Vladimir O Popov

List of Publications by Year
in descending order

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111	2,424	279701 23	243529 44
papers	citations	h-index	g-index

115	115	115	2494
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Puzzling Protein from Variovorax paradoxus Has a PLP Fold Type IV Transaminase Structure and Binds PLP without Catalytic Lysine. Crystals, 2022, 12, 619.	1.0	0
2	Structural insights into highly similar spatial organization of zinc-finger associated domains with a very low sequence similarity. Structure, 2022, 30, 1004-1015.e4.	1.6	6
3	Octaheme nitrite reductase: The mechanism of intramolecular electron transfer and kinetics of nitrite bioelectroreduction. Bioelectrochemistry, 2021, 138, 107699.	2.4	5
4	Bioeconomy in Russia: Today and tomorrow. New Biotechnology, 2021, 60, 36-43.	2.4	7
5	Structural and Biochemical Characterization of a Cold-Active PMGL3 Esterase with Unusual Oligomeric Structure. Biomolecules, 2021, 11, 57.	1.8	6
6	Structural basis of diversity and homodimerization specificity of zinc-finger-associated domains in Drosophila. Nucleic Acids Research, 2021, 49, 2375-2389.	6.5	17
7	Catalytic Properties of Flavocytochrome c Sulfide Dehydrogenase from Haloalkaliphilic Bacterium Thioalkalivibrio paradoxus. Biochemistry (Moscow), 2021, 86, 361-369.	0.7	4
8	The O to S substitution in urea brings inhibition activity against thiocyanate dehydrogenase. Mendeleev Communications, 2021, 31, 373-375.	0.6	1
9	The O to S substitution in urea brings inhibition activity against thiocyanate dehydrogenase. Mendeleev Communications, 2021, 31, 373-375.	0.6	0
10	Probing the role of the residues in the active site of the transaminase from Thermobaculum terrenum. PLoS ONE, 2021, 16, e0255098.	1.1	1
11	The Uncommon Active Site of D-Amino Acid Transaminase from Haliscomenobacter hydrossis: Biochemical and Structural Insights into the New Enzyme. Molecules, 2021, 26, 5053.	1.7	14
12	Mechanisms of CP190 Interaction with Architectural Proteins in Drosophila Melanogaster. International Journal of Molecular Sciences, 2021, 22, 12400.	1.8	11
13	Effects of pH and temperature on (S)-amine activity of transaminase from the cold-adapted bacterium Psychrobacter cryohalolentis. Extremophiles, 2020, 24, 537-549.	0.9	6
14	Glycated albumin stimulates expression of inflammatory cytokines in muscle cells. Cytokine, 2020, 128, 154991.	1.4	7
15	N-terminal domain of the architectural protein CTCF has similar structural organization and ability to self-association in bilaterian organisms. Scientific Reports, 2020, 10, 2677.	1.6	20
16	Trinuclear copper biocatalytic center forms an active site of thiocyanate dehydrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5280-5290.	3.3	19
17	Structural insight into the substrate specificity of PLP fold type IV transaminases. Applied Microbiology and Biotechnology, 2020, 104, 2343-2357.	1.7	32
18	Crystal structure of PMGL2 esterase from the hormone-sensitive lipase family with GCSAG motif around the catalytic serine. PLoS ONE, 2020, 15, e0226838.	1.1	10

