers: a promising ink additive for extrusion three-dimensional bioprinting. <i>Materials Today Bio</i> , 2020 , 8, 100078	9.9	12
132	Gelatin-Based Electrospun Fibers Insolubilized by Horseradish Peroxidase-Catalyzed Cross-Linking for Biomedical Applications. <i>ACS Omega</i> , 2020 , 5, 21254-21259	3.9	5
131	Horseradish peroxidase-catalyzed hydrogelation consuming enzyme-produced hydrogen peroxide in the presence of reducing sugars. <i>Soft Matter</i> , 2019 , 15, 2163-2169	3.6	6
130	Gelatin/Hyaluronic Acid Content in Hydrogels Obtained through Blue Light-Induced Gelation Affects Hydrogel Properties and Adipose Stem Cell Behaviors. <i>Biomolecules</i> , 2019 , 9,	5.9	15
129	Use of Anionic Polysaccharides in the Development of 3D Bioprinting Technology. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 2596	2.6	23
128	Biofabrication offers future hope for tackling various obstacles and challenges in tissue engineering and regenerative medicine: A Perspective. <i>International Journal of Bioprinting</i> , 2019 , 5, 153	6.2	9
127	Characterization of encapsulated cells within hyaluronic acid and alginate microcapsules produced via horseradish peroxidase-catalyzed crosslinking. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2019 , 30, 295-307	3.5	17
126	Cross-Linking Building Blocks Using a Boronate Bridge to Build Functional Hybrid Materials. <i>ChemNanoMat</i> , 2019 , 5, 141-151	3.5	3

125	Inkjet micropatterning through horseradish peroxidase-mediated hydrogelation for controlled cell immobilization and microtissue fabrication. <i>Biofabrication</i> , 2019 , 12, 011001	10.5	6
124	Visible Light-Induced Hydrogelation of an Alginate Derivative and Application to Stereolithographic Bioprinting Using a Visible Light Projector and Acid Red. <i>Biomacromolecules</i> , 2018 , 19, 672-679	6.9	47
123	Peroxidase-catalyzed microextrusion bioprinting of cell-laden hydrogel constructs in vaporized ppm-level hydrogen peroxide. <i>Biofabrication</i> , 2018 , 10, 045007	10.5	22
122	Drop-On-Drop Multimaterial 3D Bioprinting Realized by Peroxidase-Mediated Cross-Linking. <i>Macromolecular Rapid Communications</i> , 2018 , 39, 1700534	4.8	31
121	Versatility of hydrogelation by dual-enzymatic reactions with oxidases and peroxidase. <i>Biochemical Engineering Journal</i> , 2018 , 131, 1-8	4.2	6
120	Differentiation potential of human adipose stem cells bioprinted with hyaluronic acid/gelatin-based bioink through microextrusion and visible light-initiated crosslinking. <i>Biopolymers</i> , 2018 , 109, e23080	2.2	57
119	Impact of immobilizing of low molecular weight hyaluronic acid within gelatin-based hydrogel through enzymatic reaction on behavior of enclosed endothelial cells. <i>International Journal of Biological Macromolecules</i> , 2017 , 97, 308-316	7.9	24
118	Cytocompatible Enzymatic Hydrogelation Mediated by Glucose and Cysteine Residues. <i>ACS Macro Letters</i> , 2017 , 6, 485-488	6.6	16
117	Fabrication of single and bundled filament-like tissues using biodegradable hyaluronic acid-based hollow hydrogel fibers. <i>International Journal of Biological Macromolecules</i> , 2017 , 104, 204-212	7.9	18
116	Inkjetting Plus Peroxidase-Mediated Hydrogelation Produces Cell-Laden, Cell-Sized Particles with Suitable Characters for Individual Applications. <i>Macromolecular Bioscience</i> , 2017 , 17, 1600416	5.5	8
115	Horseradish Peroxidase Catalyzed Hydrogelation for Biomedical, Biopharmaceutical, and Biofabrication Applications. <i>Chemistry - an Asian Journal</i> , 2017 , 12, 3098-3109	4.5	33
