Sergey A Krupenko

List of Publications by Year
in descending order

58	4,259	218677 26	168389 53
papers	citations	h-index	g-index

58	58	58	8187
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Transcriptome Database for Astrocytes, Neurons, and Oligodendrocytes: A New Resource for Understanding Brain Development and Function. Journal of Neuroscience, 2008, 28, 264-278.	3.6	2,730
2	Metabolic derangement of methionine and folate metabolism in mice deficient in methionine synthase reductase. Molecular Genetics and Metabolism, 2007, 91, 85-97.	1.1	99
3	ALDH1L2 Is the Mitochondrial Homolog of 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 2010, 285, 23056-23063.	3.4	83
4	C16-ceramide is a natural regulatory ligand of p53 in cellular stress response. Nature Communications, 2018, 9, 4149.	12.8	76
5	FDH: An aldehyde dehydrogenase fusion enzyme in folate metabolism. Chemico-Biological Interactions, 2009, 178, 84-93.	4.0	71
6	Crystal Structures of the Carboxyl Terminal Domain of Rat 10-Formyltetrahydrofolate Dehydrogenase:Â Implications for the Catalytic Mechanism of Aldehyde Dehydrogenasesâ€. Biochemistry, 2007, 46, 2917-2929.	2.5	61
7	10-formyltetrahydrofolate dehydrogenase, one of the major folate enzymes, is down-regulated in tumor tissues and possesses suppressor effects on cancer cells. Cell Growth & Differentiation: the Molecular Biology Journal of the American Association for Cancer Research, 2002, 13, 227-36.	0.8	61
8	Molecular mechanisms underlying the potentially adverse effects of folate. Clinical Chemistry and Laboratory Medicine, 2013, 51, 607-16.	2.3	60
9	Folate Stress Induces Apoptosis via p53-dependent de Novo Ceramide Synthesis and Up-regulation of Ceramide Synthase 6. Journal of Biological Chemistry, 2013, 288, 12880-12890.	3.4	57
10	Epigenetic Silencing of ALDH1L1, a Metabolic Regulator of Cellular Proliferation, in Cancers. Genes and Cancer, 2011, 2, 130-139.	1.9	49
11	Activation of p21-Dependent G1/G2 Arrest in the Absence of DNA Damage as an Antiapoptotic Response to Metabolic Stress. Genes and Cancer, 2011, 2, 889-899.	1.9	45
12	Rho GTPases RhoA and Rac1 Mediate Effects of Dietary Folate on Metastatic Potential of A549 Cancer Cells through the Control of Cofilin Phosphorylation. Journal of Biological Chemistry, 2014, 289, 26383-26394.	3.4	44
13	CerS6 Is a Novel Transcriptional Target of p53 Protein Activated by Non-genotoxic Stress. Journal of Biological Chemistry, 2016, 291, 16586-16596.	3.4	42
14	ALDH1L1 and ALDH1L2 Folate Regulatory Enzymes in Cancer. Advances in Experimental Medicine and Biology, 2018, 1032, 127-143.	1.6	42
15	Expression, Purification, and Properties of the Aldehyde Dehydrogenase Homologous Carboxyl-terminal Domain of Rat 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 1997, 272, 10266-10272.	3.4	41
16	Cancer cells activate p53 in response to 10-formyltetrahydrofolate dehydrogenase expression. Biochemical Journal, 2005, 391, 503-511.	3.7	41
17	10-Formyltetrahydrofolate Dehydrogenase Requires a 4â€²-Phosphopantetheine Prosthetic Group for Catalysis. Journal of Biological Chemistry, 2007, 282, 34159-34166.	3.4	41
18	Ceramide Synthase 6 Is a Novel Target of Methotrexate Mediating Its Antiproliferative Effect in a p53-Dependent Manner. PLoS ONE, 2016, 11, e0146618.	2.5	40

