CITATION REPORT List of articles citing



DOI: 10.1146/annurev.nutr.012809.104810 Annual Review of Nutrition, 2010, 30, 57-81.

Source: https://exaly.com/paper-pdf/49364729/citation-report.pdf

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
514	Moonlighting glutamate formiminotransferases can functionally replace 5-formyltetrahydrofolate cycloligase. 2010 , 285, 41557-66		22
513	Metabolism of Folates in Plants. 2011 , 67-106		23
512	Developmental plasticity and developmental origins of non-communicable disease: theoretical considerations and epigenetic mechanisms. 2011 , 106, 272-80		209
511	Bioactive food components, cancer cell growth limitation and reversal of glycolytic metabolism. 2011 , 1807, 697-706		20
510	Phylogeny and evolution of aldehyde dehydrogenase-homologous folate enzymes. 2011 , 191, 122-8		13
509	Enzymatic properties of ALDH1L2, a mitochondrial 10-formyltetrahydrofolate dehydrogenase. 2011 , 191, 129-36		24
508	Trafficking of intracellular folates. 2011 , 2, 325-31		79
507	Gene-environment interactions and epigenetic pathways in autism: the importance of one-carbon metabolism. 2012 , 53, 322-40		42
506	Maternal choline intake modulates maternal and fetal biomarkers of choline metabolism in humans. 2012 , 95, 1060-71		117
505	The human proton-coupled folate transporter: Biology and therapeutic applications to cancer. 2012 , 13, 1355-73		113
504	Folate. 2012 , 349-375		1
503	Serine hydroxymethyltransferase anchors de novo thymidylate synthesis pathway to nuclear lamina for DNA synthesis. 2012 , 287, 7051-62		84
502	Mutations in genes encoding the glycine cleavage system predispose to neural tube defects in mice and humans. 2012 , 21, 1496-503		83
501	Formate can differentiate between hyperhomocysteinemia due to impaired remethylation and impaired transsulfuration. 2012 , 302, E61-7		30
500	Mitochondrial disorders as windows into an ancient organelle. 2012 , 491, 374-83		482
499	Nutritional influences on epigenetics and age-related disease. 2012 , 71, 75-83		141
498	Protein lysine acylation and cysteine succination by intermediates of energy metabolism. 2012 , 7, 947-	60	162

(2013-2012)

497	Glycine, a simple physiological compound protecting by yet puzzling mechanism(s) against ischaemia-reperfusion injury: current knowledge. 2012 , 165, 2059-72	30
496	Therapeutic targets in cancer cell metabolism and autophagy. 2012 , 30, 671-8	266
495	Glycine decarboxylase activity drives non-small cell lung cancer tumor-initiating cells and tumorigenesis. 2012 , 148, 259-72	483
494	Evaluation of common genetic variants in 82 candidate genes as risk factors for neural tube defects. 2012 , 13, 62	61
493	Folate. 2012 , 173-202	
492	Genetic causes of cerebral folate deficiency: clinical, biochemical and therapeutic aspects. 2012 , 17, 1299-306	33
491	Antifolates in cancer therapy: structure, activity and mechanisms of drug resistance. 2012, 15, 183-210	291
490	Folate. 2012 , 321-342	13
489	Roles of one-carbon metabolism in preimplantation periodeffects on short-term development and long-term programming 2012 , 58, 38-43	28
488	Regular Multivitamin Supplement Use, Single Nucleotide Polymorphisms in ATIC, SHMT2, and SLC46A1, and Risk of Ovarian Carcinoma. 2012 , 3, 33	2
487	Metabolite profiling identifies a key role for glycine in rapid cancer cell proliferation. 2012, 336, 1040-4	955
486	ⅢC magnetic resonance spectroscopy detection of changes in serine isotopomers reflects changes in mitochondrial redox status. 2012 , 68, 671-9	2
485	Methylation capacity in children with severe cerebral palsy. 2012 , 42, 768-76	9
484	Formate generated by cellular oxidation of formaldehyde accelerates the glycolytic flux in cultured astrocytes. 2012 , 60, 582-93	24
483	Folate metabolite profiling of different cell types and embryos suggests variation in folate one-carbon metabolism, including developmental changes in human embryonic brain. 2013 , 378, 229-36	22
482	Methotrexate normalizes up-regulated folate pathway genes in rheumatoid arthritis. 2013 , 65, 2791-802	32
481	Strain-dependent dysregulation of one-carbon metabolism in male mice is associated with choline-and folate-deficient diet-induced liver injury. 2013 , 27, 2233-43	23
480	The histone H3 methyltransferase G9A epigenetically activates the serine-glycine synthesis pathway to sustain cancer cell survival and proliferation. 2013 , 18, 896-907	151

479	Dietary and genetic manipulations of folate metabolism differentially affect neocortical functions in mice. 2013 , 38, 79-91	5
478	Contribution of serine, folate and glycine metabolism to the ATP, NADPH and purine requirements of cancer cells. 2013 , 4, e877	170
477	Environmental Epigenomics in Health and Disease. 2013,	1
476	Environmental Impact on Epigenetic Histone Language. 2013 , 163-187	
475	Calorie restriction and SIRT3 trigger global reprogramming of the mitochondrial protein acetylome. 2013 , 49, 186-99	476
474	Histone modification mapping in human brain reveals aberrant expression of histone H3 lysine 79 dimethylation in neural tube defects. 2013 , 54, 404-13	37
473	The folate metabolic network of Falciparum malaria. 2013 , 188, 51-62	31
472	Molecular mechanisms underlying the potentially adverse effects of folate. 2013 , 51, 607-16	48
471	Folate metabolism in human malaria parasites75 years on. 2013 , 188, 63-77	52
47º	Glycine consumption and mitochondrial serine hydroxymethyltransferase in cancer cells: the heme connection. 2013 , 80, 633-6	50
469	ZFP36L2 is required for self-renewal of early burst-forming unit erythroid progenitors. 2013, 499, 92-6	72
468	Folate levels and polyglutamylation profiles of papaya (Carica papaya cv. Maradol) during fruit development and ripening. 2013 , 61, 3949-56	19
467	G-protein-coupled receptor regulation of de novo purine biosynthesis: a novel druggable mechanism. 2013 , 29, 31-48	11
466	Formaldehyde in brain: an overlooked player in neurodegeneration?. 2013 , 127, 7-21	137
465	Polymorphisms in genes related to one-carbon metabolism are not related to pancreatic cancer in PanScan and PanC4. 2013 , 24, 595-602	4
464	Plasma dimethylglycine and risk of incident acute myocardial infarction in patients with stable angina pectoris. 2013 , 33, 2041-8	75
463	Folate transport in mouse cumulus-oocyte complexes and preimplantation embryos. 2013, 89, 63	17
462	Epigenetic alterations in folate transport genes in placental tissue from fetuses with neural tube defects and in leukocytes from subjects with hyperhomocysteinemia. 2013 , 8, 303-16	32

461	A tale of metabolites: the cross-talk between chromatin and energy metabolism. 2013, 3, 497-501	53
460	Plasma B vitamins and LINE-1 DNA methylation in leukocytes of patients with a history of colorectal adenomas. 2013 , 57, 698-708	3
459	Modeling cellular compartmentation in one-carbon metabolism. 2013 , 5, 343-65	37
458	Methotrexate-induced decrease in embryonic 5-methyl-tetrahydrofolate is irreversible with leucovorin supplementation. 2013 , 10, 326-37	13
457	Deletion of Mthfd1l causes embryonic lethality and neural tube and craniofacial defects in mice. 2013 , 110, 549-54	119
456	A marriage of two "Methusalem" drugs for the treatment of psoriasis?: Arguments for a pilot trial with metformin as add-on for methotrexate. 2013 , 5, 252-63	19
455	Epigenetic mechanisms underlying the link between non-alcoholic fatty liver diseases and nutrition. 2014 , 6, 3303-25	74
454	Metabolic circuits in neural stem cells. 2014 , 71, 4221-41	34
453	Mitochondrial MTHFD2L is a dual redox cofactor-specific methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate cyclohydrolase expressed in both adult and embryonic tissues. 2014 , 289, 15507-17	33
452	The start of systems biology in Ukraine. 2014 , 30, 16-24	1
45 ²	The start of systems biology in Ukraine. 2014 , 30, 16-24 Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014 , 10, e1004214	57
	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one	
451	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014 , 10, e1004214 Nuclear enrichment of folate cofactors and methylenetetrahydrofolate dehydrogenase 1	57
45 ¹ 45 ⁰	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014 , 10, e1004214 Nuclear enrichment of folate cofactors and methylenetetrahydrofolate dehydrogenase 1 (MTHFD1) protect de novo thymidylate biosynthesis during folate deficiency. 2014 , 289, 29642-50 Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support	57
451 450 449	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014, 10, e1004214 Nuclear enrichment of folate cofactors and methylenetetrahydrofolate dehydrogenase 1 (MTHFD1) protect de novo thymidylate biosynthesis during folate deficiency. 2014, 289, 29642-50 Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support mitochondrial membrane potential and neuronal survival. 2014, 3, 777-84 Mammalian mitochondrial and cytosolic folylpolyglutamate synthetase maintain the subcellular	575335
451 450 449 448	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014, 10, e1004214 Nuclear enrichment of folate cofactors and methylenetetrahydrofolate dehydrogenase 1 (MTHFD1) protect de novo thymidylate biosynthesis during folate deficiency. 2014, 289, 29642-50 Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support mitochondrial membrane potential and neuronal survival. 2014, 3, 777-84 Mammalian mitochondrial and cytosolic folylpolyglutamate synthetase maintain the subcellular compartmentalization of folates. 2014, 289, 29386-96	57 53 35 22
451 450 449 448 447	Genome-wide meta-analysis of homocysteine and methionine metabolism identifies five one carbon metabolism loci and a novel association of ALDH1L1 with ischemic stroke. 2014, 10, e1004214 Nuclear enrichment of folate cofactors and methylenetetrahydrofolate dehydrogenase 1 (MTHFD1) protect de novo thymidylate biosynthesis during folate deficiency. 2014, 289, 29642-50 Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support mitochondrial membrane potential and neuronal survival. 2014, 3, 777-84 Mammalian mitochondrial and cytosolic folylpolyglutamate synthetase maintain the subcellular compartmentalization of folates. 2014, 289, 29386-96 Mathematical modeling of folate-related processes in human placenta. 2014, 30, 149-156	57 53 35 22

