Erik SedlÃ¡k

List of Publications by Year
in descending order

74 papers	1,787 citations	257450 24 h-index	302126 39 g-index
74 all docs	74 docs citations	74 times ranked	2262 citing authors

#	Article	IF	Citations
1	Phospholipase A2Digestion of Cardiolipin Bound to Bovine CytochromecOxidase Alters Both Activity and Quaternary Structureâ€. Biochemistry, 1999, 38, 14966-14972.	2.5	147
2	Irreversible Thermal Denaturation of Glucose Oxidase from Aspergillus niger Is the Transition to the Denatured State with Residual Structure. Journal of Biological Chemistry, 2004, 279, 47601-47609.	3.4	122
3	Effect of Hofmeister ions on protein thermal stability: Roles of ion hydration and peptide groups?. Archives of Biochemistry and Biophysics, 2008, 479, 69-73.	3.0	94
4	Modulation of activity of NADH oxidase fromThermus thermophilusthrough change in flexibility in the enzyme active site induced by Hofmeister series anions. FEBS Journal, 2004, 271, 48-57.	0.2	69
5	Role of cardiolipin in stability of integral membrane proteins. Biochimie, 2017, 142, 102-111.	2.6	67
6	Directed evolution of G protein-coupled receptors in yeast for higher functional production in eukaryotic expression hosts. Scientific Reports, 2016, 6, 21508.	3.3	55
7	Photolabeling of Cardiolipin Binding Subunits within Bovine Heart CytochromecOxidaseâ€. Biochemistry, 2006, 45, 746-754.	2.5	52
8	Electrochemistry of Unfolded Cytochromecin Neutral and Acidic Urea Solutions. Journal of the American Chemical Society, 2005, 127, 7638-7646.	13.7	51
9	The heme iron coordination of unfolded ferric and ferrous cytochrome c in neutral and acidic urea solutions. Spectroscopic and electrochemical studies. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1703, 31-41.	2.3	49
10	Release Factors 2 from Escherichia coli and Thermus thermophilus: structural, spectroscopic and microcalorimetric studies. Nucleic Acids Research, 2007, 35, 1343-1353.	14.5	43
11	Polyanion Hydrophobicity and Protein Basicity Affect Protein Stability in Proteinâ^'Polyanion Complexes. Biomacromolecules, 2009, 10, 2533-2538.	5.4	43
12	Destabilization of the A1 Domain in von Willebrand Factor Dissociates the A1A2A3 Tri-domain and Provokes Spontaneous Binding to Glycoprotein Ibα and Platelet Activation under Shear Stress. Journal of Biological Chemistry, 2010, 285, 22831-22839.	3.4	43
13	Role of Copper in Thermal Stability of Human Ceruloplasmin. Biophysical Journal, 2008, 94, 1384-1391.	0.5	42
14	Flexibility and enzyme activity of NADH oxidase from Thermus thermophilus in the presence of monovalent cations of Hofmeister series. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2008, 1784, 789-795.	2.3	41
15	Kinetics of cyanide binding as a probe of local stability/flexibility of cytochrome c. Biophysical Chemistry, 2009, 144, 21-26.	2.8	40
16	Changes in Thermodynamic Stability of von Willebrand Factor Differentially Affect the Force-Dependent Binding to Platelet GPIbα. Biophysical Journal, 2009, 97, 618-627.	0.5	38
17	Role of conformational flexibility for enzymatic activity in NADH oxidase fromThermus thermophilus. FEBS Journal, 2003, 270, 4887-4897.	0.2	34
18	In vitro unfolding of yeast multicopper oxidase Fet3p variants reveals unique role of each metal site. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19258-19263.	7.1	32

