Irina F Sevrioukova

List of Publications by Citations

49 papers	2,081 citations	26 h-index	45 g-index
52 ext. papers	2,469 ext. citations	5.3 avg, IF	5.64 L-index

#	Paper	IF	Citations
49	Apoptosis-inducing factor: structure, function, and redox regulation. *Antioxidants and Redox Signaling*, **2011**, 14, 2545-79	8.4	201
48	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, 18422-7	11.5	167
47	Severe X-linked mitochondrial encephalomyopathy associated with a mutation in apoptosis-inducing factor. *American Journal of Human Genetics*, **2010**, 86, 639-49	11	163
46	Understanding the mechanism of cytochrome P450 3A4: recent advances and remaining problems. *Dalton Transactions*, **2013**, 42, 3116-26	4.3	105
45	Cowchock syndrome is associated with a mutation in apoptosis-inducing factor. *American Journal of Human Genetics*, **2012**, 91, 1095-102	11	101
44	Structural and mechanistic insights into the interaction of cytochrome P4503A4 with bromoergocryptine, a type I ligand. *Journal of Biological Chemistry*, **2012**, 287, 3510-7	5.4	93
43	Photoreduction of the active site of the metalloprotein putidaredoxin by synchrotron radiation. *Acta Crystallographica Section D: Biological Crystallography*, **2007**, 63, 951-60		85
42	Crystal structure of putidaredoxin, the [2Fe-2S] component of the P450cam monooxygenase system from Pseudomonas putida. *Journal of Molecular Biology*, **2003**, 333, 377-92	6.5	80
41	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	6.5	66
40	Structure-Based Inhibitor Design for Evaluation of a CYP3A4 Pharmacophore Model. *Journal of Medicinal Chemistry*, **2016**, 59, 4210-20	8.3	64
39	Redox-dependent changes in molecular properties of mitochondrial apoptosis-inducing factor. *Journal of Biological Chemistry*, **2008**, 283, 5622-31	5.4	63
38	Putidaredoxin-to-cytochrome P450cam electron transfer: differences between the two reductive steps required for catalysis. *Biochemistry*, **2006**, 45, 11934-44	3.2	62
37	Dissecting cytochrome P450 3A4-ligand interactions using ritonavir analogues. *Biochemistry*, **2013**, 52, 4474-81	3.2	61
36	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	11.5	59
35	Redox-dependent structural reorganization in putidaredoxin, a vertebrate-type [2Fe-2S] ferredoxin from Pseudomonas putida. *Journal of Molecular Biology*, **2005**, 347, 607-21	6.5	55
34	Pyridine-substituted desoxyritonavir is a more potent inhibitor of cytochrome P450 3A4 than ritonavir. *Journal of Medicinal Chemistry*, **2013**, 56, 3733-41	8.3	51
33	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	4.1	47