443	Natural folates from biofortified tomato and synthetic 5-methyl-tetrahydrofolate display equivalent bioavailability in a murine model. 2014 , 69, 57-64	16
442	The major facilitative folate transporters solute carrier 19A1 and solute carrier 46A1: biology and role in antifolate chemotherapy of cancer. 2014 , 42, 632-49	55
441	Principles of targeting endothelial cell metabolism to treat angiogenesis and endothelial cell dysfunction in disease. 2014 , 6, 1105-20	123
440	Metabolomic profiles delineate the potential role of glycine in gold nanorod-induced disruption of mitochondria and blood-testis barrier factors in TM-4 cells. 2014 , 6, 8265-73	27
439	Serine catabolism regulates mitochondrial redox control during hypoxia. 2014 , 4, 1406-17	264
438	The intestinal absorption of folates. 2014 , 76, 251-74	107
437	Ethanol-induced upregulation of 10-formyltetrahydrofolate dehydrogenase helps relieve ethanol-induced oxidative stress. 2014 , 34, 498-509	14
436	Folate deficiency-induced oxidative stress contributes to neuropathy in young and aged zebrafishimplication in neural tube defects and Alzheimer's diseases. 2014 , 71, 234-44	37
435	Neural tube defects. 2014 , 37, 221-42	323
434	Metabolic responses of CHO cells to limitation of key amino acids. 2014 , 111, 2095-106	54
434	Metabolic responses of CHO cells to limitation of key amino acids. 2014 , 111, 2095-106 Novel insights on interactions between folate and lipid metabolism. 2014 , 40, 277-83	113
433	Novel insights on interactions between folate and lipid metabolism. 2014 , 40, 277-83 An isotope-dilution, GC-MS assay for formate and its application to human and animal metabolism.	113
433	Novel insights on interactions between folate and lipid metabolism. 2014 , 40, 277-83 An isotope-dilution, GC-MS assay for formate and its application to human and animal metabolism. 2014 , 46, 1885-91	113 33
433 432 431	Novel insights on interactions between folate and lipid metabolism. 2014, 40, 277-83 An isotope-dilution, GC-MS assay for formate and its application to human and animal metabolism. 2014, 46, 1885-91 Quantitative flux analysis reveals folate-dependent NADPH production. 2014, 510, 298-302 Tracing compartmentalized NADPH metabolism in the cytosol and mitochondria of mammalian	113 33 671
433 432 431 430	Novel insights on interactions between folate and lipid metabolism. 2014, 40, 277-83 An isotope-dilution, GC-MS assay for formate and its application to human and animal metabolism. 2014, 46, 1885-91 Quantitative flux analysis reveals folate-dependent NADPH production. 2014, 510, 298-302 Tracing compartmentalized NADPH metabolism in the cytosol and mitochondria of mammalian cells. 2014, 55, 253-63 Cell type-specific recycling of tetrahydrobiopterin by dihydrofolate reductase explains differential	11333671361
433 432 431 430 429	Novel insights on interactions between folate and lipid metabolism. 2014, 40, 277-83 An isotope-dilution, GC-MS assay for formate and its application to human and animal metabolism. 2014, 46, 1885-91 Quantitative flux analysis reveals folate-dependent NADPH production. 2014, 510, 298-302 Tracing compartmentalized NADPH metabolism in the cytosol and mitochondria of mammalian cells. 2014, 55, 253-63 Cell type-specific recycling of tetrahydrobiopterin by dihydrofolate reductase explains differential effects of 7,8-dihydrobiopterin on endothelial nitric oxide synthase uncoupling. 2014, 90, 246-53	11333671361

(2015-2015)

425	Division of labour: how does folate metabolism partition between one-carbon metabolism and amino acid oxidation?. 2015 , 472, 135-46	59
424	Molybdenum and tungsten-dependent formate dehydrogenases. 2015 , 20, 287-309	76
423	Temporal metabolomic responses of cultured HepG2 liver cells to high fructose and high glucose exposures. 2015 , 11, 707-721	14
422	In vivo kinetics of formate metabolism in folate-deficient and folate-replete rats. 2015 , 290, 2244-50	20
421	Role of the folate receptor in ovarian cancer treatment: evidence, mechanism, and clinical implications. 2015 , 34, 41-52	86
420	Human mutations in methylenetetrahydrofolate dehydrogenase 1 impair nuclear de novo thymidylate biosynthesis. 2015 , 112, 400-5	48
419	Glycine decarboxylase deficiency causes neural tube defects and features of non-ketotic hyperglycinemia in mice. 2015 , 6, 6388	86
418	Mitochondria as biosynthetic factories for cancer proliferation. 2015 , 3, 1	206
417	Biomarkers of Nutrition for Development-Folate Review. 2015 , 145, 1636S-1680S	245
416	Aldehyde dehydrogenase homologous folate enzymes: Evolutionary switch between cytoplasmic and mitochondrial localization. 2015 , 234, 12-7	8
415	Plasma dimethylglycine, nicotine exposure and risk of low bone mineral density and hip fracture: the Hordaland Health Study. 2015 , 26, 1573-83	10
414	Characterization and review of MTHFD1 deficiency: four new patients, cellular delineation and response to folic and folinic acid treatment. 2015 , 38, 863-72	28
413	Metabolic consequences of oncogenic IDH mutations. 2015 , 152, 54-62	97
412	Metabolic pathways in cancers: key targets and implications in cancer therapy. 2015 , 5, 41751-41762	9
411	Endothelial cell metabolism in normal and diseased vasculature. 2015 , 116, 1231-44	337
410	SHMT2 drives glioma cell survival in ischaemia but imposes a dependence on glycine clearance. 2015 , 520, 363-7	216
409	One-Carbon Metabolism and Colorectal Cancer: Potential Mechanisms of Chemoprevention. 2015 , 1, 197-205	13
408	Glutathione metabolism links FOXRED1 to NADH:ubiquinone oxidoreductase (complex I) deficiency: A hypothesis. 2015 , 24, 105-12	3

407	Molecular transitions from papillomavirus infection to cervical precancer and cancer: Role of stromal estrogen receptor signaling. 2015 , 112, E3255-64	149
406	Can folic acid have a role in mitochondrial disorders?. 2015 , 20, 1349-54	25
405	Amino acid management in cancer. 2015 , 43, 22-32	66
404	Folate-Dependent Purine Nucleotide Biosynthesis in Humans. 2015 , 6, 564-71	26
403	Both the folate cycle and betaine-homocysteine methyltransferase contribute methyl groups for DNA methylation in mouse blastocysts. 2015 , 29, 1069-79	29
402	Elevated plasma dimethylglycine is a risk marker of mortality in patients with coronary heart disease. 2015 , 22, 743-52	27
401	One-Carbon Metabolism in Prostate Cancer: The Role of Androgen Signaling. 2016, 17,	27
400	Vitamins, Phytonutrients, and Minerals in Potato. 2016 , 117-166	13
399	Glycine confers neuroprotection through microRNA-301a/PTEN signaling. 2016 , 9, 59	14
398	Folylpoly-I-glutamate synthetase: A key determinant of folate homeostasis and antifolate resistance in cancer. 2016 , 28, 43-64	37
397	2-Aminoacrylate Stress Induces a Context-Dependent Glycine Requirement in ridA Strains of Salmonella enterica. 2016 , 198, 536-43	21
396	Cancer Metabolism. 2016 , 1-12	
395	Nutrition, Epigenetics and Aging. 2016 , 103-131	
394	Human Cytomegalovirus Infection Upregulates the Mitochondrial Transcription and Translation Machineries. 2016 , 7, e00029	30
393	Reversal of Cytosolic One-Carbon Flux Compensates for Loss of the Mitochondrial Folate Pathway. 2016 , 23, 1140-1153	169
392	Formate supplementation enhances folate-dependent nucleotide biosynthesis and prevents spina bifida in a mouse model of folic acid-resistant neural tube defects. 2016 , 126, 63-70	19
391	Substrate channeling between the human dihydrofolate reductase and thymidylate synthase. 2016 , 25, 79-86	20
390	Growing Mouse Oocytes Transiently Activate Folate Transport via Folate Receptors As They Approach Full Size. 2016 , 94, 125	11

