

# Jonathan S Dordick

## List of Publications by Year in descending order

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399  
papers

24,533  
citations

5574

82  
h-index

10732

138  
g-index

415  
all docs

415  
docs citations

415  
times ranked

23908  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enzymatic catalysis in monophasic organic solvents. <i>Enzyme and Microbial Technology</i> , 1989, 11, 194-211.	3.2	853
2	Ionic liquid-mediated selective extraction of lignin from wood leading to enhanced enzymatic cellulose hydrolysis. <i>Biotechnology and Bioengineering</i> , 2009, 102, 1368-1376.	3.3	844
3	Silica Nanoparticle Size Influences the Structure and Enzymatic Activity of Adsorbed Lysozyme. <i>Langmuir</i> , 2004, 20, 6800-6807.	3.5	811
4	Structure and Function of Enzymes Adsorbed onto Single-Walled Carbon Nanotubes. <i>Langmuir</i> , 2004, 20, 11594-11599.	3.5	482
5	Radio-Wave Heating of Iron Oxide Nanoparticles Can Regulate Plasma Glucose in Mice. <i>Science</i> , 2012, 336, 604-608.	12.6	428
6	Polymerization of phenols catalyzed by peroxidase in nonaqueous media. <i>Biotechnology and Bioengineering</i> , 1987, 30, 31-36.	3.3	390
7	Room temperature ionic liquids as emerging solvents for the pretreatment of lignocellulosic biomass. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1229-1245.	3.3	347
8	Organic solvents strip water off enzymes. <i>Biotechnology and Bioengineering</i> , 1992, 39, 392-397.	3.3	342
9	Protein-Assisted Solubilization of Single-Walled Carbon Nanotubes. <i>Langmuir</i> , 2006, 22, 1392-1395.	3.5	290
10	Three-dimensional cellular microarray for high-throughput toxicology assays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 59-63.	7.1	287
11	Ionic liquid solvent properties as predictors of lignocellulose pretreatment efficacy. <i>Green Chemistry</i> , 2010, 12, 1967.	9.0	282
12	Resveratrol Selectively Remodels Soluble Oligomers and Fibrils of Amyloid A $\beta$ into Off-pathway Conformers. <i>Journal of Biological Chemistry</i> , 2010, 285, 24228-24237.	3.4	271
13	Effect of gold nanoparticle morphology on adsorbed protein structure and function. <i>Biomaterials</i> , 2011, 32, 7241-7252.	11.4	264
14	High-throughput cellular microarray platforms: applications in drug discovery, toxicology and stem cell research. <i>Trends in Biotechnology</i> , 2009, 27, 342-349.	9.3	255
15	How do organic solvents affect peroxidase structure and function?. <i>Biochemistry</i> , 1992, 31, 2588-2598.	2.5	250
16	Salts dramatically enhance activity of enzymes suspended in organic solvents. <i>Journal of the American Chemical Society</i> , 1994, 116, 2647-2648.	13.7	247
17	Sulfated polysaccharides effectively inhibit SARS-CoV-2 in vitro. <i>Cell Discovery</i> , 2020, 6, 50.	6.7	246
18	Unfolding of Ribonuclease A on Silica Nanoparticle Surfaces. <i>Nano Letters</i> , 2007, 7, 1991-1995.	9.1	238