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19	Correlation of lysozyme activity and stability in the presence of Hofmeister series anions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 281-288.	2.3	32
20	Coulombic and noncoulombic effect of polyanions on cytochrome c structure. , 1998, 46, 145-154.		31
21	Molten globule-like state of cytochrome c induced by polyanion poly(vinylsulfate) in slightly acidic pH. BBA - Proteins and Proteomics, 1999, 1434, 347-355.	2.1	29
22	Lysozyme stability and amyloid fibrillization dependence on Hofmeister anions in acidic pH. Journal of Biological Inorganic Chemistry, 2015, 20, 921-933.	2.6	29
23	Stability and ATP Binding of the Nucleotide-binding Domain of the Wilson Disease Protein: Effect of the Common H1069Q Mutation. Journal of Molecular Biology, 2008, 383, 1097-1111.	4.2	28
24	Ferricytochrome c protects mitochondrial cytochrome c oxidase against hydrogen peroxide-induced oxidative damage. Free Radical Biology and Medicine, 2010, 49, 1574-1581.	2.9	27
25	Discrete Roles of Copper Ions in Chemical Unfolding of Human Ceruloplasmin. Biochemistry, 2007, 46, 9638-9644.	2.5	26
26	The Kinetic Stability of Cytochrome c Oxidase: Effect of Bound Phospholipid and Dimerization. Biophysical Journal, 2014, 107, 2941-2949.	0.5	26
27	Conformational stability and dynamics of cytochrome c affect its alkaline isomerization. Journal of Biological Inorganic Chemistry, 2007, 12, 257-266.	2.6	23
28	Generation of Fluorogen-Activating Designed Ankyrin Repeat Proteins (FADAs) as Versatile Sensor Tools. Journal of Molecular Biology, 2016, 428, 1272-1289.	4.2	22
29	The fluorescence intensities ratio is not a reliable parameter for evaluation of protein unfolding transitions. Protein Science, 2017, 26, 1236-1239.	7.6	22
30	Peroxidase activity of cytochrome c in its compact state depends on dynamics of the heme region. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 1073-1083.	2.3	22
31	Dual effect of non-ionic detergent Triton X-100 on insulin amyloid formation. Colloids and Surfaces B: Biointerfaces, 2019, 173, 709-718.	5.0	22
32	Interaction of ferricytochrome c with polyanion Nafion. Biochimica Et Biophysica Acta - Bioenergetics, 1997, 1319, 258-266.	1.0	19
33	Role of cations in stability of acidic protein Desulfovibrio desulfuricans apoflavodoxin. Archives of Biochemistry and Biophysics, 2008, 474, 128-135.	3.0	18
34	Methylation of Acridin-9-ylthioureas. Structure, Fluorescence and Biological Properties of Products. Collection of Czechoslovak Chemical Communications, 2004, 69, 833-849.	1.0	17
35	Role of copper in folding and stability of cupredoxin-like copper-carrier protein CopC. Archives of Biochemistry and Biophysics, 2007, 467, 58-66.	3.0	17
36	Differential Stability of Dimeric and Monomeric Cytochrome c Oxidase Exposed to Elevated Hydrostatic Pressure. Biochemistry, 2007, 46, 7146-7152.	2.5	17

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37	Inner mechanism of protection of mitochondrial electron-transfer proteins against oxidative damage. Focus on hydrogen peroxide decomposition. Biochimie, 2017, 142, 152-157.	2.6	16
38	Rate of oxidative modification of cytochrome c by hydrogen peroxide is modulated by Hofmeister anions. General Physiology and Biophysics, 2010, 29, 255-265.	0.9	15
39	Hofmeister effect on catalytic properties of chymotrypsin is substrate-dependent. Biophysical Chemistry, 2018, 243, 8-16.	2.8	15
40	Dimers of Thermus thermophilus elongation factor Ts are required for its function as a nucleotide exchange factor of elongation factor Tu. FEBS Journal, 1998, 255, 81-86.	0.2	14
41	Analysis of IgG kinetic stability by differential scanning calorimetry, probe fluorescence and light scattering. Protein Science, 2017, 26, 2229-2239.	7.6	14
42	Advanced analyses of kinetic stabilities of iggs modified by mutations and glycosylation. Protein Science, 2015, 24, 1100-1113.	7.6	13
43	New Approach to Synthesis of N-Substituted 9-Amino/Iminoacridines with Important Fluorescence Properties. Heterocycles, 2001, 55, 279.	0.7	13
44	Modification of the kinetic stability of immunoglobulin G by solvent additives. MAbs, 2018, 10, 607-623.	5.2	12
45	Ion-Specific Protein/Water Interface Determines the Hofmeister Effect on the Kinetic Stability of Glucose Oxidase. Journal of Physical Chemistry B, 2019, 123, 7965-7973.	2.6	12
46	Effect of the Central Disulfide Bond on the Unfolding Behavior of Elongation Factor Ts Homodimer fromThermus thermophilusâ€. Biochemistry, 2001, 40, 9579-9586.	2.5	11
47	9-Isothiocyanatoanthracene as a Versatile Starting Compound in the Chemistry of Anthracen-9-yl Derivatives. Collection of Czechoslovak Chemical Communications, 2002, 67, 665-678.	1.0	11
48	Cofactor assisted gating mechanism in the active site of NADH oxidase from Thermus thermophilus. Proteins: Structure, Function and Bioinformatics, 2006, 64, 465-476.	2.6	11
49	Unusual effect of salts on the homodimeric structure of NADH oxidase from Thermus thermophilus in acidic pH. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 129-137.	2.3	11
50	Sequential Dissociation of Subunits from Bovine Heart Cytochrome c Oxidase by Urea. Biochemistry, 2009, 48, 8143-8150.	2.5	10
51	Destabilization of the Quaternary Structure of Bovine Heart Cytochrome c Oxidase upon Removal of Tightly Bound Cardiolipin. Biochemistry, 2015, 54, 5569-5577.	2.5	10
52	Photoinduced damage of AsLOV2 domain is accompanied by increased singlet oxygen production due to flavin dissociation. Scientific Reports, 2020, 10, 4119.	3.3	10
53	Non-two-state thermal denaturation of ferricytochrome c at neutral and slightly acidic pH values. Biophysical Chemistry, 2015, 203-204, 41-50.	2.8	9
54	The molten-globule residual structure is critical for reflavination of glucose oxidase. Biophysical Chemistry, 2017, 230, 74-83.	2.8	9

