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Serine, glycine and one-carbon units: cancer metabolism in full circle

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1104	The histone H3 methyltransferase G9A epigenetically activates the serine-glycine synthesis pathway to sustain cancer cell survival and proliferation. 2013 , 18, 896-907		151
1103	Contribution of serine, folate and glycine metabolism to the ATP, NADPH and purine requirements of cancer cells. 2013 , 4, e877		170
1102	Optical imaging of treatment-related tumor cell death using a heat shock protein-90 alkylator. 2013 , 10, 3882-91		15
1101	Metastatic Melanoma Induced Metabolic Changes in C57BL/6J Mouse Stomach Measured by 1H NMR Spectroscopy. 2014 , 04,		
1100	Impact of acetylation on tumor metabolism. 2014 , 1, e963452		11
1099	Endothelial cell metabolism: parallels and divergences with cancer cell metabolism. 2014 , 2, 19		76
1098	SHMT1 knockdown induces apoptosis in lung cancer cells by causing uracil misincorporation. 2014 , 5, e1525		61
1097	Metabolic circuits in neural stem cells. 2014 , 71, 4221-41		34
1096	Characterization of the usage of the serine metabolic network in human cancer. 2014 , 9, 1507-19		94
1095	Comparative proteomic profiling of pancreatic ductal adenocarcinoma cell lines. 2014 , 37, 888-98		29
1094	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
1093	Intravital biobank and personalized cancer therapy: the correlation with omics. 2014 , 135, 1511-6		7
1092	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		35
1091	Expression of methionine adenosyltransferase 2A in renal cell carcinomas and potential mechanism for kidney carcinogenesis. 2014 , 14, 196		12
1090	Effects of palmitate on genome-wide mRNA expression and DNA methylation patterns in human pancreatic islets. 2014 , 12, 103		96
1089	The Intercellular Metabolic Interplay between Tumor and Immune Cells. 2014 , 5, 358		57

1088	Metabostemness: a new cancer hallmark. 2014 , 4, 262	76
1087	Serine, but not glycine, supports one-carbon metabolism and proliferation of cancer cells. 2014 , 7, 1248-58	345
1086	Targeting cancer stem cells to suppress acquired chemotherapy resistance. 2014 , 33, 4451-63	187
1085	Serine deprivation enhances antineoplastic activity of biguanides. 2014 , 74, 7521-33	82
1084	Principles of targeting endothelial cell metabolism to treat angiogenesis and endothelial cell dysfunction in disease. 2014 , 6, 1105-20	123
1083	Reconstruction of a generic metabolic network model of cancer cells. 2014 , 10, 3014-21	16
1082	Arginine deprivation and autophagic cell death in cancer. 2014 , 111, 14015-6	21
1081	Mice in vivo toxicity studies for monohaloacetamides emerging disinfection byproducts based on metabolomic methods. 2014 , 48, 8212-8	46
1080	Genome-wide functional analysis reveals factors needed at the transition steps of induced reprogramming. 2014 , 8, 327-37	42
1079	Amino acids--a life between metabolism and signaling. 2014 , 229, 225-237	93
1078	Heterogeneity of glycolysis in cancers and therapeutic opportunities. 2014 , 92, 12-21	30
1077	Emerging regulatory paradigms in glutathione metabolism. 2014 , 122, 69-101	89
1076	Improving amino acid nutrition to prevent intrauterine growth restriction in mammals. 2014 , 46, 1605-23	59
1075	Unique metabolic features of stem cells, cardiomyocytes, and their progenitors. 2014 , 114, 1346-60	62
1074	Metabolic reprogramming of stromal fibroblasts through p62-mTORC1 signaling promotes inflammation and tumorigenesis. 2014 , 26, 121-135	215
1073	Polymorphism of cytosolic serine hydroxymethyltransferase and breast cancer risk: evidence from a meta-analysis. 2014 , 35, 7361-7	1
1072	Combining amine metabolomics and quantitative proteomics of cancer cells using derivatization with isobaric tags. 2014 , 86, 3585-93	26
1071	Sphingolipid homeostasis in the web of metabolic routes. 2014 , 1841, 647-56	54