(2016-2016)

389	A PHGDH inhibitor reveals coordination of serine synthesis and one-carbon unit fate. 2016 , 12, 452-8	251
388	Tetrahydrofolate increases suspension growth of dihydrofolate reductase-deficient chinese hamster ovary DG44 cells in chemically defined media. 2016 , 32, 1539-1546	1
387	Metabolic flexibility of mitochondrial respiratory chain disorders predicted by computer modelling. 2016 , 31, 45-55	30
386	The importance of serine metabolism in cancer. 2016 , 214, 249-57	203
385	Metabolic requirements for cancer cell proliferation. 2016 , 4, 16	75
384	Folates as adjuvants to anticancer agents: Chemical rationale and mechanism of action. 2016 , 106, 118-31	20
383	Undercover: gene control by metabolites and metabolic enzymes. 2016 , 30, 2345-2369	123
382	Methylenetetrahydrofolate Dehydrogenase 1 Polymorphisms Modify the Associations of Plasma Glycine and Serine With Risk of Acute Myocardial Infarction in Patients With Stable Angina Pectoris in WENBIT (Western Norway B Vitamin Intervention Trial). 2016 , 9, 541-547	2
381	The astrocytic transporter SLC7A10 (Asc-1) mediates glycinergic inhibition of spinal cord motor neurons. 2016 , 6, 35592	17
380	Serine and one-carbon metabolism in cancer. 2016 , 16, 650-62	419
379	Folate: Relevance of Chemical and Microbial Production. 2016 , 103-128	6
379 378	Folate: Relevance of Chemical and Microbial Production. 2016, 103-128 Formate: The Neglected Member of One-Carbon Metabolism. <i>Annual Review of Nutrition</i> , 2016, 36, 369-88)	
		6
378	Formate: The Neglected Member of One-Carbon Metabolism. <i>Annual Review of Nutrition</i> , 2016 , 36, 369-889 Transforming Growth Factor (TGF)-IPromotes de Novo Serine Synthesis for Collagen Production.	6
378 377	Formate: The Neglected Member of One-Carbon Metabolism. <i>Annual Review of Nutrition</i> , 2016 , 36, 369-889) Transforming Growth Factor (TGF)-IPromotes de Novo Serine Synthesis for Collagen Production. 2016 , 291, 27239-27251	6 49 64
378 377 376	Formate: The Neglected Member of One-Carbon Metabolism. <i>Annual Review of Nutrition</i> , 2016 , 36, 369-88) Transforming Growth Factor (TGF)-IPromotes de Novo Serine Synthesis for Collagen Production. 2016 , 291, 27239-27251 Serine one-carbon catabolism with formate overflow. 2016 , 2, e1601273	6 49 64 72
378 377 376 375	Formate: The Neglected Member of One-Carbon Metabolism. <i>Annual Review of Nutrition</i> , 2016 , 36, 369-883 Transforming Growth Factor (TGF)-IPromotes de Novo Serine Synthesis for Collagen Production. 2016 , 291, 27239-27251 Serine one-carbon catabolism with formate overflow. 2016 , 2, e1601273 MRP1 mediates folate transport and antifolate sensitivity in Plasmodium falciparum. 2016 , 590, 482-92 Association between ALDH1L1 gene polymorphism and neural tube defects in the Chinese Han	6 49 64 72 8

371	Study of Glycine and Folic Acid Supplementation to Ameliorate Transfusion Dependence in Congenital SLC25A38 Mutated Sideroblastic Anemia. 2016 , 63, 1307-9	14
370	Give it or take it: the flux of one-carbon in cancer cells. 2016 , 283, 3695-3704	29
369	The Emerging Hallmarks of Cancer Metabolism. 2016 , 23, 27-47	2517
368	Serine Metabolism Supports the Methionine Cycle and DNA/RNA Methylation through De Novo ATP Synthesis in Cancer Cells. 2016 , 61, 210-21	232
367	Chasing One-Carbon Units to Understand the Role of Serine in Epigenetics. 2016 , 61, 185-6	20
366	Prospective Associations of Systemic and Urinary Choline Metabolites with Incident Type 2 Diabetes. 2016 , 62, 755-65	52
365	Malic enzyme tracers reveal hypoxia-induced switch in adipocyte NADPH pathway usage. 2016 , 12, 345-52	76
364	Effect of Omega-3 and Vitamins E + C Supplements on the Concentration of Serum B-Vitamins and Plasma Redox Aminothiol Antioxidant Status in Elderly Men after Strength Training for Three Months. 2016 , 68, 145-55	3
363	A mathematical model of microbial folate biosynthesis and utilisation: implications for antifolate development. 2016 , 12, 923-33	12
362	MTHFD1 regulates nuclear de novo thymidylate biosynthesis and genome stability. 2016 , 126, 27-30	19
361	Identification of a small molecule inhibitor of 3-phosphoglycerate dehydrogenase to target serine biosynthesis in cancers. 2016 , 113, 1778-83	166
360	Mitochondrial DNA Replication Defects Disturb Cellular dNTP Pools and Remodel One-Carbon Metabolism. 2016 , 23, 635-48	160
359	The metabolic basis for developmental disorders due to defective folate transport. 2016 , 126, 31-42	58
358	Transcriptomic and metabolic analyses reveal salvage pathways in creatine-deficient AGAT(-/-) mice. 2016 , 48, 2025-39	10
357	Folate deficiency facilitates recruitment of upstream binding factor to hot spots of DNA double-strand breaks of rRNA genes and promotes its transcription. 2017 , 45, 2472-2489	12
356	High dietary folate in pregnant mice leads to pseudo-MTHFR deficiency and altered methyl metabolism, with embryonic growth delay and short-term memory impairment in offspring. 2017 , 26, 888-900	37
355	dATF4 regulation of mitochondrial folate-mediated one-carbon metabolism is neuroprotective. 2017 , 24, 638-648	33
354	Metabolic Reprogramming by Folate Restriction Leads to a Less Aggressive Cancer Phenotype. 2017 , 15, 189-200	28

353	Arsenic trioxide targets MTHFD1 and SUMO-dependent nuclear de novo thymidylate biosynthesis. 2017 , 114, E2319-E2326		25
352	Folate nutrition and blood-brain barrier dysfunction. 2017 , 44, 146-152		24
351	SLC25 Family Member Genetic Interactions Identify a Role for in Yeast Electron Transport Chain Stability. 2017 , 7, 1861-1873		3
350	Role of folate in nonalcoholic fatty liver disease. 2017 , 95, 1141-1148		34
349	One-carbon metabolism in cancer. 2017 , 116, 1499-1504		184
348	Fluorescent probes for imaging formaldehyde in biological systems. 2017 , 39, 17-23		71
347	Genetic Risk Factors for Folate-Responsive Neural Tube Defects. <i>Annual Review of Nutrition</i> , 2017 , 37, 269-291	9	27
346	Serine and Functional Metabolites in Cancer. 2017 , 27, 645-657		76
345	Disturbances in Folate Metabolism and Their Impact on Development. 2017, 209-238		
344	Development of a General Aza-Cope Reaction Trigger Applied to Fluorescence Imaging of Formaldehyde in Living Cells. 2017 , 139, 5338-5350		95
343	Hypoxia-inducible factors: coupling glucose metabolism and redox regulation with induction of the breast cancer stem cell phenotype. 2017 , 36, 252-259		188
342	Maternal Nutrition and Cognition. 2017 , 29-42		
341	Human SHMT inhibitors reveal defective glycine import as a targetable metabolic vulnerability of diffuse large B-cell lymphoma. 2017 , 114, 11404-11409		108
340	MAIMS: a software tool for sensitive metabolic tracer analysis through the deconvolution of 13C mass isotopologue profiles of large composite metabolites. 2017 , 13, 1		7
339	Regulation of Reduced Folate Carrier (RFC) by Vitamin D Receptor at the Blood-Brain Barrier. 2017 , 14, 3848-3858		25
338	Human and Plasmodium serine hydroxymethyltransferases differ in rate-limiting steps and pH-dependent substrate inhibition behavior. 2017 , 630, 91-100		10
337	Mammals divert endogenous genotoxic formaldehyde into one-carbon metabolism. 2017 , 548, 549-554		158
336	Partitioning of One-Carbon Units in Folate and Methionine Metabolism Is Essential for Neural Tube Closure. 2017 , 21, 1795-1808		45