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19	Novel Extracellular Electron Transfer Channels in a Gram-Positive Thermophilic Bacterium. Frontiers in Microbiology, 2020, 11, 597818.	1.5	14
20	Counterbalance of Stability and Activity Observed for Thermostable Transaminase from Thermobaculum terrenum in the Presence of Organic Solvents. Catalysts, 2020, 10, 1024.	1.6	2
21	Identification, functional and structural characterization of novel aminoglycoside phosphotransferase APH(3â€³)-Id from Streptomyces rimosus subsp. rimosus ATCC 10970. Archives of Biochemistry and Biophysics, 2019, 671, 111-122.	1.4	7
22	Comparative Genomics of Thiohalobacter thiocyanaticus HRh1T and Guyparkeria sp. SCN-R1, Halophilic Chemolithoautotrophic Sulfur-Oxidizing Gammaproteobacteria Capable of Using Thiocyanate as Energy Source. Frontiers in Microbiology, 2019, 10, 898.	1.5	20
23	Potassium chloride released from contracting skeletal muscle may stimulate development of its hypertrophy. Biochemistry and Biophysics Reports, 2019, 18, 100627.	0.7	2
24	Functional characterization of PLP fold type IV transaminase with a mixed type of activity from Haliangium ochraceum. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2019, 1867, 575-585.	1.1	11
25	Thermostable Branched-Chain Amino Acid Transaminases From the Archaea Geoglobus acetivorans and Archaeoglobus fulgidus: Biochemical and Structural Characterization. Frontiers in Bioengineering and Biotechnology, 2019, 7, 7.	2.0	26
26	Biochemical and structural insights into PLP fold type IV transaminase from Thermobaculum terrenum. Biochimie, 2019, 158, 130-138.	1.3	19
27	3D structure of the natural tetrameric form of human butyrylcholinesterase as revealed by cryoEM, SAXS and MD. Biochimie, 2019, 156, 196-205.	1.3	26
28	Identification of branched-chain amino acid aminotransferases active towards (R)-(+)-1-phenylethylamine among PLP fold type IV transaminases. Journal of Biotechnology, 2018, 271, 26-28.	1.9	13
29	Enhanced conformational flexibility of the histone-like (HU) protein from Mycoplasma gallisepticum. Journal of Biomolecular Structure and Dynamics, 2018, 36, 45-53.	2.0	10
30	Recent biotechnology developments and trends in the Russian Federation. New Biotechnology, 2018, 40, 76-81.	2.4	18
31	Structural characterization of geranylgeranyl pyrophosphate synthase GACE1337 from the hyperthermophilic archaeon Geoglobus acetivorans. Extremophiles, 2018, 22, 877-888.	0.9	7
32	Diaminopelargonic acid transaminase from Psychrobacter cryohalolentis is active towards (S)-(-)-1-phenylethylamine, aldehydes and Î±-diketones. Applied Microbiology and Biotechnology, 2018, 102, 9621-9633.	1.7	6
33	Structure of an Acinetobacter Broad-Range Prophage Endolysin Reveals a C-Terminal Î±-Helix with the Proposed Role in Activity against Live Bacterial Cells. Viruses, 2018, 10, 309.	1.5	23
34	Specific titin and myomesin domains stimulate myoblast proliferation. Biochemistry and Biophysics Reports, 2017, 9, 226-231.	0.7	3
35	Remembering Navasard V. Karapetyan (1936â€“2015). Photosynthesis Research, 2017, 132, 221-226.	1.6	2
36	Evolving stability and pH-dependent activity of the high redox potential Botrytis aclada laccase for enzymatic fuel cells. Scientific Reports, 2017, 7, 13688.	1.6	30

