## Enzyme immobilization in MCM-41 molecular sieve

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Citation Report

#	Article	IF	Citations
1	Redox molecular sieves as heterogeneous catalysts for liquid phase oxidations. Studies in Surface Science and Catalysis, 1997, 110, 151-175.	1.5	41
2	Kinetics and Active Fraction Determination of a Protease Enzyme Immobilized on Functionalized Membranes: Mathematical Modeling and Experimental Results. Biotechnology Progress, 1998, 14, 865-873.	1.3	16
3	Zeolites as supports for an enzymatic alcoholysis reaction. Journal of Molecular Catalysis B: Enzymatic, 1998, 4, 303-311.	1.8	63
5	Mesochemistry. Current Opinion in Colloid and Interface Science, 1998, 3, 181-193.	3.4	60
6	Derivatised mesoporous solids. Current Opinion in Solid State and Materials Science, 1998, 3, 71-78.	5.6	98
7	Topological construction of mesoporous materials. Current Opinion in Solid State and Materials Science, 1998, 3, 111-121.	5.6	185
8	Potential Applications for M41S Type Mesoporous Molecular Sieves. Studies in Surface Science and Catalysis, 1998, 117, 13-21.	1.5	46
9	Mesoporous molecular sieve immobilized enzymes. Studies in Surface Science and Catalysis, 1998, , 373-380.	1.5	54
10	New organic chemical conversions over MCM-41-type materials. Studies in Surface Science and Catalysis, 1998, 117, 171-182.	1.5	28
11	Exploiting hysteresis for high activity enzymes in organic media. Progress in Biotechnology, 1998, , 373-380.	0.2	O
12	Ordered mesoporous materials. Microporous and Mesoporous Materials, 1999, 27, 131-149.	2.2	975
13	A study on the stability of MCM-41-supported heteropoly acids under liquid- and gas-phase esterification conditions. Microporous and Mesoporous Materials, 1999, 27, 365-371.	2.2	166
14	Pulsed laser deposition of mesoporous niobium oxide thin films and application as chemical sensors. Microporous and Mesoporous Materials, 1999, 28, 113-123.	2.2	78
15	Covalent immobilization of acid phosphatase on amorphous AlPO4 support. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 473-481.	1.8	34
16	Postsynthesis Hydrothermal Restructuring of M41S Mesoporous Molecular Sieves in Water. Journal of Physical Chemistry B, 1999, 103, 1216-1222.	1,2	156
17	Characterization of Iron(III) Tetramesitylporphyrin and Microperoxidase-8 Incorporated into the Molecular Sieve MCM-41. Inorganic Chemistry, 1999, 38, 4901-4905.	1.9	29
18	Preparation and Charaterization of DAM-1 type Materials. Materials Research Society Symposia Proceedings, 2000, 662, 1.	0.1	0
19	Enzymatic Peptide Synthesis in Organic Solvent with Different Zeolites as Immobilization Matrixes. Tetrahedron, 2000, 56, 3517-3522.	1.0	73

#	Article	IF	Citations
20	Cytochrome c immobilization into mesoporous molecular sieves. Journal of Molecular Catalysis B: Enzymatic, 2000, 10, 453-469.	1.8	228
21	Extensive Void Defects in Mesoporous Aluminosilicate MCM-41. Journal of Physical Chemistry B, 2000, 104, 8967-8975.	1.2	167
22	Control of Pore Sizes in Mesoporous Silica Templated by Liquid Crystals in Block Copolymerâ^'Cosurfactantâ^'Water Systems. Langmuir, 2000, 16, 5304-5310.	1.6	179
24	Chapter 22 Beyond twelve membered rings. Studies in Surface Science and Catalysis, 2001, , 1003-1027.	1.5	6
25	Immobilized enzymes in ordered mesoporous silica materials and improvement of their stability and catalytic activity in an organic solvent. Microporous and Mesoporous Materials, 2001, 44-45, 755-762.	2.2	260
26	Enzyme immobilisation using siliceous mesoporous molecular sieves. Microporous and Mesoporous Materials, 2001, 44-45, 763-768.	2.2	178
27	Separation of biological molecules using mesoporous molecular sieves. Microporous and Mesoporous Materials, 2001, 44-45, 769-774.	2.2	132
28	Perspectives in catalytic applications of mesostructured materials. Applied Catalysis A: General, 2001, 222, 299-357.	2.2	374
29	Enzyme immobilisation using SBA-15 mesoporous molecular sieves with functionalised surfaces. Journal of Molecular Catalysis B: Enzymatic, 2001, 15, 81-92.	1.8	310
30	Mesoporous molecular sieve (MCM-41) as support material for microbial cell immobilization and transformation of 2,4,6-trinitrotoluene (TNT): a novel system for whole cell immobilization. Journal of Molecular Catalysis B: Enzymatic, 2001, 16, 17-26.	1.8	17
31	Mesoporous materials as supports for heteropolyacid based catalysts. Studies in Surface Science and Catalysis, 2002, , 1221-1228.	1.5	1
32	Preparation of mesoporous materials as a support for the immobilisation of lipase. Studies in Surface Science and Catalysis, 2002, 142, 1561-1568.	1.5	15
33	Modification of silica walls of mesoporous silicate and alumino-silicate by reaction with benzoyl chloride. Studies in Surface Science and Catalysis, 2002, , 1427-1434.	1.5	1
34	Functionalization of Molecularly Templated Mesoporous Silica. Journal of the Chinese Chemical Society, 2002, 49, 883-893.	0.8	23
35	Sorption properties and hydrothermal stability of MCM-41 prepared by pH adjustment and salt addition. Studies in Surface Science and Catalysis, 2002, , 445-452.	1.5	3
36	Electrorheological response of mesoporous materials under applied electric fields. Studies in Surface Science and Catalysis, 2002, 141, 479-486.	1.5	2
37	Dam-1 Molecular Sieve Forms, Fibers and Films. Materials Research Society Symposia Proceedings, 2002, 726, 1.	0.1	0
38	Ultrasonic Synthesis of Silicaâ^'Alumina Nanomaterials with Controlled Mesopore Distribution without Using Surfactants. Langmuir, 2002, 18, 4111-4117.	1.6	25

#	Article	IF	CITATIONS
39	Mechanistic and Structural Features of Protein Adsorption onto Mesoporous Silicates. Journal of Physical Chemistry B, 2002, 106, 7340-7347.	1.2	256
40	Catalytic activity of mesoporous silicate-immobilized chloroperoxidase. Journal of Molecular Catalysis B: Enzymatic, 2002, 17, 1-8.	1.8	237
41	Delaminated Zeolites: An Efficient Support for Enzymes. Advanced Materials, 2002, 14, 71-74.	11.1	109
42	Surface-Specific Zeolite-Binding Proteins. Advanced Materials, 2002, 14, 1853-1856.	11.1	65
43	Further studies of DAM-1 mesoporous silica preparations. Microporous and Mesoporous Materials, 2002, 54, 229-248.	2.2	30
44	Recent Progress on Immobilization of Enzymes on Molecular Sieves for Reactions in Organic Solvents. Applied Biochemistry and Biotechnology, 2002, 101, 113-130.	1.4	45
45	Gas-Phase Enzymatic Esterification On Immobilized Lipases In Mcm-41 Molecular Sieves. Applied Biochemistry and Biotechnology, 2002, 98-100, 963-976.	1.4	20
46	Transesterification Catalyzed by Trypsin Supported on MCM-41. Catalysis Letters, 2003, 88, 183-186.	1.4	21
47	A Mesoporous Silica Nanosphere-Based Carrier System with Chemically Removable CdS Nanoparticle Caps for Stimuli-Responsive Controlled Release of Neurotransmitters and Drug Molecules. Journal of the American Chemical Society, 2003, 125, 4451-4459.	6.6	1,618
48	Preparation and properties of lipase immobilized on MCM-36 support. Journal of Molecular Catalysis B: Enzymatic, 2003, 22, 119-133.	1.8	65
49	The Potential of Ordered Mesoporous Silica for the Storage of Drugs: The Example of a Pentapeptide Encapsulated in a MSU-Tween 80. ChemPhysChem, 2003, 4, 281-286.	1.0	88
50	The structure–activity relationships of methane mono-oxygenase mimics in alkane activation. Catalysis Today, 2003, 81, 263-286.	2.2	10
51	Synthesis of 2-cyanoethyl-modified MCM-48 stable to surfactant removal by solvent extraction: Influence of organic modifier, base and surfactant. Microporous and Mesoporous Materials, 2003, 58, 255-261.	2.2	20
52	Chemistry of silica at different concentrations of non-ionic surfactant solutions: effect of pH of the synthesis gel on the preparation of mesoporous silicas. Microporous and Mesoporous Materials, 2003, 63, 59-73.	2.2	37
54	The covalent immobilization of trypsin at the galleries of layered $\hat{I}^3$ -zirconium phosphate. Colloids and Surfaces B: Biointerfaces, 2003, 30, 99-109.	<b>2.</b> 5	12
55	Highly Efficient "Tight Fit" Immobilization of α-Chymotrypsin in Mesoporous MCM-41: A Novel Approach Using Precursor Immobilization and Activation. Biotechnology Progress, 2003, 19, 346-351.	1.3	32
56	Template Synthesis of a New Mesostructured Silica from Highly Ordered Mesoporous Carbon Molecular Sieves. Chemistry of Materials, 2003, 15, 1932-1934.	3.2	66
57	A new method for immunoassays using field-flow fractionation with on-line, continuous chemiluminescence detection. Talanta, 2003, 60, 303-312.	2.9	32

#	Article	IF	CITATIONS
58	Adsorption of lysozyme and trypsin onto mesoporous silica materials. Studies in Surface Science and Catalysis, 2003, , 775-778.	1.5	13
59	Adsorption of Cytochrome C on New Mesoporous Carbon Molecular Sieves. Journal of Physical Chemistry B, 2003, 107, 8297-8299.	1.2	238
60	Immobilisation of single molecule magnets in mesoporous silica hosts. New Journal of Chemistry, 2003, 27, 1533-1539.	1.4	37
61	Differences between isolated silanols in all-silica ITQ-2 and MCM-41. Studies in Surface Science and Catalysis, 2004, 154, 1532-1538.	1.5	2
62	Synthesis of mesoporous silica with novel structures using rigid bolaform ammonium surfactants. Studies in Surface Science and Catalysis, 2004, 154, 528-532.	1.5	1
63	Immobilization of lipase in a mesoporous reactor based on MCM-41. Journal of Molecular Catalysis B: Enzymatic, 2004, 30, 209-217.	1.8	85
64	Directly immobilize polycation bearing Os complexes on mesoporous material MAS-5 and its electrocatalytic activity for nitrite. Materials Chemistry and Physics, 2004, 86, 425-429.	2.0	11
65	Redox properties of bis(8-hydroxyquinoline)manganese(II) encapsulated in various zeolites. Journal of Molecular Catalysis A, 2004, 223, 21-29.	4.8	24
66	Immobilization of enzymes in mesoporous materials: controlling the entrance to nanospace. Microporous and Mesoporous Materials, 2004, 73, 121-128.	2.2	218
67	Direct electrochemistry and electrocatalysis of myoglobin immobilized on a hexagonal mesoporous silica matrix. Analytical Biochemistry, 2004, 332, 23-31.	1.1	109
68	Functionalized nanoporous silicas for the immobilization of penicillin acylase. Applied Surface Science, 2004, 237, 398-404.	3.1	108
69	Design of large-pore mesoporous materials for immobilization of penicillin G acylase biocatalyst. Catalysis Today, 2004, 93-95, 293-299.	2.2	158
70	Effects of Surface Functionalization and Organo-Tailoring of Synthetic Layer Silicates on the Immobilization of Cytochrome c. Chemistry of Materials, 2004, 16, 2559-2566.	3.2	23
71	Adsorption of Lysozyme over Mesoporous Molecular Sieves MCM-41 and SBA-15:Â Influence of pH and Aluminum Incorporation. Journal of Physical Chemistry B, 2004, 108, 7323-7330.	1.2	330
72	Adsorption of cytochrome c on MCM-41 and SBA-15: Influence of pH. Studies in Surface Science and Catalysis, 2004, 154, 2987-2994.	1.5	20
73	Organic matter in small mesopores in sediments and soils. Geochimica Et Cosmochimica Acta, 2004, 68, 3863-3872.	1.6	209
74	Mineral mesopore effects on nitrogenous organic matter adsorption. Organic Geochemistry, 2004, 35, 355-375.	0.9	102
75	BIOADSORPTION AND SEPARATION WITH NANOPOROUS MATERIALS. Series on Chemical Engineering, 2004, , 812-848.	0.2	2