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55	Activity of NADH oxidase from Thermus thermophilus in water/alcohol binary mixtures is limited by the stability of quaternary structure. Journal of Molecular Catalysis B: Enzymatic, 2010, 64, 60-67.	1.8	8
56	Effect of N-domain on the stability of elongation factor Ts from Thermus thermophilus. BBA - Proteins and Proteomics, 2001, 1547, 117-126.	2.1	7
57	Characterization of the polyanion-induced molten globule-like state of cytochromec. Biopolymers, 2007, 86, 119-126.	2.4	7
58	Core glycan in the yeast multicopper ferroxidase, Fet3p: A case study of Nâ€linked glycosylation, protein maturation, and stability. Protein Science, 2010, 19, 1739-1750.	7.6	7
59	Early modification of cytochrome c by hydrogen peroxide triggers its fast degradation. International Journal of Biological Macromolecules, 2021, 174, 413-423.	7.5	7
60	Thermodynamic properties of nucleotide-free EF-Tu from Thermus thermophilus in the presence of low-molecular weight effectors of its GTPase activity. BBA - Proteins and Proteomics, 2002, 1597, 22-27.	2.1	5
61	Irreversible thermal denaturation of elongation factor Ts from Thermus thermophilus effect of the residual structure and intermonomer disulfide bond. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 1277-1285.	2.3	5
62	Multidomain Initiation Factor 2 from Thermus thermophilus Consists of the Individual Autonomous Domains. Biochemistry, 2008, 47, 4992-5005.	2.5	5
63	The Interplay among Subunit Composition, Cardiolipin Content, and Aggregation State of Bovine Heart Cytochrome c Oxidase. Cells, 2020, 9, 2588.	4.1	5
64	Destabilization effect of imidazolium cation-Hofmeister anion salts on cytochrome c. International Journal of Biological Macromolecules, 2020, 164, 3808-3813.	7.5	5
65	Delipidation of cytochrome c oxidase from Rhodobacter sphaeroides destabilizes its quaternary structure. Biochimie, 2016, 125, 23-31.	2.6	3
66	Synergistic Effects of Copper Sites on Apparent Stability of Multicopper Oxidase, Fet3p. International Journal of Molecular Sciences, 2018, 19, 269.	4.1	3
67	Purification of MBP fusion proteins using engineered DARPin affinity matrix. International Journal of Biological Macromolecules, 2021, 187, 105-112.	7.5	3
68	Specific anion effect on properties of HRV 3C protease. Biophysical Chemistry, 2022, 287, 106825.	2.8	3
69	Modulation of global stability, ligand binding and catalytic properties of trypsin by anions. Biophysical Chemistry, 2022, 288, 106856.	2.8	3
70	Conformational properties of LOV2 domain and its C450A variant within broad pH region. Biophysical Chemistry, 2020, 259, 106337.	2.8	2
71	Anion-Specific Effects on the Alkaline State of Cytochrome c. Biochemistry (Moscow), 2021, 86, 59-73.	1.5	2
72	Heme is responsible for enhanced singlet oxygen deactivation in cytochrome c. Physical Chemistry Chemical Physics, 2021, 23, 15557-15563.	2.8	1

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73	Singlet oxygen quenching as a probe for cytochrome c molten globule state formation. Physical Chemistry Chemical Physics, 2022, 24, 13317-13324.	2.8	1
74	Modulation of the Kinetic Stability of Immunoglobulin G by Solvent Additives. Biophysical Journal, 2016, 110, 211a-212a.	0.5	0