Catalytic and interfacial aspects of enzymatic polymer s systems

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Citation Report

#	Article	IF	Citations
1	Enzymatic oxidative polymerization of alkylphenols. Macromolecular Rapid Communications, 1994, 15, 507-510.	2.0	68
2	Biodegradation of pesticides in nonionic water-in-oil microemulsions of tween 85: Relationship between micelle structure and activity. Biotechnology and Bioengineering, 1994, 43, 946-959.	1.7	30
3	The use of EPR spectroscopy under non-ambient conditions to characterize the consequences of clathrate hydrate formation in water-in-oil microemulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1994, 92, 293-300.	2.3	4
4	New Directions in Hydrate Technology Applications to Biotechnology and Advanced Materials. Annals of the New York Academy of Sciences, 1994, 715, 468-480.	1.8	3
5	Superparamagnetism of ferrite particles dispersed in spherical polymeric materials. IEEE Transactions on Magnetics, 1994, 30, 4954-4956.	1.2	7
6	Enzymes in Water-in-oil Microemulsions (â€˜Reversed Micellesâ€™): Principles and Applications. Biotechnology and Genetic Engineering Reviews, 1994, 12, 255-327.	2.4	54
7	Activity of .BETA.-galactosidase solubilized in reverse micelles and selective back-extraction from micellar phase.. Journal of Chemical Engineering of Japan, 1994, 27, 410-414.	0.3	9
8	Peroxidase-Catalyzed Oxidative Polymerization of Cresols to a New Family of Polyphenols. Bulletin of the Chemical Society of Japan, 1995, 68, 3209-3214.	2.0	32
9	The morphology of phenolic polymers enzymatically synthesized in surfactant microstructures. Materials Science and Engineering C, 1995, 2, 165-171.	3.8	22
10	Enzymatic polymerizations using surfactant microstructures and the preparation of polymer-ferrite composites. Applied Biochemistry and Biotechnology, 1995, 51-52, 241-252.	1.4	12
11	Polymer Precipitation Using a Micellar Nonsolvent:Â The Role of Surfactantâ^'Polymer Interactions and the Development of a Microencapsulation Technique. Industrial & Engineering Chemistry Research, 1996, 35, 3100-3107.	1.8	22
12	Synthesis of Superparamagnetic Polymerâ^'Ferrite Composites Using Surfactant Microstructures. Chemistry of Materials, 1996, 8, 801-809.	3.2	108
13	Fluorometric assay for horseradish peroxidase in organic media. Applied Biochemistry and Biotechnology, 1996, 56, 129-139.	1.4	3
14	Peroxidase-catalyzed polymerization ofp-cresol in supercritical CO2. Korean Journal of Chemical Engineering, 1996, 13, 415-418.	1.2	10
15	Enzyme-mediated polymerization reactions: Peroxidase-catalyzed polyphenol synthesis. Acta Polymerica, 1996, 47, 193-203.	1.4	63
16	Enzyme-catalysed polymer modification: reaction of phenolic compounds with chitosan films. Polymer, 1996, 37, 4643-4648.	1.8	89
17	Characterization of phenolic polymers synthesized by enzyme-mediated reactions in bulk solvents and at oil-water interfaces. Materials Science and Engineering C, 1996, 4, 169-173.	3.8	13
18	The microstructure of polymers enzymatically synthesized in a self-assembling environment. Materials Science and Engineering C, 1996, 4, 161-168.	3.8	6

