Loredano Pollegioni

List of Publications by Citations

225 papers	7,571 citations	45 h-index	77 g-index
233 ext. papers	8,548 ext. citations	5.7 avg, IF	6.03 L-index

#	Paper	IF	Citations
225	Glia-derived D-serine controls NMDA receptor activity and synaptic memory. *Cell*, **2006**, 125, 775-84	56.2	673
224	Synaptic and extrasynaptic NMDA receptors are gated by different endogenous coagonists. *Cell*, **2012**, 150, 633-46	56.2	483
223	Glutamate receptor activation triggers a calcium-dependent and SNARE protein-dependent release of the gliotransmitter D-serine. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 5606-11	11.5	351
222	Lignin-degrading enzymes. *FEBS Journal*, **2015**, 282, 1190-213	5.7	267
221	Glial D-serine gates NMDA receptors at excitatory synapses in prefrontal cortex. *Cerebral Cortex*, **2012**, 22, 595-606	5.1	137
220	pLG72 modulates intracellular D-serine levels through its interaction with D-amino acid oxidase: effect on schizophrenia susceptibility. *Journal of Biological Chemistry*, **2008**, 283, 22244-56	5.4	123
219	Molecular basis of glyphosate resistance-different approaches through protein engineering. *FEBS Journal*, **2011**, 278, 2753-66	5.7	121
218	Characterization of human D-amino acid oxidase. *FEBS Letters*, **2006**, 580, 2358-64	3.8	107
217	New biotech applications from evolved D-amino acid oxidases. *Trends in Biotechnology*, **2011**, 29, 276-83	15.1	104
216	Covalent enzyme immobilization by poly(ethylene glycol) diglycidyl ether (PEGDE) for microelectrode biosensor preparation. *Biosensors and Bioelectronics*, **2011**, 26, 3993-4000	11.8	101
215	Properties and applications of microbial D-amino acid oxidases: current state and perspectives. *Applied Microbiology and Biotechnology*, **2008**, 78, 1-16	5.7	101
214	Yeast D-amino acid oxidase: structural basis of its catalytic properties. *Journal of Molecular Biology*, **2002**, 324, 535-46	6.5	98
213	L-amino acid oxidase as biocatalyst: a dream too far?. *Applied Microbiology and Biotechnology*, **2013**, 97, 9323-41	5.7	88
212	Glycine oxidase from Bacillus subtilis. Characterization of a new flavoprotein. *Journal of Biological Chemistry*, **2002**, 277, 6985-93	5.4	83
211	Structure-function relationships in human D-amino acid oxidase. *Amino Acids*, **2012**, 43, 1833-50	3.5	82
210	Metabolism of the neuromodulator D-serine. *Cellular and Molecular Life Sciences*, **2010**, 67, 2387-404	10.3	82
209	Characterization of a yeast D-amino acid oxidase microbiosensor for D-serine detection in the central nervous system. *Analytical Chemistry*, **2008**, 80, 1589-97	7.8	82

208	Identity of the NMDA receptor coagonist is synapse specific and developmentally regulated in the hippocampus. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E204-13	11.5	78
207	D-amino Acid Oxidase as an Industrial Biocatalyst. *Biocatalysis and Biotransformation*, **2002**, 20, 145-159	2.5	74
206	D-amino acid oxidase inhibitors as a novel class of drugs for schizophrenia therapy. *Current Pharmaceutical Design*, **2013**, 19, 2499-511	3.3	70
205	Specificity and kinetics of Rhodotorula gracilis D-amino acid oxidase. *BBA - Proteins and Proteomics*, **1992**, 1120, 11-6		64
204	Cholesterol oxidase: biotechnological applications. *FEBS Journal*, **2009**, 276, 6857-70	5.7	63
203	Evolution of an acylase active on cephalosporin C. *Protein Science*, **2005**, 14, 3064-76	6.3	63
202	Characterization of cholesterol oxidase from Streptomyces hygroscopicus and Brevibacterium sterolicum. *FEBS Journal*, **1997**, 250, 369-76		62
201	Overexpression in Escherichia coli of a recombinant chimeric Rhodotorula gracilis d-amino acid oxidase. *Protein Expression and Purification*, **1998**, 14, 289-94	2	62
200	Identity of endogenous NMDAR glycine site agonist in amygdala is determined by synaptic activity level. *Nature Communications*, **2013**, 4, 1760	17.4	61
