Alice Vrielink

List of Publications by Year
in descending order

86 papers	3,421 citations	186265 28 h-index	144013 57 g-index
88 all docs	88 docs citations	88 times ranked	3730 citing authors

#	Article	IF	Citations
1	PPARÎ± and PPARÎ³ activation is associated with pleural mesothelioma invasion but therapeutic inhibition is ineffective. IScience, 2022, 25, 103571.	4.1	7
2	Development of a novel spatiotemporal depletion system for cellular cholesterol. Journal of Lipid Research, 2022, , 100178.	4.2	3
3	Novel small molecules that increase the susceptibility of <i>Neisseria gonorrhoeae</i> to cationic antimicrobial peptides by inhibiting lipid A phosphoethanolamine transferase. Journal of Antimicrobial Chemotherapy, 2022, 77, 2441-2447.	3.0	4
4	A missense mutation sheds light on a novel structureâ€"function relationship of RANKL. Journal of Cellular Physiology, 2021, 236, 2800-2816.	4.1	15
5	Structures of an engineered phospholipase D with specificity for secondary alcohol transphosphatidylation: insights into plasticity of substrate binding and activation. Biochemical Journal, 2021, 478, 1749-1767.	3.7	9
6	Conformational flexibility of EptA driven by an interdomain helix provides insights for enzymeâ€"substrate recognition. IUCrJ, 2021, 8, 732-746.	2.2	5
7	Structure and function of lipid Aâ€"modifying enzymes. Annals of the New York Academy of Sciences, 2020, 1459, 19-37.	3.8	27
8	Oxidation of cysteine 34 of plasma albumin as a biomarker of oxidative stress. Free Radical Research, 2020, 54, 91-103.	3.3	19
9	The role of hydrogen atoms in redox catalysis by the flavoenzyme cholesterol oxidase. Methods in Enzymology, 2020, 634, 361-377.	1.0	2
10	Lipid A Phosphoethanolamine Transferase: Regulation, Structure and Immune Response. Journal of Molecular Biology, 2020, 432, 5184-5196.	4.2	34
11	Editorial overview: Catalysis and regulation: Structural features guiding enzyme catalysed processes. Current Opinion in Structural Biology, 2018, 53, iii-v.	5.7	0
12	Enzyme targets for drug design of new anti-virulence therapeutics. Current Opinion in Structural Biology, 2018, 53, 140-150.	5.7	13
13	Structure-Function Relationships of the Neisserial EptA Enzyme Responsible for Phosphoethanolamine Decoration of Lipid A: Rationale for Drug Targeting. Frontiers in Microbiology, 2018, 9, 1922.	3.5	16
14	Direct demonstration of lipid phosphorylation in the lipid bilayer of the biomimetic bicontinuous cubic phase using the confined enzyme lipid A phosphoethanolamine transferase. Soft Matter, 2017, 13, 1493-1504.	2.7	11
15	Structure of a lipid A phosphoethanolamine transferase suggests how conformational changes govern substrate binding. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2218-2223.	7.1	113
16	Computational site-directed mutagenesis studies of the role of the hydrophobic triad on substrate binding in cholesterol oxidase. Proteins: Structure, Function and Bioinformatics, 2017, 85, 1645-1655.	2.6	4
17	An extended N-H bond, driven by a conserved second-order interaction, orients the flavin N5 orbital in cholesterol oxidase. Scientific Reports, 2017, 7, 40517.	3.3	14
18	Computational insights for the hydride transfer and distinctive roles of key residues in cholesterol oxidase. Scientific Reports, 2017, 7, 17265.	3.3	16