#	Article	IF	Citations
19	Enzymatic polymerization of amphiphilic alkyl tyrosine derivatives from emulsions. Materials Science and Engineering C, 1996, 4, 189-192.	3.8	23
20	Low Molecular Mass Gelators of Organic Liquids and the Properties of Their Gels. Chemical Reviews, 1997, 97, 3133-3160.	23.0	2,981
21	Polymer microsphere and polymer-ferrite nanocomposite preparation by precipitation from water-in-oil microemulsions. Colloid and Polymer Science, 1997, 275, 930-937.	1.0	14
22	Application of reversed micelles in bioengineering. Current Opinion in Colloid and Interface Science, 1997, 2, 397-401.	3.4	27
23	A spontaneous phase transition from reverse micelles to organogels due to surfactant interactions with specific benzenediols. Journal of Molecular Liquids, 1997, 72, 121-135.	2.3	22
24	Turnover Capacity of Coprinus cinereus Peroxidase for Phenol and Monosubstituted Phenols. Biotechnology Progress, 1998, 14, 487-492.	1.3	49
26	Enzymatic synthesis and various properties of poly(catechol). Enzyme and Microbial Technology, 1998, 23, 432-437.	1.6	86
28	Enzymatic modification of the synthetic polymer polyhydroxystyrene. Enzyme and Microbial Technology, 1999, 25, 660-668.	1.6	55
29	Application of Factorial Design to the Optimization of Peroxidase Activity in Reverse Micelles of bis(2-ethylhexyl)Sodium Sulfosuccinate/ Isooctane. Applied Biochemistry and Biotechnology, 1999, 82, 27-36.	1.4	1
30	Enzymatic synthesis and modification of polymers in nonaqueous solvents. Trends in Biotechnology, 1999, 17, 67-73.	4.9	70
31	Bioorganic reactions in microemulsions. Biotechnology Advances, 1999, 17, 293-318.	6.0	175
32	Synthesis and film formation of polycarbonate-co- poly(p-ethylphenol). Journal of Polymer Science Part A, 1999, 37, 169-178.	2.5	1
33	Enzymatically Synthesized Conducting Polyaniline. Journal of the American Chemical Society, 1999, 121, 71-78.	6.6	490
34	The Role of Template in the Enzymatic Synthesis of Conducting Polyaniline. Journal of the American Chemical Society, 1999, 121, 11345-11355.	6.6	227
35	Enzymatic Template Synthesis of Polyphenol. Materials Research Society Symposia Proceedings, 1999, 600, 255.	0.1	6
36	Structured materials syntheses in a self-assembled surfactant mesophase. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 174, 275-281.	2.3	21
37	Self-assembled micron-scale fibre structures are formed by amphiphilic decyl ester derivatives of the d- and l-tyrosine amino acids prior to and following enzymatic ring polymerization. Materials Science and Engineering C, 2000, 11, 155-163.	3.8	19
38	Title is missing!. Biotechnology Letters, 2000, 22, 1355-1361.	1.1	28