114	Naphthalimide-floumarin conjugate: ratiometric fluorescent receptor for self-calibrating quantification of cyanide anions in cells. <i>RSC Advances</i> , 2017 , 7, 32304-32309	3.7	15
113	Propagation of human iPS cells in alginate-based microcapsules prepared using reactions catalyzed by horseradish peroxidase and catalase. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2016 , 44, 1406-9	6.1	9
112	Anchoring PEG-oleate to cell membranes stimulates reactive oxygen species production. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016 , 147, 336-342	6	6
111	Enzymatically-gellable galactosylated chitosan: Hydrogel characteristics and hepatic cell behavior. <i>International Journal of Biological Macromolecules</i> , 2016 , 92, 892-899	7.9	21
110	Production of hyaluronic-acid-based cell-enclosing microparticles and microcapsules via enzymatic reaction using a microfluidic system. <i>Journal of Applied Polymer Science</i> , 2016 , 133, n/a-n/a	2.9	20
109	The development of cell-adhesive hydrogel for 3D printing. <i>International Journal of Bioprinting</i> , 2016 , 2,	6.2	21
108	Engineering tissues with a perfusable vessel-like network using endothelialized alginate hydrogel fiber and spheroid-enclosing microcapsules. <i>Heliyon</i> , 2016 , 2, e00067	3.6	15

107	Cryopreservation of a small number of human sperm using enzymatically fabricated, hollow hyaluronan microcapsules handled by conventional ICSI procedures. <i>Journal of Assisted Reproduction and Genetics</i> , 2016 , 33, 501-11	3.4	19
106	In Vitro formation of vascular-like networks using hydrogels. <i>Journal of Bioscience and Bioengineering</i> , 2016 , 122, 519-527	3.3	18
105	Highly efficient and low toxic skin penetrants composed of amino acid ionic liquids. <i>RSC Advances</i> , 2016 , 6, 87753-87755	3.7	35
104	Peritoneal adhesion prevention by a biodegradable hyaluronic acid-based hydrogel formed in situ through a cascade enzyme reaction initiated by contact with body fluid on tissue surfaces. <i>Acta Biomaterialia</i> , 2015 , 24, 152-8	10.8	35
103	Cell-selective encapsulation in hydrogel sheaths via biospecific identification and biochemical cross-linking. <i>Biomaterials</i> , 2015 , 53, 494-501	15.6	20
102	Electrochemical recycling of gold nanofibrous membrane as an enzyme immobilizing carrier. <i>Chemical Engineering Journal</i> , 2015 , 280, 558-563	14.7	10
101	Cancer stem cell marker-expressing cell-rich spheroid fabrication from PANC-1 cells using alginate microcapsules with spherical cavities templated by gelatin microparticles. <i>Biotechnology Progress</i> , 2015 , 31, 1071-6	2.8	5
100	Characteristics of Duplex Microcapsules Prepared from an Alginate-Derivative Polymer via Horseradish Peroxidase- and Catalase-Catalyzed Reactions. <i>Journal of Chemical Engineering of Japan</i> , 2015 , 48, 588-591	0.8	1
99	Horseradish peroxidase-catalyzed formation of hydrogels from chitosan and poly(vinyl alcohol) derivatives both possessing phenolic hydroxyl groups. <i>Carbohydrate Polymers</i> , 2014 , 111, 404-9	10.3	36
98	Identification of hydrogen peroxide-secreting cells by cytocompatible coating with a hydrogel membrane. <i>Analytical Chemistry</i> , 2014 , 86, 11592-8	7.8	15
97	Polyacrylonitrile-based electrospun nanofibers carrying gold nanoparticles in situ formed by photochemical assembly. <i>Journal of Materials Science</i> , 2014 , 49, 4595-4600	4.3	11
96	Designing Fusion Proteins with Carbohydrate-Binding Modules Having Affinity to Enzymatically Gellable Carboxymethylcellulose Derivative Hydrogel. <i>Journal of Chemical Engineering of Japan</i> , 2014 , 47, 835-840	0.8	2
