Irina F Sevrioukova

List of Publications by Year
in descending order

51 papers	2,720 citations	172386 29 h-index	182361 51 g-index
52 all docs	52 docs citations	52 times ranked	2996 citing authors

#	Article	IF	Citations
1	Apoptosis-Inducing Factor: Structure, Function, and Redox Regulation. Antioxidants and Redox Signaling, 2011, 14, 2545-2579.	2.5	268
2	Structure and mechanism of the complex between cytochrome P4503A4 and ritonavir. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18422-18427.	3.3	240
3	Severe X-Linked Mitochondrial Encephalomyopathy Associated with a Mutation in Apoptosis-Inducing Factor. American Journal of Human Genetics, 2010, 86, 639-649.	2.6	199
4	Cowchock Syndrome Is Associated with a Mutation in Apoptosis-Inducing Factor. American Journal of Human Genetics, 2012, 91, 1095-1102.	2.6	134
5	Understanding the mechanism of cytochrome P450 3A4: recent advances and remaining problems. Dalton Transactions, 2013, 42, 3116-3126.	1.6	133
6	Structural and Mechanistic Insights into the Interaction of Cytochrome P4503A4 with Bromoergocryptine, a Type I Ligand. Journal of Biological Chemistry, 2012, 287, 3510-3517.	1.6	106
7	Photoreduction of the active site of the metalloprotein putidaredoxin by synchrotron radiation. Acta Crystallographica Section D: Biological Crystallography, 2007, 63, 951-960.	2.5	97
8	Structural basis for regiospecific midazolam oxidation by human cytochrome P450 3A4. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 486-491.	3.3	90
9	Structure-Based Inhibitor Design for Evaluation of a CYP3A4 Pharmacophore Model. Journal of Medicinal Chemistry, 2016, 59, 4210-4220.	2.9	88
10	Crystal Structure of Putidaredoxin, the [2Feâ€“2S] Component of the P450cam Monooxygenase System from Pseudomonas putida. Journal of Molecular Biology, 2003, 333, 377-392.	2.0	86
11	Dissecting Cytochrome P450 3A4â€“Ligand Interactions Using Ritonavir Analogues. Biochemistry, 2013, 52, 4474-4481.	1.2	77
12	Crystal Structure of Putidaredoxin Reductase from Pseudomonas putida, the Final Structural Component of the Cytochrome P450cam Monooxygenase. Journal of Molecular Biology, 2004, 336, 889-902.	2.0	74
13	Redox-dependent Changes in Molecular Properties of Mitochondrial Apoptosis-inducing Factor. Journal of Biological Chemistry, 2008, 283, 5622-5631.	1.6	71
14	Pyridine-Substituted Desoxyritonavir Is a More Potent Inhibitor of Cytochrome P450 3A4 than Ritonavir. Journal of Medicinal Chemistry, 2013, 56, 3733-3741.	2.9	68
15	Putidaredoxin-to-Cytochrome P450cam Electron Transfer:Â Differences between the Two Reductive Steps Required for Catalysisâ€. Biochemistry, 2006, 45, 11934-11944.	1.2	65
16	Redox-dependent Structural Reorganization in Putidaredoxin, a Vertebrate-type [2Fe-2S] Ferredoxin from Pseudomonas putida. Journal of Molecular Biology, 2005, 347, 607-621.	2.0	57
17	Interaction of human cytochrome P4503A4 with ritonavir analogs. Archives of Biochemistry and Biophysics, 2012, 520, 108-116.	1.4	54
18	Structural biology of redox partner interactions in P450cam monooxygenase: A fresh look at an old system. Archives of Biochemistry and Biophysics, 2011, 507, 66-74.	1.4	52