#	Article	IF	Citations
39	Phenols oxidizing enzymes in water-restricted media. Topics in Catalysis, 2000, 11/12, 419-434.	1.3	44
40	Polymerization of guaiacol by lignin-degrading manganese peroxidase from Bjerkandera adusta in aqueous organic solvents. Applied Microbiology and Biotechnology, 2000, 54, 104-111.	1.7	40
41	Enzymatic Synthesis of Photoactive Poly(4-phenylazophenol). Chemistry of Materials, 2000, 12, 1577-1584.	3.2	56
42	Enzyme-Mediated Free Radical Polymerization of Styrene. Biomacromolecules, 2000, 1, 592-596.	2.6	77
43	Enzymatic Polymerization. Chemical Reviews, 2001, 101, 3793-3818.	23.0	880
44	Polymer Synthesis by In Vitro Enzyme Catalysis. Chemical Reviews, 2001, 101, 2097-2124.	23.0	675
45	Mechanistic Study of the Peroxidase-Catalyzed Polymerization of Sulfonated Phenolâ€. Macromolecules, 2001, 34, 3522-3526.	2.2	34
46	PEROXIDASE, HEMATIN, AND PEGYLATED-HEMATIN CATALYZED VINYL POLYMERIZATIONS IN WATER. Journal of Macromolecular Science - Pure and Applied Chemistry, 2001, 38, 1219-1230.	1.2	34
47	Novel Templated Polyphenol for Ionic Conductivity. Materials Research Society Symposia Proceedings, 2001, 702, 1.	0.1	0
49	Molecular weight and distribution of copolymer of lignin-phenol in copolymerization catalyzed by peroxidase. Journal of Applied Polymer Science, 2001, 81, 2408-2418.	1.3	3
50	ENZYMATIC SYNTHESIS OF POLY(HYDROXYSTILBENE)S. A NEW CLASS OF LUMINESCENT DYE. Journal of Macromolecular Science - Pure and Applied Chemistry, 2001, 38, 1463-1471.	1.2	3
51	ENZYME MEDIATED OXIDATIVE POLYMERIZATION OF 4-HYDROXYBENZYL ALCOHOL FOR OPTICAL APPLICATIONS. Journal of Macromolecular Science - Pure and Applied Chemistry, 2002, 39, 1183-1193.	1.2	5
52	Enzymatic Synthesis of Conducting Polyaniline in Micelle Solutions. Langmuir, 2002, 18, 9696-9704.	1.6	111
53	HRP-mediated polymerizations of acrylamide and sodium acrylate. Green Chemistry, 2002, 4, 174-178.	4.6	47
54	Enzyme-Based Molecular Imprinting with Metals. Biomacromolecules, 2002, 3, 1353-1358.	2.6	33
55	Grafting Renewable Chemicals to Functionalize Chitosan. ACS Symposium Series, 2002, , 231-242.	0.5	5
56	BIOCATALYTIC SYNTHESIS OF A RUTHENIUM MACROMOLECULAR COMPLEX FOR PHOTOVOLTAICS. Journal of Macromolecular Science - Pure and Applied Chemistry, 2002, 39, 1195-1206.	1.2	4
57	Solvent effects in horseradish peroxidase-catalyzed polyphenol synthesis. Enzyme and Microbial Technology, 2002, 30, 3-9.	1.6	22

#	Article	IF	Citations
58	Enzyme-Based Vinyl Polymerization. Journal of Polymers and the Environment, 2002, 10, 85-91.	2.4	20
59	New substrates for reliable enzymes: enzymatic modification of polymers. Current Opinion in Biotechnology, 2003, 14, 577-582.	3.3	124
60	Biocatalytic Route to Ascorbic Acid-Modified Polymers for Free-Radical Scavenging. Advanced Materials, 2003, 15, 1291-1294.	11.1	27
61	â€œGreenâ€•enzymatic synthesis of pegylated phenolic macromer and polymer. Chemical Communications, 2004, , 862-863.	2.2	7
62	Vitamin C Functionalized Poly(Methyl Methacrylate) for Free Radical Scavenging. Journal of Macromolecular Science - Pure and Applied Chemistry, 2004, 41, 1377-1386.	1.2	16
63	Oxidative Cross-Coupling between Phenolic Polymer and Phenol-Containing Cellulose:Â Synthesis of a New Class of Artificial Wood Polymers. Macromolecules, 2004, 37, 7901-7905.	2.2	12
64	Synthesis of mesoporous carbon using enzymatically polymerized polyphenolic precursor and simultaneously assembled silica template. Microporous and Mesoporous Materials, 2005, 85, 293-296.	2.2	7
65	Synthesis of Phenol Polymers Using Peroxidases. , 0, , 1-49.		83
66	Enzymatic Polymerization of Coniferyl Alcohol in the Presence of Cyclodextrins. Biomacromolecules, 2006, 7, 1929-1934.	2.6	27
67	Peroxidative catalytic behavior of cytochrome c solubilized in reverse micelles. Biochemical Engineering Journal, 2006, 28, 156-160.	1.8	19
68	Greener method for high-quality polypyrrole. Polymer, 2006, 47, 7349-7354.	1.8	57
69	In Vitro Enzyme-Induced Vinyl Polymerization. , 0, , 211-224.		27
70	First Enzymatic Synthesis of Water-Soluble Conducting Poly(3,4-ethylenedioxythiophene). Biomacromolecules, 2007, 8, 315-317.	2.6	74
71	A new bifunctional template for the enzymatic synthesis of conducting polyaniline. Enzyme and Microbial Technology, 2007, 40, 1412-1421.	1.6	41
72	Polymeric Capsules: Catalysis and Drug Delivery. , 0, , 179-205.		2
73	Biocatalysis in Microemulsions. Surfactant Science, 2008, , .	0.0	3
77	Oxireductases in the Enzymatic Synthesis of Water-Soluble Conducting Polymers. Advances in Polymer Science, 2010, , 1-19.	0.4	13
78	Enzyme-catalyzed chemical structure-controlling template polymerization. Soft Matter, 2011, 7, 316-331.	1.2	60