95	Horseradish peroxidase-mediated encapsulation of mammalian cells in hydrogel particles by dropping. <i>Journal of Microencapsulation</i> , 2014 , 31, 100-4	3.4	12
94	Fabrication of Ultrafine Carbon Fibers Possessing a Nanoporous Structure from Electrospun Polyvinyl Alcohol Fibers Containing Silica Nanoparticles. <i>Journal of Nanomaterials</i> , 2014 , 2014, 1-6	3.2	3
93	On-Cell Surface Cross-Linking of Polymer Molecules by Horseradish Peroxidase Anchored to Cell Membrane for Individual Cell Encapsulation in Hydrogel Sheath. <i>ACS Macro Letters</i> , 2014 , 3, 972-975	6.6	28
92	Adipose tissue engineering using adipose-derived stem cells enclosed within an injectable carboxymethylcellulose-based hydrogel. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2013 , 7, 884-92	4.4	20
91	Impact of the composition of alginate and gelatin derivatives in bioconjugated hydrogels on the fabrication of cell sheets and spherical tissues with living cell sheaths. <i>Acta Biomaterialia</i> , 2013 , 9, 6616-23	10.8	34
90	Polyvinyl alcohol-based hydrogel dressing gellable on-wound via a co-enzymatic reaction triggered by glucose in the wound exudate. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 5067-5075	7.3	80

89	Fabrication of in vitro three-dimensional multilayered blood vessel model using human endothelial and smooth muscle cells and high-strength PEG hydrogel. <i>Journal of Bioscience and Bioengineering</i> , 2013 , 116, 231-4	3.3	30
88	Enzymatically-gelled amylopectin-based substrates enable on-demand harvesting cells with preserving cell-to-cell connection using saliva. <i>Journal of Bioscience and Bioengineering</i> , 2013 , 115, 462-5 ³³		
87	Electrospun polystyrene fiber-templating ultrafine gold hollow fiber production. <i>Gold Bulletin</i> , 2013 , 46, 97-101	1.6	4
86	Horseradish peroxidase/catalase-mediated cell-laden alginate-based hydrogel tube production in two-phase coaxial flow of aqueous solutions for filament-like tissues fabrication. <i>Biofabrication</i> , 2013 , 5, 015012	10.5	35
85	Competing two enzymatic reactions realizing one-step preparation of cell-enclosing duplex microcapsules. <i>Biotechnology Progress</i> , 2013 , 29, 1528-34	2.8	15
84	Bone regeneration of tibial defects in rats with enzymatic hydrogelation of gelatin derivative and recombinant human platelet-derived growth factor-BB complex. <i>International Journal of Oral and Maxillofacial Implants</i> , 2013 , 28, 1377-85	2.8	1
83	Wrapping tissues with a pre-established cage-like layer composed of living cells. <i>Biomaterials</i> , 2012 , 33, 6721-7	15.6	14
82	Multicellular tumor spheroid formation in duplex microcapsules for analysis of chemosensitivity. <i>Cancer Science</i> , 2012 , 103, 549-54	6.9	16
81	Controlling apatite microparticles formation by calcining electrospun sol-gel derived ultrafine silica fibers. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 61, 374-380	2.3	5
80	Glucose-triggered co-enzymatic hydrogelation of aqueous polymer solutions. <i>RSC Advances</i> , 2012 , 2, 1502-1507	3.7	28
79	On-demand serum-degradable amylopectin-based in situ gellable hydrogel. <i>Journal of Materials Chemistry</i> , 2012 , 22, 1944-1949		13
78	An electrospun ultrafine fibrous silica catalyst incorporating an alkyl-silica coating containing lipase for reactions in organic solvents. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012 , 83, 120-124		4
77	Enhanced productivity of electrospun polyvinyl alcohol nanofibrous mats using aqueous N,N-dimethylformamide solution and their application to lipase-immobilizing membrane-shaped catalysts. <i>Journal of Bioscience and Bioengineering</i> , 2012 , 114, 204-8	3.3	10
