Zhanjun Hou

List of Publications by Year
in descending order

52 papers	1,815 citations	257357 24 h-index	276775 41 g-index
53 all docs	53 docs citations	53 times ranked	1476 citing authors

#	Article	IF	Citations
1	Human reduced folate carrier: translation of basic biology to cancer etiology and therapy. Cancer and Metastasis Reviews, 2007, 26, 111-128.	2.7	233
2	The human proton-coupled folate transporter. Cancer Biology and Therapy, 2012, 13, 1355-1373.	1.5	135
3	Biology of the Major Facilitative Folate Transporters SLC19A1 and SLC46A1. Current Topics in Membranes, 2014, 73, 175-204.	0.5	104
4	Synthesis and Biological Activity of a Novel Series of 6-Substituted Thieno[2,3-d]pyrimidine Antifolate Inhibitors of Purine Biosynthesis with Selectivity for High Affinity Folate Receptors over the Reduced Folate Carrier and Proton-Coupled Folate Transporter for Cellular Entryâ€. Journal of Medicinal Chemistry, 2009, 52, 2940-2951.	2.9	74
5	The Major Facilitative Folate Transporters Solute Carrier 19A1 and Solute Carrier 46A1: Biology and Role in Antifolate Chemotherapy of Cancer. Drug Metabolism and Disposition, 2014, 42, 632-649.	1.7	74
6	Chapter 5 Structure and Function of the Reduced Folate Carrier. Vitamins and Hormones, 2008, 79, 145-184.	0.7	72
7	Synthesis and Discovery of High Affinity Folate Receptor-Specific Glycinamide Ribonucleotide Formyltransferase Inhibitors with Antitumor Activity. Journal of Medicinal Chemistry, 2008, 51, 5052-5063.	2.9	70
8	Synthesis and Antitumor Activity of a Novel Series of 6-Substituted Pyrrolo[2,3-d]pyrimidine Thienoyl Antifolate Inhibitors of Purine Biosynthesis with Selectivity for High Affinity Folate Receptors and the Proton-Coupled Folate Transporter over the Reduced Folate Carrier for Cellular Entry. Journal of Medicinal Chemistry, 2010, 53, 1306-1318.	2.9	63
9	Synthesis, Biological, and Antitumor Activity of a Highly Potent 6-Substituted Pyrrolo[2,3-d]pyrimidine Thienoyl Antifolate Inhibitor with Proton-Coupled Folate Transporter and Folate Receptor Selectivity over the Reduced Folate Carrier That Inhibits Î²-Glycinamide Ribonucleotide Formyltransferase. Journal of Medicinal Chemistry, 2011, 54, 7150-7164.	2.9	62
10	Therapeutic Targeting of a Novel 6-Substituted Pyrrolo [2,3-d]pyrimidine Thienoyl Antifolate to Human Solid Tumors Based on Selective Uptake by the Proton-Coupled Folate Transporter. Molecular Pharmacology, 2011, 80, 1096-1107.	1.0	59
11	The Metal Specificity and Selectivity of ZntA from Escherichia coli Using the Acylphosphate Intermediate. Journal of Biological Chemistry, 2003, 278, 28455-28461.	1.6	55
12	Targeting the Proton-Coupled Folate Transporter for Selective Delivery of 6-Substituted Pyrrolo[2,3-d]Pyrimidine Antifolate Inhibitors of De Novo Purine Biosynthesis in the Chemotherapy of Solid Tumors. Molecular Pharmacology, 2010, 78, 577-587.	1.0	53
13	Synthesis and Biological Activity of 6-Substituted Pyrrolo[2,3-d]pyrimidine Thienoyl Regioisomers as Inhibitors of de Novo Purine Biosynthesis with Selectivity for Cellular Uptake by High Affinity Folate Receptors and the Proton-Coupled Folate Transporter over the Reduced Folate Carrier. Journal of Medicinal Chemistry, 2012, 55, 1758-1770.	2.9	45
14	Dual Targeting of Epithelial Ovarian Cancer Via Folate Receptor Î± and the Proton-Coupled Folate Transporter with 6-Substituted Pyrrolo[2,3-d]pyrimidine Antifolates. Molecular Cancer Therapeutics, 2017, 16, 819-830.	1.9	40
15	Novel Pyrrolo[3,2-d]pyrimidine Compounds Target Mitochondrial and Cytosolic One-carbon Metabolism with Broad-spectrum Antitumor Efficacy. Molecular Cancer Therapeutics, 2019, 18, 1787-1799.	1.9	38
16	Therapeutic Targeting of Mitochondrial One-Carbon Metabolism in Cancer. Molecular Cancer Therapeutics, 2020, 19, 2245-2255.	1.9	38
17	The promise and challenges of exploiting the proton-coupled folate transporter for selective therapeutic targeting of cancer. Cancer Chemotherapy and Pharmacology, 2018, 81, 1-15.	1.1	36
18	Identification and Functional Impact of Homo-oligomers of the Human Proton-coupled Folate Transporter. Journal of Biological Chemistry, 2012, 287, 4982-4995.	1.6	34