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19	Detergents in Membrane Protein Purification and Crystallisation. Advances in Experimental Medicine and Biology, 2016, 922, 13-28.	1.6	33
20	The yeast transcription elongation factor Spt4/5 is a sequenceâ€specific RNA binding protein. Protein Science, 2016, 25, 1710-1721.	7.6	11
21	Production and characterization of recombinant perdeuterated cholesterol oxidase. Analytical Biochemistry, 2015, 485, 102-108.	2.4	9
22	Cholesterol oxidase: ultrahigh-resolution crystal structure and multipolar atom model-based analysis. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 954-968.	2.5	17
23	The Design and Structure of Outer Membrane Receptors from Peroxisomes, Mitochondria, and Chloroplasts. Structure, 2015, 23, 1783-1800.	3.3	2
24	Looking for Hydrogen Atoms: Neutron Crystallography Provides Novel Insights Into Protein Structure and Function. Australian Journal of Chemistry, 2014, 67, 1751.	0.9	12
25	High-resolution structures of cholesterol oxidase in the reduced state provide insights into redox stabilization. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 3155-3166.	2.5	9
26	Exploring ligand recognition, selectivity and dynamics of TPR domains of chloroplast Toc64 and mitochondria Om64 from<i>Arabidopsis thaliana</i>. Journal of Molecular Recognition, 2014, 27, 402-414.	2.1	16
27	Immunomodulatory Effects Of Rye Grass Pollen Allergen LolÂpÂ5 On The Prostaglandin E2 Pathway and Kallikrein-Kinin System Of Respiratory Epithelial Cells. Journal of Allergy and Clinical Immunology, 2014, 133, AB101.	2.9	0
28	Binding and Channeling of Alternative Substrates in the Enzyme DmpFG: a Molecular Dynamics Study. Biophysical Journal, 2014, 106, 1681-1690.	0.5	5
29	Ubiquitin fusion constructs allow the expression and purification of multi-KOW domain complexes of the Saccharomyces cerevisiae transcription elongation factor Spt4/5. Protein Expression and Purification, 2014, 100, 54-60.	1.3	2
30	The Role of Oxidoreductases in Determining the Function of the Neisserial Lipid A Phosphoethanolamine Transferase Required for Resistance to Polymyxin. PLoS ONE, 2014, 9, e106513.	2.5	24
31	The Structure of the Neisserial Lipooligosaccharide Phosphoethanolamine Transferase A (LptA) Required for Resistance to Polymyxin. Journal of Molecular Biology, 2013, 425, 3389-3402.	4.2	101
32	Mechanism of the dehydrogenase reaction of DmpFG and analysis of inter-subunit channeling efficiency and thermodynamic parameters in the overall reaction. International Journal of Biochemistry and Cell Biology, 2013, 45, 1878-1885.	2.8	2
33	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
34	Ligand Recognition by the TPR Domain of the Import Factor Toc64 from Arabidopsis thaliana. PLoS ONE, 2013, 8, e83461.	2.5	12
35	Cloning, expression, purification and crystallization of an endotoxin-biosynthesis enzyme fromNeisseria meningitidis. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1494-1497.	0.7	6
36	Biological Channeling of a Reactive Intermediate in the Bifunctional Enzyme DmpFG. Biophysical Journal, 2012, 102, 868-877.	0.5	13