76	Production of endothelial cell-enclosing alginate-based hydrogel fibers with a cell adhesive surface through simultaneous cross-linking by horseradish peroxidase-catalyzed reaction in a hydrodynamic spinning process. <i>Journal of Bioscience and Bioengineering</i> , 2012 , 114, 353-9	3.3	29
75	Rapidly serum-degradable hydrogel templating fabrication of spherical tissues and curved tubular structures. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 2911-9	4.9	11
74	Controlling the Diameters of Silica Nanofibers Obtained by Sol-Gel/Electrospinning Methods. <i>Journal of Chemical Engineering of Japan</i> , 2012 , 45, 436-440	0.8	6
73	Development of porous alginate-based scaffolds covalently cross-linked through a peroxidase-catalyzed reaction. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2011 , 22, 2407-16	3.5	11
72	Cell-enclosing gelatin-based microcapsule production for tissue engineering using a microfluidic flow-focusing system. <i>Biomicrofluidics</i> , 2011 , 5, 13402	3.2	52

71	Controlling thermo-reversibility of gelatin gels through a peroxidase-catalyzed reaction under mild conditions for mammalian cells. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2011 , 22, 1147-56	3.5	6
70	In situ simultaneous protein-polysaccharide bioconjugation and hydrogelation using horseradish peroxidase. <i>Biomacromolecules</i> , 2010 , 11, 1370-5	6.9	39
69	Hematin is an alternative catalyst to horseradish peroxidase for in situ hydrogelation of polymers with phenolic hydroxyl groups in vivo. <i>Biomacromolecules</i> , 2010 , 11, 2179-83	6.9	25
68	Enhanced catalytic activity of lipase in situ encapsulated in electrospun polystyrene fibers by subsequent water supply. <i>Catalysis Communications</i> , 2010 , 11, 576-580	3.2	10
67	Development of subsieve-size capsules and application to cell therapy. <i>Advances in Experimental Medicine and Biology</i> , 2010 , 670, 22-30	3.6	9
66	Immobilization of <i>Pseudomonas cepacia</i> lipase onto electrospun polyacrylonitrile fibers through physical adsorption and application to transesterification in nonaqueous solvent. <i>Biotechnology Letters</i> , 2010 , 32, 1059-62	3	50
65	Electrospun PVA fibrous mats immobilizing lipase entrapped in alkylsilicate cages: Application to continuous production of fatty acid butyl ester. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010 , 63, 57-61		12
64	Heat treatment of electrospun silicate fiber substrates enhances cellular adhesion and proliferation. <i>Journal of Bioscience and Bioengineering</i> , 2010 , 109, 304-6	3.3	9
63	Preparation of cell-enclosing microcapsules through photopolymerization of methacrylated alginate solution triggered by irradiation with visible light. <i>Journal of Bioscience and Bioengineering</i> , 2010 , 109, 618-21	3.3	16
62	Effect of a hepatocyte growth factor/heparin-immobilized collagen system on albumin synthesis and spheroid formation by hepatocytes. <i>Journal of Bioscience and Bioengineering</i> , 2010 , 110, 208-16	3.3	36
61	Control of cellular adhesiveness in an alginate-based hydrogel by varying peroxidase and H ₂ O ₂ concentrations during gelation. <i>Acta Biomaterialia</i> , 2010 , 6, 1446-52	10.8	42
60	Calcium alginate microcapsules with spherical liquid cores templated by gelatin microparticles for mass production of multicellular spheroids. <i>Acta Biomaterialia</i> , 2010 , 6, 3132-7	10.8	34
59	Novel technique to control inner and outer diameter of calcium-alginate hydrogel hollow microfibers, and immobilization of mammalian cells. <i>Biochemical Engineering Journal</i> , 2010 , 49, 143-147	4.2	54