335	Vascular endothelial growth factor signaling requires glycine to promote angiogenesis. 2017, 7, 14749	24
334	Role of glutathione in the regulation of epigenetic mechanisms in disease. 2017 , 112, 36-48	61
333	Use of l-Arginine and Glycine Supplementation to Reduce Radiotherapy Damage. 2017 , 543-552	
332	Inflammation, vitamin B6 and related pathways. 2017 , 53, 10-27	151
331	The proton-coupled folate transporter (PCFT-SLC46A1) and the syndrome of systemic and cerebral folate deficiency of infancy: Hereditary folate malabsorption. 2017 , 53, 57-72	40
330	Targeting nuclear thymidylate biosynthesis. 2017 , 53, 48-56	24
329	One-Carbon Metabolism in Health and Disease. 2017 , 25, 27-42	722
328	Metabolic Profiling in Association with Vascular Endothelial Cell Dysfunction Following Non-Toxic Cadmium Exposure. 2017 , 18,	6
327	Nutrients in Energy and One-Carbon Metabolism: Learning from Metformin Users. 2017, 9,	21
326	Pyridoxine (Vitamin B¶and the Glutathione Peroxidase System; a Link between One-Carbon Metabolism and Antioxidation. 2017 , 9,	48
325	Escaping Death: Mitochondrial Redox Homeostasis in Cancer Cells. 2017 , 7, 117	62
324	Human mitochondrial MTHFD2 is a dual redox cofactor-specific methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate cyclohydrolase. 2017 , 5, 11	34
323	Folate cycle enzyme MTHFD1L confers metabolic advantages in hepatocellular carcinoma. 2017 , 127, 1856-1872	64
322	Deletion of the neural tube defect-associated gene disrupts one-carbon and central energy metabolism in mouse embryos. 2018 , 293, 5821-5833	15
321	Development and clinical application of a LC-MS/MS method for simultaneous determination of one-carbon related amino acid metabolites in NTD tissues. 2018 , 10, 1315-1324	3
320	Formate rescues neural tube defects caused by mutations in. 2018 , 115, 4690-4695	30
319	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. 2018 , 57, 7508-7512	103
318	Alterations on Cellular Redox States upon Infection and Implications for Host Cell Homeostasis. 2018 , 109, 197-220	4

317	Increased formate overflow is a hallmark of oxidative cancer. 2018 , 9, 1368	47
316	Bridging the Gap between tRNA Modifications and the Respiratory Chain. 2018 , 57, 2565-2566	О
315	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. 2018 , 130, 7630-7634	41
314	Transcriptional alterations in skin fibroblasts from Parkinson's disease patients with parkin mutations. 2018 , 65, 206-216	9
313	Mitochondrial translation requires folate-dependent tRNA methylation. 2018, 554, 128-132	119
312	Effect of supplementation with methyl-donor nutrients on neurodevelopment and cognition: considerations for future research. 2018 , 76, 497-511	12
311	Serine Availability Influences Mitochondrial Dynamics and Function through Lipid Metabolism. 2018 , 22, 3507-3520	100
310	Lifestyle, metabolite, and genetic determinants of formate concentrations in a cross-sectional study in young, healthy adults. 2018 , 107, 345-354	3
309	The role of mitochondrial folate enzyme MTHFD1L in esophageal squamous cell carcinoma. 2018 , 53, 533-540	15
308	Downregulation of glycine decarboxylase enhanced cofilin-mediated migration in hepatocellular carcinoma cells. 2018 , 120, 1-12	21
307	Serum folic acid levels are associated with the presence and severity of liver steatosis in Chinese adults. 2018 , 37, 1752-1758	19
306	Reverse engineering the cancer metabolic network using flux analysis to understand drivers of human disease. 2018 , 45, 95-108	27
305	Endothelial Cell Metabolism in Health and Disease. 2018 , 28, 224-236	121
304	Relationship between Malignant Brain Tumors and Values of Homocysteine, Folic Acid and Vitamin B12. 2018 ,	
303	Neural Tube Defects. 2018 , 13-28	1
302	Association between one-carbon metabolism indices and DNA methylation status in maternal and cord blood. 2018 , 8, 16873	13
301	Mitochondrial Metabolism in Major Neurological Diseases. 2018 , 7,	28
300	Mitochondrial One-Carbon Pathway Supports Cytosolic Folate Integrity in Cancer Cells. 2018 , 175, 1546-1560	.e ქ :7

299	SFXN1 is a mitochondrial serine transporter required for one-carbon metabolism. 2018, 362,	90
298	The mitochondrial inner membrane protein MPV17 prevents uracil accumulation in mitochondrial DNA. 2018 , 293, 20285-20294	18
297	Plasma metabolite profiles in healthy women differ after intervention with supplemental folic acid folate-rich foods. 2018 , 7, e32	4
296	BODIPY-Substituted Hydrazine as a Fluorescent Probe for Rapid and Sensitive Detection of Formaldehyde in Aqueous Solutions and in Live Cells. 2018 , 3, 18189-18195	23
295	Microtubule-directed transport of purine metabolons drives their cytosolic transit to mitochondria. 2018 , 115, 13009-13014	25
294	Alcohol and Cancer. 2018,	
293	Human Endogenous Formaldehyde as an Anticancer Metabolite: Its Oxidation Downregulation May Be a Means of Improving Therapy. 2018 , 40, e1800136	13
292	ALDH1L1 and ALDH1L2 Folate Regulatory Enzymes in Cancer. 2018 , 1032, 127-143	25
291	Aggregation-Induced Emission-Based Fluorescence Probe for Fast and Sensitive Imaging of Formaldehyde in Living Cells. 2018 , 3, 14417-14422	14
290	Folic acid and primary prevention of neural tube defects: A review. 2018 , 80, 73-84	42
289	Folate receptor-targeted F MR molecular imaging and proliferation evaluation of lung cancer. 2018 , 48, 1617-1625	4
288	Nrf2-Mediated Metabolic Reprogramming in Cancer. 2018 , 2018, 9304091	28
287	The multifaceted contributions of mitochondria to cellular metabolism. 2018 , 20, 745-754	441
286	Usefulness of Higher Levels of Cardiac Troponin T in Patients With Stable Angina Pectoris to Predict Risk of Acute Myocardial Infarction. 2018 , 122, 1142-1147	10
285	Formaldehyde metabolism and its impact on human health. 2018, 9, 28-34	53
284	Increased plasma trimethylamine-N-oxide is associated with incident atrial fibrillation. 2018 , 267, 100-106	38
283	Nonketotic hyperglycinemia: Clinical range and outcome of a rare neurometabolic disease in a single-center. 2018 , 40, 865-875	6
282	Beyond the Warburg Effect: How Do Cancer Cells Regulate One-Carbon Metabolism?. 2018 , 6, 90	48

281	Formation of folates by microorganisms: towards the biotechnological production of this vitamin. 2018 , 102, 8613-8620		15
2 80	Megaloblastic Anemias. 2018 , 514-545.e7		1
279	One-Carbon Metabolism: Biological Players in Epithelial Ovarian Cancer. 2018 , 19,		15
278	Metabolic Alterations in Cancer Cells and the Emerging Role of Oncometabolites as Drivers of Neoplastic Change. 2018 , 7,		20
277	CHIP E3 ligase mediates proteasomal degradation of the proliferation regulatory protein ALDH1L1 during the transition of NIH3T3 fibroblasts from G0/G1 to S-phase. 2018 , 13, e0199699		11
276	Metabolomic profiling of human lung tumor tissues - nucleotide metabolism as a candidate for therapeutic interventions and biomarkers. 2018 , 12, 1778-1796		22
275	Nuclear Folate Metabolism. <i>Annual Review of Nutrition</i> , 2018 , 38, 219-243	9.9	27
274	Oxidized phospholipids regulate amino acid metabolism through MTHFD2 to facilitate nucleotide release in endothelial cells. 2018 , 9, 2292		26
273	Cell cycle regulation of folate-mediated one-carbon metabolism. 2018 , 10, e1426		34
272	Simultaneous measurement of folate cycle intermediates in different biological matrices using liquid chromatography-tandem mass spectrometry. 2018 , 1092, 168-178		15
271	The impact of common genetic variants in the mitochondrial glycine cleavage system on relevant metabolites. 2018 , 16, 20-22		2
270	Mitochondrial MTHFD isozymes display distinct expression, regulation, and association with cancer. 2019 , 716, 144032		8
269	Expression and Role of Methylenetetrahydrofolate Dehydrogenase 1 Like (MTHFD1L) in Bladder Cancer. 2019 , 12, 1416-1424		7
268	One-Carbon Metabolism Supports S-Adenosylmethionine and Histone Methylation to Drive Inflammatory Macrophages. 2019 , 75, 1147-1160.e5		84
267	Glycine decarboxylase is a transcriptional target of MYCN required for neuroblastoma cell proliferation and tumorigenicity. 2019 , 38, 7504-7520		6
266	Novel Pyrrolo[3,2-]pyrimidine Compounds Target Mitochondrial and Cytosolic One-carbon Metabolism with Broad-spectrum Antitumor Efficacy. 2019 , 18, 1787-1799		17
265	Spermatozoal mRNAs expression implicated in embryonic development were influenced by dietary folate supplementation of breeder roosters by altering spermatozoal piRNA expression profiles. 2019 , 138, 102-110		2
264	Serine and one-carbon metabolism, a bridge that links mTOR signaling and DNA methylation in cancer. 2019 , 149, 104352		17

