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List of Publications by Year
in descending order

68 papers	1,877 citations	361413 20 h-index	265206 42 g-index
79 all docs	79 docs citations	79 times ranked	1644 citing authors

#	Article	IF	Citations
1	Chemical-enzymic synthesis and conformational analysis of sialyl Lewis X and derivatives. Journal of the American Chemical Society, 1992, 114, 9283-9298.	13.7	415
2	Enzyme catalysed tandem reactions. Current Opinion in Chemical Biology, 2013, 17, 236-249.	6.1	127
3	Recombinant 2-Deoxyribose-5-phosphate Aldolase in Organic Synthesis: Use of Sequential Two-Substrate and Three-Substrate Aldol Reactions. Journal of the American Chemical Society, 1995, 117, 3333-3339.	13.7	111
4	Exploring the Use of Conformationally Locked Aminoglycosides as a New Strategy to Overcome Bacterial Resistance. Journal of the American Chemical Society, 2006, 128, 100-116.	13.7	73
5	Enzymes in the synthesis of bioactive compounds. Bioorganic and Medicinal Chemistry, 2004, 12, 1817-1834.	3.0	68
6	(Chemo)enzymatic cascadesâ€"Nature's synthetic strategy transferred to the laboratory. Journal of Molecular Catalysis B: Enzymatic, 2015, 114, 1-6.	1.8	61
7	Enzymic Synthesis and Regeneration of 3'-Phosphoadenosine 5'-Phosphosulfate (PAPS) for Regioselective Sulfation of Oligosaccharides. Journal of the American Chemical Society, 1995, 117, 8031-8032.	13.7	59
8	Activated Î±,Î²â€Unsaturated Aldehydes as Substrate of Dihydroxyacetone Phosphate (DHAP)â€Dependent Aldolases in the Context of a Multienzyme System. Advanced Synthesis and Catalysis, 2009, 351, 2967-2975.	4.3	58
9	A Simple Structural-Based Approach to Prevent Aminoglycoside Inactivation by Bacterial Defense Proteins. Conformational Restriction Provides Effective Protection against Neomycin-B Nucleotidylation by ANT4. Journal of the American Chemical Society, 2005, 127, 8278-8279.	13.7	50
10	Oneâ€Pot Cascade Reactions using Fructoseâ€6â€phosphate Aldolase: Efficient Synthesis of <scp>D</scp>â€Arabinose 5â€Phosphate, <scp>D</scp>â€Fructose 6â€Phosphate and Analogues. Advanced Synthesis and Catalysis, 2012, 354, 1725-1730.	4.3	47
11	A Short Enzymic Synthesis of L-Glucose from Dihydroxyacetone Phosphate and L-Glyceraldehyde. Journal of Organic Chemistry, 1995, 60, 4294-4295.	3.2	46
12	Multienzyme system for dihydroxyacetone phosphate-dependent aldolase catalyzed Câ€"C bond formation from dihydroxyacetone. Chemical Communications, 2004, , 1634-1635.	4.1	45
13	Preparation and Characterization of a Bifunctional Aldolase/Kinase Enzyme: A More Efficient Biocatalyst for Cï£¿C Bond Formation. Chemistry - A European Journal, 2010, 16, 4018-4030.	3.3	45
14	A new strategy for the cloning, overexpression and one step purification of three DHAP-dependent aldolases: Rhamnulose-1-phosphate aldolase, fuculose-1-phosphate aldolase and tagatose-1,6-diphosphate aldolase1. Bioorganic and Medicinal Chemistry, 1995, 3, 945-953.	3.0	40
15	Substrate channelling in an engineered bifunctional aldolase/kinase enzyme confers catalytic advantage for Câ€"C bond formation. Chemical Communications, 2009, , 1721.	4.1	37
16	Enzymic Synthesis of L-Fucose and Analogs. Journal of Organic Chemistry, 1995, 60, 7360-7363.	3.2	36
17	From Kinase to Cyclase: An Unusual Example of Catalytic Promiscuity Modulated by Metal Switching. ChemBioChem, 2009, 10, 225-229.	2.6	35
18	Heterologous Over-expression ofÎ±-1,6-Fucosyltransferase fromRhizobium sp.: Application to the Synthesis of the TrisaccharideÎ²-D-GlcNAc(1â†’4)- [Î±-L-Fuc-(1â†’6)]-D-GlcNAc, Study of the Acceptor Specificity and Evaluation of Polyhydroxylated Indolizidines as Inhibitors. Chemistry - A European Journal, 2001, 7, 2390-2397.	3.3	33