#	Article	IF	CITATIONS
76	Direct synthesis of zeolites self-bonded pellets for biocatalyst immobilization. Studies in Surface Science and Catalysis, 2005, 158, 383-390.	1.5	2
77	Immobilization of cytochrome P-450 on MCM-41 with different silicon/aluminum ratios. Microporous and Mesoporous Materials, 2005, 80, 25-31.	2.2	28
78	Adsorption of Bovine Serum Albumin and lysozyme on siliceous MCM-41. Microporous and Mesoporous Materials, 2005, 80, 311-320.	2.2	90
79	Proton conducting polyaniline molecular sieve composites. Microporous and Mesoporous Materials, 2005, 81, 321-332.	2.2	21
80	Synthesis of reusable lipases by immobilization on hexagonal mesoporous silica and encapsulation in calcium alginate: Transesterification in non-aqueous medium. Microporous and Mesoporous Materials, 2005, 86, 215-222.	2.2	82
81	Ordered mesoporous materials in catalysis. Microporous and Mesoporous Materials, 2005, 77, 1-45.	2.2	1,976
82	Studies on the activity and stability of immobilized $\hat{l}_{\pm}$ -amylase in ordered mesoporous silicas. Microporous and Mesoporous Materials, 2005, 77, 67-77.	2.2	178
83	Molecular sieves materials modified carbon paste electrodes for the determination of cardiac troponin I by anodic stripping voltammetry. Microporous and Mesoporous Materials, 2005, 85, 89-95.	2.2	16
84	Protein adsorption on the mesoporous molecular sieve silicate SBA-15: effects of pH and pore size. Journal of Chromatography A, 2005, 1069, 119-126.	1.8	158
85	Immobilization of Papain on the Mesoporous Molecular Sieve MCM-48. Engineering in Life Sciences, 2005, 5, 436-441.	2.0	32
86	Ordered Mesoporous Materials for Bioadsorption and Biocatalysis. Chemistry of Materials, 2005, 17, 4577-4593.	3.2	1,082
87	The adsorption characteristics, activity and stability of trypsin onto mesoporous silicates. Journal of Molecular Catalysis B: Enzymatic, 2005, 32, 231-239.	1.8	90
88	Mesoporous Materials Promoting Direct Electrochemistry and Electrocatalysis of Horseradish Peroxidase. Electroanalysis, 2005, 17, 862-868.	1.5	55
89	Stimuli-Responsive Controlled-Release Delivery System Based on Mesoporous Silica Nanorods Capped with Magnetic Nanoparticles. Angewandte Chemie - International Edition, 2005, 44, 5038-5044.	7.2	938
91	Simple Fabrication of a Highly Sensitive and Fast Glucose Biosensor Using Enzymes Immobilized in Mesocellular Carbon Foam. Advanced Materials, 2005, 17, 2828-2833.	11.1	202
92	Mesoporous Silica Nanoreactors for Highly Efficient Proteolysis. Chemistry - A European Journal, 2005, 11, 5391-5396.	1.7	81
93	Applications of zeolite inorganic composites in biotechnology: current state and perspectives. Applied Microbiology and Biotechnology, 2005, 67, 306-311.	1.7	52
94	Highly active and selective AlSBA-15 catalysts for the vapor phase tert-butylation of phenol. Applied Catalysis A: General, 2005, 281, 207-213.	2.2	84

#	Article	IF	CITATIONS
95	Immobilization of hemoglobin at the galleries of layered niobate HCaNbO. Biomaterials, 2005, 26, 5267-5275.	5.7	30
96	Simple Synthesis of Hierarchically Ordered Mesocellular Mesoporous Silica Materials Hosting Crosslinked Enzyme Aggregates. Small, 2005, 1, 744-753.	5.2	184
97	A Magnetically Separable, Highly Stable Enzyme System Based on Nanocomposites of Enzymes and Magnetic Nanoparticles Shipped in Hierarchically Ordered, Mesocellular, Mesoporous Silica. Small, 2005, 1, 1203-1207.	5.2	106
98	Determination of cardiac troponin I by anodic stripping voltammetry at SBA-15 modified carbon paste electrode. Studies in Surface Science and Catalysis, 2005, , 695-702.	1.5	O
99	A New Mesoporous Micelle-Templated Silica Route for Enzyme Encapsulation. Langmuir, 2005, 21, 4648-4655.	1.6	64
100	Immobilization of hemoglobin on stable mesoporous multilamellar silica vesicles and their activity and stability. Journal of Materials Research, 2005, 20, 2682-2690.	1.2	18
101	Immobilisation of a biological chelate in porous mesostructured silica for selective metal removal from wastewater and its recovery. New Journal of Chemistry, 2005, 29, 912.	1.4	29
102	Determination of cardiac troponin I by anodic stripping voltammetry over mesoporous materials modified carbon paste electrode. Studies in Surface Science and Catalysis, 2005, 158, 2041-2048.	1.5	1
103	NMR Study of the Adsorptionâ^'Desorption Kinetics of Dissolved Tetraalanine in MCM-41 Mesoporous Material. Journal of Physical Chemistry B, 2005, 109, 8029-8039.	1.2	39
104	Enhancing Stability and Oxidation Activity of Cytochrome c by Immobilization in the Nanochannels of Mesoporous Aluminosilicates. Journal of Physical Chemistry B, 2005, 109, 12277-12286.	1.2	101
105	Fast Photoreduction of a Heme Peptide Encapsulated in Nanostructured Materials. Journal of Physical Chemistry B, 2005, 109, 19547-19549.	1.2	11
106	Direct One-Step Immobilization of Glucose Oxidase in Well-Ordered Mesostructured Silica Using a Nonionic Fluorinated Surfactant. Chemistry of Materials, 2005, 17, 1479-1486.	3.2	80
107	Real-Time Imaging of Tunable Adenosine 5-Triphosphate Release from an MCM-41-Type Mesoporous Silica Nanosphere-Based Delivery System. Applied Spectroscopy, 2005, 59, 424-431.	1.2	70
108	Methodology for the Immobilization of Enzymes onto Mesoporous Materials. Journal of Physical Chemistry B, 2005, 109, 19496-19506.	1.2	176
109	Enzymes supported on ordered mesoporous solids: a special case of an inorganic–organic hybrid. Journal of Materials Chemistry, 2005, 15, 3690.	6.7	381
110	MCM-41 mesoporous material modified carbon paste electrode for the determination of cardiac troponin I by anodic stripping voltammetry. Talanta, 2005, 68, 61-66.	2.9	56
111	Mesoporous Silica Spheres as Supports for Enzyme Immobilization and Encapsulation. Chemistry of Materials, 2005, 17, 953-961.	3.2	509
112	Synthesis and Bio-adsorptive Properties of Large-Pore Periodic Mesoporous Organosilica Rods. Chemistry of Materials, 2005, 17, 6172-6176.	3.2	100

#	ARTICLE	IF	CITATIONS
113	Immobilization of Lipase on microporous and mesoporous materials: studies of the support surfaces. Studies in Surface Science and Catalysis, 2005, 155, 381-394.	1.5	40
114	Preparation of biocatalytic nanofibres with high activity and stability via enzyme aggregate coating on polymer nanofibres. Nanotechnology, 2005, 16, S382-S388.	1.3	175
115	Highly active horseradish peroxidase immobilized in 1-butyl-3-methylimidazolium tetrafluoroborate room-temperature ionic liquid based sol–gel host materials. Chemical Communications, 2005, , 1778-1780.	2.2	145
116	Hierarchical bimodal porous silicas and organosilicas for enzyme immobilization. Journal of Materials Chemistry, 2005, 15, 3859.	6.7	66
117	Low melting point agarose as a protection layer in photolithographic patterning of aligned binary proteins. Lab on A Chip, 2006, 6, 1080.	3.1	36
118	Immobilization of lipase on silicas. Relevance of textural and interfacial properties on activity and selectivity. New Journal of Chemistry, 2006, 30, 562.	1.4	85
119	Resolving Intermediate Solution Structures during the Formation of Mesoporous SBA-15. Journal of the American Chemical Society, 2006, 128, 3366-3374.	6.6	138
120	Recent progress in the synthesis and selected applications of MCM-41: a short review. Journal of Experimental Nanoscience, 2006, 1, 375-395.	1.3	74
121	The application of modified mesoporous silicas in liquid phase catalysis. Dalton Transactions, 2006, , 4297.	1.6	100
122	Adsorption and Activity of a Domoic Acid Binding Antibody Fragment on Mesoporous Silicates. Journal of Physical Chemistry B, 2006, 110, 18703-18709.	1.2	31
123	Adsorption Behavior of Cadmium(II) and Lead(II) on Mesoporous Silicate MCMâ€41. Separation Science and Technology, 2006, 41, 1635-1643.	1.3	28
124	Synthesis and lysozyme adsorption of rod-like large-pore periodic mesoporous organosilica. Progress in Solid State Chemistry, 2006, 34, 249-256.	3.9	59
125	Effect of spin configuration on the reactivity of cytochromecimmobilized in mesoporous silica. Molecular Physics, 2006, 104, 1635-1641.	0.8	17
126	Immobilizing catalysts on porous materials. Materials Today, 2006, 9, 32-39.	8.3	269
127	Single enzyme nanoparticles in nanoporous silica: A hierarchical approach to enzyme stabilization and immobilization. Enzyme and Microbial Technology, 2006, 39, 474-480.	1.6	63
128	Carbon coated monoliths as support material for a lactase from Aspergillus oryzae: Characterization and design of the carbon carriers. Carbon, 2006, 44, 3053-3063.	5.4	18
129	New approach to the immobilization of glucose oxidase on non-porous silica microspheres functionalized by (3-aminopropyl)trimethoxysilane (APTMS). Colloids and Surfaces B: Biointerfaces, 2006, 53, 225-232.	2.5	40
130	Photoluminescent properties of polyoxyethylene alkyl ether-type neutral surfactant templated mesoporous materials CMI-1: The absence of the 1.9eV PL band. Chemical Physics Letters, 2006, 420, 225-229.	1.2	19

#	ARTICLE	IF	CITATIONS
131	Inhibiting the leaching of lipase from mesoporous supports by polymerization of grafted vinyl groups. Microporous and Mesoporous Materials, 2006, 94, 29-33.	2.2	20
132	Synthesis of MCM-48 mesoporous molecular sieve with thermal and hydrothermal stability with the aid of promoter anions. Microporous and Mesoporous Materials, 2006, 95, 17-25.	2.2	25
133	Amino acid adsorption onto mesoporous silica molecular sieves. Separation and Purification Technology, 2006, 48, 197-201.	3.9	81
134	Fabrication of hollow multifunctional spheres containing MCM-41 nanoparticles and magnetite nanoparticles using layer-by-layer method. Journal of Colloid and Interface Science, 2006, 304, 437-441.	5.0	59
135	Synthesis of MCM-41 from coal fly ash by a green approach: Influence of synthesis pH. Journal of Hazardous Materials, 2006, 137, 1135-1148.	6.5	128
136	New families of mesoporous materials. Science and Technology of Advanced Materials, 2006, 7, 753-771.	2.8	156
137	Adsorption study of heme proteins on SBA-15 mesoporous silica with pore-filling models. Thin Solid Films, 2006, 499, 13-18.	0.8	70
138	Ultrafast enzyme immobilization over large-pore nanoscale mesoporous silica particles. Chemical Communications, 2006, , 1322.	2.2	112
139	Hybrid materials for immobilization of MP-11 catalyst. Topics in Catalysis, 2006, 38, 269-278.	1.3	108
140	Carbon nanocage: a large-pore cage-type mesoporous carbon material as an adsorbent for biomolecules. Journal of Porous Materials, 2006, 13, 379-383.	1.3	107
141	Trypsin immobilization on mesoporous silica with or without thiol functionalization. Journal of Porous Materials, 2006, 13, 385-391.	1.3	32
142	Nanostructures for enzyme stabilization. Chemical Engineering Science, 2006, 61, 1017-1026.	1.9	787
143	Effect of surface hydrophobicity/hydrophilicity of mesoporous supports on the activity of immobilized lipase. Journal of Colloid and Interface Science, 2006, 298, 780-786.	5.0	54
144	Challenges in biocatalysis for enzyme-based biofuel cells. Biotechnology Advances, 2006, 24, 296-308.	6.0	533
145	Development of an Amperometric Enzymatic Biosensor Based on Gold Modified Magnetic Nanoporous Microparticles. Electroanalysis, 2006, 18, 345-350.	1.5	42
146	"Fish-in-Net―Encapsulation of Enzymes in Macroporous Cages for Stable, Reusable, and Active Heterogeneous Biocatalysts. Advanced Materials, 2006, 18, 410-414.	11.1	82
147	Electrochemical Biosensing Systems Based on Carbon Nanotubes and Carbon Nanofibers. Analytical Letters, 2007, 40, 2271-2287.	1.0	26
148	Optimisation of production of a domoic acid-binding scFv antibody fragment in Escherichia coli using molecular chaperones and functional immobilisation on a mesoporous silicate support. Protein Expression and Purification, 2007, 52, 194-201.	0.6	63