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37	Molecular dynamics study of the structural and dynamic characteristics of the polyextremophilic short-chain dehydrogenase from the Thermococcus sibiricus archaeon and its homologues. AIP Conference Proceedings, 2017, , .	0.3	0
38	A Novel highly thermostable branched-chain amino acid aminotransferase from the crenarchaeon Vulcanisaeta moutnovskia. Enzyme and Microbial Technology, 2017, 96, 127-134.	1.6	22
39	Structural adaptations of octaheme nitrite reductases from haloalkaliphilic Thioalkalivibrio bacteria to alkaline pH and high salinity. PLoS ONE, 2017, 12, e0177392.	1.1	12
40	NADP-Dependent Aldehyde Dehydrogenase from ArchaeonPyrobaculum sp.1860: Structural and Functional Features. Archaea, 2016, 2016, 1-14.	2.3	3
41	Structural basis of the high thermal stability of the histone-like HU protein from the mollicute Spiroplasma melliferum KC3. Scientific Reports, 2016, 6, 36366.	1.6	23
42	Structural characterization of the novel aminoglycoside phosphotransferase AphVIII from Streptomyces rimosus with enzymatic activity modulated by phosphorylation. Biochemical and Biophysical Research Communications, 2016, 477, 595-601.	1.0	9
43	Experimental and computational studies on the unusual substrate specificity of branched-chain amino acid aminotransferase from Thermoproteus uzoniensis. Archives of Biochemistry and Biophysics, 2016, 607, 27-36.	1.4	20
44	First structure of archaeal branched-chain amino acid aminotransferase from Thermoproteus uzoniensis specific for l-amino acids and R-amines. Extremophiles, 2016, 20, 215-225.	0.9	28
45	Biocatalytic conversion of poultry processing leftovers: Optimization of hydrolytic conditions and peptide hydrolysate characterization. Food Chemistry, 2016, 197, 611-621.	4.2	20
46	Structure of recombinant prolidase fromThermococcus sibiricusin space groupP2₁22₁. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 951-957.	0.4	4
47	Expression, purification, crystallization and preliminary X-ray crystallographic analysis of the histone-like HU protein fromSpiroplasma melliferumKC3. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 24-27.	0.4	23
48	Understanding and Engineering Thermostability in DNA Ligase from Thermococcus sp. 1519. Biochemistry, 2015, 54, 3076-3085.	1.2	9
49	Heat-induced conformational changes of TET peptidase from crenarchaeon Desulfurococcus kamchatkensis. European Biophysics Journal, 2015, 44, 667-675.	1.2	1
50	Intramolecular hydrogen bonding in the polyextremophilic short-chain dehydrogenase from the archaeon Thermococcus sibiricus and its close structural homologs. Biochimie, 2015, 118, 82-89.	1.3	6
51	Induction of insulin-like growth factor 1 splice forms by subfragments of myofibrillar proteins. Molecular and Cellular Endocrinology, 2015, 399, 69-77.	1.6	9
52	High-synconformation of uridine and asymmetry of the hexameric molecule revealed in the high-resolution structures ofShewanella oneidensisMR-1 uridine phosphorylase in the free form and in complex with uridine. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 3310-3319.	2.5	13
53	Effect of the L499M mutation of the ascomycetousBotrytis acladalaccase on redox potential and catalytic properties. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2913-2923.	2.5	31
54	Selfâ€Charging Electrochemical Biocapacitor. ChemElectroChem, 2014, 1, 343-346.	1.7	82

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55	Targeted delivery of siRNA to differentiated murine myotubes in culture by a conjugate of cationic oligopeptide with FS2 venom. Biochemistry (Moscow), 2013, 78, 418-423.	0.7	1
56	From gene to structure: The protein factory of the NBICS Centre of Kurchatov Institute. Crystallography Reports, 2013, 58, 442-449.	0.1	12
57	Contrasting catalytic profiles of multiheme nitrite reductases containing CxxCK heme-binding motifs. Journal of Biological Inorganic Chemistry, 2013, 18, 655-667.	1.1	10
58	Structures of Î²-glycosidase from Acidilobus saccharovorans in complexes with tris and glycerol. Doklady Biochemistry and Biophysics, 2013, 449, 99-101.	0.3	5
59	Sodium Chloride-Induced Modulation of the Activity and Thermal Stability of Short-Chain Oxidoreductase from the Archaeon Thermococcus sibiricus. Applied Biochemistry and Biotechnology, 2013, 171, 1877-1889.	1.4	1
60	Growth promotion of <scp>B</scp>ifidobacterium and <scp>L</scp>actobacillus species by proteinaceous hydrolysates derived from poultry processing leftovers. International Journal of Food Science and Technology, 2013, 48, 341-349.	1.3	22
61	Biofuel Cell Based on Microscale Nanostructured Electrodes with Inductive Coupling to Rat Brain Neurons. Scientific Reports, 2013, 3, 3270.	1.6	68
62	A Comparative Study of Biocathodes Based on Multiwall Carbon Nanotube Buckypapers Modified with Three Different Multicopper Oxidases. Electroanalysis, 2013, 25, 1143-1149.	1.5	27
63	Crystallization of uridine phosphorylase fromShewanella oneidensisMR-1 in the laboratory and under microgravity and preliminary X-ray diffraction analysis. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1387-1389.	0.7	11
64	Comparative structural and functional analysis of two octaheme nitrite reductases from closely related <scp>T</scp>hioalkalivibrio species. FEBS Journal, 2012, 279, 4052-4061.	2.2	25
65	Structural insight into the molecular basis of polyextremophilicity of short-chain alcohol dehydrogenase from the hyperthermophilic archaeon Thermococcus sibiricus. Biochimie, 2012, 94, 2628-2638.	1.3	23
66	Covalent modifications of the catalytic tyrosine in octahaem cytochromecnitrite reductase and their effect on the enzyme activity. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 144-153.	2.5	13
67	Molecular modeling of formate dehydrogenase: the formation of the Michaelis complex. Journal of Biomolecular Structure and Dynamics, 2012, 30, 170-179.	2.0	17
68	Stimulation of mechano-growth factor expression by myofibrillar proteins in murine myoblasts and myotubes. Molecular and Cellular Biochemistry, 2012, 363, 347-355.	1.4	13
69	Stimulation of mechano-growth factor expression by second messengers. Archives of Biochemistry and Biophysics, 2011, 507, 323-331.	1.4	16
70	Methods of detection and identification of manufactured nanoparticles. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.2	20
71	Composition of the air emission from a tobacco factory and development of the biocatalyst for odour control. Journal of Chemical Technology and Biotechnology, 2010, 85, 320-327.	1.6	8
72	Structures of complexes of octahaem cytochromecnitrite reductase fromThioalkalivibrio nitratireducenswith sulfite and cyanide. Acta Crystallographica Section D: Biological Crystallography, 2010, 66, 1043-1047.	2.5	10

