Nathalie Colloc'h

List of Publications by Year
in descending order

29 papers	1,163 citations	394421 19 h-index	477307 29 g-index
30 all docs	30 docs citations	30 times ranked	1106 citing authors

#	Article	IF	Citations
1	Exploring hydrophobic sites in proteins with xenon or krypton. Proteins: Structure, Function and Bioinformatics, 1998, 30, 61-73.	2.6	168
2	Crystal Structure of the protein drug urate oxidase-inhibitor complex at 2.05 Ã... resolution. Nature Structural and Molecular Biology, 1997, 4, 947-952.	8.2	150
3	Complexed and ligand-free high-resolution structures of urate oxidase (Uox) fromAspergillus flavus: a reassignment of the active-site binding mode. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 453-462.	2.5	82
4	Protein Crystallography under Xenon and Nitrous Oxide Pressure: Comparison with In Vivo Pharmacology Studies and Implications for the Mechanism of Inhaled Anesthetic Action. Biophysical Journal, 2007, 92, 217-224.	0.5	80
5	Oxygen Pressurized X-Ray Crystallography: Probing the Dioxygen Binding Site in Cofactorless Urate Oxidase and Implications for Its Catalytic Mechanism. Biophysical Journal, 2008, 95, 2415-2422.	0.5	65
6	Sequence and structural features of the T-fold, an original tunnelling building unit. Proteins: Structure, Function and Bioinformatics, 2000, 39, 142-154.	2.6	55
7	Structure-Function Perturbation and Dissociation of Tetrameric Urate Oxidase by High Hydrostatic Pressure. Biophysical Journal, 2010, 98, 2365-2373.	0.5	53
8	Modification of a reactive cysteine explains differences between rasburicase and Uricozyme, a natural Aspergillus flavus uricase. Biotechnology and Applied Biochemistry, 2002, 36, 21.	3.1	48
9	Xenon is an Inhibitor of Tissue-Plasminogen Activator: Adverse and Beneficial Effects in a Rat Model of Thromboembolic Stroke. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 718-728.	4.3	47
10	Structural analysis of urate oxidase in complex with its natural substrate inhibited by cyanide: Mechanistic implications. BMC Structural Biology, 2008, 8, 32.	2.3	44
11	Direct Evidence for a Peroxide Intermediate and a Reactive Enzymeâ€“Substrateâ€“Dioxygen Configuration in a Cofactorâ€free Oxidase. Angewandte Chemie - International Edition, 2014, 53, 13710-13714.	13.8	43
12	Urate oxidase fromAspergillus flavus: new crystal-packing contacts in relation to the content of the active site. Acta Crystallographica Section D: Biological Crystallography, 2005, 61, 218-229.	2.5	34
13	Pressureâ€response analysis of anesthetic gases xenon and nitrous oxide on urate oxidase: a crystallographic study. FASEB Journal, 2011, 25, 2266-2275.	0.5	31
14	Structural Basis for Xenon Inhibition in a Cationic Pentameric Ligand-Gated Ion Channel. PLoS ONE, 2016, 11, e0149795.	2.5	31
15	Recapture of [S]-allantoin, the product of the two-step degradation of uric acid, by urate oxidase. FEBS Letters, 2006, 580, 2087-2091.	2.8	29
16	Near-atomic resolution structures of urate oxidase complexed with its substrate and analogues: the protonation state of the ligand. Acta Crystallographica Section D: Biological Crystallography, 2010, 66, 714-724.	2.5	29
17	Functional relevance of the internal hydrophobic cavity of urate oxidase. FEBS Letters, 2014, 588, 1715-1719.	2.8	26
18	Crystallographic Studies with Xenon and Nitrous Oxide Provide Evidence for Protein-dependent Processes in the Mechanisms of General Anesthesia. Anesthesiology, 2014, 121, 1018-1027.	2.5	25

#	Article	IF	Citations
19	Gas-sensitive biological crystals processed in pressurized oxygen and krypton atmospheres: deciphering gas channels in proteins using a novel `soak-and-freeze' methodology. Journal of Applied Crystallography, 2016, 49, 1478-1487.	4.5	25
20	High-Pressure Macromolecular Crystallography (HPMX): Status and prospects. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 384-390.	2.3	19
21	Equilibria between conformational states of the Ras oncogene protein revealed by high pressure crystallography. Chemical Science, 2022, 13, 2001-2010.	7.4	17
22	Xâ€ray, ESR, and quantum mechanics studies unravel a spin well in the cofactorâ€less urate oxidase. Proteins: Structure, Function and Bioinformatics, 2011, 79, 1964-1976.	2.6	16
23	Mapping Hydrophobic Tunnels and Cavities in Neuroglobin with Noble Gas under Pressure. Biophysical Journal, 2017, 113, 2199-2206.	0.5	14
24	Ligand pathways in neuroglobin revealed by low-temperature photodissociation and docking experiments. IUCrJ, 2019, 6, 832-842.	2.2	8
25	Determinants of neuroglobin plasticity highlighted by joint coarse-grained simulations and high pressure crystallography. Scientific Reports, 2017, 7, 1858.	3.3	7
26	Comparative study of the effects of high hydrostatic pressure per se and high argon pressure on urate oxidase ligand stabilization. Acta Crystallographica Section D: Structural Biology, 2022, 78, 162-173.	2.3	6
27	Azide inhibition of urate oxidase. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 896-902.	0.8	4
28	Behavior of B- and Z-DNA Crystals under High Hydrostatic Pressure. Crystals, 2022, 12, 871.	2.2	2
29	Method for the Identification of Potentially Bioactive Argon Binding Sites in Protein Families. Journal of Chemical Information and Modeling, 2022, 62, 1318-1327.	5.4	0