1070	The metabolic alterations of cancer cells. 2014 , 542, 1-23	68
1069	Techniques to monitor glycolysis. 2014 , 542, 91-114	157
1068	Fatty acid metabolic enzyme acyl-CoA thioesterase β promotes the development of hepatocellular carcinoma. 2014 , 31, 2797-803	20
1067	miR-370 and miR-373 regulate the pathogenesis of osteoarthritis by modulating one-carbon metabolism via SHMT-2 and MECP-2, respectively. 2015 , 14, 826-37	29
1066	Identification of the differentially expressed genes associated with familial combined hyperlipidemia using bioinformatics analysis. 2015 , 11, 4032-8	6
1065	Deciphering metabolic networks by blue native polyacrylamide gel electrophoresis: A functional proteomic exploration. 2015 , 7, 64-72	4
1064	Mondo-Mlx Mediates Organismal Sugar Sensing through the Gli-Similar Transcription Factor Sugarbabe. 2015 , 13, 350-64	56
1063	Intracellular metabolic flux analysis of CHO cells supplemented with wheat hydrolysates for improved mAb production and cell-growth. 2015 , 90, 291-302	10
1062	A distinct and replicable variant of the squamous cell carcinoma gene inositol polyphosphate-5-phosphatase modifies the susceptibility of arsenic-associated skin lesions in Bangladesh. 2015 , 121, 2222-9	6
1061	Targeting amino acid metabolism in cancer growth and anti-tumor immune response. 2015 , 6, 281-9	91
1060	Role and Regulation of Glutathione Metabolism in Plasmodium falciparum. 2015 , 20, 10511-34	39
1059	Insulin and mTOR Pathway Regulate HDAC3-Mediated Deacetylation and Activation of PGK1. 2015 , 13, e1002243	48
1058	Metabolic control of cancer cell stemness: Lessons from iPS cells. 2015 , 14, 3801-11	28
1057	Epigenetic regulation of the nuclear-coded GCAT and SHMT2 genes confers human age-associated mitochondrial respiration defects. 2015 , 5, 10434	60
1056	Metabolic Reprogramming of Stem Cell Epigenetics. 2015 , 17, 651-662	174
1055	Repurposing metformin: an old drug with new tricks in its binding pockets. 2015 , 471, 307-22	178
1054	Muscle mitohormesis promotes cellular survival via serine/glycine pathway flux. 2015 , 29, 1314-28	47
1053	Role of diet in prostate cancer: the epigenetic link. 2015 , 34, 4683-91	41

1052	Temporal metabolomic responses of cultured HepG2 liver cells to high fructose and high glucose exposures. 2015 , 11, 707-721	14
1051	Epithelial-mesenchymal transition in human cancer: comprehensive reprogramming of metabolism, epigenetics, and differentiation. 2015 , 150, 33-46	201
1050	An ancient riboswitch class in bacteria regulates purine biosynthesis and one-carbon metabolism. 2015 , 57, 317-28	75
1049	ROS and energy metabolism in cancer cells: alliance for fast growth. 2015 , 38, 338-45	62
1048	Tumor Cell Metabolism. 2015 ,	5
1047	Arsenic Exposure, Arsenic Metabolism, and Incident Diabetes in the Strong Heart Study. 2015 , 38, 620-7	93
1046	Cancer metabolomics in basic science perspective. 2015 , 38, 372-80	21
1045	Glycine decarboxylase deficiency causes neural tube defects and features of non-ketotic hyperglycinemia in mice. 2015 , 6, 6388	86
1044	Metabolism in embryonic and cancer stemness. 2015 , 38, 381-8	33
1043	Fathers that are born small program alterations in the next-generation preimplantation rat embryos. 2015 , 145, 876-83	9
1042	The role of mammalian sirtuins in cancer metabolism. 2015 , 43, 33-42	29
1041	Metal Ion-Mediated Nucleobase Recognition by the ZTP Riboswitch. 2015 , 22, 829-37	29
1040	Context dependent utilization of serine in cancer. 2015 , 2, e996418	5
1039	Assessing the carcinogenic potential of low-dose exposures to chemical mixtures in the environment: the challenge ahead. 2015 , 36 Suppl 1, S254-96	176
1038	Cells deficient in base-excision repair reveal cancer hallmarks originating from adjustments to genetic instability. 2015 , 43, 3667-79	34
1037	Distinct profiles of human embryonic stem cell metabolism and mitochondria identified by oxygen. 2015 , 150, 367-82	21
1036	Dietary control of chromatin. 2015 , 34, 69-74	12
1035	An epitope tag alters phosphoglycerate dehydrogenase structure and impairs ability to support cell proliferation. 2015 , 3, 5	26