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19	Designing enzymes for use in organic solvents. <i>Biotechnology Progress</i> , 1992, 8, 259-267.	2.6	235
20	Characterization of heparin and severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) spike glycoprotein binding interactions. <i>Antiviral Research</i> , 2020, 181, 104873.	4.1	233
21	Substrate structure and solvent hydrophobicity control lipase catalysis and enantioselectivity in organic media. <i>Journal of the American Chemical Society</i> , 1991, 113, 2253-2259.	13.7	226
22	Hydration of Enzyme in Nonaqueous Media Is Consistent with Solvent Dependence of Its Activity. <i>Biophysical Journal</i> , 2004, 87, 812-821.	0.5	219
23	Enzyme activation for organic solvents made easy. <i>Trends in Biotechnology</i> , 2008, 26, 48-54.	9.3	217
24	Bidirectional electromagnetic control of the hypothalamus regulates feeding and metabolism. <i>Nature</i> , 2016, 531, 647-650.	27.8	212
25	Cytochrome <i>c</i> on Silica Nanoparticles: Influence of Nanoparticle Size on Protein Structure, Stability, and Activity. <i>Small</i> , 2009, 5, 470-476.	10.0	206
26	Solvent Effect on Organogel Formation by Low Molecular Weight Molecules. <i>Chemistry of Materials</i> , 2006, 18, 5988-5995.	6.7	200
27	Enzyme activation for nonaqueous media. <i>Current Opinion in Biotechnology</i> , 2002, 13, 376-384.	6.6	195
28	Designer DNA architecture offers precise and multivalent spatial pattern-recognition for viral sensing and inhibition. <i>Nature Chemistry</i> , 2020, 12, 26-35.	13.6	193
29	Remote regulation of glucose homeostasis in mice using genetically encoded nanoparticles. <i>Nature Medicine</i> , 2015, 21, 92-98.	30.7	189
30	Increasing Protein Stability through Control of the Nanoscale Environment. <i>Langmuir</i> , 2006, 22, 5833-5836.	3.5	184
31	Inhibition of NADPH Oxidase Activation in Endothelial Cells by ortho -Methoxy-Substituted Catechols. <i>Endothelium: Journal of Endothelial Cell Research</i> , 2002, 9, 191-203.	1.7	175
32	Enzymatic analyses in organic solvents. <i>Biotechnology and Bioengineering</i> , 1986, 28, 417-421.	3.3	172
33	Synthesis and Application of Carbohydrate-Containing Polymers. <i>Chemistry of Materials</i> , 2002, 14, 3232-3244.	6.7	172
34	Structure, Function, and Stability of Enzymes Covalently Attached to Single-Walled Carbon Nanotubes. <i>Langmuir</i> , 2007, 23, 12318-12321.	3.5	171
35	Aromatic Small Molecules Remodel Toxic Soluble Oligomers of Amyloid $\beta^2$ through Three Independent Pathways. <i>Journal of Biological Chemistry</i> , 2011, 286, 3209-3218.	3.4	169
36	Metabolizing enzyme toxicology assay chip (MetaChip) for high-throughput microscale toxicity analyses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 983-987.	7.1	166

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37	Lysostaphin-functionalized cellulose fibers with antistaphylococcal activity for wound healing applications. <i>Biomaterials</i> , 2011, 32, 9557-9567.	11.4	163
38	Enzyme-Polymer-Single Walled Carbon Nanotube Composites as Biocatalytic Films. <i>Nano Letters</i> , 2003, 3, 829-832.	9.1	161
39	Electrospinning of Nanomaterials and Applications in Electronic Components and Devices. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 5507-5519.	0.9	160
40	Heparin and anticoagulation. <i>Frontiers in Bioscience - Landmark</i> , 2016, 21, 1372-1392.	3.0	156
41	Water-soluble carbon nanotube-enzyme conjugates as functional biocatalytic formulations. <i>Biotechnology and Bioengineering</i> , 2006, 95, 804-811.	3.3	154
42	Spaceflight Promotes Biofilm Formation by <i>Pseudomonas aeruginosa</i> . <i>PLoS ONE</i> , 2013, 8, e62437.	2.5	153
43	Glycosaminoglycans in infectious disease. <i>Biological Reviews</i> , 2013, 88, 928-943.	10.4	152
44	Aqueous-Like Activity of $\alpha$ -Chymotrypsin Dissolved in Nearly Anhydrous Organic Solvents. <i>Journal of the American Chemical Society</i> , 1994, 116, 5009-5010.	13.7	150
45	Enzymatic synthesis of a sucrose-containing linear polyester in nearly anhydrous organic media. <i>Biotechnology and Bioengineering</i> , 1991, 37, 639-646.	3.3	149
46	Polymer-Nanotube-Enzyme Composites as Active Antifouling Films. <i>Small</i> , 2007, 3, 50-53.	10.0	140
47	Catalytic Silica Particles via Template-Directed Molecular Imprinting. <i>Langmuir</i> , 2000, 16, 1759-1765.	3.5	138
48	Osmolyte Trimethylamine-N-Oxide Does Not Affect the Strength of Hydrophobic Interactions: Origin of Osmolyte Compatibility. <i>Biophysical Journal</i> , 2005, 89, 858-866.	0.5	138
49	On the Salt-Induced Activation of Lyophilized Enzymes in Organic Solvents: Effect of Salt Kosmotropicity on Enzyme Activity. <i>Journal of the American Chemical Society</i> , 2000, 122, 1565-1571.	13.7	135
50	Nanostructured glycan architecture is important in the inhibition of influenza A virus infection. <i>Nature Nanotechnology</i> , 2017, 12, 48-54.	31.5	131
51	Mechanism of extraction of chymotrypsin into iso-octane at very low concentrations of aerosol OT in the absence of reversed micelles. <i>Biotechnology and Bioengineering</i> , 1994, 43, 529-540.	3.3	127
52	Facile pretreatment of lignocellulosic biomass at high loadings in room temperature ionic liquids. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2865-2875.	3.3	126
53	Biocatalytic plastics as active and stable materials for biotransformations. <i>Nature Biotechnology</i> , 1997, 15, 789-793.	17.5	124
54	Unusual Thermal Stability of Soybean Peroxidase. <i>Biotechnology Progress</i> , 1996, 12, 555-558.	2.6	123