#	Article	IF	CITATIONS
149	Mesoporous Silica Nanoparticles for Intracellular Delivery of Membrane-Impermeable Proteins. Journal of the American Chemical Society, 2007, 129, 8845-8849.	6.6	734
150	Catalytic activity of acetylcholinesterase immobilized on mesoporous molecular sieves. International Journal of Biological Macromolecules, 2007, 40, 444-448.	3.6	14
151	Low-cost preparation of mesoporous silica with high pore volume. International Journal of Minerals, Metallurgy, and Materials, 2007, 14, 369-372.	0.2	6
152	Mesoporous Silica Applications. Macromolecular Symposia, 2007, 258, 129-141.	0.4	147
153	Immobilization of Ntn hydrolases on APTES fuctionalized SBA-15. Studies in Surface Science and Catalysis, 2007, , 1891-1898.	1.5	0
154	Immobilization of <i>Trametes versicolor</i> Laccase on Magnetically Separable Mesoporous Silica Spheres. Chemistry of Materials, 2007, 19, 6408-6413.	3.2	162
155	Synergetic Effects of Nanoporous Support and Urea on Enzyme Activity. Nano Letters, 2007, 7, 1050-1053.	4.5	49
156	Asymmetric reactions on chiral catalysts entrapped within a mesoporous cage. Chemical Communications, 2007, , 1086.	2.2	106
157	Infiltration of Macromolecules into Nanoporous Silica Particles. Macromolecules, 2007, 40, 7594-7600.	2.2	64
158	Mesoporous silica nanomaterial-based biotechnological and biomedical delivery systems. Nanomedicine, 2007, 2, 99-111.	1.7	146
159	Encapsulation of Hemoglobin in Mesoporous Silica (FSM)—Enhanced Thermal Stability and Resistance to Denaturants. ChemBioChem, 2007, 8, 668-674.	1.3	85
160	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: A simple and effective method for enzyme stabilization. Biotechnology and Bioengineering, 2007, 96, 210-218.	1.7	187
163	Magnetic-Core/Porous-Shell CoFe2O4/SiO2 Composite Nanoparticles as Immobilized Affinity Supports for Clinical Immunoassays. Advanced Functional Materials, 2007, 17, 976-982.	7.8	113
164	Conductive Mesocellular Silica-Carbon Nanocomposite Foams for Immobilization, Direct Electrochemistry, and Biosensing of Proteins. Advanced Functional Materials, 2007, 17, 585-592.	7.8	176
165	Functionalization of Cubic I <b><i>a</i></b> 3d Mesoporous Silica for Immobilization of Penicillin G Acylase. Advanced Functional Materials, 2007, 17, 2160-2166.	7.8	57
166	Enzyme Immobilization: The Quest for Optimum Performance. Advanced Synthesis and Catalysis, 2007, 349, 1289-1307.	2.1	1,835
167	Layer-by-layer films of hemoglobin or myoglobin assembled with zeolite particles: Electrochemistry and electrocatalysis. Bioelectrochemistry, 2007, 70, 311-319.	2.4	21
168	Hierarchical aluminosilicate macrochannels with structured mesoporous walls: Towards a single catalyst for multistep reactions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 300, 129-135.	2.3	33

#	Article	IF	CITATIONS
169	Direct electron-transfer and electrochemical catalysis of hemoglobin immobilized on mesoporous Al2O3. Electrochimica Acta, 2007, 53, 1995-2001.	2.6	53
170	Covalent immobilization of trypsin on to siliceous mesostructured cellular foams to obtain effective biocatalysts. Catalysis Today, 2007, 124, 2-10.	2.2	51
171	Coordination chemistry and supramolecular chemistry in mesoporous nanospace. Coordination Chemistry Reviews, 2007, 251, 2562-2591.	9.5	179
172	Biodiesel production from waste oils by using lipase immobilized on hydrotalcite and zeolites. Chemical Engineering Journal, 2007, 134, 262-267.	6.6	173
173	Direct electrochemistry of glucose oxidase immobilized on a hexagonal mesoporous silica-MCM-41 matrix. Bioelectrochemistry, 2007, 70, 250-256.	2.4	113
174	Application and properties of siliceous mesostructured cellular foams as enzymes carriers to obtain efficient biocatalysts. Microporous and Mesoporous Materials, 2007, 99, 167-175.	2.2	71
175	Solid state fluorescence of a 3,4,9,10-perylenetetracarboxylic diimide derivative encapsulated in the pores of mesoporous silica MCM-41. Microporous and Mesoporous Materials, 2007, 102, 258-264.	2.2	16
176	Carbon–ceramic composites for enzyme immobilization. Microporous and Mesoporous Materials, 2007, 99, 216-223.	2.2	17
177	Preparation of bifunctional hybrid mesoporous silica potentially useful for drug targeting. Microporous and Mesoporous Materials, 2007, 103, 166-173.	2.2	74
178	Influence of pH and ionic strength on the adsorption, leaching and activity of myoglobin immobilized onto ordered mesoporous silicates. Journal of Molecular Catalysis B: Enzymatic, 2007, 49, 61-68.	1.8	89
179	Immobilization of hemoglobin on SBA-15 applied to the electrocatalytic reduction of H2O2. Analytical and Bioanalytical Chemistry, 2007, 387, 1553-1559.	1.9	38
180	Stable and continuous long-term enzymatic reaction using an enzyme–nanofiber composite. Applied Microbiology and Biotechnology, 2007, 75, 1301-1307.	1.7	42
181	Electron paramagnetic resonance analyses of biotransformation reactions with cytochrome P-450 immobilized on mesoporous molecular sieves. Biotechnology Letters, 2007, 29, 919-924.	1.1	12
182	Immobilization of chloroperoxidase on mesoporous materials for the oxidation of 4,6-dimethyldibenzothiophene, a recalcitrant organic sulfur compound present in petroleum fractions. Biotechnology Letters, 2007, 30, 173-179.	1.1	30
183	Epoxy-functionalized mesostructured cellular foams as effective support for covalent immobilization of penicillin G acylase. Applied Surface Science, 2008, 255, 1625-1630.	3.1	40
184	A bienzyme channeling glucose sensor with a wide concentration range based on co-entrapment of enzymes in SBA-15 mesopores. Biosensors and Bioelectronics, 2008, 23, 1070-1076.	5.3	100
185	Growth of nanoporous silicon dioxide thin films using porous alumina substrates. Thin Solid Films, 2008, 517, 622-625.	0.8	8
186	Effect of pore structure of SBA-15 on immobilization of hemoglobin. Journal of Porous Materials, 2008, 15, 653-659.	1.3	8

#	Article	IF	CITATIONS
187	Trypsin entrapped in poly(diallyldimethylammonium chloride) silica solâ€gel microreactor coupled to matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2008, 22, 1257-1264.	0.7	23
188	Protein loaded mesoporous silica spheres as a controlled delivery platform. Journal of Chemical Technology and Biotechnology, 2008, 83, 351-358.	1.6	31
189	A Nanoporous Reactor for Efficient Proteolysis. Chemistry - A European Journal, 2008, 14, 151-157.	1.7	76
190	Threeâ€Dimensional Mesoporous Gallosilicate with <i>Pm</i> 3 <i>n</i> Symmetry and its Unusual Catalytic Performances. Chemistry - A European Journal, 2008, 14, 3553-3561.	1.7	28
191	Threeâ€Dimensional Ultralargeâ€Pore <i>la</i> d Mesoporous Silica with Various Pore Diameters and Their Application in Biomolecule Immobilization. Chemistry - A European Journal, 2008, 14, 11529-11538.	1.7	80
192	Proteins in Mesoporous Silicates. Angewandte Chemie - International Edition, 2008, 47, 8582-8594.	7.2	622
193	Adsorption heterogeneity of lysozyme over functionalized mesoporous silica: Effect of interfacial noncovalent interactions. AICHE Journal, 2008, 54, 2495-2506.	1.8	17
195	Protein encapsulation into mesoporous silica hosts. Microporous and Mesoporous Materials, 2008, 109, 535-541.	2.2	30
196	Mesoporous materials as host for an entrapped enzyme. Microporous and Mesoporous Materials, 2008, 110, 355-362.	2.2	48
197	Structural features of Penicillin acylase adsorption on APTES functionalized SBA-15. Microporous and Mesoporous Materials, 2008, 116, 157-165.	2.2	88
198	Enzyme immobilization on anodic aluminum oxide/polyethyleneimine or polyaniline composites. Reactive and Functional Polymers, 2008, 68, 27-32.	2.0	47
199	Adsorption of urease on PE-MCM-41 and its catalytic effect on hydrolysis of urea. Colloids and Surfaces B: Biointerfaces, 2008, 62, 42-50.	2.5	65
200	Direct electrochemistry of cytochrome c at ordered macroporous active carbon electrode. Biosensors and Bioelectronics, 2008, 23, 1610-1615.	5.3	79
201	Direct electron transfer of hemoglobin in layered α-zirconium phosphate with a high thermal stability. Analytical Biochemistry, 2008, 375, 27-34.	1.1	41
202	Synthesis and stealthing study of bare and PEGylated silica micro- and nanoparticles as potential drug-delivery vectors. Chemical Engineering Journal, 2008, 137, 45-53.	6.6	76
203	Evaluation of various immobilized enzymatic microreactors coupled on-line with liquid chromatography and mass spectrometry detection for quantitative analysis of cytochrome c. Journal of Chromatography A, 2008, 1209, 95-103.	1.8	29
204	Mesoporous benzene silica functionalized with various amine groups. Microporous and Mesoporous Materials, 2008, 108, 86-94.	2.2	7
205	Direct synthesis of mesoporous silica presenting large and tunable pores using BAB triblock copolymers: Influence of each copolymer block on the porous structure. Microporous and Mesoporous Materials, 2008, 112, 612-620.	2,2	43