263	MTHFD2 links RNA methylation to metabolic reprogramming in renal cell carcinoma. 2019 , 38, 6211-6225	45
262	synthesis of serine and glycine fuels purine nucleotide biosynthesis in human lung cancer tissues. 2019 , 294, 13464-13477	32
261	Deleterious mutations in suggest a novel cause for neuro-ichthyotic syndrome. 2019 , 4, 17	8
260	Formate concentrations in maternal plasma during pregnancy and in cord blood in a cohort of pregnant Canadian women: relations to genetic polymorphisms and plasma metabolites. 2019 , 110, 1131-113	7 ⁵
259	Cell Metabolism in Cancer: An Energetic Switch. 2019 , 97-116	
258	Cytosolic 10-formyltetrahydrofolate dehydrogenase regulates glycine metabolism in mouse liver. 2019 , 9, 14937	7
257	Combinatorial targeting of MTHFD2 and PAICS in purine synthesis as a novel therapeutic strategy. 2019 , 10, 786	7
256	Deletion of neural tube defect-associated gene Mthfd1l causes reduced cranial mesenchyme density. 2019 , 111, 1520-1534	3
255	Potassium and Sodium Channels and the Warburg Effect: Biophysical Regulation of Cancer Metabolism. 2019 , 1, 188-200	6
254	The effect of MTHFD2 on the proliferation and migration of colorectal cancer cell lines. 2019 , 12, 6361-6370	15
253	Upregulation of reduced folate carrier by vitamin D enhances brain folate uptake in mice lacking folate receptor alpha. 2019 , 116, 17531-17540	15
252	Elimination of human folypolyglutamate synthetase alters programming and plasticity of somatic cells. 2019 , 33, 13747-13761	3
251	Vitamin B , folate, and the methionine remethylation cycle-biochemistry, pathways, and regulation. 2019 , 42, 673-685	88
250	Glycine Exhibits Neuroprotective Effects in Ischemic Stroke in Rats through the Inhibition of M1 Microglial Polarization via the NF -B p65/Hif-1 ignaling Pathway. 2019 , 202, 1704-1714	34
249	Metabolic Regulation of the Epitranscriptome. 2019 , 14, 316-324	11
248	MicroRNA-33a-5p suppresses colorectal cancer cell growth by inhibiting MTHFD2. 2019 , 46, 928-936	18
247	Folate pathway genes linked to mitochondrial biogenesis and respiration are associated with outcome of patients with stage III colorectal cancer. 2019 , 41, 1010428319846231	2
246	Molecular and Cell Biology of Cancer. 2019 ,	1

245	Development of methionine methylation profiling and relative quantification in human breast cancer cells based on metabolic stable isotope labeling. 2019 , 144, 3988-3998	2
244	D-Serine made by serine racemase in Drosophila intestine plays a physiological role in sleep. 2019 , 10, 1986	23
243	Mito-Nuclear Communication by Mitochondrial Metabolites and Its Regulation by B-Vitamins. 2019 , 10, 78	20
242	Folic acid deficiency and vision: a review. 2019 , 257, 1573-1580	18
241	NADPH production by the oxidative pentose-phosphate pathway supports folate metabolism. 2019 , 1, 404-415	92
240	Regulation of folate and methionine metabolism by multisite phosphorylation of human methylenetetrahydrofolate reductase. 2019 , 9, 4190	11
239	Glycine promotes longevity in Caenorhabditis elegans in a methionine cycle-dependent fashion. 2019 , 15, e1007633	21
238	Lysosome-targeted carbon dots for ratiometric imaging of formaldehyde in living cells. 2019 , 11, 8458-8463	73
237	Loss of ALDH1L1 folate enzyme confers a selective metabolic advantage for tumor progression. 2019 , 302, 149-155	16
236	Glycine Protects against Hypoxic-Ischemic Brain Injury by Regulating Mitochondria-Mediated Autophagy via the AMPK Pathway. 2019 , 2019, 4248529	20
235	Metabolic Pathways Fueling the Endothelial Cell Drive. 2019 , 81, 483-503	43
234	Glycine decarboxylase induces autophagy and is downregulated by miRNA-30d-5p in hepatocellular carcinoma. 2019 , 10, 192	19
233	Glycine decarboxylase regulates the maintenance and induction of pluripotency via metabolic control. 2019 , 53, 35-47	13
232	Cellular mechanisms underlying related neural tube defects and their prevention by folic acid. 2019 , 12,	11
231	The Role of Single-Nucleotide Polymorphisms in the Function of Candidate Tumor Suppressor ALDH1L1. 2019 , 10, 1013	5
230	Systems and Synthetic Biotechnology for Production of Nutraceuticals. 2019 ,	2
229	Significant alteration of liver metabolites by AAV8.Urocortin 2 gene transfer in mice with insulin resistance. 2019 , 14, e0224428	3
228	MTHFD1L-Mediated Redox Homeostasis Promotes Tumor Progression in Tongue Squamous Cell Carcinoma. 2019 , 9, 1278	6

227	Formaldehyde quantification using ampicillin is not selective. 2019 , 9, 18289	3
226	MTHFD1 promoter hypermethylation increases the risk of hypertension. 2019 , 41, 422-427	8
225	Targeting Cancer Stem Cell Redox Metabolism to Enhance Therapy Responses. 2019 , 29, 42-54	30
224	Toward a better understanding of folate metabolism in health and disease. 2019 , 216, 253-266	44
223	Cancer stem-like properties and gefitinib resistance are dependent on purine synthetic metabolism mediated by the mitochondrial enzyme MTHFD2. 2019 , 38, 2464-2481	36
222	Folate and Vitamins B6 and B12. 2020 , 295-302	O
221	Red carbon dots as label-free two-photon fluorescent nanoprobes for imaging of formaldehyde in living cells and zebrafishes. 2020 , 31, 759-763	16
220	Formate metabolism in health and disease. 2020 , 33, 23-37	46
219	The complexity of the serine glycine one-carbon pathway in cancer. 2020 , 219,	30
218	Alcohol dehydrogenase 5 of Helicoverpa armigera interacts with the CYP6B6 promoter in response to 2-tridecanone. 2020 , 27, 1053-1066	3
217	Nutrigenomic aspects of dietary pyridoxine (vitamin B6) and selenium interaction and their implications in reproduction. 2020 , 131-151	2
216	Nonalcoholic fatty liver disease and use of folate. 2020 , 323-343	1
215	A benzothiazole-based ratiometric fluorescent probe for detection of formaldehyde and its applications for bioimaging. 2020 , 229, 117988	18
214	Distinct RNA demethylation pathways catalyzed by nonheme iron ALKBH5 and FTO enzymes enable regulation of formaldehyde release rates. 2020 , 117, 25284-25292	13
213	Formaldehyde inhibits development of T lymphocytes in mice. 2020 , 102, 473-489	2
212	Nuclear metabolism and the regulation of the epigenome. 2020 , 2, 1190-1203	26
211	The Roles of Mitochondrial Folate Metabolism in Supporting Mitochondrial DNA Synthesis, Oxidative Phosphorylation, and Cellular Function. 2020 , 4, nzaa153	8
21 0	Tracing Metabolic Fate of Mitochondrial Glycine Cleavage System Derived Formate In Vitro and In Vivo. 2020 , 21,	4

(2020-2020)