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55	Microwave assisted combinatorial chemistry synthesis of substituted pyridines. <i>Tetrahedron Letters</i> , 1998, 39, 1117-1120.	1.4	123
56	Structure and Function of Subtilisin BPN $\alpha$ Solubilized in Organic Solvents. <i>Journal of the American Chemical Society</i> , 1997, 119, 70-76.	13.7	119
57	Nanoparticle-Mediated Cytoplasmic Delivery of Proteins To Target Cellular Machinery. <i>ACS Nano</i> , 2010, 4, 1493-1500.	14.6	119
58	Nanotubes in biological applications. <i>Current Opinion in Biotechnology</i> , 2014, 28, 25-32.	6.6	119
59	Macroporous poly(sucrose acrylate) hydrogel for controlled release of macromolecules. <i>Biomaterials</i> , 1996, 17, 2343-2350.	11.4	114
60	Multienzymic Synthesis of Poly(hydroquinone) for Use as a Redox Polymer. <i>Journal of the American Chemical Society</i> , 1995, 117, 12885-12886.	13.7	111
61	Electrospinning from room temperature ionic liquids for biopolymer fiber formation. <i>Green Chemistry</i> , 2010, 12, 1883.	9.0	109
62	Highly Active and Stable DNAzyme $\alpha$ -Carbon Nanotube Hybrids. <i>Journal of the American Chemical Society</i> , 2005, 127, 12200-12201.	13.7	108
63	<i>E. coli</i> K5 fermentation and the preparation of heparosan, a bioengineered heparin precursor. <i>Biotechnology and Bioengineering</i> , 2010, 107, 964-973.	3.3	106
64	Engineering of routes to heparin and related polysaccharides. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 1-16.	3.6	106
65	Recent progress and applications in glycosaminoglycan and heparin research. <i>Current Opinion in Chemical Biology</i> , 2009, 13, 633-640.	6.1	103
66	Interaction of Zika Virus Envelope Protein with Glycosaminoglycans. <i>Biochemistry</i> , 2017, 56, 1151-1162.	2.5	102
67	Biocatalytic synthesis of sugar-containing polyacrylate-based hydrogels. <i>Macromolecules</i> , 1992, 25, 7081-7085.	4.8	101
68	Enzymatically Derived Sugar-Containing Self-Assembled Organogels with Nanostructured Morphologies. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4772-4775.	13.8	101
69	Antistaphylococcal Nanocomposite Films Based on Enzyme $\alpha$ -Nanotube Conjugates. <i>ACS Nano</i> , 2010, 4, 3993-4000.	14.6	101
70	Enzyme $\alpha$ -Based Nanoscale Composites for Use as Active Decontamination Surfaces. <i>Advanced Functional Materials</i> , 2010, 20, 392-398.	14.9	99
71	Controlling enzyme-catalyzed regioselectivity in sugar ester synthesis. <i>Biotechnology and Bioengineering</i> , 1995, 45, 426-434.	3.3	98
72	Optimizing the salt-induced activation of enzymes in organic solvents: Effects of lyophilization time and water content. , 1999, 63, 233-241.		98