1034	Maternal omega-3 fatty acids and micronutrients modulate fetal lipid metabolism: A review. 2015 , 98, 49-55	12
1033	Targeting endothelial cell metabolism: new therapeutic prospects?. 2015 , 10, 125-140	1
1032	Organ-Specific Cancer Metabolism and Its Potential for Therapy. 2016 , 233, 321-53	64
1031	Concise Review: Energy Metabolites: Key Mediators of the Epigenetic State of Pluripotency. 2015 , 33, 2374-80	32
1030	A metabolomic approach to identifying platinum resistance in ovarian cancer. 2015 , 8, 13	48
1029	cMyc-mediated activation of serine biosynthesis pathway is critical for cancer progression under nutrient deprivation conditions. 2015 , 25, 429-44	148
1028	Metabolic pathways in cancers: key targets and implications in cancer therapy. 2015 , 5, 41751-41762	9
1027	Oncometabolites: tailoring our genes. 2015 , 282, 2796-805	86
1026	Endothelial cell metabolism in normal and diseased vasculature. 2015 , 116, 1231-44	337
1025	Imaging tumor metabolism using positron emission tomography. 2015 , 21, 129-36	33
1024	Amino Acid transporters in cancer and their relevance to "glutamine addiction": novel targets for the design of a new class of anticancer drugs. 2015 , 75, 1782-8	269
1023	Histone Methylation Dynamics and Gene Regulation Occur through the Sensing of One-Carbon Metabolism. 2015 , 22, 861-73	329
1022	Quantification of folate metabolism using transient metabolic flux analysis. 2015 , 3, 6	19
1021	From microbiology to cancer biology: the Rid protein family prevents cellular damage caused by endogenously generated reactive nitrogen species. 2015 , 96, 211-9	28
1020	T cell metabolism drives immunity. 2015 , 212, 1345-60	668
1019	Mitochondrial Phosphoenolpyruvate Carboxykinase Regulates Metabolic Adaptation and Enables Glucose-Independent Tumor Growth. 2015 , 60, 195-207	154
1018	Regulation of heme biosynthesis and transport in metazoa. 2015 , 58, 757-64	9
1017	DNMT1-associated long non-coding RNAs regulate global gene expression and DNA methylation in colon cancer. 2015 , 24, 6240-53	112

1016	Metformin and cancer: Between the bioenergetic disturbances and the antifolate activity. 2015 , 101, 102-8	39
1015	Does epigenetic dysregulation of pancreatic islets contribute to impaired insulin secretion and type 2 diabetes?. 2015 , 93, 511-21	27
1014	Comparative proteomic analysis of silkworm fat body after knocking out fibroin heavy chain gene: a novel insight into cross-talk between tissues. 2015 , 15, 611-37	9
1013	Amino acid management in cancer. 2015 , 43, 22-32	66
1012	MYC and metabolism on the path to cancer. 2015 , 43, 11-21	191
1011	Transcriptional regulation of T cell metabolism. 2015 , 68, 520-6	15
1010	Metabolic reprogramming and dysregulated metabolism: cause, consequence and/or enabler of environmental carcinogenesis?. 2015 , 36 Suppl 1, S203-31	61
1009	MYC, Metabolism, and Cancer. 2015 , 5, 1024-39	627
1008	Metabolomics identifies the intersection of phosphoethanolamine with menaquinone-triggered apoptosis in an in vitro model of leukemia. 2015 , 11, 2406-16	20
1007	Cancer's Fuel Choice: New Flavors for a Picky Eater. 2015 , 60, 514-23	89
1006	Targeting mitochondria metabolism for cancer therapy. 2015 , 11, 9-15	858
1005	PSAT1 regulates cyclin D1 degradation and sustains proliferation of non-small cell lung cancer cells. 2015 , 136, E39-50	50
1004	Mass isotopomer analysis of nucleosides isolated from RNA and DNA using GC/MS. 2015 , 87, 617-23	13
1003	Metabolism and epigenetics: a link cancer cells exploit. 2015 , 34, 23-9	62
1002	Targeting the epigenetic machinery of cancer cells. 2015 , 34, 135-43	37
1001	Epigenetics and cancer metabolism. 2015 , 356, 309-14	73
1000	Human phosphoglycerate dehydrogenase produces the oncometabolite D-2-hydroxyglutarate. 2015 , 10, 510-6	120
999	Organ-Specific Gene Expression Changes in the Fetal Liver and Placenta in Response to Maternal Folate Depletion. 2016 , 8,	7

