Ann-Sofie Jemth

List of Publications by Citations

36 papers	1,390 citations	16 h-index	37 g-index
43 ext. papers	1,787 ext. citations	12 avg, IF	3.58 L-index

#	Paper	IF	Citations
36	MTH1 inhibition eradicates cancer by preventing sanitation of the dNTP pool. *Nature*, **2014**, 508, 215-21	50.4	326
35	Stereospecific targeting of MTH1 by (S)-crizotinib as an anticancer strategy. *Nature*, **2014**, 508, 222-7	50.4	272
34	Processing of protein ADP-ribosylation by Nudix hydrolases. *Biochemical Journal*, **2015**, 468, 293-301	3.8	89
33	Crystal structure, biochemical and cellular activities demonstrate separate functions of MTH1 and MTH2. *Nature Communications*, **2015**, 6, 7871	17.4	71
32	NUDT15 Hydrolyzes 6-Thio-DeoxyGTP to Mediate the Anticancer Efficacy of 6-Thioguanine. *Cancer Research*, **2016**, 76, 5501-11	10.1	71
31	Small-molecule inhibitor of OGG1 suppresses proinflammatory gene expression and inflammation. *Science*, **2018**, 362, 834-839	33.3	71
30	Targeting SAMHD1 with the Vpx protein to improve cytarabine therapy for hematological malignancies. *Nature Medicine*, **2017**, 23, 256-263	50.5	69
29	A comprehensive structural, biochemical and biological profiling of the human NUDIX hydrolase family. *Nature Communications*, **2017**, 8, 1541	17.4	62
28	Crystal structure of human MTH1 and the 8-oxo-dGMP product complex. *FEBS Letters*, **2011**, 585, 2617-21	3.8	62
27	Crystal Structure of the Emerging Cancer Target MTHFD2 in Complex with a Substrate-Based Inhibitor. *Cancer Research*, **2017**, 77, 937-948	10.1	37
26	Discovery of the First Potent and Selective Inhibitors of Human dCTP Pyrophosphatase 1. *Journal of Medicinal Chemistry*, **2016**, 59, 1140-1148	8.3	30
25	Targeted NUDT5 inhibitors block hormone signaling in breast cancer cells. *Nature Communications*, **2018**, 9, 250	17.4	28
24	Hypoxic Signaling and the Cellular Redox Tumor Environment Determine Sensitivity to MTH1 Inhibition. *Cancer Research*, **2016**, 76, 2366-75	10.1	28
23	Addiction to MTH1 protein results in intense expression in human breast cancer tissue as measured by liquid chromatography-isotope-dilution tandem mass spectrometry. *DNA Repair*, **2015**, 33, 101-10	4.3	25
22	Structural basis of inhibition of the human serine hydroxymethyltransferase SHMT2 by antifolate drugs. *FEBS Letters*, **2019**, 593, 1863-1873	3.8	18
21	dUTPase inhibition augments replication defects of 5-Fluorouracil. *Oncotarget*, **2017**, 8, 23713-23726	3.3	18
20	Piperazin-1-ylpyridazine Derivatives Are a Novel Class of Human dCTP Pyrophosphatase 1 Inhibitors. *Journal of Medicinal Chemistry*, **2017**, 60, 4279-4292	8.3	14

19	Identification of Triazolothiadiazoles as Potent Inhibitors of the dCTP Pyrophosphatase 1. *Journal of Medicinal Chemistry*, **2017**, 60, 2148-2154	8.3	12
18	Novel Broad-Spectrum Antiviral Inhibitors Targeting Host Factors Essential for Replication of Pathogenic RNA Viruses. *Viruses*, **2020**, 12,	6.2	9
17	Crystal Structures and Inhibitor Interactions of Mouse and Dog MTH1 Reveal Species-Specific Differences in Affinity. *Biochemistry*, **2018**, 57, 593-603	3.2	8
16	Targeting OGG1 arrests cancer cell proliferation by inducing replication stress. *Nucleic Acids Research*, **2020**, 48, 12234-12251	20.1	8
15	MutT homologue 1 (MTH1) catalyzes the hydrolysis of mutagenic O6-methyl-dGTP. *Nucleic Acids Research*, **2018**, 46, 10888-10904	20.1	8
14	Production, Purification, and Characterization of □N-Labeled DNA Repair Proteins as Internal Standards for Mass Spectrometric Measurements. *Methods in Enzymology*, **2016**, 566, 305-32	1.7	7
13	Germline variation in the oxidative DNA repair genes NUDT1 and OGG1 is not associated with hereditary colorectal cancer or polyposis. *Human Mutation*, **2018**, 39, 1214-1225	4.7	6
12	Crystal structures of human PAICS reveal substrate and product binding of an emerging cancer target. *Journal of Biological Chemistry*, **2020**, 295, 11656-11668	5.4	6
11	Development of a chemical probe against NUDT15. *Nature Chemical Biology*, **2020**, 16, 1120-1128	11.7	5
10	Human NUDT22 Is a UDP-Glucose/Galactose Hydrolase Exhibiting a Unique Structural Fold. *Structure*, **2018**, 26, 295-303.e6	5.2	4
9	Diverse heterocyclic scaffolds as dCTP pyrophosphatase 1 inhibitors. Part 2: Pyridone- and pyrimidinone-derived systems. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 3219-3225	2.9	3
8	MutT homologue 1 (MTH1) removes N6-methyl-dATP from the dNTP pool. *Journal of Biological Chemistry*, **2020**, 295, 4761-4772	5.4	3
7	MTH1 promotes mitotic progression to avoid oxidative DNA damage in cancer cells		3
6	Crystal Structure and Substrate Specificity of the 8-oxo-dGTP Hydrolase NUDT1 from Arabidopsis thaliana. *Biochemistry*, **2019**, 58, 887-899	3.2	3
5	Diverse heterocyclic scaffolds as dCTP pyrophosphatase 1 inhibitors. Part 1: Triazoles, triazolopyrimidines, triazinoindoles, quinoline hydrazones and arylpiperazines. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 3897-3904	2.9	2
4	Crystal structures of NUDT15 variants enabled by a potent inhibitor reveal the structural basis for thiopurine sensitivity. *Journal of Biological Chemistry*, **2021**, 296, 100568	5.4	2
3	Pharmacological targeting of MTHFD2 suppresses acute myeloid leukemia by inducing thymidine depletion and replication stress.. *Nature Cancer*, **2022**, 3, 156-172	15.4	2
2	The First Structure of an Active Mammalian dCTPase and its Complexes With Substrate Analogs and Products. *Journal of Molecular Biology*, **2020**, 432, 1126-1142	6.5	1

1 NUDT15-mediated hydrolysis limits the efficacy of anti-HCMV drug ganciclovir. *Cell Chemical Biology*, **2021**, 8.2 1