Makoto Yoshimoto

List of Publications by Year
in descending order

72	1,866	304743 22	276875 41
papers	citations	h-index	g-index

72	72	72	2506
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficient Entrapment of Carbonic Anhydrase in Alginate Hydrogels Using Liposomes for Continuous-Flow Catalytic Reactions. ACS Omega, 2021, 6, 6368-6378.	3.5	10
2	Confinement of Metalloenzymes in PEGylated Liposomes to Formulate Colloidal Catalysts for Antioxidant Cascade. Langmuir, 2021, 37, 10624-10635.	3.5	1
3	Preparation and Characteristics of Enzymatic Reaction Systems Using Lipid Membranes and Fine Droplets of Liposomes. Membrane, 2021, 46, 78-83.	0.0	0
4	A two-enzyme cascade reaction consisting of two reaction pathways. Studies in bulk solution for understanding the performance of a flow-through device with immobilised enzymes. RSC Advances, 2020, 10, 18655-18676.	3.6	9
5	High Permeability of Polyunsaturated Lipid Bilayers As Applied to Attoliter Enzyme Reactors. ACS Applied Bio Materials, 2019, 2, 2453-2463.	4.6	4
6	Rapid leakage from PEGylated liposomes triggered by bubbles. Soft Matter, 2019, 15, 9537-9546.	2.7	14
7	Aggregation of chlorophyll a induced in self-assembled membranes composed of DMPC and DHPC. Colloids and Surfaces B: Biointerfaces, 2019, 175, 403-408.	5.0	6
8	Evaluation of Hydrodynamic Properties of Bubble Columns Based on Membrane Permeability of Liposomes. Bunseki Kagaku, 2018, 67, 711-717.	0.2	0
9	Immobilized carbonic anhydrase: preparation, characteristics and biotechnological applications. World Journal of Microbiology and Biotechnology, 2018, 34, 151.	3.6	27
10	Immobilization of Carbonic Anhydrase in Glass Micropipettes and Glass Fiber Filters for Flow-Through Reactor Applications. ACS Omega, 2018, 3, 10391-10405.	3.5	23
11	Reactive bienzyme systems fabricated through immobilization of biotinylated glucose oxidase and peroxidase molecules onto neutralized avidin-conjugated liposomes. Biochemical Engineering Journal, 2017, 125, 81-87.	3.6	8
12	Characterization of Liposome Membrane Containing Chlorophyll a Molecules and Its Photosensitized Functions. Journal of Nanoscience and Nanotechnology, 2017, 17, 4888-4893.	0.9	1
13	Preparation and characterization of carbonic anhydrase-conjugated liposomes for catalytic synthesis of calcium carbonate particles. Enzyme and Microbial Technology, 2017, 105, 9-17.	3.2	22
14	Stabilization of Enzymes Through Encapsulation in Liposomes. Methods in Molecular Biology, 2017, 1504, 9-18.	0.9	12
15	Clusters of Phospholipid Vesicles as Platforms for Glucose Oxidaseâ€Catalyzed Reaction in a Bubbleâ€Column Bioreactor. Chemical Engineering and Technology, 2016, 39, 1130-1136.	1.5	3
16	Enzymatic reactions in confined environments. Nature Nanotechnology, 2016, 11, 409-420.	31.5	597
17	Enhanced Heat Stability of Î±â€Chymotrypsin through Singleâ€Enzyme Confinement in Attoliter Liposomes. ChemBioChem, 2016, 17, 1221-1224.	2.6	6
18	Modulation of cellulase activity by charged lipid bilayers with different acyl chain properties for efficient hydrolysis of ionic liquid-pretreated cellulose. Colloids and Surfaces B: Biointerfaces, 2016, 146, 198-203.	5.0	3