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73	Engineering Nanomaterials for Biomedical Applications Requires Understanding the Nano-Bio Interface: A Perspective. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3149-3158.	4.6	98
74	Tailoring lipase specificity by solvent and substrate chemistries. <i>Journal of Organic Chemistry</i> , 1993, 58, 3238-3244.	3.2	97
75	Chemoenzymatic synthesis of novel sucrose-containing polymers. <i>Macromolecules</i> , 1991, 24, 3462-3463.	4.8	94
76	Free energy relationships of substrate and solvent hydrophobicities on enzymic catalysis in organic media. <i>Journal of the American Chemical Society</i> , 1989, 111, 8026-8027.	13.7	92
77	Three-dimensional cell culture microarray for high-throughput studies of stem cell fate. <i>Biotechnology and Bioengineering</i> , 2010, 106, 106-118.	3.3	92
78	Controlling Subtilisin Activity and Selectivity in Organic Media by Imprinting with Nucleophilic Substrates. <i>Journal of the American Chemical Society</i> , 1997, 119, 3245-3252.	13.7	90
79	Directed Assembly of Carbon Nanotubes at Liquid-Liquid Interfaces: Nanoscale Conveyors for Interfacial Biocatalysis. <i>Journal of the American Chemical Society</i> , 2006, 128, 1046-1047.	13.7	90
80	Synthesis of Water-Soluble Paclitaxel Derivatives by Enzymatic Acylation. <i>Journal of the American Chemical Society</i> , 1997, 119, 11554-11555.	13.7	89
81	Catalytic properties and potential of an extracellular protease from an extreme halophile. <i>Enzyme and Microbial Technology</i> , 1994, 16, 266-275.	3.2	88
82	Lignin peroxidase-type activity of soybean peroxidase. <i>Enzyme and Microbial Technology</i> , 1995, 17, 359-365.	3.2	87
83	Enzyme-catalyzed synthesis of sugar-containing monomers and linear polymers. <i>Biotechnology and Bioengineering</i> , 2000, 70, 208-216.	3.3	86
84	Combinatorial biocatalysis: a natural approach to drug discovery. <i>Trends in Biotechnology</i> , 1998, 16, 210-215.	9.3	85
85	Identification of a novel class in the ?? hydrolase fold superfamily: The N-myc differentiation-related proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 47, 163-168.	2.6	83
86	Influence of a three-dimensional, microarray environment on human Cell culture in drug screening systems. <i>Biomaterials</i> , 2012, 33, 9087-9096.	11.4	83
87	Gene Delivery in Three-Dimensional Cell Cultures by Superparamagnetic Nanoparticles. <i>ACS Nano</i> , 2010, 4, 4733-4743.	14.6	80
88	Conductive Cable Fibers with Insulating Surface Prepared by Coaxial Electrospinning of Multiwalled Nanotubes and Cellulose. <i>Biomacromolecules</i> , 2010, 11, 2440-2445.	5.4	79
89	Unusual salt and solvent dependence of a protease from an extreme halophile. , 1997, 55, 471-479.		76
90	Enzymatic and chemoenzymatic approaches to polymer synthesis. <i>Trends in Biotechnology</i> , 1992, 10, 287-293.	9.3	75