32	Interaction of human cytochrome P4503A4 with ritonavir analogs. *Archives of Biochemistry and Biophysics*, **2012**, 520, 108-16	4.1	45
31	Redox-linked conformational dynamics in apoptosis-inducing factor. *Journal of Molecular Biology*, **2009**, 390, 924-38	6.5	45
30	The putidaredoxin reductase-putidaredoxin electron transfer complex: theoretical and experimental studies. *Journal of Biological Chemistry*, **2005**, 280, 16135-42	5.4	37
29	Structure/Function Relations in AIFM1 Variants Associated with Neurodegenerative Disorders. *Journal of Molecular Biology*, **2016**, 428, 3650-65	6.5	37
28	Laser flash induced electron transfer in P450cam monooxygenase: putidaredoxin reductase-putidaredoxin interaction. *Biochemistry*, **2001**, 40, 10592-600	3.2	36
27	Anion-Dependent Stimulation of CYP3A4 Monooxygenase. *Biochemistry*, **2015**, 54, 4083-96	3.2	35
26	Current Approaches for Investigating and Predicting Cytochrome P450 3A4-Ligand Interactions. *Advances in Experimental Medicine and Biology*, **2015**, 851, 83-105	3.6	30
25	High-Level Production and Properties of the Cysteine-Depleted Cytochrome P450 3A4. *Biochemistry*, **2017**, 56, 3058-3067	3.2	27
24	Electron transfer between cytochrome P450cin and its FMN-containing redox partner, cindoxin. *Journal of Biological Chemistry*, **2007**, 282, 27006-27011	5.4	27
23	Crystal structure of the putidaredoxin reductase x putidaredoxin electron transfer complex. *Journal of Biological Chemistry*, **2010**, 285, 13616-20	5.4	24
22	Electron transfer in the ruthenated heme domain of cytochrome P450BM-3. *Israel Journal of Chemistry*, **2000**, 40, 47-53	3.4	24
21	Putidaredoxin reductase, a new function for an old protein. *Journal of Biological Chemistry*, **2002**, 277, 25831-9	5.4	22
20	Ritonavir analogues as a probe for deciphering the cytochrome P450 3A4 inhibitory mechanism. *Current Topics in Medicinal Chemistry*, **2014**, 14, 1348-55	3	17
19	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	3.2	16
18	Heme Binding Biguanides Target Cytochrome P450-Dependent Cancer Cell Mitochondria. *Cell Chemical Biology*, **2017**, 24, 1259-1275.e6	8.2	15
17	Inhibition of Human CYP3A4 by Rationally Designed Ritonavir-Like Compounds: Impact and Interplay of the Side Group Functionalities. *Molecular Pharmaceutics*, **2018**, 15, 279-288	5.6	15
16	Production and characterization of a functional putidaredoxin reductase-putidaredoxin covalent complex. *Biochemistry*, **2010**, 49, 58-67	3.2	14
15	Interaction of Human Drug-Metabolizing CYP3A4 with Small Inhibitory Molecules. *Biochemistry*, **2019**, 58, 930-939	3.2	13

14	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	4	10
13	Redox reactions of the FAD-containing apoptosis-inducing factor (AIF) with quinoidal xenobiotics: a mechanistic study. *Archives of Biochemistry and Biophysics*, **2011**, 512, 183-9	4.1	10
12	Photosensitive Ru(II) Complexes as Inhibitors of the Major Human Drug Metabolizing Enzyme CYP3A4. *Journal of the American Chemical Society*, **2021**, 143, 9191-9205	16.4	9
11	Conformational Response of N-Terminally Truncated Cytochrome P450 3A4 to Ligand Binding in Solution. *Biochemistry*, **2019**, 58, 3903-3910	3.2	8
10	Structure-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	3.2	7
9	Structural Insights into the Interaction of Cytochrome P450 3A4 with Suicide Substrates: Mibefradil, Azamulin and 6Ų7ŲDihydroxybergamottin. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	6
8	An increase in side-group hydrophobicity largely improves the potency of ritonavir-like inhibitors of CYP3A4. *Bioorganic and Medicinal Chemistry*, **2020**, 28, 115349	3.4	6
7	Direct Synthesis of Thio Aromatic Acids from Aromatic Amino Acids. *Tetrahedron Letters*, **2018**, 59, 1140-1142	2	5
6	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,	6.3	5
5	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	4.1	4
4	Unexpected Differences between Two Closely Related Bacterial P450 Camphor Monooxygenases. *Biochemistry*, **2020**, 59, 2743-2750	3.2	3
3	Arginines 65 and 310 in putidaredoxin reductase are critical for interaction with putidaredoxin. *Biochemistry*, **2010**, 49, 5160-6	3.2	3
2	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	6.8	2
1	Structural Dynamics of Cytochrome P450 3A4 in the Presence of Substrates and Cytochrome P450 Reductase. *Biochemistry*, **2021**, 60, 2259-2271	3.2	1