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19	Synthesis, physicochemical characterization and biological evaluation of chitosan sulfate as heparan sulfate mimics. Carbohydrate Polymers, 2018, 191, 225-233.	10.2	26
20	Synthesis of Carba- and C-Fucopyranosides and Their Evaluation as Î±-Fucosidase Inhibitors â^’ Analysis of an Unusual Conformation Adopted by an Amino-C-fucopyranoside. European Journal of Organic Chemistry, 2001, 2001, 4127-4135.	2.4	24
21	Large scale production of recombinant .alpha.-1,2-mannosyltransferase from E. coli for the study of acceptor specificity and use of the recombinant whole cells in synthesis. Journal of Organic Chemistry, 1994, 59, 6356-6362.	3.2	20
22	Molecular Recognition of Aminoglycoside Antibiotics by Bacterial Defence Proteins: NMR Study of the Structural and Conformational Features of Streptomycin Inactivation byBacillus subtilis Aminoglycoside-6-adenyl Transferase. Chemistry - A European Journal, 2005, 11, 5102-5113.	3.3	19
23	A holistic approach to unravelling chondroitin sulfation: Correlations between surface charge, structure and binding to growth factors. Carbohydrate Polymers, 2018, 202, 211-218.	10.2	19
24	Exploring the Origin of Amidase Substrate Promiscuity in CALB by a Computational Approach. ACS Catalysis, 2020, 10, 1938-1946.	11.2	19
25	Cloning, overexpression and isolation of the type II FDP aldolase from E. coli for specificity study and synthetic application. Bioorganic and Medicinal Chemistry, 1994, 2, 837-843.	3.0	18
26	<scp>L</scp>â€Rhamnuloseâ€1â€phosphate Aldolase from <i>Thermotoga maritima</i> in Organic Synthesis: Oneâ€Pot Multistep Reactions for the Preparation of Iminoâ€and Nitrocyclitols. Advanced Synthesis and Catalysis, 2015, 357, 1951-1960.	4.3	18
27	Immobilization of Enzymes Acting on Macromolecular Substrates: Reduction of Steric Problems. , 1997, , 261-276.		15
28	Chitosan sulfate-lysozyme hybrid hydrogels as platforms with fine-tuned degradability and sustained inherent antibiotic and antioxidant activities. Carbohydrate Polymers, 2022, 291, 119611.	10.2	15
29	Heparanized chitosans: towards the third generation of chitinous biomaterials. Materials Horizons, 2021, 8, 2596-2614.	12.2	14
30	Cloning and overexpression of rhamnose isomerase and fucose isomerase. Bioorganic and Medicinal Chemistry, 1995, 3, 1349-1355.	3.0	13
31	A New Strategy for Liquid-Phase Synthesis of Disaccharides Based on the Use of Glycosidases. Biocatalysis and Biotransformation, 2000, 18, 271-281.	2.0	13
32	l-Rhamnulose-1-phosphate and l-fuculose-1-phosphate aldolase mediated multi-enzyme cascade systems for nitrocyclitol synthesis. Journal of Molecular Catalysis B: Enzymatic, 2015, 114, 50-57.	1.8	13
33	Phosphorylation Catalyzed by Dihydroxyacetone Kinase. European Journal of Organic Chemistry, 2018, 2018, 2892-2895.	2.4	13
34	Deciphering Structural Determinants in Chondroitin Sulfate Binding to FGF-2: Paving the Way to Enhanced Predictability of Their Biological Functions. Polymers, 2021, 13, 313.	4.5	13
35	Synthesis and evaluation of xylopyranoside derivatives as â€œdecoy acceptorsâ€of human Î²-1,4-galactosyltransferase 7. Molecular BioSystems, 2011, 7, 1312.	2.9	12
36	Design and biocatalytic applications of genetically fused multifunctional enzymes. Biotechnology Advances, 2022, 60, 108016.	11.7	12

