Elena Rosini

List of Publications by Year
in descending order

61 papers	1,893 citations	257450 24 h-index	276875 41 g-index
62 all docs	62 docs citations	62 times ranked	2228 citing authors

#	Article	IF	Citations
1	Ligninâ€degrading enzymes. FEBS Journal, 2015, 282, 1190-1213.	4.7	347
2	Properties and applications of microbial D-amino acid oxidases: current state and perspectives. Applied Microbiology and Biotechnology, 2008, 78, 1-16.	3.6	131
3	D-Amino Acid Oxidase Inhibitors as a Novel Class of Drugs for Schizophrenia Therapy. Current Pharmaceutical Design, 2013, 19, 2499-2511.	1.9	84
4	D-amino acids in foods. Applied Microbiology and Biotechnology, 2020, 104, 555-574.	3.6	76
5	Glyphosate Resistance by Engineering the Flavoenzyme Glycine Oxidase. Journal of Biological Chemistry, 2009, 284, 36415-36423.	3.4	70
6	Evolution of an acylase active on cephalosporin C. Protein Science, 2005, 14, 3064-3076.	7.6	69
7	Enzymatic Conversion of Unnatural Amino Acids by YeastD-Amino Acid Oxidase. Advanced Synthesis and Catalysis, 2006, 348, 2183-2190.	4.3	59
8	Comparison of different microbial laccases as tools for industrial uses. New Biotechnology, 2016, 33, 387-398.	4.4	55
9	O2 Reactivity of Flavoproteins. Journal of Biological Chemistry, 2010, 285, 24439-24446.	3.4	52
10	Cephalosporin C acylase: dream and(/or) reality. Applied Microbiology and Biotechnology, 2013, 97, 2341-2355.	3.6	50
11	A biosensor for all d-amino acids using evolved d-amino acid oxidase. Journal of Biotechnology, 2008, 135, 377-384.	3.8	45
12	Olanzapine, but not clozapine, increases glutamate release in the prefrontal cortex of freely moving mice by inhibiting D-aspartate oxidase activity. Scientific Reports, 2017, 7, 46288.	3.3	44
13	Enzymatic transformation of aflatoxin B1 by Rh_DypB peroxidase and characterization of the reaction products. Chemosphere, 2020, 250, 126296.	8.2	41
14	Modulating D-amino acid oxidase substrate specificity: production of an enzyme for analytical determination of all D-amino acids by directed evolution. Protein Engineering, Design and Selection, 2004, 17, 517-525.	2.1	34
15	Cascade enzymatic cleavage of the Î²-O-4 linkage in a lignin model compound. Catalysis Science and Technology, 2016, 6, 2195-2205.	4.1	34
16	Multistep enzyme catalysed deracemisation of 2-naphthyl alanine. Biocatalysis and Biotransformation, 2006, 24, 409-413.	2.0	33
17	Optimization of <scp>d</scp>â€amino acid oxidase for low substrate concentrations â€“ towards a cancer enzyme therapy. FEBS Journal, 2009, 276, 4921-4932.	4.7	32
18	Characterization and use of a bacterial lignin peroxidase with an improved manganese-oxidative activity. Applied Microbiology and Biotechnology, 2018, 102, 10579-10588.	3.6	32

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19	A valuable peroxidase activity from the novel species Nonomuraea gerenzanensis growing on alkali lignin. Biotechnology Reports (Amsterdam, Netherlands), 2017, 13, 49-57.	4.4	31
20	The levels of the NMDA receptor co-agonist D-serine are reduced in the substantia nigra of MPTP-lesioned macaques and in the cerebrospinal fluid of Parkinsonâ€™s disease patients. Scientific Reports, 2019, 9, 8898.	3.3	31
21	Assays of D-Amino Acid Oxidase Activity. Frontiers in Molecular Biosciences, 2017, 4, 102.	3.5	30
22	Advances in Enzymatic Synthesis of D-Amino Acids. International Journal of Molecular Sciences, 2020, 21, 3206.	4.1	28
23	Deracemization and Stereoinversion of Î±â€Amino Acids by <scp>l</scp>â€Amino Acid Deaminase. Advanced Synthesis and Catalysis, 2017, 359, 3773-3781.	4.3	27
24	Structure of a class III engineered cephalosporin acylase: comparisons with class I acylase and implications for differences in substrate specificity and catalytic activity. Biochemical Journal, 2013, 451, 217-226.	3.7	26
25	Isolation and characterization of a heterologously expressed bacterial laccase from the anaerobe Geobacter metallireducens. Applied Microbiology and Biotechnology, 2018, 102, 2425-2439.	3.6	26
26	Biosensors for D-Amino Acids: Detection Methods and Applications. International Journal of Molecular Sciences, 2020, 21, 4574.	4.1	26
27	Intrinsic antimicrobial properties of silk spun by genetically modified silkworm strains. Transgenic Research, 2018, 27, 87-101.	2.4	24
28	Bacterial Nanocellulose and Its Surface Modification by Glycidyl Methacrylate and Ethylene Glycol Dimethacrylate. Incorporation of Vancomycin and Ciprofloxacin. Nanomaterials, 2019, 9, 1668.	4.1	22
29	Strategic manipulation of an industrial biocatalyst â€“ evolution of a cephalosporinÂ<scp>C</scp> acylase. FEBS Journal, 2014, 281, 2443-2455.	4.7	21
30	Binding Residence Time through Scaled Molecular Dynamics: A Prospective Application to hDAAO Inhibitors. Journal of Chemical Information and Modeling, 2018, 58, 2255-2265.	5.4	21
31	Demethylation of vanillic acid by recombinant LigM in a one-pot cofactor regeneration system. Catalysis Science and Technology, 2016, 6, 7729-7737.	4.1	17
32	On the reaction of dâ€amino acid oxidase with dioxygen: O₂ diffusion pathways and enhancement of reactivity. FEBS Journal, 2011, 278, 482-492.	4.7	16
33	Novel biosensors based on optimized glycine oxidase. FEBS Journal, 2014, 281, 3460-3472.	4.7	16
34	A novel, simple screening method for investigating the properties of lignin oxidative activity. Enzyme and Microbial Technology, 2017, 96, 143-150.	3.2	16
35	Antimicrobial Role of RNASET2 Protein During Innate Immune Response in the Medicinal Leech Hirudo verbana. Frontiers in Immunology, 2020, 11, 370.	4.8	16
36	An antibody-based enzymatic therapy for cancer treatment: The selective localization of D-amino acid oxidase to EDA fibronectin. Nanomedicine: Nanotechnology, Biology, and Medicine, 2021, 36, 102424.	3.3	16