#	Article	IF	CITATIONS
206	Covalent attachment of 3,4,9,10-perylenediimides onto the walls of mesoporous molecular sieves MCM-41 and SBA-15. Microporous and Mesoporous Materials, 2008, 113, 463-471.	2.2	22
207	Immobilization of lipase in ordered mesoporous materials: Effect of textural and structural parameters. Microporous and Mesoporous Materials, 2008, 114, 201-213.	2.2	107
208	Oxidation of ABTS by Silicate-Immobilized Cytochrome c in Nonaqueous Solutions. Biotechnology Progress, 2008, 19, 1238-1243.	1.3	28
209	Large pore 3D cubic mesoporous silica HOM-5 for enzyme immobilization. Materials Letters, 2008, 62, 3707-3709.	1.3	10
210	Nanobiocatalysis and its potential applications. Trends in Biotechnology, 2008, 26, 639-646.	4.9	392
211	Polyethyleneimine (PEI) functionalized ceramic monoliths as enzyme carriers: Preparation and performance. Journal of Molecular Catalysis B: Enzymatic, 2008, 50, 20-27.	1.8	47
212	Decolorization of an anthraquinone dye by the recombinant dye-decolorizing peroxidase (rDyP) immobilized on mesoporous materials. Journal of Molecular Catalysis B: Enzymatic, 2008, 54, 42-49.	1.8	24
213	The direct electrochemistry behavior of Cyt c on the modified glassy carbon electrode by SBA-15 with a high-redox potential. Journal of Molecular Catalysis B: Enzymatic, 2008, 55, 93-98.	1.8	30
214	Dynamics and Cleavability at the î±-Cleavage Site of APP(684-726) in Different Lipid Environments. Biophysical Journal, 2008, 95, 1460-1473.	0.2	15
215	Novel Magnetically Separable Mesoporous Fe2O3@SBA-15 Nanocomposite with Fully Open Mesochannels for Protein Immobilization. Chemistry of Materials, 2008, 20, 6617-6622.	3.2	38
216	A novel tetragonal pyramid-shaped porous ZnO nanostructure and its application in the biosensing of horseradish peroxidase. Journal of Materials Chemistry, 2008, 18, 1919.	6.7	51
217	Nanostructured materials for enzyme immobilization and biosensors. , 2008, , 355-394.		17
218	Enzyme catalytic membrane based on a hybrid mesoporous membrane. Chemical Communications, 2008, , 853-855.	2.2	28
219	Active Biocatalysts Based on Pepsin Immobilized in Mesoporous SBA-15. Journal of Physical Chemistry C, 2008, 112, 18110-18116.	1.5	54
220	Enhanced Protein Digestion through the Confinement of Nanozeolite-Assembled Microchip Reactors. Analytical Chemistry, 2008, 80, 2457-2463.	3.2	74
221	A comprehensive strategy for the immobilization of lipase in ordered mesoporous materials. Studies in Surface Science and Catalysis, 2008, , 369-372.	1.5	9
222	Highly Sensitive and Magnetically Switchable Biosensors Using Ordered Mesoporous Carbons. ACS Symposium Series, 2008, , 234-242.	0.5	4
223	Permeation of polyelectrolytes and other solutes into the pore spaces of water-swollen cellulose: A review. BioResources, 2009, 4, 1222-1262.	0.5	36

#	Article	IF	CITATIONS
225	Recent Development, Applications, and Perspectives of Mesoporous Silica Particles in Medicine and Biotechnology. Current Medicinal Chemistry, 2009, 16, 3054-3063.	1.2	50
226	Immobilization of alkaline serine endopeptidase from Bacillus licheniformis on SBA-15 and MCF by surface covalent binding. Journal of Molecular Catalysis B: Enzymatic, 2009, 56, 34-40.	1.8	42
227	Effects of pH and pore characters of mesoporous silicas on horseradish peroxidase immobilization. Journal of Molecular Catalysis B: Enzymatic, 2009, 56, 246-252.	1.8	68
228	Synthesis of length controllable mesoporous SBA-15 rods. Materials Chemistry and Physics, 2009, 115, 649-655.	2.0	66
229	Architecture and performance of mesoporous silicaâ€lipase hybrids via nonâ€covalent interfacial adsorption. AICHE Journal, 2010, 56, 506-514.	1.8	7
230	Glucose biosensor based on the room-temperature phosphorescence of TiO2/SiO2 nanocomposite. Biosensors and Bioelectronics, 2009, 24, 3706-3710.	5.3	52
231	Immobilization of Invertase on Mesoporous Silicas to Obtain Hyper Active Biocatalysts. Topics in Catalysis, 2009, 52, 1030-1036.	1.3	43
232	Enzyme-functionalized mesoporous silica for bioanalytical applications. Analytical and Bioanalytical Chemistry, 2009, 393, 543-554.	1.9	203
233	Intracellular Localization and Cytotoxicity of Spherical Mesoporous Silica Nano―and Microparticles. Small, 2009, 5, 2722-2729.	5.2	280
234	Comparative studies on catalytic properties of immobilized Candida rugosa lipase in ordered mesoporous rod-like silica and vesicle-like silica. Microporous and Mesoporous Materials, 2009, 119, 223-229.	2.2	54
235	Mechanism of creatinine adsorption from physiological solutions onto mordenite. Microporous and Mesoporous Materials, 2009, 119, 186-192.	2.2	30
236	A comparative study of the functionalization of mesoporous silica MCM-41 by deposition of 3-aminopropyltrimethoxysilane from toluene and from the vapor phase. Microporous and Mesoporous Materials, 2009, 121, 79-83.	2.2	59
237	Hydrophobic mesoporous materials for immobilization of enzymes. Microporous and Mesoporous Materials, 2009, 124, 76-83.	2.2	101
238	Laccase immobilized on methylene blue modified mesoporous silica MCM-41/PVA. Materials Science and Engineering C, 2009, 29, 2160-2164.	3.8	61
239	Direct electrochemistry of hemoglobin immobilized on siliceous mesostructured cellular foam. Sensors and Actuators B: Chemical, 2009, 138, 545-549.	4.0	20
240	Mesoporous materials for encapsulating enzymes. Nano Today, 2009, 4, 165-179.	6.2	418
241	Tuning interfacial non-covalent interactions through biomimetic functionalization of inorganic surface: The case of lysozyme and mesocellular silica foam hybrids. Chemical Engineering Journal, 2009, 146, 503-514.	6.6	13
242	Immobilization and direct electrochemistry of glucose oxidase on a tetragonal pyramid-shaped porous ZnO nanostructure for a glucose biosensor. Biosensors and Bioelectronics, 2009, 24, 1286-1291.	5.3	139

#	Article	IF	CITATIONS
243	Adsorption of trypsin on commercial silica gel. Engineering in Life Sciences, 2009, 9, 336-341.	2.0	8
244	Real-Time Monitoring of Peptide Cleavage Using a Nanopore Probe. Journal of the American Chemical Society, 2009, 131, 6324-6325.	6.6	125
245	Synthesis and Protein Adsorption of Hierarchical Nanoporous Ultrathin Fibers. Journal of Physical Chemistry B, 2009, 113, 5837-5842.	1.2	36
246	Improving Adsorbent Properties of Cage-like Ordered Amine Functionalized Mesoporous Silica with Very Large Pores for Bioadsorption. Langmuir, 2009, 25, 6413-6424.	1.6	132
247	Enzyme immobilization: Part 2Immobilization of alkaline phosphatase on Na-bentonite and modified bentonite. Applied Clay Science, 2009, 43, 308-316.	2.6	54
248	Probing mechanisms for enzymatic activity enhancement of organophosphorus hydrolase in functionalized mesoporous silica. Biochemical and Biophysical Research Communications, 2009, 390, 1177-1181.	1.0	31
249	Improved selection of LMW over HMW proteins from human plasma by mesoporous silica particles with external modification. Talanta, 2009, 80, 703-709.	2.9	13
250	Immobilization of Penicillin G Acylase on Oxirane-Modified Mesoporous Silicas. Langmuir, 2009, 25, 1807-1812.	1.6	33
251	On Defining a Simple Empirical Relationship to Predict the Pore Size of Mesoporous Silicas Prepared from PEO- <i>b</i> -PS Diblock Copolymers. Chemistry of Materials, 2009, 21, 48-55.	3.2	43
252	Preparation of Spherical Magnetic Mesoporous Silica Containing Magnetite Nanoparticles by Phase Transfer. Industrial & Engineering Chemistry Research, 2009, 48, 2577-2582.	1.8	3
254	Magnetically-separable and highly-stable enzyme system based on crosslinked enzyme aggregates shipped in magnetite-coated mesoporous silica. Journal of Materials Chemistry, 2009, 19, 7864.	6.7	44
255	Bottom-up tailoring of nonionic surfactant-templated mesoporous silica nanomaterials by a novel composite liquid crystal templating mechanism. Journal of Materials Chemistry, 2009, 19, 6498.	6.7	30
256	Nanochannels for supramolecular organization of luminescent guests. Journal of Materials Chemistry, 2009, 19, 8040.	6.7	139
257	Immobilization of HRP in Mesoporous Silica and Its Application for the Construction of Polyaniline Modified Hydrogen Peroxide Biosensor. Sensors, 2009, 9, 4635-4648.	2.1	44
258	Removing dye Rhodamine B from aqueous medium via wet peroxidation with V-MCM-41 and H2O2. Water Science and Technology, 2009, 59, 565-571.	1.2	2
259	Adsorption kinetics of hemoglobin onto silicate adsorbents. Russian Journal of Physical Chemistry A, 2010, 84, 1071-1075.	0.1	6
260	Entrapping Flavinâ€Containing Monooxygenase on Corrugated Silica Nanospheres and their Recyclable Biocatalytic Activities. ChemCatChem, 2010, 2, 1004-1010.	1.8	7
261	Selective extraction of low molecular weight proteins by mesoporous silica particles with modified internal and external surfaces. Analytical and Bioanalytical Chemistry, 2010, 398, 1715-1722.	1.9	10

#	Article	IF	CITATIONS
262	The effect of PEGylation of mesoporous silica nanoparticles on nonspecific binding of serum proteins and cellular responses. Biomaterials, 2010, 31, 1085-1092.	5.7	433
263	Immobilization of horseradish peroxidase on nanoporous copper and its potential applications. Bioresource Technology, 2010, 101, 9415-9420.	4.8	80
264	Nanoscale enzyme reactors in mesoporous carbon for improved performance and lifetime of biosensors and biofuel cells. Biosensors and Bioelectronics, 2010, 26, 655-660.	5 <b>.</b> 3	45
265	Study on the resonance Raman scattering properties of $\hat{l}^2$ -carotene incorporated into SBA-15. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 77, 518-521.	2.0	3
266	Effects of pore structure of mesoporous silicas on the electrochemical properties of hemoglobin. Microporous and Mesoporous Materials, 2010, 130, 333-337.	2.2	13
267	Preparation and evaluation of an enzymatic microreactor based on HILIC matrix for digestion and identification of proteins. Science Bulletin, 2010, 55, 910-914.	1.7	6
268	Tuning mesoporous molecular sieve SBA-15 for the immobilization of $\hat{l}_{\pm}$ -amylase. Journal of Porous Materials, 2010, 17, 341-349.	1.3	33
269	Immobilization and enzymatic activity of $\hat{l}^2$ -glucosidase on mesoporous SBA-15 silica. Journal of Porous Materials, 2010, 17, 657-662.	1.3	33
270	Enhancing performance of lipase immobilized on methyl-modified silica aerogels at the adsorption and catalysis processes: Effect of cosolvents. Journal of Molecular Catalysis B: Enzymatic, 2010, 62, 218-224.	1.8	14
271	Efficient decolorization of an anthraquinone dye by recombinant dye-decolorizing peroxidase (rDyP) immobilized in silica-based mesocellular foam. Journal of Molecular Catalysis B: Enzymatic, 2010, 62, 277-281.	1.8	20
272	Immobilization of P450 BM-3 monooxygenase on mesoporous molecular sieves with different pore diameters. Journal of Molecular Catalysis B: Enzymatic, 2010, 64, 29-37.	1.8	60
273	Functional immobilization of racemase by adsorption on folded-sheet mesoporous silica. Journal of Molecular Catalysis B: Enzymatic, 2010, 64, 107-112.	1.8	23
274	Immobilization of lysozyme on the layered silicate RUB-15. Materials Chemistry and Physics, 2010, 122, 269-272.	2.0	17
275	A Wasteâ€Derived Biosurfactant for the Preparation of Templated Silica Powders. ChemSusChem, 2010, 3, 445-452.	3.6	24
276	Luminescent CaWO4:Tb3+-Loaded Mesoporous Silica Composites for the Immobilization and Release of Lysozyme. European Journal of Inorganic Chemistry, 2010, 2010, 2655-2662.	1.0	19
277	The Influence of Surface Chemistry and Pore Size on the Adsorption of Proteins on Nanostructured Carbon Materials. Advanced Functional Materials, 2010, 20, 2489-2499.	7.8	30
278	Advances in Biomimetic and Nanostructured Biohybrid Materials. Advanced Materials, 2010, 22, 323-336.	11,1	275
279	Smart Trypsin Adsorption into <i>N</i> â€{2â€Aminoethyl)â€3â€aminopropylâ€Modified Mesoporous Silica for Ultra Fast Protein Digestion. Chemistry - A European Journal, 2010, 16, 8998-9001.	1.7	28