58	Hepatocytes exhibit constant metabolic activity on carboxymethylcellulose-based hydrogel with high phenolic hydroxy group content. <i>Biochemical Engineering Journal</i> , 2010 , 51, 147-152	4.2	8
57	Production of butyl-biodiesel using lipase physically-adsorbed onto electrospun polyacrylonitrile fibers. <i>Bioresource Technology</i> , 2010 , 101, 7344-9	11	53
56	Surface immobilization of poly(ethyleneimine) and plasmid DNA on electrospun poly(L-lactic acid) fibrous mats using a layer-by-layer approach for gene delivery. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 88, 281-7	5.4	34
55	Phenolic hydroxy groups incorporated for the peroxidase-catalyzed gelation of a carboxymethylcellulose support: cellular adhesion and proliferation. <i>Macromolecular Bioscience</i> , 2009 , 9, 262-7	5.5	28
54	Enzymatically fabricated and degradable microcapsules for production of multicellular spheroids with well-defined diameters of less than 150 microm. <i>Biomaterials</i> , 2009 , 30, 5937-42	15.6	54

53	An injectable, in situ enzymatically gellable, gelatin derivative for drug delivery and tissue engineering. <i>Biomaterials</i> , 2009 , 30, 3371-7	15.6	253
52	Application of a lipase-immobilized silica monolith bioreactor to the production of fatty acid methyl esters. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009 , 57, 194-197		17
51	Enzymatically crosslinked carboxymethylcellulose-tyramine conjugate hydrogel: cellular adhesiveness and feasibility for cell sheet technology. <i>Acta Biomaterialia</i> , 2009 , 5, 554-9	10.8	65
50	Novel chitosan derivative soluble at neutral pH and in-situ gellable via peroxidase-catalyzed enzymatic reaction. <i>Journal of Materials Chemistry</i> , 2009 , 19, 230-235		106
49	Small agarose microcapsules with cell-enclosing hollow core for cell therapy: transplantation of l-fosamide-activating cells to the mice with preestablished subcutaneous tumor. <i>Cell Transplantation</i> , 2009 , 18, 933-9	4	17
48	Reinforcement of porous alginate scaffolds by incorporating electrospun fibres. <i>Biomedical Materials (Bristol)</i> , 2008 , 3, 034102	3.5	20
47	Oxidized alginate-cross-linked alginate/gelatin hydrogel fibers for fabricating tubular constructs with layered smooth muscle cells and endothelial cells in collagen gels. <i>Biomacromolecules</i> , 2008 , 9, 2036-41	6.9	73
46	Transesterification by lipase entrapped in electrospun poly(vinyl alcohol) fibers and its application to a flow-through reactor. <i>Journal of Bioscience and Bioengineering</i> , 2008 , 105, 687-9	3.3	23
45	Agarose-gelatin conjugate membrane enhances proliferation of adherent cells enclosed in hollow-core microcapsules. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008 , 19, 937-44	3.5	16
44	Feasibility of carboxymethylcellulose with phenol moieties as a material for mammalian cell-enclosing subsieve-size capsules. <i>Cellulose</i> , 2008 , 15, 723-729	5.5	14
43	Application of silicate electrospun nanofibers for cell culture. <i>Journal of Sol-Gel Science and Technology</i> , 2008 , 48, 350-355	2.3	24
42	Both ionically and enzymatically crosslinkable alginate-tyramine conjugate as materials for cell encapsulation. <i>Journal of Biomedical Materials Research - Part A</i> , 2008 , 85, 345-51	5.4	37
41	Production of cell-enclosing hollow-core agarose microcapsules via jetting in water-immiscible liquid paraffin and formation of embryoid body-like spherical tissues from mouse ES cells enclosed within these microcapsules. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 235-43	4.9	54