#	Article	IF	Citations
79	Advances in the Application of Oxidative Enzymes in Biopolymer Chemistry and Biomaterial Research. ACS Symposium Series, 2012, , 329-349.	0.5	1
80	Enzymatic Polymerization of Phenolic Compounds by Oxidoreductases. Springer Briefs in Molecular Science, 2012, , 1-46.	0.1	12
81	Engineering Strategies for Successful Development of Functional Polymers Using Oxidative Enzymes. Chemical Engineering and Technology, 2012, 35, 1359-1372.	0.9	27
82	Experimental design and MM2â€“PM6 molecular modelling of hematin as a peroxidase-like catalyst in Alizarin Red S degradation. Journal of Molecular Catalysis A, 2012, 355, 44-60.	4.8	17
83	Horseradish peroxidase (HRP) as a tool in green chemistry. RSC Advances, 2014, 4, 37244-37265.	1.7	104
84	Enzymatic oxidative polymerization of paraâ€imine functionalized phenol catalyzed by horseradish peroxidase. Polymers for Advanced Technologies, 2015, 26, 1123-1129.	1.6	19
85	Free Radical Copolymerization of Acrylamide andN-Vinylpyrrolidone Catalyzed by Iron(III)porphyrins in the Presence of Ionic Liquids. Organic Preparations and Procedures International, 2018, 50, 359-371.	0.6	4
86	Increasing and eliminating the (Fecal coliforms, thermotolerant coliform and fecal streptococcus) bacteria by resin of the poly (para carboxy acid phenol-d-Glucose) to clean up waste water. Human Microbiome Journal, 2019, 11, 100053.	3.8	0
87	Antioxidant Activity of Synthetic Polymers of Phenolic Compounds. Polymers, 2020, 12, 1646.	2.0	51
88	Functional nanomaterial-enabled synthetic biology. Nano Futures, 2021, 5, 022001.	1.0	6
89	Low-molecular weight organogelators. , 1997, , 208-268.		15
90	Oxidoreductions. Tetrahedron Organic Chemistry Series, 1994, 12, 131-194.	0.1	6
91	How to Employ Proteins in Nonaqueous Environments. , 2001, , .		1
92	Synthesis of single-walled carbon nanotube networks using monodisperse metallic nanocatalysts encapsulated in reverse micelles. Hemijska Industrija, 2016, 70, 1-8.	0.3	2
93	Enzymes in Polymers and Polymers from Enzymes. NATO Science Series Partnership Sub-series 1, Disarmament Technologies, 2000, , 397-431.	0.1	2
96	Multiple Effects of Water Pools and Their Interfaces Formed by Reversed Micelles on Enzymic Reactions and Photochemistry. , 2002, , .		0
98	Enzymatic Synthesis: Nanostructured Polymers and Composites. , 2014, , 1409-1421.		0
99	Enzyme-Catalyzed Polymerization in Microstructured Fluid Media: The Synthesis and Characterization of Novel Biomolecular Materials. , 1994, , 613-620.		0

#	Article	IF	Citations
100	Advanced Materials from Enzymatic Polymerization of Substituted Phenols in Ordered Templates. , 1995, , 667-675.		0
101	Chapter 13. Peroxidases as Potential Industrial Biocatalysts. 2-Oxoglutarate-Dependent Oxygenases, 2015, , 309-333.	0.8	0
102	Enzymatic and Biomimetic Approaches to the Synthesis of Electrically Conducting Polymers. , 2017, , 191-239.		0