#	Article	IF	CITATIONS
280	Immobilization and activity of Rhizomucor miehei lipase. Effect of the matrix properties prepared from nonionic fluorinated surfactants. Process Biochemistry, 2010, 45, 39-46.	1.8	7
281	Improved enzymatic activity of Thermomyces lanuginosus lipase immobilized in a hydrophobic particulate mesoporous carrier. Journal of Colloid and Interface Science, 2010, 343, 359-365.	5.0	53
282	A comparative study of periodic mesoporous organosilica and different hydrophobic mesoporous silicas for lipase immobilization. Microporous and Mesoporous Materials, 2010, 132, 487-493.	2.2	68
283	The three-stage in vitro degradation behavior of mesoporous silica in simulated body fluid. Microporous and Mesoporous Materials, 2010, 131, 314-320.	2.2	257
284	Effective immobilization of enzyme in glycidoxypropyl-functionalized periodic mesoporous organosilicas (PMOs). Microporous and Mesoporous Materials, 2010, 134, 72-78.	2.2	46
285	Ordered hexagonal mesoporous silica materials (SBA-15) with additional disordered large-mesopore networks formed by gaseous expansion. Microporous and Mesoporous Materials, 2010, 136, 126-131.	2.2	28
286	Development of amperometric laccase biosensor through immobilizing enzyme in copper-containing ordered mesoporous carbon (Cu-OMC)/chitosan matrix. Materials Science and Engineering C, 2010, 30, 722-729.	3.8	58
287	Synthesis and characterization of a hexagonal mesoporous silica with enhanced thermal and hydrothermal stabilities. Applied Surface Science, 2010, 256, 3573-3580.	3.1	33
288	Cross-linking enzyme aggregates in the macropores of silica gel: A practical and efficient method for enzyme stabilization. Biochemical Engineering Journal, 2010, 52, 168-174.	1.8	62
289	An anti-ROS/hepatic fibrosis drug delivery system based on salvianolic acid B loaded mesoporous silica nanoparticles. Biomaterials, 2010, 31, 7785-7796.	5.7	111
290	The adsorption of divalent metal cations on mesoporous silicate MCM-41. Chemical Engineering Journal, 2010, 157, 25-28.	6.6	47
291	Preparation and characterization of mesoporous materials from a nonionic fluorinated surfactant: Adsorption of glucose oxidase. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 357, 128-135.	2.3	18
292	Enhancement in thermal stability and resistance to denaturants of lipase encapsulated in mesoporous silica with alkyltrimethylammonium (CTAB). Colloids and Surfaces B: Biointerfaces, 2010, 75, 478-482.	2.5	33
293	Property control of enzyme coatings on polymer nanofibers by varying the conjugation site concentration. Enzyme and Microbial Technology, 2010, 47, 216-221.	1.6	10
294	Trypsin-loaded mesoporous silica as a sensing material for amplified detection of ATP <sup>4Ââ^Â</sup> ions. Supramolecular Chemistry, 2010, 22, 389-395.	1.5	7
295	An Overview of Recent Development in Composite Catalysts from Porous Materials for Various Reactions and Processes. International Journal of Molecular Sciences, 2010, 11, 2152-2187.	1.8	83
296	Intraparticle Transport and Release of Dextran in Silica Spheres with Cylindrical Mesopores. Langmuir, 2010, 26, 466-470.	1.6	8
298	Functionalized Mesoporous Silica with Very Large Pores for Cellulase Immobilization. Journal of Physical Chemistry C, 2010, 114, 8353-8362.	1.5	137

#	Article	IF	CITATIONS
299	Biocatalysis with enzymes immobilized on mesoporous hosts: the status quo and future trends. Journal of Materials Chemistry, 2010, 20, 844-857.	6.7	310
300	Mesoporous silica nanoparticles: structural design and applications. Journal of Materials Chemistry, 2010, 20, 7924.	6.7	363
301	The Role of Nonbonded Interactions in the Conformational Dynamics of Organophosphorous Hydrolase Adsorbed onto Functionalized Mesoporous Silica Surfaces. Journal of Physical Chemistry B, 2010, 114, 531-540.	1.2	37
302	Hemoglobin immobilized on mesoporous silica as effective material for the removal of polycyclic aromatic hydrocarbons pollutants from water. New Journal of Chemistry, 2010, 34, 2153.	1.4	34
303	Measurement of Proteinâ^'Ligand Binding Constants from Reaction-Diffusion Concentration Profiles. Analytical Chemistry, 2010, 82, 8780-8784.	3.2	20
304	Phospholipid-templated silica nanocapsules as efficient polyenzymatic biocatalysts. Dalton Transactions, 2010, 39, 8511.	1.6	18
305	Elevating enzyme activity through the immobilization of horseradish peroxidase onto periodic mesoporous organosilicas. New Journal of Chemistry, 2011, 35, 1867.	1.4	27
306	Photosynthetic Oxygen Evolution in Mesoporous Silica Material: Adsorption of Photosystem II Reaction Center Complex into 23 nm Nanopores in SBA. Langmuir, 2011, 27, 705-713.	1.6	61
307	Porcine pancreatic Lipase Immobilized in Amino-Functionalized Short Rod-Shaped Mesoporous Silica Prepared Using Poly(ethylene glycol) and Triblock Copolymer as Templates. Journal of Physical Chemistry C, 2011, 115, 22191-22199.	1.5	31
308	Diffusion-Controlled Protein Adsorption in Mesoporous Silica. Journal of Physical Chemistry B, 2011, 115, 7744-7750.	1.2	24
309	Biosensors Based on Nanoporous Materials. Biological and Medical Physics Series, 2011, , 171-205.	0.3	6
310	Perspective of Recent Progress in Immobilization of Enzymes. ACS Catalysis, 2011, 1, 956-968.	5.5	428
311	Immobilization of glucose oxidase on rod-like and vesicle-like mesoporous silica for enhancing current responses of glucose biosensors. Talanta, 2011, 84, 659-665.	2.9	41
312	Adsorption and Desorption Behaviors of DNA with Magnetic Mesoporous Silica Nanoparticles. Langmuir, 2011, 27, 6099-6106.	1.6	126
313	In Mesopore Protein Digestion: A New Forthcoming Strategy in Proteomics. Molecules, 2011, 16, 5938-5962.	1.7	20
314	Immobilization of antibodies on mesoporous silica materials and their binding abilities to antigens. Journal of the Ceramic Society of Japan, 2011, 119, 238-245.	0.5	14
315	Improving adsorption and activation of the lipase immobilized in amino-functionalized ordered mesoporous SBA-15. Solid State Sciences, 2011, 13, 867-874.	1.5	60
316	Enhancing oxidation activity and stability of iso-1-cytochrome c and chloroperoxidase by immobilization in nanostructured supports. Journal of Molecular Catalysis B: Enzymatic, 2011, 70, 81-87.	1.8	27

#	ARTICLE	IF	CITATIONS
317	Immobilization of glucose oxidase enzyme (GOD) in large pore ordered mesoporous cage-like FDU-1 silica. Journal of Molecular Catalysis B: Enzymatic, 2011, 70, 149-153.	1.8	10
318	Fabrication of cellulase protein fibers through concentric electrospinning. Journal of Molecular Catalysis B: Enzymatic, 2011, 72, 1-5.	1.8	9
319	Immobilization of enzymes into self-assembled iron(III) hydrous oxide nano-scaffolds: A bio-inspired one-pot approach to hybrid catalysts. Applied Catalysis A: General, 2011, 408, 73-77.	2.2	8
320	Mesoporous silica nanoparticles for bioadsorption, enzyme immobilisation, and delivery carriers. Nanoscale, 2011, 3, 2801.	2.8	501
321	Biofuel cells Based on the Immobilization of Photosynthetically Active Bioentities. ChemCatChem, 2011, 3, 476-488.	1.8	40
322	Adsorption and catalytic properties of peroxidase. Russian Journal of Physical Chemistry A, 2011, 85, 321-326.	0.1	4
323	The special features of protein adsorption isotherms on silica adsorbents. Russian Journal of Physical Chemistry A, 2011, 85, 890-896.	0.1	7
324	Fabrication of different silica nanotubes and examination of their catalytic activity in organic solvents. Research on Chemical Intermediates, 2011, 37, 719-727.	1.3	2
325	Enzyme precipitate coatings of lipase on polymer nanofibers. Bioprocess and Biosystems Engineering, 2011, 34, 841-847.	1.7	13
326	Reagentless amperometric glucose biosensor based on the immobilization of glucose oxidase on a ferrocene@NaY zeolite composite. Mikrochimica Acta, 2011, 174, 281-288.	2.5	22
327	Carbon fiber microelectrodes modified with carbon nanotubes as a new support for immobilization of glucose oxidase. Mikrochimica Acta, 2011, 175, 283-289.	2.5	48
328	Immobilization of hemoglobin within channel of mesoporous TiO2-SiO2 composite. Rare Metals, 2011, 30, 144-146.	3.6	0
329	In vivo Biodistribution and Urinary Excretion of Mesoporous Silica Nanoparticles: Effects of Particle Size and PEGylation. Small, 2011, 7, 271-280.	5.2	547
330	Exocytosis of Mesoporous Silica Nanoparticles from Mammalian Cells: From Asymmetric Cellâ€toâ€Cell Transfer to Protein Harvesting. Small, 2011, 7, 1526-1532.	5.2	84
331	A Thirdâ€Generation Hydrogen Peroxide Biosensor Based on Horseradish Peroxidase Immobilized in Carbon Nanotubes/ SBAâ€15 Film. Electroanalysis, 2011, 23, 2415-2420.	1.5	13
332	Protein hydrolysis by immobilized and stabilized trypsin. Biotechnology Progress, 2011, 27, 677-683.	1.3	18
333	Specifically and Reversibly Immobilizing Proteins/Enzymes to Nitriolotriaceticâ€Acidâ€Modified Mesoporous Silicas through Histidine Tags for Purification or Catalysis. Chemistry - A European Journal, 2011, 17, 13059-13067.	1.7	29
334	Mesoporous zeolites as enzyme carriers: Synthesis, characterization, and application in biocatalysis. Catalysis Today, 2011, 168, 28-37.	2.2	84

#	Article	IF	CITATIONS
335	Influence of the support surface properties on the protein loading and activity of lipase/mesoporous carbon biocatalysts. Carbon, 2011, 49, 406-415.	5.4	42
336	Permeation of a cationic polyelectrolyte into mesoporous silica. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 381, 1-6.	2.3	11
337	A comparison of lipase and trypsin encapsulated in mesoporous materials with varying pore sizes and pH conditions. Colloids and Surfaces B: Biointerfaces, 2011, 87, 464-471.	2.5	65
338	Ultrasensitive electrochemical immunoassay for BRCA1 using BMIM·BF4-coated SBA-15 as labels and functionalized graphene as enhancer. Biomaterials, 2011, 32, 2117-2123.	5.7	115
339	Aminopropyl-functionalized cubic la3d mesoporous silica nanoparticle as an efficient support for immobilization of superoxide dismutase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1195-1202.	1.1	53
340	Oriented adsorptive immobilization of esterase BioH based on protein structure analysis. Biochemical Engineering Journal, 2011, 53, 286-291.	1.8	19
341	Immobilization of papain by carboxyl-modified SBA-15: Rechecking the carboxyl after excluding the contribution of H2SO4 treatment. Microporous and Mesoporous Materials, 2011, 143, 341-347.	2.2	23
342	Immobilization of trypsin on spent grains for whey protein hydrolysis. Process Biochemistry, 2011, 46, 505-511.	1.8	51
343	Multiwalled carbon nanotubes grafted chitosan nanobiocomposite: A prosperous functional nanomaterials for glucose biosensor application. Sensors and Actuators B: Chemical, 2011, 155, 897-902.	4.0	31
344	Multifunctional Mesoporous Silica Nanoparticles for Combined Therapeutic, Diagnostic and Targeted Action in Cancer Treatment. Current Drug Targets, 2011, 12, 1166-1186.	1.0	156
345	Silica-Based Mesoporous Nanospheres. , 2011, , 515-528.		0
346	Immobilization of <i>Porcine pancreatic</i> Lipase on Vesicle-Like Silica Material with Large Pore. Advanced Materials Research, 0, 485, 314-317.	0.3	0
347	Papain Catalyzed (co)Oligomerization of α-Amino Acids. Polymers, 2012, 4, 710-740.	2.0	34
348	Combining the Physical Adsorption Approach and the Covalent Attachment Method to Prepare a Bifunctional Bioreactor. International Journal of Molecular Sciences, 2012, 13, 11443-11454.	1.8	10
349	Synthesis of new modified MCM-41/PSF nanocomposite membrane for improvement of water permeation flux. Desalination and Water Treatment, 2012, 41, 53-61.	1.0	8
350	Recent Progress in Biocatalysis with Enzymes Immobilized on Mesoporous Hosts. Topics in Catalysis, 2012, 55, 1081-1100.	1.3	104
351	Immobilization of $\hat{l}^2$ -glucosidase in fixed bed reactor and evaluation of the enzymatic activity. Bioprocess and Biosystems Engineering, 2012, 35, 1399-1405.	1.7	24
352	Enhancement in thermal and hydrothermal stabilities of novel mesoporous MCM-41. Journal of Porous Materials, 2012, 19, 979-988.	1.3	15