40	Development of electrospun poly(vinyl alcohol) fibers immobilizing lipase highly activated by alkyl-silicate for flow-through reactors. <i>Journal of Membrane Science</i> , 2008 , 325, 454-459	9.6	21
39	???. <i>Seni Kikai Gakkai Shi/Journal of the Textile Machinery Society of Japan</i> , 2008 , 61, 487-491		
38	Peroxidase-catalyzed cell encapsulation in subsieve-size capsules of alginate with phenol moieties in water-immiscible fluid dissolving H ₂ O ₂ . <i>Biomacromolecules</i> , 2007 , 8, 2622-6	6.9	48
37	Development of a silica monolith microreactor entrapping highly activated lipase and an experiment toward integration with chromatographic separation of chiral esters. <i>Journal of Separation Science</i> , 2007 , 30, 3077-84	3.4	23
36	Synthesis and characterization of both ionically and enzymatically cross-linkable alginate. <i>Acta Biomaterialia</i> , 2007 , 3, 495-501	10.8	137

35	Laccase-mediated degradation and reduction of toxicity of the postharvest fungicide imazalil. <i>Process Biochemistry</i> , 2007 , 42, 459-461	4.8	16
34	Fabrication of artificial endothelialized tubes with predetermined three-dimensional configuration from flexible cell-enclosing alginate fibers. <i>Biotechnology Progress</i> , 2007 , 23, 182-6	2.8	34
33	Expression of a liver-specific function by a hepatoblastoma cell line cocultured with three-dimensional endothelialized tubes in collagen gels. <i>Journal of Bioscience and Bioengineering</i> , 2007 , 103, 200-2	3.3	9
32	Novel technique for fabricating double-layered tubular constructs consisting of two vascular cell types in collagen gels used as templates for three-dimensional tissues. <i>Journal of Bioscience and Bioengineering</i> , 2007 , 104, 435-8	3.3	19
31	Agarose-gelatin conjugate for adherent cell-enclosing capsules. <i>Biotechnology Letters</i> , 2007 , 29, 731-5	3	29
30	Synthesis of an agarose-gelatin conjugate for use as a tissue engineering scaffold. <i>Journal of Bioscience and Bioengineering</i> , 2007 , 103, 22-6	3.3	57
29	Synthesis of enzymatically-gellable carboxymethylcellulose for biomedical applications. <i>Journal of Bioscience and Bioengineering</i> , 2007 , 104, 30-3	3.3	126
28	Fabrication of endothelialized tube in collagen gel as starting point for self-developing capillary-like network to construct three-dimensional organs in vitro. <i>Biotechnology and Bioengineering</i> , 2006 , 95, 1-7	4.9	38
27	Biocompatibility of subsieve-size capsules versus conventional-size microcapsules. <i>Journal of Biomedical Materials Research - Part A</i> , 2006 , 78, 394-8	5.4	38
26	Effect of diglucosamine on the entrapment of protein into liposomes. <i>Journal of Liposome Research</i> , 2006 , 16, 103-12	6.1	6
25	Development of alginate-agarose subsieve-size capsules for subsequent modification with a polyelectrolyte complex membrane. <i>Biochemical Engineering Journal</i> , 2006 , 30, 76-81	4.2	20
24	Usefulness of flow focusing technology for producing subsieve-size cell enclosing capsules: Application for agarose capsules production. <i>Biochemical Engineering Journal</i> , 2006 , 30, 218-221	4.2	14
23	Prospective use of electrospun ultra-fine silicate fibers for bone tissue engineering. <i>Biotechnology Journal</i> , 2006 , 1, 958-62	5.6	36
22	Development of mammalian cell-enclosing calcium-alginate hydrogel fibers in a co-flowing stream. <i>Biotechnology Journal</i> , 2006 , 1, 1014-7	5.6	34
21	Effects of Lipid Composition on Entrapment of Proteins into Phosphatidylglycerol-Containing Liposomes. <i>Kagaku Kogaku Ronbunshu</i> , 2006 , 32, 514-517	0.4	