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37	Aryl Sulfotransferase from <i>Haliangium ochraceum</i>: A Versatile Tool for the Sulfation of Small Molecules. ChemCatChem, 2014, 6, 1059-1065.	3.7	11
38	Tuning the Phosphoryl Donor Specificity of Dihydroxyacetone Kinase from ATP to Inorganic Polyphosphate. An Insight from Computational Studies. International Journal of Molecular Sciences, 2015, 16, 27835-27849.	4.1	11
39	Kinetics and stability of an immobilized orsellinate depside hydrolase in polyacrylamide gel. Enzyme and Microbial Technology, 1991, 13, 275-279.	3.2	10
40	The use of immobilized cells to stabilize orsellinate depside hydrolase of Pseudevernia furfuracea. Plant Cell Reports, 1986, 5, 155-157.	5.6	9
41	Rescue of the streptomycin antibiotic activity by using streptidine as a â€œdecoy acceptorâ€•for the aminoglycoside-inactivating enzyme adenyl transferase. Chemical Communications, 2007, , 2829-2831.	4.1	9
42	Assembly of glycoamino acid building blocks: a new strategy for the straightforward synthesis of heparan sulfate mimics. Chemical Communications, 2018, 54, 13455-13458.	4.1	9
43	Photosynthetical and nutritional implications in the accumulation of phenols in the lichen Pseudevernia furfuracea. Biochemical Systematics and Ecology, 1987, 15, 289-296.	1.3	8
44	Crystallization and preliminary crystallographic data for class I deoxyribose-5-phosphate aldolase fromEscherichia coli: An Application of Reverse Screening. Proteins: Structure, Function and Bioinformatics, 1995, 22, 67-72.	2.6	8
45	Hyperthermophilic aldolases as biocatalyst for Câ€“C bond formation: rhamnulose 1-phosphate aldolase from Thermotoga maritima. Applied Microbiology and Biotechnology, 2015, 99, 3057-3068.	3.6	8
46	Stabilization of Immobilized Enzymes by Chemical Modification with Polyfunctional Macromolecules. , 1997, , 289-298.		7
47	7.20 Multi-Enzyme Reactions. , 2012, , 430-453.		6
48	Biochemical profiling of rat embryonic stem cells grown on electrospun polyester fibers using synchrotron infrared microspectroscopy. Analytical and Bioanalytical Chemistry, 2018, 410, 3649-3660.	3.7	6
49	Enzymatic hydrolysis of physodic acid in Pseudevernia furfuracea. Characterization of the product of depsidone hydrolysis. Plant Science, 1991, 77, 197-206.	3.6	5
50	C-Terminal truncation of Î± 1,6-fucosyltransferase from Rhizobium sp. does not annul the transferase activity of the enzyme. Bioorganic and Medicinal Chemistry, 2002, 10, 737-742.	3.0	5
51	In Vivo Chaperone-Assisted Folding of Î±-1,6-Fucosyltransferase from Rhizobium sp.. ChemBioChem, 2003, 4, 531-533.	2.6	5
52	Unraveling the Structural Landscape of Chitosan-Based Heparan Sulfate Mimics Binding to Growth Factors: Deciphering Structural Determinants for Optimal Activity. ACS Applied Materials & Interfaces, 2020, 12, 25534-25545.	8.0	5
53	Enzymatic synthesis of disaccharides by Î²-galactosidase-catalyzed glycosylation of a glycocluster. Journal of Molecular Catalysis B: Enzymatic, 2000, 11, 71-79.	1.8	4
54	Structure / Activity Relationship of Carba- and C-Fucopyranosides as Inhibitors of an α 1,6-Fucosyltransferase by Molecular Modeling and Kinetic Studies. Letters in Organic Chemistry, 2005, 2, 247-251.	0.5	4

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55	Corrigendum to â€œEnzyme catalysed tandem reactionsâ€•[Curr Opin Chem Biol 17 (2013) 236â€“249]. Current Opinion in Chemical Biology, 2013, 17, 1039.	6.1	4
56	Development of a new method for d-xylose detection and quantification in urine, based on the use of recombinant xylose dehydrogenase from Caulobacter crescentus. Journal of Biotechnology, 2016, 234, 50-57.	3.8	4
57	Preparation and Characterization of Aminoglycoside-Loaded Chitosan/Tripolyphosphate/Alginate Microspheres against E. coli. Polymers, 2021, 13, 3326.	4.5	4
58	Kinetic comparison between soluble and polyacrylamide-entrapped depsidone ether hydrolase from the lichen Pseudevernia furfuracea. Plant Science, 1992, 85, 143-149.	3.6	3
59	Highly improved enzymatic peptide synthesis by using biphasic reactors. Biocatalysis and Biotransformation, 2018, 36, 271-278.	2.0	3
60	Simple and Practical Multigram Synthesis of <scp>d</scp>-Xylonate Using a Recombinant Xylose Dehydrogenase. ACS Omega, 2019, 4, 10593-10598.	3.5	3
61	6-<i>O</i>-Nucleotidyltransferase: an aminoglycoside-modifying enzyme specific for streptomycin/streptidine. MedChemComm, 2016, 7, 177-183.	3.4	2
62	Computational study of the phosphoryl donor activity of dihydroxyacetone kinase from ATP to inorganic polyphosphate. International Journal of Quantum Chemistry, 2018, 118, e25520.	2.0	2
63	Multienzyme System for Dihydroxyacetone Phosphate-Dependent Aldolase Catalyzed Câ€”C Bond Formation from Dihydroxyacetone.. ChemInform, 2004, 35, no.	0.0	1
64	Analytical Validation of a New Enzymatic and Automatable Method for d-Xylose Measurement in Human Urine Samples. BioMed Research International, 2017, 2017, 1-9.	1.9	1
65	Enzymes in the Synthesis of Bioactive Compounds: The Prodigious Decades. ChemInform, 2004, 35, no.	0.0	0
66	Chemoenzymatic preparation of chondroitin sulfates with a defined sulfation pattern. New Biotechnology, 2016, 33, S43-S44.	4.4	0
67	Preparation of chondroitin derivatives for the recognition of neurotrophic factor. New Biotechnology, 2016, 33, S185.	4.4	0
68	Biocatalysis in Spain: A field of success and innovation. Biocatalysis and Biotransformation, 2018, 36, 180-183.	2.0	0