209	MTHFD2 Blockade Enhances the Efficacy of Lapachone Chemotherapy With Ionizing Radiation in Head and Neck Squamous Cell Cancer. 2020 , 10, 536377	3
208	Aldh1l2 knockout mouse metabolomics links the loss of the mitochondrial folate enzyme to deregulation of a lipid metabolism observed in rare human disorder. 2020 , 14, 41	1
207	The RNA-binding protein SERBP1 functions as a novel oncogenic factor in glioblastoma by bridging cancer metabolism and epigenetic regulation. 2020 , 21, 195	23
206	Mthfd2 Modulates Mitochondrial Function and DNA Repair to Maintain the Pluripotency of Mouse Stem Cells. 2020 , 15, 529-545	14
205	Comprehensive Vitamer Profiling of Folate Mono- and Polyglutamates in Baker's Yeast () as a Function of Different Sample Preparation Procedures. 2020 , 10,	1
204	Folate. 2020 , 239-255	1
203	Atherosclerosis Linked to Aberrant Amino Acid Metabolism and Immunosuppressive Amino Acid Catabolizing Enzymes. 2020 , 11, 551758	11
202	Therapeutic Targeting of Mitochondrial One-Carbon Metabolism in Cancer. 2020 , 19, 2245-2255	14
201	Metabolic Potential of Cancer Cells in Context of the Metastatic Cascade. 2020 , 9,	6
200	Nuclear respiratory factor 1 (NRF-1) upregulates the expression and function of reduced folate carrier (RFC) at the blood-brain barrier. 2020 , 34, 10516-10530	7
199	Impact of Formate Supplementation on Body Weight and Plasma Amino Acids. 2020, 12,	О
198	Systemic vitamin intake impacting tissue proteomes. 2020 , 17, 73	1
197	Clinical characterization and hematopoietic stem cell transplant outcomes for congenital sideroblastic anemia caused by a novel pathogenic variant in SLC25A38. 2020 , 67, e28623	2
196	Genetic Variants in One-Carbon Metabolism Pathway Predict Survival Outcomes of Early-Stage Non-Small Cell Lung Cancer. 2020 , 98, 897-904	O
195	Mapping choline metabolites in normal and transformed cells. 2020 , 16, 125	O
194	Metabolomics analysis of plasma and adipose tissue samples from mice orally administered with polydextrose and correlations with cecal microbiota. 2020 , 10, 21577	2
193	Folate and macrophage folate receptor-In idiopathic pulmonary fibrosis disease: the potential therapeutic target?. 2020 , 131, 110711	4
192	High expression of folate cycle enzyme MTHFD1L correlates with poor prognosis and increased proliferation and migration in colorectal cancer. 2020 , 11, 4213-4221	7

191	Formate induces a metabolic switch in nucleotide and energy metabolism. 2020, 11, 310	11
190	More Than a Metabolic Enzyme: MTHFD2 as a Novel Target for Anticancer Therapy?. 2020 , 10, 658	22
189	Effects of folic acid withdrawal on transcriptomic profiles in murine triple-negative breast cancer cell lines. 2020 , 173, 114-122	5
188	Approaches to studying the genomic architecture of complex birth defects. 2020 , 40, 1047-1055	2
187	Disruption of hepatic one-carbon metabolism impairs mitochondrial function and enhances macrophage activity in methionine-choline-deficient mice. 2020 , 81, 108381	1
186	Genetics and epigenetics purpose in nonalcoholic fatty liver disease. 2020 , 14, 733-748	O
185	Metabolic Modulation of Macrophage Function Post Myocardial Infarction. 2020, 11, 674	4
184	Interactions between metabolism and chromatin in plant models. 2020, 38, 100951	27
183	One-Carbon Metabolism in Fatty Liver Disease and Fibrosis: One-Carbon to Rule Them All. 2020 , 150, 994-1003	11
182	One-carbon metabolism and folate transporter genes: Do they factor prominently in the genetic etiology of neural tube defects?. 2020 , 173, 27-32	13
181	Systemic Cardiac Troponin T Associated With Incident Atrial Fibrillation Among Patients With Suspected Stable Angina Pectoris. 2020 , 127, 30-35	
180	Glutathione Restricts Serine Metabolism to Preserve Regulatory T Cell Function. 2020 , 31, 920-936.e7	43
179	Cellular Pharmacodynamics of a Novel Pyrrolo[3,2-]pyrimidine Inhibitor Targeting Mitochondrial and Cytosolic One-Carbon Metabolism. 2020 , 97, 9-22	8
178	Shedding New Light on Cancer Metabolism: A Metabolic Tightrope Between Life and Death. 2020 , 10, 409	15
177	Folate pathways mediating the effects of ethanol in tumorigenesis. 2020, 324, 109091	5
176	Metabolomics and mass spectrometry imaging reveal channeled de novo purine synthesis in cells. 2020 , 368, 283-290	90
175	SHMT inhibition is effective and synergizes with methotrexate in T-cell acute lymphoblastic leukemia. 2021 , 35, 377-388	26
174	An apicoplast-resident folate transporter is essential for sporogony of malaria parasites. 2021 , 23, e13266	2

173	Human de novo purine biosynthesis. 2021 , 56, 1-16	11
172	Endothelial cell senescence: A machine learning-based meta-analysis of transcriptomic studies. 2021 , 65, 101213	3
171	One Carbon Metabolism and Mammalian Pregnancy Outcomes. 2021 , 65, e2000734	6
170	Folate-mediated one-carbon metabolism: a targeting strategy in cancer therapy. 2021 , 26, 817-825	10
169	Tumor Reliance on Cytosolic versus Mitochondrial One-Carbon Flux Depends on Folate Availability. 2021 , 33, 190-198.e6	10
168	Modelling of SHMT1 riboregulation predicts dynamic changes of serine and glycine levels across cellular compartments. 2021 , 19, 3034-3041	1
167	Folinate Supplementation Ameliorates Methotrexate Induced Mitochondrial Formate Depletion In Vitro and In Vivo. 2021 , 22,	1
166	Metabolism of Amino Acids in Cancer. 2020 , 8, 603837	36
165	Genome and population evolution and environmental adaptation of on the Qinghai-Tibet Plateau. 2021 , 42, 502-513	0
164	Metabolic control of cancer progression as novel targets for therapy. 2021 , 152, 103-177	1
163	One-carbon metabolism in cancer cells: a critical review based on a core model of central metabolism. 2021 , 49, 1-15	3
162	Folic acid ameliorates palmitate-induced inflammation through decreasing homocysteine and inhibiting NF-B pathway in HepG2 cells. 2021 , 1-8	4
161	Hypermethylation of PI3K-AKT signalling pathway genes is associated with human neural tube defects. 2021 , 1-14	2
160	Role of mitochondria in liver metabolic health and diseases. 2021 , 94, 102336	13
159	Folate metabolism: a re-emerging therapeutic target in haematological cancers. 2021 , 35, 1539-1551	4
158	The folate cycle enzyme MTHFD2 induces cancer immune evasion through PD-L1 up-regulation. 2021 , 12, 1940	7
157	Folate transporter dynamics and therapy with classic and tumor-targeted antifolates. 2021 , 11, 6389	3
156	3-Phosphoglycerate dehydrogenase: a potential target for cancer treatment. 2021 , 44, 541-556	2

155 Metabolic adaptation to progressive mitochondrial dysfunction in aging POLGD257A mice.

154	The effects of flavonoids, green tea polyphenols and coffee on DMBA induced LINE-1 DNA hypomethylation. 2021 , 16, e0250157	1
153	Vitamins and non-alcoholic fatty liver disease: A Molecular Insight. 2021 , 5, 62-71	11
152	The toxic side of one-carbon metabolism and epigenetics. 2021 , 40, 101850	8
151	Reduced Shmt2 expression impairs mitochondrial folate accumulation and respiration, and leads to uracil accumulation in mouse mitochondrial DNA.	
150	Folylpoly-?-glutamate synthetase association to the cytoskeleton: Implications to folate metabolon compartmentalization. 2021 , 239, 104169	O
149	A narrative review on the role of folate-mediated one-carbon metabolism and its associated gene polymorphisms in posing risk to preeclampsia. 2021 , 43, 487-504	1
148	The role of energy, serine, glycine, and 1-carbon units in the cost of nitrogen excretion in mammals and birds. 2021 , 15, 100213	O
147	The cellular function and molecular mechanism of formaldehyde in cardiovascular disease and heart development. 2021 , 25, 5358-5371	11
146	Mitochondrial One-Carbon Flux has a Growth-Independent Role in Promoting Breast Cancer Metastasis.	O
145	One-Carbon Metabolism Associated Vulnerabilities in Glioblastoma: A Review. 2021 , 13,	1
144	Knockout of Putative Tumor Suppressor Aldh1l1 in Mice Reprograms Metabolism to Accelerate Growth of Tumors in a Diethylnitrosamine (DEN) Model of Liver Carcinogenesis. 2021 , 13,	2
143	One carbon metabolism in human lung cancer. 2021 , 10, 2523-2538	2
142	Stress-Mediated Reprogramming of Prostate Cancer One-Carbon Cycle Drives Disease Progression. 2021 , 81, 4066-4078	3
141	Complementary Nuclear Magnetic Resonance-Based Metabolomics Approaches for Glioma Biomarker Identification in a Model. 2021 , 20, 3977-3991	2
140	mTORC1 activity regulates post-translational modifications of glycine decarboxylase to modulate glycine metabolism and tumorigenesis. 2021 , 12, 4227	2
139	Metformin Is a Pyridoxal-5'-phosphate (PLP)-Competitive Inhibitor of SHMT2. 2021 , 13,	3
138	Expression and Prognostic Value Identification of Methylenetetrahydrofolate Dehydrogenase 2 (MTHFD2) in Brain Low-Grade Glioma. 2021 , 14, 4517-4527	O