199	Cholesterol oxidase from Brevibacterium sterolicum. The relationship between covalent flavinylation and redox properties. *Journal of Biological Chemistry*, **2001**, 276, 18024-30	5.4	61
198	Optimization of glutaryl-7-aminocephalosporanic acid acylase expression in E. coli. *Protein Expression and Purification*, **2008**, 61, 131-7	2	60
197	Induction of cytotoxic oxidative stress by D-alanine in brain tumor cells expressing Rhodotorula gracilis D-amino acid oxidase: a cancer gene therapy strategy. *Human Gene Therapy*, **1998**, 9, 185-93	4.8	60
196	Reduced D-serine levels in the nucleus accumbens of cocaine-treated rats hinder the induction of NMDA receptor-dependent synaptic plasticity. *Brain*, **2013**, 136, 1216-30	11.2	59
195	Engineering the substrate specificity of D-amino-acid oxidase. *Journal of Biological Chemistry*, **2002**, 277, 27510-6	5.4	58
194	Catalytic properties of D-amino acid oxidase in cephalosporin C bioconversion: a comparison between proteins from different sources. *Biotechnology Progress*, **2004**, 20, 467-73	2.8	57
193	Dissecting the structural determinants of the stability of cholesterol oxidase containing covalently bound flavin. *Journal of Biological Chemistry*, **2005**, 280, 22572-81	5.4	57
192	Properties of D-amino-acid oxidase from Rhodotorula gracilis. *FEBS Journal*, **1989**, 180, 199-204		57
191	pH and kinetic isotope effects in d-amino acid oxidase catalysis. *FEBS Journal*, **2001**, 268, 5504-20		56

190	A study on apoenzyme from Rhodotorula gracilis D-amino acid oxidase. *FEBS Journal*, **1991**, 197, 513-7		54
189	Glyphosate resistance by engineering the flavoenzyme glycine oxidase. *Journal of Biological Chemistry*, **2009**, 284, 36415-36423	5.4	51
188	Enzymatic Conversion of Unnatural Amino Acids by Yeast D-Amino Acid Oxidase. *Advanced Synthesis and Catalysis*, **2006**, 348, 2183-2190	5.6	51
187	Structure-function correlation in glycine oxidase from Bacillus subtilis. *Journal of Biological Chemistry*, **2004**, 279, 29718-27	5.4	51
186	Evaluation of D-amino acid oxidase from Rhodotorula gracilis for the production of alpha-keto acids: a reactor system. *Biotechnology and Bioengineering*, **1994**, 44, 1288-94	4.9	50
185	O2 reactivity of flavoproteins: dynamic access of dioxygen to the active site and role of a H+ relay system in D-amino acid oxidase. *Journal of Biological Chemistry*, **2010**, 285, 24439-46	5.4	49
184	Co-agonists differentially tune GluN2B-NMDA receptor trafficking at hippocampal synapses. *ELife*, **2017**, 6,	8.9	48
183	Studies on the reaction mechanism of Rhodotorula gracilis D-amino-acid oxidase. Role of the highly conserved Tyr-223 on substrate binding and catalysis. *Journal of Biological Chemistry*, **1999**, 274, 36233-40	5.4	47
182	Evidence for the interaction of D-amino acid oxidase with pLG72 in a glial cell line. *Molecular and Cellular Neurosciences*, **2011**, 48, 20-8	4.8	46
181	Role of arginine 285 in the active site of Rhodotorula gracilis D-amino acid oxidase. A site-directed mutagenesis study. *Journal of Biological Chemistry*, **2000**, 275, 24715-21	5.4	46
180	Breaking the mirror: l-Amino acid deaminase, a novel stereoselective biocatalyst. *Biotechnology Advances*, **2017**, 35, 657-668	17.8	45
179	Comparison of different microbial laccases as tools for industrial uses. *New Biotechnology*, **2016**, 33, 387-98	6.4	44
178	On the mechanism of D-amino acid oxidase. Structure/linear free energy correlations and deuterium kinetic isotope effects using substituted phenylglycines. *Journal of Biological Chemistry*, **1997**, 272, 4924-34	5.4	43
177	Kinetic mechanisms of cholesterol oxidase from Streptomyces hygroscopicus and Brevibacterium sterolicum. *FEBS Journal*, **1999**, 264, 140-51		43