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73	Proteinase B Disruption Is Required for High Level Production of Human Mechano-Growth Factor in <i>Saccharomyces cerevisiae</i>. Journal of Molecular Microbiology and Biotechnology, 2010, 18, 188-194.	1.0	3
74	Characterization of a Thermostable Short-Chain Alcohol Dehydrogenase from the Hyperthermophilic Archaeon Thermococcus sibiricus. Applied and Environmental Microbiology, 2010, 76, 4096-4098.	1.4	21
75	Structural Basis for Phototoxicity of the Genetically Encoded Photosensitizer KillerRed. Journal of Biological Chemistry, 2009, 284, 32028-32039.	1.6	123
76	Small interfering RNA targeting the human myostatin gene. Molecular Biology, 2009, 43, 586-590.	0.4	1
77	High-Resolution Structural Analysis of a Novel Octaheme Cytochrome c Nitrite Reductase from the Haloalkaliphilic Bacterium Thioalkalivibrio nitratireducens. Journal of Molecular Biology, 2009, 389, 846-862.	2.0	78
78	Structureâ€guided alteration of coenzyme specificity of formate dehydrogenase by saturation mutagenesis to enable efficient utilization of NADP⁺. FEBS Journal, 2008, 275, 3859-3869.	2.2	78
79	Producing human mechano growth factor (MGF) in Escherichia coli. Protein Expression and Purification, 2008, 58, 70-77.	0.6	7
80	Hyperthermia and acidification stimulate mechano-growth factor synthesis in murine myoblasts and myotubes. Biochemical and Biophysical Research Communications, 2008, 375, 271-274.	1.0	7
81	Thiocyanate hydrolase, the primary enzyme initiating thiocyanate degradation in the novel obligately chemolithoautotrophic halophilic sulfur-oxidizing bacterium Thiohalophilus thiocyanoxidans. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2007, 1774, 1563-1570.	1.1	42
82	Refined crystal structures of red and green fluorescent proteins from the button polypZoanthus. Acta Crystallographica Section D: Biological Crystallography, 2007, 63, 1082-1093.	2.5	25
83	Hydrophilicity Impact upon Physical Properties of the Environmentally Friendly Poly(3-hydroxybutyrate) Blends: Modification Via Blending. Macromolecular Symposia, 2006, 233, 108-116.	0.4	15
84	Monoclonal Antibodies to Mechano-Growth Factor. Hybridoma, 2006, 25, 300-305.	0.5	15
85	Structure of a red fluorescent protein fromZoanthus, zRFP574, reveals a novel chromophore. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 527-532.	2.5	15
86	Molecular and catalytic properties of a novel cytochrome c nitrite reductase from nitrate-reducing haloalkaliphilic sulfur-oxidizing bacterium Thioalkalivibrio nitratireducens. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 715-723.	1.1	59
87	Protein engineering of formate dehydrogenase. New Biotechnology, 2006, 23, 89-110.	2.7	207
88	Study of action of cyclophosphamide and extract of mycelium of Pleurotus ostreatus in vivo on mice, bearing melanoma B16-F0-GFP. , 2005, 5704, 214.		2
89	Odor Removal in Industrial Facilities. , 2005, , 305-326.		3
90	In memory of Boris Fedorovich Poglazov (1930?2001). Biochemistry (Moscow), 2004, 69, 1175-1176.	0.7	0