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19	Metabolic Reprogramming by Folate Restriction Leads to a Less Aggressive Cancer Phenotype. Molecular Cancer Research, 2017, 15, 189-200.	3.4	33
20	Enzymatic properties of ALDH1L2, a mitochondrial 10-formyltetrahydrofolate dehydrogenase. Chemico-Biological Interactions, 2011, 191, 129-136.	4.0	32
21	Conserved Catalytic Residues of the ALDH1L1 Aldehyde Dehydrogenase Domain Control Binding and Discharging of the Coenzyme. Journal of Biological Chemistry, 2011, 286, 23357-23367.	3.4	32
22	A Novel Tumor Suppressor Function of Glycine N-Methyltransferase Is Independent of Its Catalytic Activity but Requires Nuclear Localization. PLoS ONE, 2013, 8, e70062.	2.5	32
23	The Crystal Structure of the Hydrolase Domain of 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 2004, 279, 14355-14364.	3.4	30
24	Domain Structure of Rat 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 1997, 272, 10273-10278.	3.4	29
25	Loss of ALDH1L1 folate enzyme confers a selective metabolic advantage for tumor progression. Chemico-Biological Interactions, 2019, 302, 149-155.	4.0	28
26	Ectopic expression of 10-formyltetrahydrofolate dehydrogenase in A549 cells induces G1 cell cycle arrest and apoptosis. Molecular Cancer Research, 2003, 1, 577-88.	3.4	27
27	Cysteine 707 Is Involved in the Dehydrogenase Active Site of Rat 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 1995, 270, 519-522.	3.4	23
28	Leucovorin-induced resistance against FDH growth suppressor effects occurs through DHFR up-regulation. Biochemical Pharmacology, 2006, 72, 256-266.	4.4	23
29	Metabolic Phenotype of Wild-Type and As3mt -Knockout C57BL/6J Mice Exposed to Inorganic Arsenic: The Role of Dietary Fat and Folate Intake. Environmental Health Perspectives, 2018, 126, 127003.	6.0	22
30	On the Role of Conserved Histidine 106 in 10-Formyltetrahydrofolate Dehydrogenase Catalysis. Journal of Biological Chemistry, 2001, 276, 24030-24037.	3.4	21
31	Acyl Carrier Protein-specific 4â€²-Phosphopantetheinyl Transferase Activates 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 2010, 285, 1627-1633.	3.4	21
32	Modular organization of FDH: Exploring the basis of hydrolase catalysis. Protein Science, 2006, 15, 1076-1084.	7.6	19
33	10-Formyltetrahydrofolate Dehydrogenaseâ€“Induced c-Jun-NH2-Kinase Pathways Diverge at the c-Jun-NH2-Kinase Substrate Level in Cells with Different p53 Status. Molecular Cancer Research, 2009, 7, 99-107.	3.4	18
34	CHIP E3 ligase mediates proteasomal degradation of the proliferation regulatory protein ALDH1L1 during the transition of NIH3T3 fibroblasts from G0/G1 to S-phase. PLoS ONE, 2018, 13, e0199699.	2.5	18
35	Aspartate 142 Is Involved in Both Hydrolase and Dehydrogenase Catalytic Centers of 10-Formyltetrahydrofolate Dehydrogenase. Journal of Biological Chemistry, 1999, 274, 35777-35784.	3.4	16
36	Deleterious mutations in ALDH1L2 suggest a novel cause for neuro-ichthyotic syndrome. Npj Genomic Medicine, 2019, 4, 17.	3.8	15