(2020-2021)

137	MTHFR Knockdown Assists Cell Defense against Folate Depletion Induced Chromosome Segregation and Uracil Misincorporation in DNA. 2021 , 22,	1
136	Role of Mitochondria in Neurodegenerative Diseases: From an Epigenetic Perspective. 2021 , 9, 688789	2
135	Xanthine Derivatives Reveal an Allosteric Binding Site in Methylenetetrahydrofolate Dehydrogenase 2 (MTHFD2). 2021 , 64, 11288-11301	1
134	Reduced Shmt2 Expression Impairs Mitochondrial Folate Accumulation and Respiration, and Leads to Uracil Accumulation in Mouse Mitochondrial DNA. 2021 , 151, 2882-2893	О
133	Mitochondria in Neuronal Health: From Energy Metabolism to Parkinson's Disease. 2021 , 5, e2100663	7
132	Serum metabolites of hypertension among Chinese adolescents aged 12-17 years. 2021 ,	O
131	Oncogenic Ras expression increases cellular formate production. 2021 , 53, 1589-1595	О
130	Transcriptome Analysis of Effects of Folic Acid Supplement on Gene Expression in Liver of Broiler Chickens. 2021 , 8, 686609	O
129	Association of Methylenetetrahydrofolate Reductase C677T Gene Polymorphisms with Mild Cognitive Impairment Susceptibility: A Systematic Review and Meta-Analysis. 2021 , 2021, 2962792	
128	Interkingdom Comparison of Threonine Metabolism for Stem Cell Maintenance in Plants and Animals. 2021 , 9, 672545	1
127	Mitochondrial dysfunction in kidney diseases. 2021 , 119-154	
126	The Metabolic Mechanisms of Breast Cancer Metastasis. 2020 , 10, 602416	19
125	The ins and outs of serine and glycine metabolism in cancer. 2021 , 3, 131-141	8
124	Neural Tube Defects. 1-12	1
123	Deuterium Tracing to Interrogate Compartment-Specific NAD(P)H Metabolism in Cultured Mammalian Cells. 2020 , 2088, 51-71	2
122	Microbial Production of Vitamins. 2019 , 159-187	3
121	Mouse Models of Neural Tube Defects. 2020 , 1236, 39-64	2
120	Reprogramming of serine, glycine and one-carbon metabolism in cancer. 2020 , 1866, 165841	13

119	Folate metabolic pathways in Leishmania. 2011 , 51, 63-80	70
118	Disrupting folate metabolism reduces the capacity of bacteria in exponential growth to develop persisters to antibiotics. 2018 , 164, 1432-1445	6
117	Polymorphisms in MTHFD1 Gene and Susceptibility to Neural Tube Defects: A Case-Control Study in a Chinese Han Population with Relatively Low Folate Levels. 2015 , 21, 2630-7	5
116	High Expression of Serine Hydroxymethyltransferase 2 Indicates Poor Prognosis of Gastric Cancer Patients. 2019 , 25, 7430-7438	9
115	Glycine and Folate Ameliorate Models of Congenital Sideroblastic Anemia. 2016 , 12, e1005783	42
114	A novel tumor suppressor function of glycine N-methyltransferase is independent of its catalytic activity but requires nuclear localization. 2013 , 8, e70062	30
113	Rare de novo copy number variants in patients with congenital pulmonary atresia. 2014 , 9, e96471	16
112	Cardiac metabolic pathways affected in the mouse model of barth syndrome. 2015 , 10, e0128561	42
111	Modulating redox homeostasis and cellular reprogramming through inhibited methylenetetrahydrofolate dehydrogenase 2 enzymatic activities in lung cancer. 2020 , 12, 17930-17947	2
110	DJ1 at the interface between neuro-degeneration and cancer. 2017 , 8, 9015-9016	1
109	A pyrazolopyran derivative preferentially inhibits the activity of human cytosolic serine hydroxymethyltransferase and induces cell death in lung cancer cells. 2016 , 7, 4570-83	32
108	Serine catabolism is essential to maintain mitochondrial respiration in mammalian cells. 2018 , 1, e201800036	31
107	Mitochondrial dysfunction remodels one-carbon metabolism in human cells. 2016 , 5,	237
106	Progressive alterations in amino acid and lipid metabolism correlate with peripheral neuropathy in mice. 2021 , 7, eabj4077	1
105	The effects of vitamins and dietary pattern on epigenetic modification of non-communicable diseases. 2021 ,	
104	Bayesian Inference for Integrating Multiomics Datasets with Metabolic Modeling. 2021 , 10, 2968-2981	1
103	Folate deficiency facilitates coordination of KDM6A with p53 in response to DNA damage.	
102	Formate induces a metabolic switch in nucleotide and energy metabolism.	

101 Potato Vitamins. **2020**, 113-132

100	Impact of formate supplementation on body weight and plasma amino acids.	
99	Active mitochondrial respiration in cancer: a target for the drug. 2021 , 1	5
98	A novel oral inhibitor for one-carbon metabolism and checkpoint kinase 1 inhibitor as a rational combination treatment for breast cancer. 2021 , 584, 7-14	O
97	Modelling of SHMT1 riboregulation predicts dynamic changes of serine and glycine levels across cellular compartments.	
96	Nutritional Significance of Processed Potato Products. 2020 , 247-270	1
95	Oxygen dependent mitochondrial formate production and the reverse Pasteur effect.	1
94	Methionine synthase supports tumor tetrahydrofolate pools.	
93	An updated mode of action and human relevance framework evaluation for Formaldehyde-Related nasal tumors. 2020 , 50, 919-952	3
92	MicroRNA-940 inhibits glioma progression by blocking mitochondrial folate metabolism through targeting of MTHFD2. 2019 , 9, 250-269	18
91	NADPH production by the oxidative pentose-phosphate pathway supports folate metabolism. 2019 , 1, 404-415	63
90	Supplemental folic acid and/or multivitamins in pregnancy is associated with a decreased risk of childhood and adolescent nasopharyngeal carcinoma. 2021 , 1-6	
89	Methionine synthase supports tumour tetrahydrofolate pools. 2021 , 3, 1512-1520	2
88	Methylene tetrahydrofolate dehydrogenase 2 (MTHFD2) is overexpressed in head and neck squamous cell carcinoma (HNSCC) and correlated with patient poor prognosis. 2021 , 32, 98-105	
87	Effect of preconception pictured-based health education and counseling on adherence to iron-folic acid supplementation to improve maternal pregnancy and birth outcome among women who plan to pregnant: "Randomized Control Trial". 2022 ,	О
86	One-Carbon Metabolism: Pulling the Strings behind Aging and Neurodegeneration 2022 , 11,	5
85	Interaction between dolutegravir and folate transporters and receptor in human and rodent placenta 2021 , 75, 103771	O
84	Reduced nicotinamide adenine dinucleotide phosphate in redox balance and diseases: a friend or foe?. 2022 ,	1