176	Effect of ligand binding on human D-amino acid oxidase: implications for the development of new drugs for schizophrenia treatment. *Protein Science*, **2010**, 19, 1500-12	6.3	41
175	Characterization of the covalently bound anionic flavin radical in monoamine oxidase a by electron paramagnetic resonance. *Journal of the American Chemical Society*, **2007**, 129, 16091-7	16.4	41
174	Alpha-synuclein oligomers impair memory through glial cell activation and via Toll-like receptor 2. *Brain, Behavior, and Immunity*, **2018**, 69, 591-602	16.6	40
173	A biosensor for all D-amino acids using evolved D-amino acid oxidase. *Journal of Biotechnology*, **2008**, 135, 377-84	3.7	40

172	Age-Related Changes in D-Aspartate Oxidase Promoter Methylation Control Extracellular D-Aspartate Levels and Prevent Precocious Cell Death during Brain Aging. *Journal of Neuroscience*, **2016**, 36, 3064-78	6.6	39
171	In vivo D-serine hetero-exchange through alanine-serine-cysteine (ASC) transporters detected by microelectrode biosensors. *ACS Chemical Neuroscience*, **2013**, 4, 772-81	5.7	39
170	Decreased free d-aspartate levels are linked to enhanced d-aspartate oxidase activity in the dorsolateral prefrontal cortex of schizophrenia patients. *NPJ Schizophrenia*, **2017**, 3, 16	5.5	38
169	Cephalosporin C acylase: dream and(/or) reality. *Applied Microbiology and Biotechnology*, **2013**, 97, 2341-55	3.7	38
168	On the oxygen reactivity of flavoprotein oxidases: an oxygen access tunnel and gate in brevibacterium sterolicum cholesterol oxidase. *Journal of Biological Chemistry*, **2008**, 283, 24738-47	5.4	38
167	Contribution of the dimeric state to the thermal stability of the flavoprotein D-amino acid oxidase. *Protein Science*, **2003**, 12, 1018-29	6.3	38
166	The primary structure of D-amino acid oxidase from Rhodotorula gracilis. *Biotechnology Letters*, **1995**, 17, 193-198	3	37
165	Cloning, sequencing and expression in E. coli of a D-amino acid oxidase cDNA from Rhodotorula gracilis active on cephalosporin C. *Journal of Biotechnology*, **1997**, 58, 115-23	3.7	36
164	Overexpression of a recombinant wild-type and His-tagged Bacillus subtilis glycine oxidase in Escherichia coli. *FEBS Journal*, **2002**, 269, 1456-63		36
163	Structure-Function Relationships in l-Amino Acid Deaminase, a Flavoprotein Belonging to a Novel Class of Biotechnologically Relevant Enzymes. *Journal of Biological Chemistry*, **2016**, 291, 10457-75	5.4	36
162	Human D-Amino Acid Oxidase: Structure, Function, and Regulation. *Frontiers in Molecular Biosciences*, **2018**, 5, 107	5.6	36
161	Determination of D-amino acids using a D-amino acid oxidase biosensor with spectrophotometric and potentiometric detection. *Biotechnology Letters*, **1998**, 12, 149-153		35
160	Expression in Escherichia coli and in vitro refolding of the human protein pLG72. *Protein Expression and Purification*, **2006**, 46, 150-5	2	35
159	Relevance of weak flavin binding in human D-amino acid oxidase. *Protein Science*, **2009**, 18, 801-10	6.3	33
158	Cascade enzymatic cleavage of the β-O-4 linkage in a lignin model compound. *Catalysis Science and Technology*, **2016**, 6, 2195-2205	5.5	32
157	Optimizing HIV-1 protease production in Escherichia coli as fusion protein. *Microbial Cell Factories*, **2011**, 10, 53	6.4	31
156	Engineering the properties of D-amino acid oxidases by a rational and a directed evolution approach. *Current Protein and Peptide Science*, **2007**, 8, 600-18	2.8	31
155	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, 517-25	1.9	31

154	D-amino acids in foods. *Applied Microbiology and Biotechnology*, **2020**, 104, 555-574	5.7	31
153	A process for bioconversion of cephalosporin C by Rhodotorula gracilis D-amino acid oxidase. *Biotechnology Letters*, **1995**, 17, 199-204	3	30
152	Production and characterization of a novel antifungal chitinase identified by functional screening of a suppressive-soil metagenome. *Microbial Cell Factories*, **2017**, 16, 16	6.4	29