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19	Electrochemical synthesis of a nanohybrid film consisting of stacked graphene sheets and manganese oxide as oxygen evolution reaction catalyst. RSC Advances, 2016, 6, 23377-23382.	3.6	16
20	Liposomes as Chaperone Mimics with Controllable Affinity toward Heat-Denatured Formate Dehydrogenase from Candida boidinii. Langmuir, 2015, 31, 762-770.	3.5	12
21	Phase transitionâ€induced rapid permeabilization of liposome membranes composed of milkâ€sphingomyelin. European Journal of Lipid Science and Technology, 2014, 116, 226-231.	1.5	6
22	A kinetic analysis of catalytic production of oxygen in catalaseâ€containing liposome dispersions for controlled transfer of oxygen in a bioreactor. Journal of Chemical Technology and Biotechnology, 2014, 89, 1388-1395.	3.2	10
23	Selective Oxidation of d-Amino Acids Catalyzed by Oligolamellar Liposomes Intercalated with d-Amino Acid Oxidase. Langmuir, 2014, 30, 6180-6186.	3.5	13
24	Mechanosensitive Liposomes as Artificial Chaperones for Shear-Driven Acceleration of Enzyme-Catalyzed Reaction. ACS Applied Materials & Interfaces, 2014, 6, 3671-3679.	8.0	26
25	Liposome clusters with shear stress-induced membrane permeability. Chemistry and Physics of Lipids, 2013, 174, 8-16.	3.2	22
26	Preparation of liposome-coupled NADH and evaluation of its affinity toward formate dehydrogenase based on deactivation kinetics of the enzyme. Colloids and Surfaces B: Biointerfaces, 2013, 109, 40-44.	5.0	2
27	Hydrolysis of insoluble cellulose to glucose catalyzed by cellulaseâ€containing liposomes in an aqueous solution of 1â€butylâ€3â€methylimidazolium chloride. Biotechnology Progress, 2013, 29, 1190-1196.	2.6	9
28	Oligolamellar vesicles for covalent immobilization and stabilization of d-amino acid oxidase. Enzyme and Microbial Technology, 2013, 52, 13-19.	3.2	10
29	A Method To Estimate the Average Shear Rate in a Bubble Column Using Liposomes. Industrial & Engineering Chemistry Research, 2013, 52, 18498-18502.	3.7	10
30	Membrane Permeability and Stability of Liposomes Suspended in Shear Flow. Journal of Dispersion Science and Technology, 2013, 34, 1557-1562.	2.4	11
31	Oxidation of Glucose in Gasâ€“Liquid Flow Catalyzed by Glucose Oxidase-Containing Liposomes with Different Acyl Chain Properties. Journal of Chemical Engineering of Japan, 2013, 46, 302-306.	0.6	1
32	Effects of Bubble Interactions on Liquid Phase Mass Transfer Coefficients in Three Types of Bubble Columns. Journal of Chemical Engineering of Japan, 2012, 45, 655-660.	0.6	2
33	Stabilization of Enzymes Through Encapsulation in Liposomes. Methods in Molecular Biology, 2011, 679, 9-18.	0.9	23
34	Temperature-dependent permeability of liposome membrane incorporated with Mg-chlorophyll a. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 387, 65-70.	4.7	9
35	Thermal stabilization of formaldehyde dehydrogenase by encapsulation in liposomes with nicotinamide adenine dinucleotide. Enzyme and Microbial Technology, 2011, 49, 209-214.	3.2	8
36	A Biosensor Composed of Glucose Oxidaseâ€Containing Liposomes and MnO₂â€Based Layered Nanocomposite. Electroanalysis, 2010, 22, 653-659.	2.9	10

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37	Stability and reactivity of liposomeâ€encapsulated formate dehydrogenase and cofactor system in carbon dioxide gasâ€liquid flow. Biotechnology Progress, 2010, 26, 1047-1053.	2.6	18
38	Stabilization of formate dehydrogenase from Candida boidinii through liposome-assisted complexation with cofactors. Enzyme and Microbial Technology, 2010, 46, 588-593.	3.2	13
39	Gasâ€“liquid flow-induced permeabilization of phospholipid bilayer membranes for regulating catalytic performance of liposome-encapsulated bovine liver catalase. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 360, 63-68.	4.7	2
40	Catalase-conjugated liposomes encapsulating glucose oxidase for controlled oxidation of glucose with decomposition of hydrogen peroxide produced. Colloids and Surfaces B: Biointerfaces, 2010, 79, 403-408.	5.0	18
41	Covalent conjugation of tetrameric bovine liver catalase to liposome membranes for stabilization of the enzyme tertiary and quaternary structures. Colloids and Surfaces B: Biointerfaces, 2009, 69, 281-287.	5.0	31
42	Liposomal Encapsulation of Yeast Alcohol Dehydrogenase with Cofactor for Stabilization of the Enzyme Structure and Activity. Biotechnology Progress, 2008, 24, 576-582.	2.6	31
43	Estimation of Local Superficial Gas Velocity in Slurry Bubble Columns Using a Triple Electroresistivity Probe. Journal of Chemical Engineering of Japan, 2008, 41, 578-584.	0.6	1
44	Characterization of Bubble Properties in Slurry Bubble Columns Using a Triple Electroresistivity Probe. Journal of Chemical Engineering of Japan, 2008, 41, 568-577.	0.6	2
45	Phosphatidylcholine Vesicle-Mediated Decomposition of Hydrogen Peroxide. Langmuir, 2007, 23, 9416-9422.	3.5	36
46	Characterization and immobilization of liposome-bound cellulase for hydrolysis of insoluble cellulose. Bioresource Technology, 2007, 98, 1366-1372.	9.6	68
47	Stabilization of quaternary structure and activity of bovine liver catalase through encapsulation in liposomes. Enzyme and Microbial Technology, 2007, 41, 849-858.	3.2	69
48	Permeabilization of Phospholipid Bilayer Membranes Induced by Gas-Liquid Flow in an Airlift Bubble Column. Biotechnology Progress, 2007, 23, 1321-1326.	2.6	8
49	Liposome-Assisted Refolding of Microbial Transglutaminase. Membrane, 2007, 32, 287-293.	0.0	2
50	Optimal Preparation of Immobilized Liposome-Bound Cellulase for Hydrolysis of Insoluble Cellulose in an External Loop Airlift Bioreactor. Biotechnology Progress, 2006, 22, 459-464.	2.6	10
51	Glucose Oxidation Catalyzed by Liposomal Glucose Oxidase in the Presence of Catalase-Containing Liposomes. Biotechnology Progress, 2006, 22, 704-709.	2.6	22
52	Evaluation of temperature and guanidine hydrochloride-induced proteinâ€“liposome interactions by using immobilized liposome chromatography. Biochemical Engineering Journal, 2006, 29, 174-181.	3.6	32
53	Structural stability of glucose oxidase encapsulated in liposomes to inhibition by hydrogen peroxide produced during glucose oxidation. Biochemical Engineering Journal, 2006, 30, 158-163.	3.6	18
54	Novel immobilized liposomal glucose oxidase system using the channel protein OmpF and catalase. Biotechnology and Bioengineering, 2005, 90, 231-238.	3.3	52