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91	High-throughput and combinatorial gene expression on a chip for metabolism-induced toxicology screening. <i>Nature Communications</i> , 2014, 5, 3739.	12.8	75
92	Silica-immobilized enzymes for multi-step synthesis in microfluidic devices. <i>Biotechnology and Bioengineering</i> , 2007, 98, 701-705.	3.3	73
93	Enzymatic synthesis of dextran-containing hydrogels. <i>Biomaterials</i> , 2002, 23, 3957-3967.	11.4	72
94	On-Chip, Cell-Based Microarray Immunofluorescence Assay for High-Throughput Analysis of Target Proteins. <i>Analytical Chemistry</i> , 2008, 80, 6633-6639.	6.5	72
95	Cell-Based Assay Design for High-Content Screening of Drug Candidates. <i>Journal of Microbiology and Biotechnology</i> , 2016, 26, 213-225.	2.1	72
96	Ultra-performance ion-pairing liquid chromatography with on-line electrospray ion trap mass spectrometry for heparin disaccharide analysis. <i>Analytical Biochemistry</i> , 2011, 415, 59-66.	2.4	66
97	Horseradish peroxidase-catalyzed hydroxylations: mechanistic studies. <i>Biochemistry</i> , 1986, 25, 2946-2951.	2.5	65
98	Biocatalytic synthesis of highly ordered degradable dextran-based hydrogels. <i>Biomaterials</i> , 2005, 26, 4707-4716.	11.4	65
99	Toward an Artificial Golgi: Redesigning the Biological Activities of Heparan Sulfate on a Digital Microfluidic Chip. <i>Journal of the American Chemical Society</i> , 2009, 131, 11041-11048.	13.7	65
100	Siloxane-based biocatalytic films and paints for use as reactive coatings. <i>Biotechnology and Bioengineering</i> , 2001, 72, 475-482.	3.3	64
101	Effect of gold nanoparticle structure on the conformation and function of adsorbed proteins. <i>Biomaterials</i> , 2012, 33, 8503-8516.	11.4	64
102	Metabolic engineering and in vitro biosynthesis of phytochemicals and non-natural analogues. <i>Plant Science</i> , 2013, 210, 10-24.	3.6	64
103	Enzymatic polymerization of phenols in room-temperature ionic liquids. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009, 59, 177-184.	1.8	63
104	Transition state stabilization of subtilisins in organic media. <i>Biotechnology and Bioengineering</i> , 1994, 43, 515-520.	3.3	62
105	Multienzyme catalysis in microfluidic biochips. <i>Biotechnology and Bioengineering</i> , 2003, 83, 20-28.	3.3	62
106	Structural characterization of heparins from different commercial sources. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 2793-2803.	3.7	62
107	Lipid-Based Nanotubes as Functional Architectures with Embedded Fluorescence and Recognition Capabilities. <i>Journal of the American Chemical Society</i> , 2004, 126, 15012-15013.	13.7	61
108	Enzymic Modification of Insoluble Amylose in Organic Solvents. <i>Macromolecules</i> , 1995, 28, 8881-8883.	4.8	60