#	Article	IF	CITATIONS
353	Conformation and Dynamics of Organic Tethers Bound to MCM41-Type Surfaces from Solid State NMR Measurements. Journal of Physical Chemistry C, 2012, 116, 7442-7449.	1.5	8
354	Microfabrication of mesoporous silica encapsulated enzymes using deep X-ray lithography. Journal of Materials Chemistry, 2012, 22, 16191.	6.7	13
355	Fabrication of boehmite films with cage-like pores and their properties as enzyme immobilization supports. Journal of Materials Chemistry, 2012, 22, 3234.	6.7	21
356	Mechanism of interaction between colloids and bacteria as evidenced by tailored silica–lysozyme composites. Journal of Materials Chemistry, 2012, 22, 22851.	6.7	30
357	Hybrid Periodic Mesoporous Organosilicas (PMO-SBA-16): A Support for Immobilization of <scp>d</scp> -Amino Acid Oxidase and Glutaryl-7-amino Cephalosporanic Acid Acylase Enzymes. Journal of Physical Chemistry C, 2012, 116, 10904-10912.	1.5	15
358	Enhancement of Enzyme Activity by Confinement in an Inverse Opal Structure. Journal of Physical Chemistry C, 2012, 116, 12165-12171.	1.5	20
359	Functionalized periodic mesoporous organosilicas for selective adsorption of proteins. Applied Surface Science, 2012, 258, 7126-7134.	3.1	27
360	Immobilization of carbonic anhydrase on mesoporous aluminosilicate for carbonation reaction. Microporous and Mesoporous Materials, 2012, 160, 151-158.	2.2	47
361	Immobilization of lipase from Mucor miehei and Rhizopus oryzae into mesoporous silicaâ€"The effect of varied particle size and morphology. Colloids and Surfaces B: Biointerfaces, 2012, 100, 22-30.	2.5	81
362	The study of palladium ions incorporation into the mesoporous ordered silicates. Applied Surface Science, 2012, 261, 616-622.	3.1	12
363	Production of l-theanine using glutaminase encapsulated in carbon-coated mesoporous silica with high pH stability. Biochemical Engineering Journal, 2012, 68, 207-214.	1.8	30
364	Highly Efficient Enzyme Immobilization and Stabilization within Meso-Structured Onion-Like Silica for Biodiesel Production. Chemistry of Materials, 2012, 24, 924-929.	3.2	70
365	Encapsulation of enzyme in large mesoporous material with small mesoporous windows. Chemical Communications, 2012, 48, 7853.	2.2	25
366	Enzyme Immobilization via Electrospinning. Topics in Catalysis, 2012, 55, 1057-1069.	1.3	55
367	Effects of Microenvironment on Supported Enzymes. Topics in Catalysis, 2012, 55, 1114-1123.	1.3	8
368	The effect of functionalization of mesoporous silica nanoparticles on the interaction and stability of confined enzyme. International Journal of Biological Macromolecules, 2012, 50, 1048-1054.	3.6	27
369	Mesocylindrical Aluminosilica Monolith Biocaptors for Sizeâ€Selective Macromolecule Cargos. Advanced Functional Materials, 2012, 22, 3013-3021.	7.8	72
370	Immobilization of superoxide dismutase onto ordered mesoporous silica nanoparticles and improvement of its stability. Journal of the Iranian Chemical Society, 2012, 9, 157-161.	1.2	4

#	Article	IF	Citations
371	Citral hydrogenation over novel niobia and titania supported Au, Ir–Au and Ir catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2012, 106, 445-455.	0.8	12
372	Promoting immobilization and catalytic activity of horseradish peroxidase on mesoporous silica through template micelles. Journal of Colloid and Interface Science, 2012, 377, 497-503.	5.0	17
373	Highly efficient immobilization of beta-lactoglobulin in functionalized mesoporous nanoparticles: A simple and useful approach for enhancement of protein stability. Biophysical Chemistry, 2012, 165-166, 13-20.	1.5	22
374	Biocatalytic zeolite membrane for the production of l-DOPA. Journal of Membrane Science, 2012, 407-408, 86-92.	4.1	20
375	Mussel-inspired surface capping and pore filling to confer mesoporous silica with high loading and enhanced stability of enzyme. Microporous and Mesoporous Materials, 2012, 152, 122-127.	2.2	26
376	Enzymatic conversion of CO2 to bicarbonate in functionalized mesoporous silica. Microporous and Mesoporous Materials, 2012, 153, 166-170.	2.2	35
377	Immobilization of lipase on aminopropyl-grafted mesoporous silica nanotubes for the resolution of (R, S)-1-phenylethanol. Journal of Molecular Catalysis B: Enzymatic, 2012, 76, 82-88.	1.8	27
378	Room temperature ionic liquid (RTIL)-decorated mesoporous silica SBA-15 for papain immobilization: RTIL increased the amount and activity of immobilized enzyme. Materials Science and Engineering C, 2012, 32, 364-368.	3.8	26
379	Adsorption of amino acids on periodic mesoporous organosilicas. Journal of Porous Materials, 2012, 19, 29-35.	1.3	14
380	Enzyme immobilization: an overview on techniques and support materials. 3 Biotech, 2013, 3, 1-9.	1.1	850
381	Nanoscale Confinement and Fluorescence Effects of Bacterial Light Harvesting Complex LH2 in Mesoporous Silicas. Journal of Physical Chemistry C, 2013, 117, 2868-2878.	1.5	14
382	Switchable polymer-grafted mesoporous silica's: from polyesters toÂpolyamides biosilica hybrid materials. Tetrahedron, 2013, 69, 7670-7674.	1.0	8
383	Enhancing enzymatic stability of bioactive papers by implanting enzyme-immobilized mesoporous silica nanorods into paper. Journal of Materials Chemistry B, 2013, 1, 4719.	2.9	15
384	Facile fabrication of three-dimensional mesoporous Si/SiC composites via one-step magnesiothermic reduction at relative low temperature. Materials Research Bulletin, 2013, 48, 4139-4145.	2.7	10
385	Immobilization of $\hat{l}^2$ -glucosidase on bifunctional periodic mesoporous organosilicas. Biotechnology Letters, 2013, 35, 1323-1330.	1.1	8
387	A microbead-incorporated centrifugal sample pretreatment microdevice. Lab on A Chip, 2013, 13, 3383.	3.1	33
388	Location of enzyme in lipase-SBA-12 hybrid biocatalyst. Journal of Molecular Catalysis B: Enzymatic, 2013, 90, 23-25.	1.8	14
389	Polyacrolein/mesoporous silica nanocomposite: Synthesis, thermal stability and covalent lipase immobilization. Materials Chemistry and Physics, 2013, 143, 76-84.	2.0	19

#	Article	IF	Citations
390	Size-dependent optical properties of bio-compatible ZnS:Mn nanocrystals and their application in the immobilisation of trypsin. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 108, 223-228.	2.0	5
391	Effect of pore size on the performance of immobilised enzymes. Chemical Society Reviews, 2013, 42, 9000.	18.7	125
392	Nanobiotechnology as a novel paradigm for enzyme immobilisation and stabilisation with potential applications in biodiesel production. Applied Microbiology and Biotechnology, 2013, 97, 23-39.	1.7	244
393	Catalase immobilized on siliceous mesocellular foam with controlled window size. Journal of Porous Materials, 2013, 20, 75-79.	1.3	8
394	Manganeseâ€Doped Highly Ordered Mesoporous Silicate with High Efficiency for Oxidation Suppression. Chemistry - A European Journal, 2013, 19, 135-140.	1.7	1
395	Development of a Bienzymatic Amperometric Glucose Biosensor Using Mesoporous Silica (MCMâ€41) for Enzyme Immobilization and Its Application on Liquid Pharmaceutical Formulations. Electroanalysis, 2013, 25, 308-315.	1.5	11
396	Salicylaldiminato chromium complex supported on chemically modified silica as highly active catalysts for the oxidation of cyclohexene. Catalysis Today, 2013, 204, 114-124.	2.2	32
397	Mesoporous silicas synthesis and application for lignin peroxidase immobilization by covalent binding method. Journal of Environmental Sciences, 2013, 25, 181-187.	3.2	21
398	Designing Inorganic Porous Materials for Enzyme Adsorption and Applications in Biocatalysis. ChemCatChem, 2013, 5, 862-884.	1.8	107
399	Enzyme nanoarchitectonics: organization and device application. Chemical Society Reviews, 2013, 42, 6322.	18.7	376
400	Enzyme immobilisation in biocatalysis: why, what and how. Chemical Society Reviews, 2013, 42, 6223-6235.	18.7	2,100
401	Progress in enzyme immobilization in ordered mesoporous materials and related applications. Chemical Society Reviews, 2013, 42, 3894.	18.7	498
402	Electrochemical approaches for the fabrication and/or characterization of pure and hybrid templated mesoporous oxide thin films: a review. Analytical and Bioanalytical Chemistry, 2013, 405, 1497-1512.	1.9	71
403	Immobilization of enzymes on porous silicas – benefits and challenges. Chemical Society Reviews, 2013, 42, 6277.	18.7	522
404	CHAPTER 10. MOFs as Nano‐reactors. RSC Catalysis Series, 0, , 310-343.	0.1	14
405	Efficient Synthesis of Molecularly Imprinted Polymers with Enzyme Inhibition Potency by the Controlled Surface Imprinting Approach. ACS Macro Letters, 2013, 2, 566-570.	2.3	69
406	Enhancement of activity and stability of the formaldehyde dehydrogenase by immobilizing onto phenyl-functionalized mesoporous silica. Colloids and Surfaces B: Biointerfaces, 2013, 101, 26-33.	2.5	40
407	Enzyme stabilization by nano/microsized hybrid materials. Engineering in Life Sciences, 2013, 13, 49-61.	2.0	388