151	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	4.9	29
150	Production of recombinant cholesterol oxidase containing covalently bound FAD in Escherichia coli. *BMC Biotechnology*, **2010**, 10, 33	3.5	28
149	Disk-shaped amperometric enzymatic biosensor for in vivo detection of D-serine. *Analytical Chemistry*, **2014**, 86, 3501-7	7.8	27
148	Optimization of human D-amino acid oxidase expression in Escherichia coli. *Protein Expression and Purification*, **2009**, 68, 72-8	2	27
147	Multistep enzyme catalysed deracemisation of 2-naphthyl alanine. *Biocatalysis and Biotransformation*, **2006**, 24, 409-413	2.5	27
146	Kinetic mechanisms of glycine oxidase from Bacillus subtilis. *FEBS Journal*, **2003**, 270, 1474-82		27
145	Cellular prion protein neither binds to alpha-synuclein oligomers nor mediates their detrimental effects. *Brain*, **2019**, 142, 249-254	11.2	27
144	The degradation (by distinct pathways) of human D-amino acid oxidase and its interacting partner pLG72--two key proteins in D-serine catabolism in the brain. *FEBS Journal*, **2014**, 281, 708-23	5.7	26
143	Structural, kinetic, and pharmacodynamic mechanisms of D-amino acid oxidase inhibition by small molecules. *Journal of Medicinal Chemistry*, **2013**, 56, 3710-24	8.3	26
142	D-amino acid oxidase-nanoparticle system: a potential novel approach for cancer enzymatic therapy. *Nanomedicine*, **2013**, 8, 1797-806	5.6	26
141	G72 primate-specific gene: a still enigmatic element in psychiatric disorders. *Cellular and Molecular Life Sciences*, **2016**, 73, 2029-39	10.3	26
140	Contribution of serine racemase/d-serine pathway to neuronal apoptosis. *Aging Cell*, **2012**, 11, 588-98	9.9	25
139	Optimizing Escherichia coli as a protein expression platform to produce Mycobacterium tuberculosis immunogenic proteins. *Microbial Cell Factories*, **2013**, 12, 115	6.4	25
138	P53 family members modulate the expression of PRODH, but not PRODH2, via intronic p53 response elements. *PLoS ONE*, **2013**, 8, e69152	3.7	25
137	Redox potentials and their pH dependence of D-amino-acid oxidase of Rhodotorula gracilis and Trigonopsis variabilis. *FEBS Journal*, **2000**, 267, 6624-32		25

136	D-Serine and Glycine Differentially Control Neurotransmission during Visual Cortex Critical Period. *PLoS ONE*, **2016**, 11, e0151233	3.7	25
135	Hydrophilic interaction liquid chromatography-mass spectrometry as a new tool for the characterization of intact semi-synthetic glycoproteins. *Analytica Chimica Acta*, **2017**, 981, 94-105	6.6	24
134	Novel human D-amino acid oxidase inhibitors stabilize an active-site lid-open conformation. *Bioscience Reports*, **2014**, 34,	4.1	24
133	Characterization of VanYn, a novel D,D-peptidase/D,D-carboxypeptidase involved in glycopeptide antibiotic resistance in Nonomuraea sp. ATCC 39727. *FEBS Journal*, **2012**, 279, 3203-13	5.7	24
132	Characterization of human DAAO variants potentially related to an increased risk of schizophrenia. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2013**, 1832, 400-10	6.9	24
131	Unfolding intermediate in the peroxisomal flavoprotein D-amino acid oxidase. *Journal of Biological Chemistry*, **2004**, 279, 28426-34	5.4	24
130	Regulation of D-amino acid oxidase expression in the yeast Rhodotorula gracilis. *Yeast*, **2003**, 20, 1061-9	3.4	24
129	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, 217-26	3.8	23
128	Is rat an appropriate animal model to study the involvement of D-serine catabolism in schizophrenia? Insights from characterization of D-amino acid oxidase. *FEBS Journal*, **2011**, 278, 4362-73	5.7	23
127	Stability and Kinetic Properties of Immobilized Rhodotorula gracilis d-Amino Acid Oxidase. *Biotechnology and Applied Biochemistry*, **1992**, 16, 252-262	2.8	23