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91	Catalytic mechanism and application of formate dehydrogenase. Biochemistry (Moscow), 2004, 69, 1252-1267.	0.7	146
92	Evaluation of industrial biotrickling filter at the flexographic printing facility. Environmental Progress, 2004, 23, 39-44.	0.8	19
93	Site-directed mutagenesis of the essential arginine of the formate dehydrogenase active centre. BBA - Proteins and Proteomics, 2002, 1594, 136-149.	2.1	22
94	Enzymatic oxidation of cadmium and lead metals photodeposited on cadmium sulfide. Bioelectrochemistry, 2001, 53, 61-71.	2.4	8
95	Conserved supersecondary structural motif in NAD-dependent dehydrogenases. FEBS Letters, 1998, 423, 105-109.	1.3	29
96	Effect of pH on kinetic parameters of NAD+-dependent formate dehydrogenase. Biochemical Journal, 1997, 321, 475-480.	1.7	31
97	Site-directed mutagenesis of the formate dehydrogenase active centre: role of the His332-Gln313pair in enzyme catalysis. FEBS Letters, 1996, 390, 104-108.	1.3	56
98	High Resolution Structures of Holo and Apo Formate Dehydrogenase. Journal of Molecular Biology, 1994, 236, 759-785.	2.0	178
99	Direct electron transfer between Alcaligenes eutrophus Z-1 hydrogenase and glassy carbon electrodes. Journal of Electroanalytical Chemistry, 1992, 343, 473-482.	1.9	0
100	Direct electron transfer between Alcaligenes eutrophus Z-1 hydrogenase and glassy carbon electrodes. Bioelectrochemistry, 1992, 28, 473-482.	1.0	16
101	Crystal structure of NAD-dependent formate dehydrogenase. FEBS Journal, 1992, 206, 441-452.	0.2	55
102	Mapping of the immunodominant regions of the NAD-dependent formate dehydrogenase. FEBS Letters, 1990, 260, 297-300.	1.3	0
103	Effect of redox potential on the activation of the NAD-dependent hydrogenase from Alcaligenes eutrophus Z1. Archives of Biochemistry and Biophysics, 1989, 268, 287-297.	1.4	12
104	Redox-dependent inactivation of the NAD-dependent hydrogenase from Alcaligenes eutrophus Z1. Archives of Biochemistry and Biophysics, 1989, 268, 298-305.	1.4	8
105	Effect of redox potential on the catalytic properties of the NAD-dependent hydrogenase from Alcaligenes eutrophus Z1. Archives of Biochemistry and Biophysics, 1989, 268, 306-313.	1.4	6
106	NAD-dependent hydrogenase from Alcaligenes eutrophus Z1: Does it have a regulatory centre?. Biochemical and Biophysical Research Communications, 1987, 142, 297-301.	1.0	1
107	NAD+-dependent hydrogenase from the hydrogen oxidizing bacterium Alcaligenes eutrophus Z1. Stabilization against temperature and urea induced inactivation. Biochimie, 1986, 68, 63-68.	1.3	5
108	NAD-dependent hydrogenase from the hydrogen-oxidizing bacterium Alcaligenes eutrophus Z1. Kinetic studies of the NADH-dehydrogenase activity. BBA - Proteins and Proteomics, 1985, 827, 466-471.	2.1	13

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109	Hydrogenase from the hydrogen-oxidizing bacterium Alcaligenes eutrophus Z I. BBA - Proteins and Proteomics, 1983, 744, 298-303.	2.1	22
110	Study of the role of arginine residues in bacterial formate dehydrogenase. Biochimica Et Biophysica Acta - Biomembranes, 1981, 659, 141-149.	1.4	10
111	NAD-Dependent Formate Dehydrogenase from Methylotrophic Bacterium, Strain 1. Purification and Characterization. FEBS Journal, 1979, 99, 569-576.	0.2	59