#	Article	IF	CITATIONS
408	Papain Catalyzed Synthesis of Protected Amino Acid Amides. Journal of Renewable Materials, 2013, 1, 73-78.	1.1	9
409	Mesoporous silica as the enzyme carrier for organophosphate detection and/or detoxification. , 2013, , .		0
410	Novel adsorbents and approaches for nutraceutical separation. , 2013, , 148-179.		0
411	Microspheres for Enzyme Immobilization. , 2013, , 1-47.		1
412	Improvement of the Enzyme Performance of Trypsin via Adsorption in Mesoporous Silica SBA-15: Hydrolysis of BAPNA. Molecules, 2013, 18, 1138-1149.	1.7	19
413	Encapsulation of PEG-modified Myoglobin in Hydrophobic Mesoporous Silica as Studied by Optical Waveguide Spectroscopy. Analytical Sciences, 2013, 29, 187-192.	0.8	4
414	Use of rice husk ash as only source of silica in the formation of mesoporous materials. Ceramica, 2013, 59, 181-185.	0.3	13
415	Enzymatic Interesterification of Soybean Oil and Methyl Stearate Blends Using Lipase Immobilized on Magnetic Fe3O4/SBA-15 Composites as a Biocatalyst. Journal of Oleo Science, 2014, 63, 1027-1034.	0.6	11
417	Dominated Effect Analysis of the Channel Size of Silica Support Materials on the Catalytic Performance of Immobilized Lipase Catalysts in the Transformation of Unrefined Waste Cooking Oil to Biodiesel. Bioenergy Research, 2014, 7, 1541-1549.	2.2	11
418	Clinoptilolite particles as a carrier for biocatalysts immobilization: invertase immobilization and characterization. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 31-38.	0.8	11
420	Simple way to obtain pHâ€sensitive drug release from functional mesoporous silica materials. IET Nanobiotechnology, 2014, 8, 179-183.	1.9	1
421	Direct Electrochemistry and Electrocatalysis of Hemoglobin on Bimetallic Au–Pt Inorganic–Organic Nanofiber Hybrid Nanocomposite and Mesoporous Molecular Sieve MCM-41. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 573-581.	1.9	4
422	Aldehydepropyl-functionalized mesostructured cellular foams: Efficient supports for immobilization of penicillin G acylase. Journal of Molecular Catalysis B: Enzymatic, 2014, 105, 111-117.	1.8	5
423	Antibacterial activity of nanofibrous mats coated with lysozyme-layered silicate composites via electrospraying. Carbohydrate Polymers, 2014, 99, 218-225.	5.1	86
424	Materialsâ€based strategies for multiâ€enzyme immobilization and coâ€localization: A review. Biotechnology and Bioengineering, 2014, 111, 209-222.	1.7	221
425	Synthesis of mono-dispersed mesoporous SBA-1 nanoparticles with tunable pore size and their application in lysozyme immobilization. RSC Advances, 2014, 4, 37470-37478.	1.7	16
426	Surfactant recovery from mesoporous metal-modified materials (Sn–, Y–, Ce–, Si–MCM-41), by ultrasound assisted ion-exchange extraction and its re-use for a microwave in situ cheap and eco-friendly MCM-41 synthesis. Journal of Materials Chemistry A, 2014, 2, 7020-7033.	5.2	22
427	Degradation of 2,4-dichlorophenol catalyzed by the immobilized laccase with the carrier of Fe3O4@MSS–NH2. Science Bulletin, 2014, 59, 509-520.	1.7	25

#	Article	IF	CITATIONS
428	Trapping RNase A on MCM41 pores: effects on structure stability, product inhibition and overall enzymatic activity. Physical Chemistry Chemical Physics, 2014, 16, 9031-9038.	1.3	12
429	Large pore raspberry textured phosphonate@silica nanoparticles for protein immobilization. Journal of Materials Chemistry B, 2014, 2, 903-914.	2.9	9
430	Immunoprecipitation of bisphenol A by antibody–mesoporous silica composites. Journal of Asian Ceramic Societies, 2014, 2, 275-280.	1.0	2
431	Probing structural and catalytic characteristics of galactose oxidase confined in nanoscale chemical environments. RSC Advances, 2014, 4, 21939-21950.	1.7	7
432	Transesterification of plant oils using Staphylococcus haemolyticus L62 lipase displayed on Escherichia coli cell surface using the OmpA signal peptide and EstAÎ <sup>2</sup> 8 anchoring motif. Enzyme and Microbial Technology, 2014, 67, 32-39.	1.6	6
433	Kinetics of adsorption of lipase onto different mesoporous materials: Evaluation of Avrami model and leaching studies. Journal of Molecular Catalysis B: Enzymatic, 2014, 105, 26-32.	1.8	27
434	Catalytic properties of 2,3-dihydroxybiphenyl 1,2-dioxygenase from Dyella Ginsengisoli LA-4 immobilized on mesoporous silica SBA-15. Journal of Molecular Catalysis B: Enzymatic, 2014, 99, 136-142.	1.8	9
435	Fast Multipoint Immobilized MOF Bioreactor. Chemistry - A European Journal, 2014, 20, 8923-8928.	1.7	58
436	Immobilization, stability and enzymatic activity of albumin and trypsin adsorbed onto nanostructured mesoporous SBA-15 with compatible pore sizes. RSC Advances, 2014, 4, 4387-4394.	1.7	34
437	Synthesis of Homopolypeptides by Aminolysis Mediated by Proteases Encapsulated in Silica Nanospheres. Macromolecular Bioscience, 2014, 14, 1619-1626.	2.1	19
438	Adsorption of hemoglobin on biporous silica. Russian Journal of Physical Chemistry A, 2015, 89, 1924-1928.	0.1	6
439	Mechanically Tunable Hollow Silica Ultrathin Nanoshells for Ultrasound Contrast Agents. Advanced Functional Materials, 2015, 25, 4049-4057.	7.8	48
440	Combined Spectroscopic and Calorimetric Studies to Reveal Absorption Mechanisms and Conformational Changes of Protein on Nanoporous Biomaterials. International Journal of Molecular Sciences, 2015, 16, 17289-17302.	1.8	6
441	Utilization of Enzyme-Immobilized Mesoporous Silica Nanocontainers (IBN-4) in Prodrug-Activated Cancer Theranostics. Nanomaterials, 2015, 5, 2169-2191.	1.9	37
442	Recent Trends of Polymer-Protein Conjugate Application in Biocatalysis: A Review. Polymer Reviews, 2015, 55, 163-198.	5.3	17
443	Immobilising proteins on silica with site-specifically attached modified silaffin peptides. Biomaterials Science, 2015, 3, 288-297.	2.6	26
444	Generation of a Highly Stable Reusable Biocatalyst by Entrapment of an Oligomeric Enzyme in Ultra-Large-Pore Mesoporous Silica. Australian Journal of Chemistry, 2015, 68, 396.	0.5	3
445	Intracellular delivery of BSA by phosphonate@silica nanoparticles. Journal of Materials Chemistry B, 2015, 3, 6057-6070.	2.9	11

#	Article	IF	CITATIONS
446	Immobilization of bovine carbonic anhydrase on glycidoxypropyl-functionalized nanostructured mesoporous silicas for carbonation reaction. Journal of Molecular Catalysis B: Enzymatic, 2015, 116, 134-139.	1.8	17
447	Preparation of nano-magnetite impregnated mesocellular foam composite with a Cu ligand for His-tagged enzyme immobilization. Chemical Engineering Journal, 2015, 274, 1-8.	6.6	22
448	Roles of nanostructures and carboxylic acid functionalization of ordered cubic mesoporous silicas in lysozyme immobilization. Microporous and Mesoporous Materials, 2015, 213, 150-160.	2.2	31
449	Potential new biocatalysts for biofuel production: The fungal lipases of Thermomyces lanuginosus and Rhizomucor miehei immobilized on zeolitic supports ion exchanged with transition metals. Microporous and Mesoporous Materials, 2015, 214, 166-180.	2.2	17
450	Influence of the hydrophilic–hydrophobic contrast of porous surfaces on the enzymatic performance. Journal of Materials Chemistry B, 2015, 3, 2341-2349.	2.9	18
451	Rapid and high-density covalent immobilization of Rhizomucor miehei lipase using a multi component reaction: application in biodiesel production. RSC Advances, 2015, 5, 32698-32705.	1.7	47
452	Rational synthesis of novel recyclable Fe <sub>3</sub> O <sub>4</sub> @MOF nanocomposites for enzymatic digestion. Chemical Communications, 2015, 51, 8116-8119.	2.2	107
453	Silver Enhancement for Transmission Electron Microscopy Imaging of Antibody Fragment–Gold Nanoparticles Conjugates Immobilized on Ordered Mesoporous Silica. Langmuir, 2015, 31, 9458-9463.	1.6	12
454	Potential Toxicity of Phthalic Acid Esters Plasticizer: Interaction of Dimethyl Phthalate with Trypsin in Vitro. Journal of Agricultural and Food Chemistry, 2015, 63, 75-84.	2.4	80
455	Immobilization of lipase in cage-type mesoporous organosilicas via covalent bonding and crosslinking. Catalysis Today, 2015, 243, 173-183.	2.2	48
456	Aldehyde-functionalized mesostructured cellular foams prepared by copolymerization method for immobilization of penicillin G acylase. Microporous and Mesoporous Materials, 2015, 202, 90-96.	2.2	21
457	Recent Updates on Immobilization of Microbial Cellulase. , 2016, , 107-139.		9
458	Enzyme Immobilization. Advances in Food and Nutrition Research, 2016, 79, 179-211.	1.5	180
459	Protein encapsulation in SBA-15 with expanded pores. Microporous and Mesoporous Materials, 2016, 235, 59-68.	2.2	22
460	Metal Organic Frameworks as Nanoreactors and Host Matrices for Encapsulation. , 2016, , 305-340.		4
461	Preparation and characterization of a green nano-support for the covalent immobilization of glucoamylase from Neurospora sitophila. Journal of Photochemistry and Photobiology B: Biology, 2016, 162, 309-317.	1.7	10
462	Mesoporous Silica Nanoparticles with Large Pores for the Encapsulation and Release of Proteins. ACS Applied Materials & Diterfaces, 2016, 8, 32211-32219.	4.0	111
463	Synthesis of Fe3O4@nickel–silicate core–shell nanoparticles for His-tagged enzyme immobilizing agents. Nanotechnology, 2016, 27, 495705.	1.3	13

#	Article	IF	CITATIONS
464	Hierarchically macro/mesoporous silica sphere: A high efficient carrier for enzyme immobilization. Microporous and Mesoporous Materials, 2016, 231, 147-153.	2.2	25
465	Entrapping cross-linked glucose oxidase aggregates within a graphitized mesoporous carbon network for enzymatic biofuel cells. Enzyme and Microbial Technology, 2016, 90, 26-34.	1.6	34
466	Phosphatase activity and its relationship with physical and chemical parameters during vermicomposting of filter cake and cattle manure. Journal of the Science of Food and Agriculture, 2016, 96, 1223-1230.	1.7	21
467	Synthesis, functionalization, and applications of morphology-controllable silica-based nanostructures: A review. Progress in Solid State Chemistry, 2016, 44, 1-19.	3.9	76
468	Mesoporous silica nanoparticles with controllable morphology prepared from oil-in-water emulsions. Journal of Colloid and Interface Science, 2016, 467, 253-260.	5.0	46
469	Immobilization of cellulase on a silica gel substrate modified using a 3-APTES self-assembled monolayer. SpringerPlus, 2016, 5, 48.	1.2	75
470	Synthesis of Ordered Mesoporous Silica with Tunable Morphologies and Pore Sizes via a Nonpolar Solvent-Assisted Stöber Method. Chemistry of Materials, 2016, 28, 2356-2362.	3.2	159
471	Label-Free Nanopore Single-Molecule Measurement of Trypsin Activity. ACS Sensors, 2016, 1, 607-613.	4.0	59
472	Stabilizing effect of biochar on soil extracellular enzymes after a denaturing stress. Chemosphere, 2016, 142, 114-119.	4.2	45
473	Effect of electrolytes on proteins physisorption on ordered mesoporous silica materials. Colloids and Surfaces B: Biointerfaces, 2016, 137, 77-90.	2.5	31
474	Selective external surface functionalization of large-pore silica materials capable of protein loading. Microporous and Mesoporous Materials, 2017, 244, 199-207.	2.2	20
475	A spectroscopic study on the absorption of carbonic anhydrase onto the nanoporous silica nanoparticle. International Journal of Biological Macromolecules, 2017, 99, 739-745.	3.6	22
476	Cage like ordered carboxylic acid functionalized mesoporous silica with enlarged pores for enzyme adsorption. Journal of Materials Science, 2017, 52, 6322-6340.	1.7	14
477	Protein adsorption and activity on carbon xerogels with narrow pore size distributions covering a wide mesoporous range. Carbon, 2017, 118, 743-751.	5.4	12
478	Cellular level evaluation and lysozyme adsorption regulation of bimodal nanoporous silica. Materials Science and Engineering C, 2017, 76, 509-517.	3.8	8
479	Rational synthesis of hierarchical magnetic mesoporous silica microspheres with tunable mesochannels for enhanced enzyme immobilization. Chemical Communications, 2017, 53, 8902-8905.	2.2	31
480	Valorization of biomass to hydroxymethylfurfural, levulinic acid, and fatty acid methyl ester by heterogeneous catalysts. Chemical Engineering Journal, 2017, 328, 246-273.	6.6	196
481	Adsorption of uremic toxins over dealuminated zeolites. Adsorption Science and Technology, 2017, 35, 3-19.	1.5	20