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19	Redox-Linked Conformational Dynamics in Apoptosis-Inducing Factor. Journal of Molecular Biology, 2009, 390, 924-938.	2.0	51
20	Structure/Function Relations in AIFM1 Variants Associated with Neurodegenerative Disorders. Journal of Molecular Biology, 2016, 428, 3650-3665.	2.0	48
21	The Putidaredoxin Reductase-Putidaredoxin Electron Transfer Complex. Journal of Biological Chemistry, 2005, 280, 16135-16142.	1.6	45
22	Anion-Dependent Stimulation of CYP3A4 Monooxygenase. Biochemistry, 2015, 54, 4083-4096.	1.2	45
23	High-Level Production and Properties of the Cysteine-Depleted Cytochrome P450 3A4. Biochemistry, 2017, 56, 3058-3067.	1.2	40
24	Laser Flash Induced Electron Transfer in P450cam Monooxygenase:Â Putidaredoxin Reductaseâ˜Putidaredoxin Interactionâ€. Biochemistry, 2001, 40, 10592-10600.	1.2	38
25	Current Approaches for Investigating and Predicting Cytochrome P450 3A4-Ligand Interactions. Advances in Experimental Medicine and Biology, 2015, 851, 83-105.	0.8	37
26	Photosensitive Ru(II) Complexes as Inhibitors of the Major Human Drug Metabolizing Enzyme CYP3A4. Journal of the American Chemical Society, 2021, 143, 9191-9205.	6.6	37
27	Heme Binding Biguanides Target Cytochrome P450-Dependent Cancer Cell Mitochondria. Cell Chemical Biology, 2017, 24, 1259-1275.e6.	2.5	35
28	Electron Transfer between Cytochrome P450cin and Its FMN-containing Redox Partner, Cindoxin. Journal of Biological Chemistry, 2007, 282, 27006-27011.	1.6	34
29	Crystal Structure of the Putidaredoxin ReductaseÂ·Putidaredoxin Electron Transfer Complex. Journal of Biological Chemistry, 2010, 285, 13616-13620.	1.6	30
30	Interaction of Human Drug-Metabolizing CYP3A4 with Small Inhibitory Molecules. Biochemistry, 2019, 58, 930-939.	1.2	30
31	Putidaredoxin Reductase, a New Function for an Old Protein. Journal of Biological Chemistry, 2002, 277, 25831-25839.	1.6	28
32	Ritonavir Analogues as a Probe for Deciphering the Cytochrome P450 3A4 Inhibitory Mechanism. Current Topics in Medicinal Chemistry, 2014, 14, 1348-1355.	1.0	28
33	Electron transfer in the ruthenated heme domain of cytochrome P450BM-3. Israel Journal of Chemistry, 2000, 40, 47-53.	1.0	27
34	Key Role of the Adenylate Moiety and Integrity of the Adenylate-Binding Site for the NAD⁺/H Binding to Mitochondrial Apoptosis-Inducing Factor. Biochemistry, 2015, 54, 6996-7009.	1.2	26
35	Inhibition of Human CYP3A4 by Rationally Designed Ritonavir-Like Compounds: Impact and Interplay of the Side Group Functionalities. Molecular Pharmaceutics, 2018, 15, 279-288.	2.3	23
36	Structural Insights into the Interaction of Cytochrome P450 3A4 with Suicide Substrates: Mibefradil, Azamulin and 6â€²,7â€²-Dihydroxybergamottin. International Journal of Molecular Sciences, 2019, 20, 4245.	1.8	18

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37	Stereoselective Oxidation Kinetics of Deoxycholate in Recombinant and Microsomal CYP3A Enzymes: Deoxycholate 19-Hydroxylation Is an In Vitro Marker of CYP3A7 Activity. Drug Metabolism and Disposition, 2019, 47, 574-581.	1.7	17
38	Rational Design of CYP3A4 Inhibitors: A One-Atom Linker Elongation in Ritonavir-Like Compounds Leads to a Marked Improvement in the Binding Strength. International Journal of Molecular Sciences, 2021, 22, 852.	1.8	15
39	Production and Characterization of a Functional Putidaredoxin Reductaseâ^'Putidaredoxin Covalent Complex. Biochemistry, 2010, 49, 58-67.	1.2	14
40	Redox reactions of the FAD-containing apoptosis-inducing factor (AIF) with quinoidal xenobiotics: A mechanistic study. Archives of Biochemistry and Biophysics, 2011, 512, 183-189.	1.4	13
41	Conformational Response of N-Terminally Truncated Cytochrome P450 3A4 to Ligand Binding in Solution. Biochemistry, 2019, 58, 3903-3910.	1.2	12
42	Structureâ€"Activity Relationships of Rationally Designed Ritonavir Analogues: Impact of Side-Group Stereochemistry, Headgroup Spacing, and Backbone Composition on the Interaction with CYP3A4. Biochemistry, 2019, 58, 2077-2087.	1.2	12
43	An increase in side-group hydrophobicity largely improves the potency of ritonavir-like inhibitors of CYP3A4. Bioorganic and Medicinal Chemistry, 2020, 28, 115349.	1.4	11
44	Steroid bioconjugation to a CYP3A4 allosteric site and its effect on substrate binding and coupling efficiency. Archives of Biochemistry and Biophysics, 2018, 653, 90-96.	1.4	8
45	Structural Basis for the Diminished Ligand Binding and Catalytic Ability of Human Fetal-Specific CYP3A7. International Journal of Molecular Sciences, 2021, 22, 5831.	1.8	8
46	Innovative C-symmetric testosterone and androstenedione dimers: Design, synthesis, biological evaluation on prostate cancer cell lines and binding study to recombinant CYP3A4. European Journal of Medicinal Chemistry, 2021, 220, 113496.	2.6	7
47	Direct synthesis of Î±-thio aromatic acids from aromatic amino acids. Tetrahedron Letters, 2018, 59, 1140-1142.	0.7	6
48	Unexpected Differences between Two Closely Related Bacterial P450 Camphor Monooxygenases. Biochemistry, 2020, 59, 2743-2750.	1.2	6
49	Structural Dynamics of Cytochrome P450 3A4 in the Presence of Substrates and Cytochrome P450 Reductase. Biochemistry, 2021, 60, 2259-2271.	1.2	6
50	Arginines 65 and 310 in Putidaredoxin Reductase Are Critical for Interaction with Putidaredoxin. Biochemistry, 2010, 49, 5160-5166.	1.2	3
51	Interaction of CYP3A4 with Rationally Designed Ritonavir Analogues: Impact of Steric Constraints Imposed on the Heme-Ligating Group and the End-Pyridine Attachment. International Journal of Molecular Sciences, 2022, 23, 7291.	1.8	3