#	Article	IF	Citations
19	6-Substituted Pyrrolo[2,3-d]pyrimidine Thienoyl Regioisomers as Targeted Antifolates for Folate Receptor Î± and the Proton-Coupled Folate Transporter in Human Tumors. Journal of Medicinal Chemistry, 2015, 58, 6938-6959.	2.9	34
20	Discovery of 5-Substituted Pyrrolo[2,3-d]pyrimidine Antifolates as Dual-Acting Inhibitors of Glycinamide Ribonucleotide Formyltransferase and 5-Aminoimidazole-4-carboxamide Ribonucleotide Formyltransferase in De Novo Purine Nucleotide Biosynthesis: Implications of Inhibiting 5-Aminoimidazole-4-carboxamide Ribonucleotide Formyltransferase to AMPK Activation and Antitumor Activity. Journal of Medicinal Chemistry, 2013, 56, 10016-10032.	2.9	33
21	Localization of a Substrate Binding Domain of the Human Reduced Folate Carrier to Transmembrane Domain 11 by Radioaffinity Labeling and Cysteine-substituted Accessibility Methods. Journal of Biological Chemistry, 2005, 280, 36206-36213.	1.6	31
22	Tumor Targeting with Novel 6-Substituted Pyrrolo [2,3-d] Pyrimidine Antifolates with Heteroatom Bridge Substitutions via Cellular Uptake by Folate Receptor Î± and the Proton-Coupled Folate Transporter and Inhibition of de Novo Purine Nucleotide Biosynthesis. Journal of Medicinal Chemistry, 2016, 59, 7856-7876.	2.9	30
23	Functional Loss of the Reduced Folate Carrier Enhances the Antitumor Activities of Novel Antifolates with Selective Uptake by the Proton-Coupled Folate Transporter. Molecular Pharmacology, 2012, 82, 591-600.	1.0	27
24	Transmembrane Domains 4, 5, 7, 8, and 10 of the Human Reduced Folate Carrier Are Important Structural or Functional Components of the Transmembrane Channel for Folate Substrates. Journal of Biological Chemistry, 2006, 281, 33588-33596.	1.6	26
25	Oligomeric Structure of the Human Reduced Folate Carrier. Journal of Biological Chemistry, 2009, 284, 3285-3293.	1.6	24
26	Tumor-Targeting with Novel Non-Benzoyl 6-Substituted Straight Chain Pyrrolo[2,3-d]pyrimidine Antifolates via Cellular Uptake by Folate Receptor Î± and Inhibition of de Novo Purine Nucleotide Biosynthesis. Journal of Medicinal Chemistry, 2013, 56, 8684-8695.	2.9	24
27	Therapeutic targeting malignant mesothelioma with a novel 6-substituted pyrrolo[2,3-d]pyrimidine thienoyl antifolate via its selective uptake by the proton-coupled folate transporter. Cancer Chemotherapy and Pharmacology, 2013, 71, 999-1011.	1.1	23
28	Structureâ€“Activity Profiles of Novel 6-Substituted Pyrrolo[2,3-d]pyrimidine Thienoyl Antifolates with Modified Amino Acids for Cellular Uptake by Folate Receptors Î± and Î² and the Proton-Coupled Folate Transporter. Journal of Medicinal Chemistry, 2014, 57, 8152-8166.	2.9	23
29	Novel 5-Substituted Pyrrolo[2,3-d]pyrimidines as Dual Inhibitors of Glycinamide Ribonucleotide Formyltransferase and 5-Aminoimidazole-4-carboxamide Ribonucleotide Formyltransferase and as Potential Antitumor Agents. Journal of Medicinal Chemistry, 2015, 58, 1479-1493.	2.9	22
30	Targeting Nonsquamous Nonsmall Cell Lung Cancer via the Proton-Coupled Folate Transporter with 6-Substituted Pyrrolo[2,3-d]Pyrimidine Thienoyl Antifolates. Molecular Pharmacology, 2016, 89, 425-434.	1.0	22
31	Fluorine-Substituted Pyrrolo[2,3-d]Pyrimidine Analogues with Tumor Targeting via Cellular Uptake by Folate Receptor Î± and the Proton-Coupled Folate Transporter and Inhibition of de Novo Purine Nucleotide Biosynthesis. Journal of Medicinal Chemistry, 2018, 61, 4228-4248.	2.9	21
32	Cellular Pharmacodynamics of a Novel Pyrrolo[3,2-d]pyrimidine Inhibitor Targeting Mitochondrial and Cytosolic One-Carbon Metabolism. Molecular Pharmacology, 2020, 97, 9-22.	1.0	21
33	Role of Lysine 411 in Substrate Carboxyl Group Binding to the Human Reduced Folate Carrier, as Determined by Site-Directed Mutagenesis and Affinity Inhibition. Molecular Pharmacology, 2008, 73, 1274-1281.	1.0	16
34	Substituted Cysteine Accessibility Reveals a Novel Transmembrane 2â€“3 Reentrant Loop and Functional Role for Transmembrane Domain 2 in the Human Proton-coupled Folate Transporter. Journal of Biological Chemistry, 2014, 289, 25287-25295.	1.6	16
35	Folate transporter dynamics and therapy with classic and tumor-targeted antifolates. Scientific Reports, 2021, 11, 6389.	1.6	15
36	Structural determinants of human proton-coupled folate transporter oligomerization: role of GXXXG motifs and identification of oligomeric interfaces at transmembrane domains 3 and 6. Biochemical Journal, 2015, 469, 33-44.	1.7	13