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55	Enhancement of apparent substrate selectivity of proteinase K encapsulated in liposomes through a cholate-induced alteration of the bilayer permeability. Biotechnology and Bioengineering, 2004, 85, 222-233.	3.3	23
56	A kinetic study on enzymatic hydrolysis of a variety of pulps for its enhancement with continuous ultrasonic irradiation. Biochemical Engineering Journal, 2004, 19, 155-164.	3.6	37
57	Mechanism for High Stability of Liposomal Glucose Oxidase to Inhibitor Hydrogen Peroxide Produced in Prolonged Glucose Oxidation. Bioconjugate Chemistry, 2004, 15, 1055-1061.	3.6	38
58	A Kinetic Model for Glucose Oxidation Catalyzed by Immobilized Glucose Oxidase-Containing Liposomes in a Mini-Scale External Loop Airlift Bubble Column. Journal of Chemical Engineering of Japan, 2004, 37, 1012-1018.	0.6	6
59	Continuous Production of Calcium Gluconate Crystals in an Integrated Bioreaction-Crystallization Process Using External Loop Airlift Bubble Columns with Immobilized Glucose Oxidase Gel Beads. Journal of Chemical Engineering of Japan, 2004, 37, 1035-1040.	0.6	7
60	Preparation and Characterization of Cellulase-Containing Liposomesand Their Immobilization Suitable for Enzymatic Hydrolysis of Cellulose. Journal of Chemical Engineering of Japan, 2004, 37, 680-684.	0.6	9
61	Preparation and characterization of reactive and stable glucose oxidase-containing liposomes modulated with detergent. Biotechnology and Bioengineering, 2003, 81, 695-704.	3.3	30
62	Optimal covalent immobilization of glucose oxidase-containing liposomes for highly stable biocatalyst in bioreactor. Biotechnology and Bioengineering, 2003, 83, 444-453.	3.3	41
63	Gas holdup, liquid circulating velocity and mass transfer properties in a mini-scale external loop airlift bubble column. Chemical Engineering Science, 2003, 58, 3353-3360.	3.8	20
64	Competitive inhibition by hydrogen peroxide produced in glucose oxidation catalyzed by glucose oxidase. Biochemical Engineering Journal, 2003, 13, 69-72.	3.6	81
65	Measurement and Correlation of Critical Gas and Liquid Velocities for Complete Circulation of Solid Particles in External Loop Airlift Bubble Columns. Canadian Journal of Chemical Engineering, 2003, 81, 444-450.	1.7	4
66	Title is missing!. Biotechnology Letters, 2002, 24, 1157-1160.	2.2	4
67	Characterization of Stimuli-Induced Membrane Fusion of Liposomes.. Kagaku Kogaku Ronbunshu, 2002, 28, 481-484.	0.3	1
68	Optimal operation of an integrated bioreactionâ€“crystallization process for continuous production of calcium gluconate using external loop airlift columns. Chemical Engineering Science, 2001, 56, 6165-6170.	3.8	22
69	Oxidative Refolding of Denatured/Reduced Lysozyme Utilizing the Chaperone-like Function of Liposomes and Immobilized Liposome Chromatography. Biotechnology Progress, 1999, 15, 480-487.	2.6	48
70	Conformationally Changed Cytochrome c-Mediated Fusion of Enzyme- and Substrate-Containing Liposomes. Biotechnology Progress, 1999, 15, 689-696.	2.6	24
71	Model System for Heat-Induced Translocation of Cytoplasmic Î²-Galactosidase across Phospholipid Bilayer Membrane. Biotechnology Progress, 1998, 14, 218-226.	2.6	34
72	Refolding of Carbonic Anhydrase Assisted by 1-Palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine Liposomes. Biotechnology Progress, 1997, 13, 828-836.	2.6	58