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109	Combinatorial formulation of biocatalyst preparations for increased activity in organic solvents: Salt activation of penicillin amidase. <i>Biotechnology and Bioengineering</i> , 2004, 85, 553-560.	3.3	59
110	Combinatorial one-pot chemoenzymatic synthesis of heparin. <i>Carbohydrate Polymers</i> , 2015, 122, 399-407.	10.2	59
111	Regioselective enzymatic acylation as a tool for producing solution-phase combinatorial libraries. <i>Tetrahedron</i> , 1998, 54, 3971-3982.	1.9	58
112	Enhanced Stability of Enzymes Adsorbed onto Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 1675-1678.	0.9	58
113	Enzymatic Synthesis of Unique Thymidine-Containing Polyphenols. <i>Macromolecules</i> , 1998, 31, 941-943.	4.8	57
114	Position-Specific Chemical Modification and Quantitative Proteomics Disclose Protein Orientation Adsorbed on Silica Nanoparticles. <i>Nano Letters</i> , 2012, 12, 1583-1587.	9.1	57
115	Three dimensional cellular microarray platform for human neural stem cell differentiation and toxicology. <i>Stem Cell Research</i> , 2014, 13, 36-47.	0.7	57
116	Regulation of stem cell signaling by nanoparticle-mediated intracellular protein delivery. <i>Biomaterials</i> , 2011, 32, 3210-3219.	11.4	56
117	Carbon Nanotube-Induced Loss of Multicellular Chirality on Micropatterned Substrate Is Mediated by Oxidative Stress. <i>ACS Nano</i> , 2014, 8, 2196-2205.	14.6	56
118	Protein and solvent engineering of subtilisin BPN' in nearly anhydrous organic media. <i>Journal of the American Chemical Society</i> , 1993, 115, 12231-12237.	13.7	55
119	Chemoenzymic Synthesis and Characterization of Poly(.alpha.-methyl galactoside 6-acrylate) Hydrogels. <i>Macromolecules</i> , 1995, 28, 6014-6019.	4.8	55
120	High-Throughput Toxicity and Phenotypic Screening of 3D Human Neural Progenitor Cell Cultures on a Microarray Chip Platform. <i>Stem Cell Reports</i> , 2016, 7, 970-982.	4.8	55
121	Molecular dynamics simulation of C8E5micelle in explicit water: structure and hydrophobic solvation thermodynamics. <i>Molecular Physics</i> , 2002, 100, 2299-2306.	1.7	54
122	Highly swelling hydrogels from ordered galactose-based polyacrylates. <i>Biomaterials</i> , 1998, 19, 69-76.	11.4	53
123	Sugar acrylate-based polymers as chiral molecularly imprintable hydrogels. <i>Journal of Polymer Science Part A</i> , 1999, 37, 1665-1671.	2.3	53
124	Incorporation of p-cresol into lignins via peroxidase-catalysed copolymerization in nonaqueous media. <i>Enzyme and Microbial Technology</i> , 1991, 13, 964-968.	3.2	52
125	Biocompatibility of chemoenzymatically derived dextran-acrylate hydrogels. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 68A, 584-596.	3.1	52
126	The Role of the Methoxyphenol Apocynin, a Vascular NADPH Oxidase Inhibitor, as a Chemopreventative Agent in the Potential Treatment of Cardiovascular Diseases. <i>Current Vascular Pharmacology</i> , 2008, 6, 204-217.	1.7	52



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127	Combinatorial array-based enzymatic polyester synthesis. <i>Biotechnology and Bioengineering</i> , 2001, 76, 200-206.	3.3	51
128	Polyphenolic Glycosides and Aglycones Utilize Opposing Pathways To Selectively Remodel and Inactivate Toxic Oligomers of Amyloid $\beta$ . <i>ChemBioChem</i> , 2011, 12, 1749-1758.	2.6	51
129	Towards more active biocatalysts in organic media: Increasing the activity of salt-activated enzymes. <i>Biotechnology and Bioengineering</i> , 2001, 75, 187-196.	3.3	50
130	Nonaqueous Biocatalytic Synthesis of New Cytotoxic Doxorubicin Derivatives: Exploiting Unexpected Differences in the Regioselectivity of Salt-Activated and Solubilized Subtilisin. <i>Journal of the American Chemical Society</i> , 2002, 124, 1871-1876.	13.7	50
131	Numerical and Monte Carlo simulations of phenolic polymerizations catalyzed by peroxidase. <i>Biotechnology and Bioengineering</i> , 1993, 42, 807-814.	3.3	49
132	Preparation of Active and Stable Biocatalytic Hydrogels for Use in Selective Transformations. <i>Chemistry of Materials</i> , 1998, 10, 955-958.	6.7	49
133	Water dynamics and salt-activation of enzymes in organic media: Mechanistic implications revealed by NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 5706-5710.	7.1	49
134	Control of the heparosan N-deacetylation leads to an improved bioengineered heparin. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 91-99.	3.6	49
135	Recent advances in sulfotransferase enzyme activity assays. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 1491-1500.	3.7	49
136	Selective Killing of Pathogenic Bacteria by Antimicrobial Silver Nanoparticle-Cell Wall Binding Domain Conjugates. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 13317-13324.	8.0	49
137	Purification of glycoproteins by selective transport using concanavalin-mediated reverse micellar extraction. <i>Biotechnology Progress</i> , 1991, 7, 330-334.	2.6	48
138	Peroxidase-catalyzed synthesis of lignin-phenol copolymers. <i>Journal of Polymer Science Part A</i> , 1993, 31, 1839-1846.	2.3	48
139	Protein-Directed Formation of Silver Nanoparticles on Carbon Nanotubes. <i>Advanced Materials</i> , 2007, 19, 3167-3170.	21.0	48
140	Preparation of synthetic wood composites using ionic liquids. <i>Wood Science and Technology</i> , 2011, 45, 719-733.	3.2	48
141	<i>Escherichia coli</i> K5 heparosan fermentation and improvement by genetic engineering. <i>Bioengineered Bugs</i> , 2011, 2, 63-67.	1.7	48
142	Affinity-based reverse micellar extraction and separation (ARMES): A facile technique for the purification of peroxidase from soybean hulls. <i>Biotechnology Progress</i> , 1993, 9, 199-203.	2.6	47
143	Bacterial P450-catalyzed polyketide hydroxylation on a microfluidic platform. <i>Biotechnology and Bioengineering</i> , 2004, 88, 528-535.	3.3	47
144	Enzyme-Based Listericidal Nanocomposites. <i>Scientific Reports</i> , 2013, 3, 1584.	3.3	47