83	Magnetic Resonance/Infrared Dual-Modal Imaging-Guided Synergistic Photothermal/Photodynamic Therapy Nanoplatform Based on CuS-Gd@FA for Precision Cancer Theranostics 2022 , 615, 95-109	1
82	Ailanthone Inhibits Proliferation, Migration and Invasion of Osteosarcoma Cells by Downregulating the Serine Biosynthetic Pathway 2022 , 12, 842406	
81	Engineering the Reductive Glycine Pathway: A Promising Synthetic Metabolism Approach for C1-Assimilation 2022 , 1	O
80	Olive Oil Improves While Trans Fatty Acids Further Aggravate the Hypomethylation of LINE-1 Retrotransposon DNA in an Environmental Carcinogen Model 2022 , 14,	O
79	Ketogenic Diet Consumption Inhibited Mitochondrial One-Carbon Metabolism 2022, 23,	0
78	The Purinosome: A Case Study for a Mammalian Metabolon 2022 ,	O
77	Rewiring mitochondrial metabolism to counteract exhaustion of CAR-T cells 2022, 15, 38	0
76	Mitochondria as the Target of Hepatotoxicity and Drug-Induced Liver Injury: Molecular Mechanisms and Detection Methods 2022 , 23,	1
75	Protein methylation in mitochondria 2022 , 101791	1
74	Cerebrospinal fluid amino acids glycine, serine, and threonine in nonketotic hyperglycinemia 2022,	Ο
73	Nitrous oxide abuse in the emergency practice, and Review of toxicity mechanisms and potential markers 2022 , 162, 112894	O
72	Impairments in SHMT2 expression or cellular folate availability reduce oxidative phosphorylation and pyruvate kinase activity.	
71	Reduced mitochondria provide an essential function for the cytosolic methionine cycle.	0
70	Methyl Metabolism and the Clock: An Ancient Story With New Perspectives 2022, 7487304221083507	O
69	Earlier or delayed seasonal broodstock spawning changes nutritional status and metabolic programming of growth for next-generation Atlantic salmon. 2022 , 554, 738187	0
68	Mitochondrial-cell cycle cross-talk drives endoreplication in heart disease. 2021 , 13, eabi7964	2
67	Folate Transport and One-Carbon Metabolism in Targeted Therapies of Epithelial Ovarian Cancer 2021 , 14,	О
66	In Situ Imaging of Formaldehyde in Live Mice with High Spatiotemporal Resolution Reveals Aldehyde Dehydrogenase-2 as a Potential Target for Alzheimer's Disease Treatment 2021 ,	3

65	Changes in serum amino acid levels in non-small cell lung cancer: a case-control study in Chinese population 2022 , 10, e13272	0
64	Table_1.DOCX. 2020 ,	
63	Table_2.DOCX. 2020 ,	
62	Image_1.tif. 2019 ,	
61	Image_2.tif. 2019 ,	
60	Table_1.docx. 2019 ,	
59	Table_2.xlsx. 2019 ,	
58	The potential roles of amino acids and their major derivatives in the management of multiple sclerosis 2022 , 1	
57	Genetic variants in ALDH1L1 and GLDC influence serine to glycine ratio in Hispanic children 2022,	0
56	Physical-Exercise-Induced Antioxidant Effects on the Brain and Skeletal Muscle. 2022, 11, 826	0
55	Glycyrrhetinic acid restricts mitochondrial energy metabolism by targeting SHMT2. 2022, 104349	0
54	Alterations in cellular metabolisms after Imatinib therapy: a review 2022 , 39, 95	0
53	Metabolite Signature in the Carriers of Pathogenic Genetic Variants for Cardiomyopathy: A Population-Based METSIM Study. 2022 , 12, 437	1
52	Mitochondria preserve an autarkic one-carbon cycle to confer growth-independent cancer cell migration and metastasis 2022 , 13, 2699	2
51	Targeting the DNA damage response and repair in cancer through nucleotide metabolism 2022,	1
50	5-Methyltetrahydrofolate Attenuates Oxidative Stress and Improves Kidney Function in Acute Kidney Injury through Activation of Nrf2 and Antioxidant Defense. 2022 , 11, 1046	1
49	Sex-Specific Metabolic Effects of Dietary Folate Withdrawal in Wild-Type and Aldh1l1 Knockout Mice. 2022 , 12, 454	1
48	Nonketotic Hyperglycinaemia and Lipoate Deficiency Disorders. 2022, 459-469	О

47	The first structure of human MTHFD2L and its implications for the development of isoform-selective inhibitors.	O
46	Mitochondrial FAD shortage in SLC25A32 deficiency affects folate-mediated one-carbon metabolism. 2022 , 79,	
45	MicroRNA-21 guide and passenger strand regulation of adenylosuccinate lyase-mediated purine metabolism promotes transition to an EGFR-TKI-tolerant persister state.	1
44	Targeting mitochondrial metabolism for precision medicine in cancer. 2022 , 29, 1304-1317	5
43	Design of a New Hydrazine Moiety-Based Near-Infrared Fluorescence Probe for Detection and Imaging of Endogenous Formaldehyde In Vivo.	1
42	Targeted Proteomics for Monitoring One-Carbon Metabolism in Liver Diseases. 2022 , 12, 779	
41	Progress in the Study of Optical Probes for the Detection of Formaldehyde. 1-27	О
40	A parallel glycolysis supports rapid adaptation in dynamic environments.	
39	MYCN and Metabolic Reprogramming in Neuroblastoma. 2022 , 14, 4113	О
38	MicroRNA-mediated reprogramming of glucose, fatty acid and amino acid metabolism in cancer.	
37	The Effect of Metabolites on Mitochondrial Functions in the Pathogenesis of Skeletal Muscle Aging. Volume 17, 1275-1295	
36	Targeting purine metabolism in ovarian cancer. 2022 , 15,	1
35	Repurposing of metabolic drugs and mitochondrial modulators as an emerging class of cancer therapeutics with a special focus on breast cancer. 2022 , 6, 100065	О
34	Metabolic dysregulation in cancer progression. 2022 , 1-39	O
33	Reduced methionine synthase (Mtr) expression creates a functional vitamin B12 deficiency that leads to uracil accumulation in mouse mitochondrial DNA.	О
32	High Folate, Perturbed One-Carbon Metabolism and Gestational Diabetes Mellitus. 2022 , 14, 3930	1
31	Rational Construction of a Mitochondria-Targeted Reversible Fluorescent Probe with Intramolecular FRET for Ratiometric Monitoring Sulfur Dioxide and Formaldehyde. 2022 , 12, 715	О

29	Effects of H19/SAHH/DNMT1 on the oxidative DNA damage related to benzo[a]pyrene exposure.	Ο
28	Epigenetic Reprogramming of the Glucose Metabolic Pathways by the Chromatin Effectors During Cancer. 2022 , 269-336	O
27	Modulation of DNA/RNA Methylation Signaling Mediating Metabolic Homeostasis in Cancer. 2022 , 201-237	O
26	Cancer Metabolism. 1-14	O
25	Mitochondrion at the crossroads between nutrients and the epigenome. 2023 , 71-92	O
24	The role of B vitamins in protecting mitochondrial function. 2023 , 167-193	1
23	Molecular Mechanisms of Breast Cancer Metastasis.	O
22	Reduced mitochondria provide an essential function for the cytosolic methionine cycle. 2022,	1
21	Metabolic Reprogramming in Cancer. 2022 , 841-892	O
20	Folate inhibits lipid deposition via the autophagy pathway in chicken hepatocytes. 2023 , 102, 102363	1
19	A serine-folate metabolic unit controls resistance and tolerance of infection.	O
18	Relative contributions of endogenous and exogenous formaldehyde to formation of deoxyguanosine monoadducts and DNA-protein crosslink adducts of DNA in rat nasal mucosa.	O
17	Mitochondrial folate metabolism inhibition drives differentiation through mTORC1 mediated purine sensing.	O
16	Probing Folate-Responsive and Stage-Sensitive Metabolomics and Transcriptional Co-Expression Network Markers to Predict Prognosis of Non-Small Cell Lung Cancer Patients. 2023 , 15, 3	O
15	Eukaryotic evolution: Spatial proteomics sheds light on mitochondrial reduction. 2022, 32, R1308-R1311	O
14	One-Carbon and Polyamine Metabolism as Cancer Therapy Targets. 2022 , 12, 1902	O
13	Formaldehyde reacts with N-terminal proline residues to give bicyclic aminals. 2023, 6,	O
12	In silico drug screen reveals potential competitive MTHFR inhibitors for clinical repurposing. 1-14	O

11	A highly sensitive dehydroabietic acid-based difunctional fluorescent probe for detecting formaldehyde and Ag+. 2023 , 257, 119658	О
10	Formate Promotes Invasion and Metastasis by Activating Fatty Acid Synthesis and Matrix Metalloproteinases.	О
9	A Review of the Regulatory Mechanisms of N-Myc on Cell Cycle. 2023 , 28, 1141	0
8	NAD+-Consuming Enzymes in Stem Cell Homeostasis. 2023 , 2023, 1-11	O
7	A ratiometric fluorescent probe for fast detection and bioimaging of formaldehyde. 2023, 21, 2167-2171	0
6	The Role of Reprogrammed Glucose Metabolism in Cancer. 2023 , 13, 345	1
5	Impairments in SHMT2 expression or cellular folate availability reduce oxidative phosphorylation and pyruvate kinase activity. 2023 , 18,	0
4	Effects of sulforaphane on breast cancer based on metabolome and microbiome.	O
3	Formate overflow drives toxic folate trapping in MTHFD1 inhibited cancer cells.	0
2	Diabetic vascular diseases: molecular mechanisms and therapeutic strategies. 2023, 8,	O
1	SHMT2 Promotes Gastric Cancer Development through Regulation of HIF1 NEGF/STAT3 Signaling. 2023 , 24, 7150	0