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37	Different recombinant forms of polyphenol oxidase A, a laccase from Marinomonas mediterranea. Protein Expression and Purification, 2016, 123, 60-69.	1.3	15
38	Reactive oxygen species as a doubleâ€edged sword: The role of oxidative enzymes in antitumor therapy. BioFactors, 2022, 48, 384-399.	5.4	15
39	In vitro evolution of an <scp>l</scp>-amino acid deaminase active on <scp>l</scp>-1-naphthylalanine. Catalysis Science and Technology, 2018, 8, 5359-5367.	4.1	13
40	Biosensors for d-Amino Acid Detection. Methods in Molecular Biology, 2012, 794, 313-324.	0.9	11
41	On the substrate preference of glutaryl acylases. Journal of Molecular Catalysis B: Enzymatic, 2012, 76, 52-58.	1.8	11
42	Engineering methionine Î³-lyase from Citrobacter freundii for anticancer activity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 1260-1270.	2.3	11
43	D-Amino Acid Oxidase-pLG72 Interaction and D-Serine Modulation. Frontiers in Molecular Biosciences, 2018, 5, 3.	3.5	11
44	PEG-DAAO conjugate: A promising tool for cancer therapy optimized by protein engineering. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 24, 102122.	3.3	11
45	Engineering substrate promiscuity in halophilic alcohol dehydrogenase (HvADH2) by in silico design. PLoS ONE, 2017, 12, e0187482.	2.5	11
46	Activity of yeast d-amino acid oxidase on aromatic unnatural amino acids. Journal of Molecular Catalysis B: Enzymatic, 2008, 50, 93-98.	1.8	10
47	Analyzing the d-amino acid content in biological samples by engineered enzymes. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 3235-3239.	2.3	10
48	Evolution of histamine oxidase activity for biotechnological applications. Applied Microbiology and Biotechnology, 2014, 98, 739-748.	3.6	10
49	Characterization and Investigation of Redox-Sensitive Liposomes for Gene Delivery. Methods in Molecular Biology, 2016, 1445, 217-233.	0.9	9
50	Glycine oxidase from Bacillus subtilis: Role of Histidine 244 and Methionine 261. Biochimie, 2007, 89, 1372-1380.	2.6	8
51	One-pot conversion of cephalosporin C by using an optimized two-enzyme process. Catalysis Science and Technology, 2015, 5, 1854-1863.	4.1	8
52	Antibacterial Properties of D-Amino Acid Oxidase: Impact on the Food Industry. Frontiers in Microbiology, 2019, 10, 2786.	3.5	7
53	Multiâ€Enzymatic Cascade Reactions for the Synthesis of cis,cisâ€Muconic Acid. Advanced Synthesis and Catalysis, 2022, 364, 114-123.	4.3	7
54	Expression of rat diamine oxidase in Escherichia coli. Journal of Molecular Catalysis B: Enzymatic, 2012, 82, 115-120.	1.8	5

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55	Immobilization of <scp>l</scp>-aspartate oxidase from Sulfolobus tokodaii as a biocatalyst for resolution of aspartate solutions. Catalysis Science and Technology, 2015, 5, 1106-1114.	4.1	5
56	Expression and purification of the human tumor suppressor protein RNASET2 in CHOâ€“S cells. Protein Expression and Purification, 2020, 174, 105675.	1.3	2
57	Unveiling the Bio-corona Fingerprinting of Potential Anticancer Carbon Nanotubes Coupled with d-Amino Acid Oxidase. Molecular Biotechnology, 2022, 64, 1164-1176.	2.4	2
58	Unveiling the Atomic-Level Determinants of Acylaseâ€“Ligand Complexes: An Experimental and Computational Study. Journal of Chemical Information and Modeling, 2015, 55, 2227-2241.	5.4	1
59	A comprehensive practical laboratory course on protein engineering: Evolution of a glycine oxidase variant active on the herbicide glyphosate. Biochemistry and Molecular Biology Education, 2019, 47, 689-699.	1.2	1
60	High-Throughput Strategy for Glycine Oxidase Biosensor Development Reveals Glycine Release from Cultured Cells. Analytical Chemistry, 2021, , .	6.5	1
61	CASCAT: The Power of The Combined Protein Engineering Approach: Evolution of A Glycine Oxidase for A Novel Mechanism of Glyphosate Toleranceâ˜†. Journal of Biotechnology, 2010, 150, 122-123.	3.8	0