126	Optimization of D-amino acid oxidase for low substrate concentrations--towards a cancer enzyme therapy. *FEBS Journal*, **2009**, 276, 4921-32	5.7	22
125	Deracemization and Stereoinversion of α-Amino Acids by l-Amino Acid Deaminase. *Advanced Synthesis and Catalysis*, **2017**, 359, 3773-3781	5.6	21
124	Biochemical Properties of Human D-Amino Acid Oxidase. *Frontiers in Molecular Biosciences*, **2017**, 4, 88	5.6	21
123	Expression in Escherichia coli of the catalytic domain of human proline oxidase. *Protein Expression and Purification*, **2012**, 82, 345-51	2	21
122	Recombinant production of eight human cytosolic aminotransferases and assessment of their potential involvement in glyoxylate metabolism. *Biochemical Journal*, **2009**, 422, 265-72	3.8	21
121	Structural and kinetic analyses of the H121A mutant of cholesterol oxidase. *Biochemical Journal*, **2006**, 400, 13-22	3.8	21
120	Conversion of the dimeric D-amino acid oxidase from Rhodotorula gracilis to a monomeric form. A rational mutagenesis approach. *FEBS Letters*, **2002**, 526, 43-8	3.8	21
119	Streptomyces spp. as efficient expression system for a D,D-peptidase/D,D-carboxypeptidase involved in glycopeptide antibiotic resistance. *BMC Biotechnology*, **2013**, 13, 24	3.5	20

118	Strategic manipulation of an industrial biocatalyst--evolution of a cephalosporin C acylase. *FEBS Journal*, **2014**, 281, 2443-55	5.7	20
117	d-Serine diffusion through the blood-brain barrier: effect on d-serine compartmentalization and storage. *Neurochemistry International*, **2012**, 60, 837-45	4.4	20
116	A thermostable L-aspartate oxidase: a new tool for biotechnological applications. *Applied Microbiology and Biotechnology*, **2013**, 97, 7285-95	5.7	19
115	Relevance of the flavin binding to the stability and folding of engineered cholesterol oxidase containing noncovalently bound FAD. *Protein Science*, **2008**, 17, 409-19	6.3	19
114	Characterization and use of a bacterial lignin peroxidase with an improved manganese-oxidative activity. *Applied Microbiology and Biotechnology*, **2018**, 102, 10579-10588	5.7	19
113	The Gliotransmitter d-Serine Promotes Synapse Maturation and Axonal Stabilization. *Journal of Neuroscience*, **2017**, 37, 6277-6288	6.6	18
112	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 Parkinson's disease patients. *Scientific Reports*, **2019**, 9, 8898	4.9	18
111	Structure-function relationships in human d-amino acid oxidase variants corresponding to known SNPs. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2015**, 1854, 1150-9	4	18
110	Hydrogel-based delivery of Tat-fused protein Hsp70 protects dopaminergic cells in vitro and in a mouse model of Parkinson□ disease. *NPG Asia Materials*, **2019**, 11,	10.3	18
109	Serine racemase: a key player in apoptosis and necrosis. *Frontiers in Synaptic Neuroscience*, **2014**, 6, 9	3.5	18
108	Free d-aspartate triggers NMDA receptor-dependent cell death in primary cortical neurons and perturbs JNK activation, Tau phosphorylation, and protein SUMOylation in the cerebral cortex of mice lacking d-aspartate oxidase activity. *Experimental Neurology*, **2019**, 317, 51-65	5.7	17
107	Liquid chromatography-mass spectrometry structural characterization of neo glycoproteins aiding the rational design and synthesis of a novel glycovaccine for protection against tuberculosis. *Journal of Chromatography A*, **2014**, 1367, 57-67	4.5	17
106	One single method to produce native and Tat-fused recombinant human □synuclein in Escherichia coli. *BMC Biotechnology*, **2013**, 13, 32	3.5	17
105	Proline oxidase controls proline, glutamate, and glutamine cellular concentrations in a U87 glioblastoma cell line. *PLoS ONE*, **2018**, 13, e0196283	3.7	17
104	Investigating brain d-serine: Advocacy for good practices. *Acta Physiologica*, **2019**, 226, e13257	5.6	16