998	DNA Methylation in Skeletal Muscle Stem Cell Specification, Proliferation, and Differentiation. 2016 , 2016, 5725927	43
997	One-Carbon Metabolism in Prostate Cancer: The Role of Androgen Signaling. 2016 , 17,	27
996	Epigenetic Alterations in Endocrine-Dependent Cancers: Implications of Endocrine Dysfunctions. 2016 , 351-374	
995	Specific Metabolomics Adaptations Define a Differential Regional Vulnerability in the Adult Human Cerebral Cortex. 2016 , 9, 138	14
994	Compartmentation of metabolites in regulating epigenome of cancer. 2016 , 22, 349-360	14
993	Intakes of Folate and Vitamin B12 and Biomarkers of Status in the Very Old: The Newcastle 85+ Study. 2016 , 8,	14
992	K-Ras Activation Induces Differential Sensitivity to Sulfur Amino Acid Limitation and Deprivation and to Oxidative and Anti-Oxidative Stress in Mouse Fibroblasts. 2016 , 11, e0163790	5
991	A comprehensive review on the efficacy of S-Adenosyl-L-methionine in Major Depressive Disorder. 2016 , 15, 35-44	37
990	Targeting folate receptor alpha for cancer treatment. 2016 , 7, 52553-52574	202
989	Epithelial-Mesenchymal Transition and its Regulation in Tumor Metastasis. 2016 ,	7
988	Oncogenic regulation of tumor metabolic reprogramming. 2016 , 7, 62726-62753	82
987	The Hallmarks of Cancer from a Redox Perspective. 2016 , 25, 300-25	61
986	Noncoding RNAs in Regulation of Cancer Metabolic Reprogramming. 2016 , 927, 191-215	23
985	The Long and Short Non-coding RNAs in Cancer Biology. 2016 ,	3
984	2-Aminoacrylate Stress Induces a Context-Dependent Glycine Requirement in ridA Strains of Salmonella enterica. 2016 , 198, 536-43	21
983	Colloidal Polymeric Platform for Facile Click-Assisted Ligand Functionalization and Receptor Targeting. 2016 , 1, 1114-1120	4
982	Mitochondrial phosphoenolpyruvate carboxykinase (PEPCK-M) and serine biosynthetic pathway genes are co-ordinately increased during anabolic agent-induced skeletal muscle growth. 2016 , 6, 28693	17
981	Maternal diet quality before pregnancy and risk of childhood leukaemia. 2016 , 116, 1469-1478	8