#	Article	IF	Citations
37	Identification of the Minimal Functional Unit of the Homo-oligomeric Human Reduced Folate Carrier. Journal of Biological Chemistry, 2010, 285, 4732-4740.	1.6	12
38	Structural and Enzymatic Analysis of Tumor-Targeted Antifolates That Inhibit Glycinamide Ribonucleotide Formyltransferase. Biochemistry, 2016, 55, 4574-4582.	1.2	12
39	Folate Transport and One-Carbon Metabolism in Targeted Therapies of Epithelial Ovarian Cancer. Cancers, 2022, 14, 191.	1.7	12
40	Tumor Targeting with Novel Pyridyl 6-Substituted Pyrrolo[2,3-d]Pyrimidine Antifolates via Cellular Uptake by Folate Receptor Î± and the Proton-Coupled Folate Transporter and Inhibition of De Novo Purine Nucleotide Biosynthesis. Journal of Medicinal Chemistry, 2018, 61, 2027-2040.	2.9	11
41	Design, synthesis and biological evaluation of novel pyrrolo[2,3-d]pyrimidine as tumor-targeting agents with selectivity for tumor uptake by high affinity folate receptors over the reduced folate carrier. Bioorganic and Medicinal Chemistry, 2020, 28, 115544.	1.4	10
42	The evolving biology of the protonâ€coupled folate transporter: New insights into regulation, structure, and mechanism. FASEB Journal, 2022, 36, e22164.	0.2	9
43	Pattern Analysis of Organellar Maps for Interpretation of Proteomic Data. Proteomes, 2022, 10, 18.	1.7	9
44	Post-transcriptional regulation of the human reduced folate carrier as a novel adaptive mechanism in response to folate excess or deficiency. Bioscience Reports, 2014, 34, .	1.1	8
45	Targeted therapy of pyrrolo[2,3-d]pyrimidine antifolates in a syngeneic mouse model of high grade serous ovarian cancer and the impact on the tumor microenvironment. Scientific Reports, 2022, 12, .	1.6	7
46	Discovery of 6-substituted thieno[2,3-d]pyrimidine analogs as dual inhibitors of glycinamide ribonucleotide formyltransferase and 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase in de novo purine nucleotide biosynthesis in folate receptor expressing human tumors. Bioorganic and Medicinal Chemistry, 2021, 37, 116093.	1.4	6
47	Functional and mechanistic roles of the human proton-coupled folate transporter transmembrane domain 6â€“7 linker. Biochemical Journal, 2016, 473, 3545-3562.	1.7	5
48	Substrate-specific binding and conformational changes involving Ser313 and transmembrane domain 8 of the human reduced folate carrier, as determined by site-directed mutagenesis and protein cross-linking. Biochemical Journal, 2010, 430, 265-274.	1.7	4
49	Regulation of differential proton-coupled folate transporter gene expression in human tumors: transactivation by KLF15 with NRF-1 and the role of Sp1. Biochemical Journal, 2019, 476, 1247-1266.	1.7	3
50	Discovery of amide-bridged pyrrolo[2,3-d]pyrimidines as tumor targeted classical antifolates with selective uptake by folate receptor Î± and inhibition of de novo purine nucleotide biosynthesis. Bioorganic and Medicinal Chemistry, 2019, 27, 115125.	1.4	1
51	Development and validation of chemical features-based proton-coupled folate transporter/activity and reduced folate carrier/activity models (pharmacophores). Journal of Molecular Graphics and Modelling, 2018, 81, 125-133.	1.3	0
52	A Novel Isoflavone, ME-344, Enhances Venetoclax Antileukemic Activity Against AML Via Suppression of Oxidative Phosphorylation and Purine Biosynthesis. Blood, 2021, 138, 2238-2238.	0.6	0