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145	High-throughput screening and quantitative structure-efficacy relationship models of potential displacer molecules for ion-exchange systems. <i>Biotechnology and Bioengineering</i> , 2002, 80, 60-72.	3.3	46
146	Chemoenzymatic Synthesis and High-Throughput Screening of an Aminoglycoside~Polyamine Library:~ Identification of High-Affinity Displacers and DNA-Binding Ligands. <i>Journal of the American Chemical Society</i> , 2004, 126, 12306-12315.	13.7	46
147	Analysis of E. coli K5 capsular polysaccharide heparosan. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 737-745.	3.7	46
148	Enzymatically prepared poly(hydroquinone) as a mediator for amperometric glucose sensors. <i>Polymer</i> , 1998, 39, 123-127.	3.8	45
149	High-throughput human metabolism and toxicity analysis. <i>Current Opinion in Biotechnology</i> , 2006, 17, 619-627.	6.6	45
150	Tubulin Encapsulation of Carbon Nanotubes into Functional Hybrid Assemblies. <i>Small</i> , 2009, 5, 310-315.	10.0	45
151	Antimicrobial mechanism of resveratrol~trans~dihydrodimer produced from peroxidase~catalyzed oxidation of resveratrol. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2417-2428.	3.3	45
152	Enzymatic Synthesis of Various Aromatic Polyesters in Anhydrous Organic Solvents. <i>Biocatalysis</i> , 1994, 11, 263-271.	0.9	44
153	Intrinsic effects of solvent polarity on enzymic activation energies. <i>Biotechnology and Bioengineering</i> , 2000, 67, 112-116.	3.3	44
154	Enzymatic Synthesis of Glycosaminoglycan Heparin. <i>Seminars in Thrombosis and Hemostasis</i> , 2007, 33, 453-465.	2.7	44
155	Testing for diffusion limitations in salt-activated enzyme catalysts operating in organic solvents. , 1998, 58, 654-657.		43
156	High-Throughput, Microarray-Based Synthesis of Natural Product Analogues via in Vitro Metabolic Pathway Construction. <i>ACS Chemical Biology</i> , 2007, 2, 419-425.	3.4	43
157	Biochemical strategies for enhancing the in vivo production of natural products with pharmaceutical potential. <i>Current Opinion in Biotechnology</i> , 2014, 25, 86-94.	6.6	43
158	Carbonic anhydrase for CO2 capture, conversion and utilization. <i>Current Opinion in Biotechnology</i> , 2022, 74, 230-240.	6.6	43
159	Molecular Imprinting of Enzymes with Water-Insoluble Ligands for Nonaqueous Biocatalysis. <i>Journal of the American Chemical Society</i> , 2002, 124, 5254-5255.	13.7	42
160	Fabrication of enzyme-based coatings on intact multi-walled carbon nanotubes as highly effective electrodes in biofuel cells. <i>Scientific Reports</i> , 2017, 7, 40202.	3.3	42
161	Oxidation of Polycyclic Aromatic Hydrocarbons Catalyzed by Soybean Peroxidase. <i>Applied Biochemistry and Biotechnology</i> , 1999, 80, 221-230.	2.9	41
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