20	Higher viscous solution induces smaller droplets for cell-enclosing capsules in a co-flowing stream. <i>Biotechnology Progress</i> , 2005 , 21, 994-7	2.8	14
19	Transition of mechanical property of porous alginate scaffold with cells during culture period. <i>Journal of Bioscience and Bioengineering</i> , 2005 , 100, 127-9	3.3	19
18	Development of mammalian cell-enclosing subsieve-size agarose capsules (. <i>Biomaterials</i> , 2005 , 26, 4786-92	4.9	74

17	Development and Characterization of a Silica Monolith Immobilized Enzyme Micro-bioreactor. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 236-240	3.9	47
16	Enhanced Angiogenesis in bFGF-Containing Scaffold Promoted Viability of Enclosed Hepatocytes and Maintained Hepatospecific Glycogen Storage Capacity. <i>Journal of Chemical Engineering of Japan</i> , 2005 , 38, 913-917	0.8	6
15	Subsieve-size agarose capsules enclosing ifosfamide-activating cells: a strategy toward chemotherapeutic targeting to tumors. <i>Molecular Cancer Therapeutics</i> , 2005 , 4, 1786-90	6.1	27
14	Preparation of mammalian cell-enclosing subsieve-sized capsules (. <i>Biotechnology and Bioengineering</i> , 2004 , 86, 168-73	4.9	29
13	MIN6 cells-enclosing aminopropyl-silicate membrane templated by alginate gels differences in guluronic acid content. <i>International Journal of Pharmaceutics</i> , 2004 , 270, 65-73	6.5	13
12	Behavior of enclosed sol- and gel-alginates in vivo. <i>Biochemical Engineering Journal</i> , 2004 , 22, 19-24	4.2	16
11	Proliferation and Insulin Secretion Function of Mouse Insulinoma Cells Encapsulated in Alginate/Sol-Gel Synthesized Aminopropyl-Silicate/Alginate Microcapsule. <i>Journal of Sol-Gel Science and Technology</i> , 2003 , 28, 267-272	2.3	26
10	Modification of porous aminopropyl-silicate microcapsule membrane by electrically-bonded external anionic polymers. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2003 , 14, 643-52	3.5	12
9	Permeability of a sol-gel synthesized aminopropyl-silicate-titanate hybrid membrane for the microcapsule-shaped bioartificial pancreas. <i>Journal of Artificial Organs</i> , 2002 , 5, 0054-0059	1.8	
8	Aminopropyl-silicate membrane for microcapsule-shaped bioartificial organs: control of molecular permeability. <i>Journal of Membrane Science</i> , 2002 , 202, 73-80	9.6	16
7	Permeability of alginate/sol-gel synthesized aminopropyl-silicate/alginate membrane templated by calcium-alginate gel. <i>Journal of Membrane Science</i> , 2002 , 205, 183-189	9.6	17
6	In vitro and in vivo evaluation of alginate/sol-gel synthesized aminopropyl-silicate/alginate membrane for bioartificial pancreas. <i>Biomaterials</i> , 2002 , 23, 4177-83	15.6	67
5	Alginate/aminopropyl-silicate/alginate membrane immunoisolation and insulin secretion of encapsulated islets. <i>Biotechnology Progress</i> , 2002 , 18, 401-3	2.8	23
4	Newly developed aminopropyl-silicate immunoisolation membrane for a microcapsule-shaped bioartificial pancreas. <i>Annals of the New York Academy of Sciences</i> , 2001 , 944, 277-83	6.5	11
3	Synthesis and transport characterization of alginate/aminopropyl-silicate/alginate microcapsule: application to bioartificial pancreas. <i>Biomaterials</i> , 2001 , 22, 2827-34	15.6	79
2	Bioseparation Engineering. Control of Transport Characteristic of Membrane by Multi-layering of Polyelectrolyte Complex Toward Microcapsule-shaped Bioartificial Pancreas.. <i>Kagaku Kogaku Ronbunshu</i> , 2001 , 27, 165-168	0.4	2
1	Control of molecular weight cut-off for immunoisolation by multilayering glycol chitosan-alginate polyion complex on alginate-based microcapsules. <i>Journal of Microencapsulation</i> , 2000 , 17, 691-9	3.4	42