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37	Cytosolic 10-formyltetrahydrofolate dehydrogenase regulates glycine metabolism in mouse liver. Scientific Reports, 2019, 9, 14937.	3.3	15
38	Phylogeny and evolution of aldehyde dehydrogenase-homologous folate enzymes. Chemico-Biological Interactions, 2011, 191, 122-128.	4.0	14
39	Disruption of a Calmodulin Central Helix-like Region of 10-Formyltetrahydrofolate Dehydrogenase Impairs Its Dehydrogenase Activity by Uncoupling the Functional Domains. Journal of Biological Chemistry, 2003, 278, 22894-22900.	3.4	13
40	Aldh1l2 knockout mouse metabolomics links the loss of the mitochondrial folate enzyme to deregulation of a lipid metabolism observed in rare human disorder. Human Genomics, 2020, 14, 41.	2.9	11
41	The mechanism of discrimination between oxidized and reduced coenzyme in the aldehyde dehydrogenase domain of Aldh1l1. Chemico-Biological Interactions, 2013, 202, 62-69.	4.0	10
42	Aldehyde dehydrogenase homologous folate enzymes: Evolutionary switch between cytoplasmic and mitochondrial localization. Chemico-Biological Interactions, 2015, 234, 12-17.	4.0	10
43	The Role of Single-Nucleotide Polymorphisms in the Function of Candidate Tumor Suppressor ALDH1L1. Frontiers in Genetics, 2019, 10, 1013.	2.3	10
44	Knockout of Putative Tumor Suppressor Aldh1l1 in Mice Reprograms Metabolism to Accelerate Growth of Tumors in a Diethylnitrosamine (DEN) Model of Liver Carcinogenesis. Cancers, 2021, 13, 3219.	3.7	10
45	Folate pathways mediating the effects of ethanol in tumorigenesis. Chemico-Biological Interactions, 2020, 324, 109091.	4.0	8
46	Effects of folic acid withdrawal on transcriptomic profiles in murine triple-negative breast cancer cell lines. Biochimie, 2020, 173, 114-122.	2.6	7
47	Sex-Specific Metabolic Effects of Dietary Folate Withdrawal in Wild-Type and Aldh1l1 Knockout Mice. Metabolites, 2022, 12, 454.	2.9	7
48	Structure of putative tumor suppressor ALDH1L1. Communications Biology, 2022, 5, 3.	4.4	6
49	Modeling of interactions between functional domains of ALDH1L1. Chemico-Biological Interactions, 2017, 276, 23-30.	4.0	5
50	Metabolic Response of Triple-Negative Breast Cancer to Folate Restriction. Nutrients, 2021, 13, 1637.	4.1	5
51	Genetic variants in ALDH1L1 and GLDC influence the serine-to-glycine ratio in Hispanic children. American Journal of Clinical Nutrition, 2022, 116, 500-510.	4.7	3
52	Is ALDH1L1 Elevated in Lung Cancer? Comment on: Lee, S.-H.; et al. â€œThe Combination of Loss of ALDH1L1 Function and Phenformin Treatment Decreases Tumor Growth in KRAS-Driven Lung Cancerâ€•Cancers 2020, 12, 1382. Cancers, 2021, 13, 1691.	3.7	1
53	The Role of CDK Inhibitor p21 in Antiâ€proliferative Effects of 10â€Formyltetrahydrofolate Dehydrogenase. FASEB Journal, 2008, 22, .	0.5	1
54	Impact of Aldh1l1 Knockout On Metabolic Phenotype in Mouse Liver. FASEB Journal, 2019, 33, lb249.	0.5	1

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55	Metabolic Effects of ALDH1L1 Knockout in Diethylnitrosamineâ€Induced Model of Liver Carcinogenesis. FASEB Journal, 2021, 35, .	0.5	0
56	Effect of Folate Diet on Liver Metabolomics in Wild Type and Aldh1l1 Knockout Mice. Current Developments in Nutrition, 2021, 5, 949.	0.3	0
57	Abstract 2257: Effect ofALDH1L1folate enzyme on hepatocellular carcinoma inachemical carcinogenesismodel. , 2021, , .		0
58	A novel role of the conserved glutamate in aldehyde dehydrogenase catalysis. FASEB Journal, 2008, 22, 1012.3.	0.5	0