103	Enzymatic transformation of aflatoxin B by Rh_DypB peroxidase and characterization of the reaction products. *Chemosphere*, **2020**, 250, 126296	8.4	16
102	Identification of a reactive cysteine in the flavin-binding domain of Rhodotorula gracilis D-amino acid oxidase. *Archives of Biochemistry and Biophysics*, **1997**, 343, 1-5	4.1	16
101	Role of tyrosine 238 in the active site of Rhodotorula gracilis D-amino acid oxidase. A site-directed mutagenesis study. *FEBS Journal*, **2002**, 269, 4762-71		16

100	Demethylation of vanillic acid by recombinant LigM in a one-pot cofactor regeneration system. *Catalysis Science and Technology*, **2016**, 6, 7729-7737	5.5	16
99	Localized Detection of d-Serine by using an Enzymatic Amperometric Biosensor and Scanning Electrochemical Microscopy. *ChemElectroChem*, **2017**, 4, 920-926	4.3	15
98	Metabolic resistance of the D-peptide RD2 developed for direct elimination of amyloid- oligomers. *Scientific Reports*, **2019**, 9, 5715	4.9	15
97	Isolation and characterization of a heterologously expressed bacterial laccase from the anaerobe Geobacter metallireducens. *Applied Microbiology and Biotechnology*, **2018**, 102, 2425-2439	5.7	15
96	On the reaction of D-amino acid oxidase with dioxygen: O2 diffusion pathways and enhancement of reactivity. *FEBS Journal*, **2011**, 278, 482-92	5.7	15
95	A valuable peroxidase activity from the novel species growing on alkali lignin. *Biotechnology Reports (Amsterdam, Netherlands)*, **2017**, 13, 49-57	5.3	14
94	L-serine synthesis via the phosphorylated pathway in humans. *Cellular and Molecular Life Sciences*, **2020**, 77, 5131-5148	10.3	14
93	Novel biosensors based on optimized glycine oxidase. *FEBS Journal*, **2014**, 281, 3460-72	5.7	14
92	Binding Residence Time through Scaled Molecular Dynamics: A Prospective Application to hDAAO Inhibitors. *Journal of Chemical Information and Modeling*, **2018**, 58, 2255-2265	6.1	14
91	A novel, simple screening method for investigating the properties of lignin oxidative activity. *Enzyme and Microbial Technology*, **2017**, 96, 143-150	3.8	13
90	Biosensors for D-Amino Acids: Detection Methods and Applications. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	12
89	Regulating levels of the neuromodulator d-serine in human brain: structural insight into pLG72 and d-amino acid oxidase interaction. *FEBS Journal*, **2016**, 283, 3353-70	5.7	12
88	Assays of D-amino acid oxidases. *Methods in Molecular Biology*, **2012**, 794, 381-95	1.4	12
87	Xenopus allantoicase: molecular cloning, enzymatic activity and developmental expression. *Archives of Biochemistry and Biophysics*, **2000**, 379, 90-6	4.1	12
86	Identification and role of ionizing functional groups at the active center of Rhodotorula gracilis D-amino acid oxidase. *FEBS Letters*, **2001**, 507, 323-6	3.8	12
85	Limited proteolysis and site-directed mutagenesis reveal the origin of microheterogeneity in Rhodotorula gracilis D-amino acid oxidase. *Biochemical Journal*, **1998**, 330 (Pt 2), 615-21	3.8	12
84	Bacterial Nanocellulose and Its Surface Modification by Glycidyl Methacrylate and Ethylene Glycol Dimethacrylate. Incorporation of Vancomycin and Ciprofloxacin. *Nanomaterials*, **2019**, 9,	5.4	12
83	High-Throughput Screening Strategy Identifies Allosteric, Covalent Human D-Amino Acid Oxidase Inhibitor. *Journal of Biomolecular Screening*, **2015**, 20, 1218-31		11

82	Advances in Enzymatic Synthesis of D-Amino Acids. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	11
81	Glycosylation of Recombinant Antigenic Proteins from Mycobacterium tuberculosis: In Silico Prediction of Protein Epitopes and Ex Vivo Biological Evaluation of New Semi-Synthetic Glycoconjugates. *Molecules*, **2017**, 22,	4.8	11
80	Biosensors for D-amino acid detection. *Methods in Molecular Biology*, **2012**, 794, 313-24	1.4	11