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37	Enzymatic toxins from snake venom: structural characterization and mechanism of catalysis. FEBS Journal, 2011, 278, 4544-4576.	4.7	233
38	Preliminary studies into the inhibition of the cholesterol Î±-glucosyltransferase from Helicobacter pylori using azasugars. Carbohydrate Research, 2010, 345, 960-964.	2.3	7
39	Crystallization and preliminary diffraction analysis of an engineered cephalosporin acylase. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 808-810.	0.7	4
40	Conserved and Novel Functions for Arabidopsis thaliana MIA40 in Assembly of Proteins in Mitochondria and Peroxisomes. Journal of Biological Chemistry, 2010, 285, 36138-36148.	3.4	108
41	Cholesterol Oxidase: Structure and Function. Sub-Cellular Biochemistry, 2010, 51, 137-158.	2.4	29
42	A hydrogen-bonding network is important for oxidation and isomerization in the reaction catalyzed by cholesterol oxidase. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 1222-1231.	2.5	14
43	Cholesterol oxidase: biochemistry and structural features. FEBS Journal, 2009, 276, 6826-6843.	4.7	86
44	The Binding and Release of Oxygen and Hydrogen Peroxide Are Directed by a Hydrophobic Tunnel in Cholesterol Oxidase. Biochemistry, 2008, 47, 5368-5377.	2.5	74
45	Distortion of flavin geometry is linked to ligand binding in cholesterol oxidase. Protein Science, 2007, 16, 2647-2656.	7.6	26
46	Crystal Structure of LAAO from Calloselasma rhodostoma with an l-Phenylalanine Substrate: Insights into Structure and Mechanism. Journal of Molecular Biology, 2006, 364, 991-1002.	4.2	134
47	Structural and kinetic analyses of the H121A mutant of cholesterol oxidase. Biochemical Journal, 2006, 400, 13-22.	3.7	24
48	Atomic resolution crystallography reveals how changes in pH shape the protein microenvironment. Nature Chemical Biology, 2006, 2, 259-264.	8.0	38
49	Sub-Ã…ngstrom resolution enzyme X-ray structures: is seeing believing?. Current Opinion in Structural Biology, 2003, 13, 709-715.	5.7	32
50	Cholesterol Oxidases: A Study of Natureâ€²s Approach to Protein Design. ChemInform, 2003, 34, no.	0.0	0
51	Cholesterol Oxidases:Â A Study of Nature's Approach to Protein Design. Accounts of Chemical Research, 2003, 36, 713-722.	15.6	58
52	Atomic Resolution Density Maps Reveal Secondary Structure Dependent Differences in Electronic Distribution. Journal of the American Chemical Society, 2003, 125, 12787-12794.	13.7	34
53	Sub-atomic Resolution Crystal Structure of Cholesterol Oxidase: What Atomic Resolution Crystallography Reveals about Enzyme Mechanism and the Role of the FAD Cofactor in Redox Activity. Journal of Molecular Biology, 2003, 326, 1635-1650.	4.2	118
54	Crystal structure of a bifunctional aldolase-dehydrogenase: Sequestering a reactive and volatile intermediate. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6992-6997.	7.1	95

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55	Molecular Features of the Copper Binding Sites in the Octarepeat Domain of the Prion Proteinâ€. Biochemistry, 2002, 41, 3991-4001.	2.5	407
56	A novel type of regulation of the vimentin intermediate filament cytoskeleton by a Golgi protein. European Journal of Cell Biology, 2002, 81, 391-401.	3.6	37
57	Purification and Characterization of the Human PDE4A Catalytic Domain (PDE4A330â€"723) Expressed in Sf9 Cells. Archives of Biochemistry and Biophysics, 2001, 394, 54-60.	3.0	11
58	The Presence of a Hydrogen Bond between Asparagine 485 and the Ï€ System of FAD Modulates the Redox Potential in the Reaction Catalyzed by Cholesterol Oxidase,. Biochemistry, 2001, 40, 13779-13787.	2.5	42
59	Structure and characterization of the glycan moiety of L-amino-acid oxidase from the Malayan pit viperCalloselasma rhodostoma. FEBS Journal, 2001, 268, 4044-4053.	0.2	58
60	Crystallization and preliminary X-ray analysis of dmpFG-encoded 4-hydroxy-2-ketovalerate aldolaseâ€"aldehyde dehydrogenase (acylating) fromPseudomonasÂsp. strain CF600. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 582-585.	2.5	6
61	Differences in nucleotide specificity and catalytic mechanism between Vibrio harveyi aldehyde dehydrogenase and other members of the aldehyde dehydrogenase superfamily. Chemico-Biological Interactions, 2001, 130-132, 29-38.	4.0	3
62	Oxygen Access to the Active Site of Cholesterol Oxidase through a Narrow Channel Is Gated by an Arg-Glu Pair. Journal of Biological Chemistry, 2001, 276, 30435-30441.	3.4	99
63	Crystal structure of the NADP+-dependent aldehyde dehydrogenase from Vibrio harveyi: structural implications for cofactor specificity and affinity. Biochemical Journal, 2000, 349, 853-861.	3.7	79
64	The crystal structure of the formiminotransferase domain of formiminotransferase-cyclodeaminase: implications for substrate channeling in a bifunctional enzyme. Structure, 2000, 8, 35-46.	3.3	40
65	The structure of L-amino acid oxidase reveals the substrate trajectory into an enantiomerically conserved active site. EMBO Journal, 2000, 19, 4204-4215.	7.8	224
66	A Histidine Residue in the Catalytic Mechanism Distinguishes Vibrio harveyi Aldehyde Dehydrogenase from Other Members of the Aldehyde Dehydrogenase Superfamily. Biochemistry, 2000, 39, 14409-14418.	2.5	6
67	Crystallization and preliminary X-ray analysis of the formiminotransferase domain from the bifunctional enzyme formiminotransferaseâ€"cyclodeaminase. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 1206-1208.	2.5	5
68	Crystal Structure Determination of Cholesterol Oxidase fromStreptomycesand Structural Characterization of Key Active Site Mutantsâ€,â€¡. Biochemistry, 1999, 38, 4277-4286.	2.5	115
69	Change of Nucleotide Specificity and Enhancement of Catalytic Efficiency in Single Point Mutants ofVibrio harveyiAldehyde Dehydrogenaseâ€. Biochemistry, 1999, 38, 11440-11447.	2.5	50
70	Expression, Purification, and in Vitro Characterization of the Human Outer Mitochondrial Membrane Receptor Human Translocase of the Outer Mitochondrial Membrane 20. Archives of Biochemistry and Biophysics, 1999, 367, 95-103.	3.0	4
71	Identification of Amino Acid Residues in a Class I Ubiquitin-conjugating Enzyme Involved in Determining Specificity of Conjugation of Ubiquitin to Proteins. Journal of Biological Chemistry, 1998, 273, 18435-18442.	3.4	14
72	Involvement of Conserved Glycine Residues, 229 and 234, ofVibrio harveyiAldehyde Dehydrogenase in Activity and Nucleotide Binding. Biochemical and Biophysical Research Communications, 1997, 238, 448-451.	2.1	11