#	Article	IF	CITATIONS
482	Structural and Chemical Characterization of Silica Spheres before and after Modification by Silanization for Trypsin Immobilization. Journal of Nanomaterials, 2017, 2017, 1-10.	1.5	1
483	4.36 Silica Based Mesoporous Nanospheres â~†., 2017,, 686-704.		0
484	Mesoporous Silica Nanoparticles: A Review. Journal of Developing Drugs, 2017, 06, .	0.9	103
485	Immobilization of formaldehyde dehydrogenase in tailored siliceous mesostructured cellular foams and evaluation of its activity for conversion of formate to formaldehyde. Colloids and Surfaces B: Biointerfaces, 2018, 163, 41-46.	2.5	16
486	UiO-66-NH <sub>2</sub> @PMAA: A Hybrid Polymer–MOFs Architecture for Pectinase Immobilization. Industrial & Description of the Pertinase Immobilization of the Pertinase Immobilization. Industrial & Description of the Pertinase Immobilization of the Pert	1.8	53
487	Clickable Multifunctional Large-Pore Mesoporous Silica Nanoparticles as Nanocarriers. Chemistry of Materials, 2018, 30, 644-654.	3.2	34
488	Modification of electrical properties of silicon dioxide through intrinsic nano-patterns. Materials Research Express, 2018, 5, 056403.	0.8	1
489	Conserved Activity of Reassociated Homotetrameric Protein Subunits Released from Mesoporous Silica Nanoparticles. Langmuir, 2018, 34, 228-233.	1.6	6
490	Biodiesel Synthesis: Use of Activated Carbon as Support of the Catalysts. Biofuel and Biorefinery Technologies, 2018, , 117-152.	0.1	2
491	The Synthesis and Application of the Hollow Mesoporous SiO <sub>2</sub> / Dense SiO <sub>2</sub> /Fe <sub>3</sub> 0 <sub>4</sub> Composite Particles. Solid State Phenomena, 0, 281, 842-847.	0.3	0
492	Functionalized Ordered Mesoporous Silicas (MCM-41): Synthesis and Applications in Catalysis. Catalysts, 2018, 8, 617.	1.6	98
493	<i>In situ</i> intercalation of Au nanoparticles and magnetic γ-Fe <sub>2</sub> O <sub>3</sub> in the walls of MCM-41 with abundant void defects for highly efficient reduction of 4-nitrophenol and organic dyes. Dalton Transactions, 2018, 47, 16862-16875.	1.6	20
494	Heterogeneous catalysis with encapsulated haem and other synthetic porphyrins: Harnessing the power of porphyrins for oxidation reactions. Open Chemistry, 2018, 16, 763-789.	1.0	14
495	Significant Enhancement of Structural Stability of the Hyperhalophilic ADH from <i>Haloferax volcanii</i> via Entrapment on Metal Organic Framework Support. Langmuir, 2018, 34, 8274-8280.	1.6	23
496	Synthesis of high surface area mesoporous silica SBAâ€15 for hydrogen storage application. International Journal of Applied Ceramic Technology, 2019, 16, 294-303.	1.1	14
497	A sulfonated mesoporous silica nanoparticle for enzyme protection against denaturants and controlled release under reducing conditions. Journal of Colloid and Interface Science, 2019, 556, 292-300.	5.0	12
498	Magnetite nanoparticle as a support for stabilization of chondroitinase ABCI. Artificial Cells, Nanomedicine and Biotechnology, 2019, 47, 2721-2728.	1.9	9
499	Immobilization of Lipases – A Review. Part II: Carrier Materials. ChemBioEng Reviews, 2019, 6, 167-194.	2.6	48

#	Article	IF	CITATIONS
500	Nanoporous Phyllosilicate Assemblies for Enzyme Immobilization. ACS Applied Bio Materials, 2019, 2, 777-786.	2.3	16
501	Surface Modifications of Biomaterials and Their Implication on Biocompatibility. , 2019, , 639-674.		6
502	Adsorptive Immobilization of Proteins on Mesoporous Molecular Sieves and Zeolites. Petroleum Chemistry, 2019, 59, 327-337.	0.4	10
503	Immobilization of <scp>I</scp> -methioninase on a zirconium-based metal–organic framework as an anticancer agent. Journal of Materials Chemistry B, 2019, 7, 3268-3278.	2.9	20
504	Mesoporous Carbon-Based Enzyme Biocatalyst for Aquatic Recalcitrant Pollutant Treatment. , 2019, , 103-124.		1
505	Immobilized Enzymes and Their Applications. , 2019, , 169-200.		18
506	Engineered Stimuli-Responsive Nanoparticles for the Interaction With Biological Structures. , 2019, , 399-412.		0
507	pH responsive selective protein adsorption by carboxylic acid functionalized large pore mesoporous silica nanoparticles SBA-1. Materials Science and Engineering C, 2019, 94, 344-356.	3.8	29
508	Mesoporous matrices for the delivery of the broad spectrum bacteriocin, nisin A. Journal of Colloid and Interface Science, 2019, 537, 396-406.	5.0	33
509	Preparation of a new chromatographic media and assessment of some kinetic and interaction parameters for lysozyme. Journal of Molecular Liquids, 2019, 276, 480-487.	2.3	18
510	Function and structural stability of protein adsorbed to swellable organosilica. Microporous and Mesoporous Materials, 2020, 296, 109965.	2.2	1
511	Strategies, challenges and opportunities of enzyme immobilization on porous silicon for biosensing applications. Journal of Environmental Chemical Engineering, 2020, 8, 104266.	3.3	45
512	Immobilization of Cellulolytic Enzymes in Mesostructured Silica Materials. Catalysts, 2020, 10, 706.	1.6	32
513	Enzyme Stabilization by Virus-Like Particles. Biochemistry, 2020, 59, 2870-2881.	1.2	28
514	CFD Simulations of Microreactors for the Hydrolysis of Cellobiose to Glucose by $\hat{l}^2$ -Glucosidase Enzyme. Micromachines, 2020, 11, 790.	1.4	8
515	Immobilization of $\hat{l}^2$ -Glucosidase over Structured Cordierite Monoliths Washcoated with Wrinkled Silica Nanoparticles. Catalysts, 2020, 10, 889.	1.6	10
516	Biocatalytic microgels ( $\hat{l}^1/4$ -Gel <i>zymes</i> ): synthesis, concepts, and emerging applications. Green Chemistry, 2020, 22, 8183-8209.	4.6	23
517	Incorporating Lanthanum into Mesoporous Silica Foam Enhances Enzyme Immobilization and the Activity of Penicillin G Acylase Due to Lewis Acidâ€Base Interactions. ChemBioChem, 2020, 21, 2143-2148.	1.3	4

#	Article	IF	CITATIONS
518	CO2 capture adsorbents functionalized by amine – bearing polymers: A review. International Journal of Greenhouse Gas Control, 2020, 96, 103005.	2.3	176
519	Comparison of spherical and rod-like morphologies of SBA-15 for enzyme immobilization. Journal of Porous Materials, 2020, 27, 1547-1557.	1.3	8
520	On the taught new tricks of enzymes immobilization: An all-inclusive overview. Reactive and Functional Polymers, 2020, 152, 104613.	2.0	154
521	Entrapment of peroxophosphotungstate in SBA-15 by silylation and its catalytic efficiency in the epoxidation of soybean oil. Applied Catalysis A: General, 2020, 596, 117537.	2.2	16
522	Pristine and modified chitosan as solid catalysts for catalysis and biodiesel production: A minireview. International Journal of Biological Macromolecules, 2021, 167, 807-833.	3.6	27
523	Mesoporous Materials–Based Electrochemical Biosensors from Enzymatic to Nonenzymatic. Small, 2021, 17, e1904022.	5.2	49
524	Effects of morphology and pore size of mesoporous silicas on the efficiency of an immobilized enzyme. RSC Advances, 2021, 11, 10010-10017.	1.7	15
525	Immobilization of Soybean Lipoxygenase on Nanoporous Rice Husk Silica by Adsorption: Retention of Enzyme Function and Catalytic Potential. Molecules, 2021, 26, 291.	1.7	9
526	Catalase-Loaded Silica Nanoparticles Formulated via Direct Surface Modification as Potential Oxygen Generators for Hypoxia Relief. ACS Applied Materials & Samp; Interfaces, 2021, 13, 5945-5954.	4.0	10
527	Direct synthesis of Cerium( $\hat{a}$ £)-Incorporated mesostructured cellular foam for immobilization of penicillin G acylase. Microporous and Mesoporous Materials, 2021, 312, 110762.	2.2	0
529	Advances on ultra-sensitive electrospun nanostructured electrochemical and colorimetric sensors for diabetes mellitus detection. Nano Materials Science, 2021, 3, 321-343.	3.9	26
530	Studies of the Processes of the Trypsin Interactions with Ion Exchange Fibers and Chitosan. Russian Journal of Bioorganic Chemistry, 2021, 47, 765-776.	0.3	3
531	Enhanced catalytic stability of acid phosphatase immobilized in the mesospaces of a SiO2-nanoparticles assembly for catalytic hydrolysis of organophosphates. Molecular Catalysis, 2021, 510, 111669.	1.0	1
532	In situ monitoring of protein transfer into nanoscale channels. Cell Reports Physical Science, 2021, 2, 100576.	2.8	12
533	Biocomposites based on SBA-15 and papain: Characterization, enzymatic activity and cytotoxicity evaluation. Microporous and Mesoporous Materials, 2021, 325, 111316.	2.2	7
534	Zeolites and Mesoporous Crystals Under the Electron Microscope. , 2015, , 93-138.		2
535	Recent advances in mesoporous materials for sample preparation in proteomics research. TrAC - Trends in Analytical Chemistry, 2018, 99, 88-100.	5 <b>.</b> 8	50
536	Chapter 5. Immobilization of Enzymes on Porous Surfaces. RSC Nanoscience and Nanotechnology, 2011, , 65-74.	0.2	1

#	Article	IF	CITATIONS
537	Synthesis and Characterization of DAM-1 type Materials. Materials Research Society Symposia Proceedings, 2000, 628, 1.	0.1	5
539	Gas-Phase Enzymatic Esterification on Immobilized Lipases in MCM-41 Molecular Sieves., 2002,, 963-976.		2
540	Characteristics of Hydrolysis with Lipase Immobilized in Mesoporous Silica. Kagaku Kogaku Ronbunshu, 2005, 31, 133-137.	0.1	0
541	Fabrication and Function of Biohybrid Nanomaterials Prepared via Supramolecular Approaches. , 2008, , 335-366.		O
542	Hybrid Organic-Inorganic Composite Materials for Application in Chemical Sensors. Chemistry Journal of Moldova, 2009, 4, 100-104.	0.3	1
544	Hydrothermal treatment and Mesoporosity of MCM-41 mesoporous nanocomposite. Journal of Applied Pharmaceutical Science, 0, , .	0.7	O
545	Enzyme Immobilization on Metal-Organic Framework (MOF): Effects on Thermostability and Function. Protein and Peptide Letters, 2019, 26, 636-647.	0.4	5
546	Valorization of Passion Fruit Stalk by the Preparation of Cellulose Nanofibers and Immobilization of Trypsin. Fibers and Polymers, 2020, 21, 2807-2816.	1.1	6
547	Immobilization of $\hat{l}$ ±-Chymotrypsin on zeolite for peptide synthesis in organic solvent. , 2002, , 21-25.		0
548	Immobilization and Characterization of Pectinase onto the Cationic Polystyrene Resin. ACS Omega, 2021, 6, 31683-31688.	1.6	9
549	Effect of Functional Group on the Catalytic Activity of Lipase B from Candida antarctica Immobilized in a Silica-Reinforced Pluronic F127/î±-Cyclodextrin Hydrogel. Gels, 2022, 8, 3.	2.1	3
552	Surface Functionalization of SBA-15 for Immobilization of Myoglobin. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	4
553	Fabrication and Characterization of Au-Decorated MCM-41 Mesoporous Spheres Using Laser-Ablation Technique. Materials, 2022, 15, 7470.	1.3	0
554	Mesoporous Materials of the MCM Type: Synthesis, Application, use of lonic Solids and Functionalization with Graphene: A Review. Silicon, 2023, 15, 4345-4364.	1.8	2
555	Mn(III) Schiff base complexes containing crown ether rings immobilized onto MCM-41 matrix as heterogeneous catalysts for oxidation of alkenes. Heliyon, 2023, 9, e15041.	1.4	5