79	Catalytic and redox properties of glycine oxidase from Bacillus subtilis. *Biochimie*, **2009**, 91, 604-12	4.6	11
78	Dissection of the structural determinants involved in formation of the dimeric form of D-amino acid oxidase from Rhodotorula gracilis: role of the size of the betaF5-betaF6 loop. *Protein Engineering, Design and Selection*, **2003**, 16, 1063-9	1.9	11
77	Structure and kinetic properties of human d-aspartate oxidase, the enzyme-controlling d-aspartate levels in brain. *FASEB Journal*, **2020**, 34, 1182-1197	0.9	11
76	Different recombinant forms of polyphenol oxidase A, a laccase from Marinomonas mediterranea. *Protein Expression and Purification*, **2016**, 123, 60-9	2	11
75	Serum D-serine levels are altered in early phases of Alzheimer's disease: towards a precocious biomarker. *Translational Psychiatry*, **2021**, 11, 77	8.6	11
74	In vitro evolution of an L-amino acid deaminase active on L-1-naphthylalanine. *Catalysis Science and Technology*, **2018**, 8, 5359-5367	5.5	11
73	Single-batch, homogeneous phase depolymerization of cellulose catalyzed by a monocomponent endocellulase in ionic liquid [BMIM][Cl]. *Journal of Molecular Catalysis B: Enzymatic*, **2014**, 106, 76-80		10
72	On the substrate preference of glutaryl acylases. *Journal of Molecular Catalysis B: Enzymatic*, **2012**, 76, 52-58		10
71	Investigating the role of active site residues of Rhodotorula gracilis D-amino acid oxidase on its substrate specificity. *Biochimie*, **2007**, 89, 360-8	4.6	10
70	Property comparison of recombinant amphibian and mammalian allantoicases. *FEBS Letters*, **2002**, 512, 323-8	3.8	10
69	Analytical methods for the investigation of enzyme-catalyzed degradation of polyethylene terephthalate. *FEBS Journal*, **2021**, 288, 4730-4745	5.7	10
68	Synthesis, characterization and programmable toxicity of iron oxide nanoparticles conjugated with D-amino acid oxidase. *RSC Advances*, **2017**, 7, 1439-1442	3.7	9
67	Enhancement of the Enzymatic Biosensor Response through Targeted Electrode Surface Roughness. *Journal of the Electrochemical Society*, **2018**, 165, G3074-G3079	3.9	9
66	D-Amino Acid Oxidase-pLG72 Interaction and D-Serine Modulation. *Frontiers in Molecular Biosciences*, **2018**, 5, 3	5.6	9
65	Aminoacetone oxidase from Streptococcus oligofermentans belongs to a new three-domain family of bacterial flavoproteins. *Biochemical Journal*, **2014**, 464, 387-99	3.8	9

64	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, 3235-9	3.2	9
63	Activity of yeast d-amino acid oxidase on aromatic unnatural amino acids. *Journal of Molecular Catalysis B: Enzymatic*, **2008**, 50, 93-98		9
62	On the holoenzyme reconstitution process in native and truncated Rhodotorula gracilis D-amino acid oxidase. *Archives of Biochemistry and Biophysics*, **1996**, 332, 58-62	4.1	9
61	Novel insights into renal D-amino acid oxidase accumulation: propiverine changes DAAO localization and peroxisomal size in vivo. *Archives of Toxicology*, **2017**, 91, 427-437	5.8	8
60	New synthesis and biodistribution of the D-amino acid oxidase-magnetic nanoparticle system. *Future Science OA*, **2015**, 1, FSO67	2.7	8
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58	Direct chromatographic methods for enantioresolution of amino acids: recent developments. *Amino Acids*, **2020**, 52, 849-862	3.5	8
57	Properties of l-amino acid deaminase: En route to optimize bioconversion reactions. *Biochimie*, **2019**, 158, 199-207	4.6	7
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55	Astroglial d-serine is the endogenous co-agonist at the presynaptic NMDA receptor in rat entorhinal cortex. *Neuropharmacology*, **2014**, 83, 118-27	5.5	7
54	Evolution of histamine oxidase activity for biotechnological applications. *Applied Microbiology and Biotechnology*, **2014**, 98, 739-48	5.7	7
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