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73	Electron spin echo envelope modulation studies of the semiquinone anion radical of cholesterol oxidase from Brevibacterium sterolicum. FEBS Letters, 1997, 400, 247-251.	2.8	15
74	Crystallization and Preliminary X-Ray Analysis of Cholesterol Oxidase fromBrevibacterium sterolicumContaining Covalently Bound FAD. Journal of Structural Biology, 1996, 116, 317-319.	2.8	25
75	Chapter 5 Protein-nucleic acid recognition and interactions. Principles of Medical Biology, 1996, 5, 85-115.	0.1	0
76	Thermosensitive mutants of the MPTP and hPTP1B protein tyrosine phosphatases: Isolation and structural analysis. Protein Science, 1996, 5, 604-613.	7.6	7
77	Crystallization and preliminary Xâ€ray analysis of aldehyde dehydrogenase from <i>Vibrio harveyi</i>. Protein Science, 1996, 5, 2130-2132.	7.6	4
78	Structural and Functional Studies of A NADP+-Specific Aldehyde Dehydrogenase from the Luminescent Marine Bacterium Vibrio harveyi. Advances in Experimental Medicine and Biology, 1996, 414, 269-275.	1.6	5
79	Crystallization of the chaperone protein SecB. Protein Science, 1995, 4, 1651-1653.	7.6	4
80	ESR and electron nuclear double resonance characterization of the cholesterol oxidase from Brevibacterium sterolicum in its semiquinone state. FEBS Journal, 1994, 222, 941-947.	0.2	28
81	Crystal structure of cholesterol oxidase complexed with a steroid substrate: Implications for flavin adenine dinucleotide dependent alcohol oxidases. Biochemistry, 1993, 32, 11507-11515.	2.5	180
82	Crystal structure of cholesterol oxidase from Brevibacterium sterolicum refined at 1.8 Ã… resolution. Journal of Molecular Biology, 1991, 219, 533-554.	4.2	190
83	Crystal structures of two factitious mutants of tyrosyl-tRNA synthetase. Biochemical Society Transactions, 1986, 14, 1228-1229.	3.4	7
84	Crystal and moleclar structures of 5-allyl-25-methoxy-26,27,28-tribenzoylcalix[4]arene. Journal of Inclusion Phenomena, 1986, 4, 199-207.	0.6	6
85	Structural studies of inhibitors of angiotensin converting enzyme. Acta Crystallographica Section A: Foundations and Advances, 1984, 40, C61-C61.	0.3	0
86	Evidence for the incursion of intermediates in the hydrolysis of tertiary, secondary, and primary substrates. Journal of the American Chemical Society, 1980, 102, 2585-2592.	13.7	13