980	Serine Metabolism Links Tumor Suppression to the Epigenetic Landscape. 2016 , 24, 777-779	8
979	Integrative modelling of tumour DNA methylation quantifies the contribution of metabolism. 2016 , 7, 13666	29
978	High Expression of PHGDH Predicts Poor Prognosis in Non-Small Cell Lung Cancer. 2016 , 9, 592-599	38
977	Integrated Role of subsp. Supplementation in Gut Microbiota, Immunity, and Metabolism of Infant Rhesus Monkeys. 2016 , 1,	14
976	Nutrition, Epigenetics and Aging. 2016 , 103-131	
975	The ERK signaling target RNF126 regulates anoikis resistance in cancer cells by changing the mitochondrial metabolic flux. 2016 , 2, 16019	32
974	Maternal folate deficiency and metabolic dysfunction in offspring. 2016 , 75, 90-95	16
973	The role of glycine in regulated cell death. 2016 , 73, 2285-308	46
972	The effect of immunosuppressive molecules on T-cell metabolic reprogramming. 2016 , 127, 23-36	35
971	The Role of PGC1 β in Cancer Metabolism and its Therapeutic Implications. 2016 , 15, 774-82	113
970	MOTS-c: A novel mitochondrial-derived peptide regulating muscle and fat metabolism. 2016 , 100, 182-187	86
969	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
968	KDM4C and ATF4 Cooperate in Transcriptional Control of Amino Acid Metabolism. 2016 , 14, 506-519	74
967	Construction of a metabolomics profile of arsenic trioxide effect in gastric carcinoma cell line SGC7901. 2016 , 48, 474-81	12
966	A PHGDH inhibitor reveals coordination of serine synthesis and one-carbon unit fate. 2016 , 12, 452-8	251
965	Metabolic profiling of antioxidant supplement with phytochemicals using plasma ¹ H NMR-based metabolomics in humans. 2016 , 24, 112-121	4
964	Celecoxib Alters the Intestinal Microbiota and Metabolome in Association with Reducing Polyp Burden. 2016 , 9, 721-31	25
963	A family-based study of gene variants and maternal folate and choline in neuroblastoma: a report from the Children's Oncology Group. 2016 , 27, 1209-18	6

- 962 A Flux Balance of Glucose Metabolism Clarifies the Requirements of the Warburg Effect. **2016**, 111, 1088-100 30
- 961 MicroRNAs and oncogenic transcriptional regulatory networks controlling metabolic reprogramming in cancers. **2016**, 14, 223-33 52
- 960 Glycolytic Metabolism Plays a Functional Role in Regulating Human Pluripotent Stem Cell State. **2016**, 19, 476-490 153
- 959 Imaging Tumor Metabolism to Assess Disease Progression and Treatment Response. **2016**, 22, 5196-5203 14
- 958 Collagen Matrix Density Drives the Metabolic Shift in Breast Cancer Cells. **2016**, 13, 146-156 65
- 957 Transcriptional Profiling Reveals a Common Metabolic Program in High-Risk Human Neuroblastoma and Mouse Neuroblastoma Sphere-Forming Cells. **2016**, 17, 609-623 28
- 956 Targeting One Carbon Metabolism with an Antimetabolite Disrupts Pyrimidine Homeostasis and Induces Nucleotide Overflow. **2016**, 15, 2367-76 23
- 955 Methionine restriction inhibits chemically-induced malignant transformation in the BALB/c 3T3 cell transformation assay. **2016**, 95, 196-202 4
- 954 Epigenetics and nutrition-related epidemics of metabolic diseases: Current perspectives and challenges. **2016**, 96, 191-204 20
- 953 Psat1-Dependent Fluctuations in β -Ketoglutarate Affect the Timing of ESC Differentiation. **2016**, 24, 494-501 88
- 952 From Krebs to clinic: glutamine metabolism to cancer therapy. *Nature Reviews Cancer*, **2016**, 16, 619-34 31.3 796
- 951 The importance of serine metabolism in cancer. **2016**, 214, 249-57 203
- 950 One-carbon metabolism and epigenetics: understanding the specificity. **2016**, 1363, 91-8 177
- 949 The Role of Glucose and Lipid Metabolism in Growth and Survival of Cancer Cells. **2016**, 207, 1-22 7
- 948 Endothelial cell metabolism: A novel player in atherosclerosis? Basic principles and therapeutic opportunities. **2016**, 253, 247-257 53
- 947 Folates as adjuvants to anticancer agents: Chemical rationale and mechanism of action. **2016**, 106, 118-31 20
- 946 Metabolic pathways in T cell activation and lineage differentiation. **2016**, 28, 514-524 220
- 945 Undercover: gene control by metabolites and metabolic enzymes. **2016**, 30, 2345-2369 123

944	Childhood Leukemia and Primary Prevention. 2016 , 46, 317-352		59
943	The BRAF Inhibitor Vemurafenib Activates Mitochondrial Metabolism and Inhibits Hyperpolarized Pyruvate-Lactate Exchange in BRAF-Mutant Human Melanoma Cells. 2016 , 15, 2987-2999		30
942	Targeting Cancer Metabolism: Dietary and Pharmacologic Interventions. 2016 , 6, 1315-1333		107
941	Serine and one-carbon metabolism in cancer. <i>Nature Reviews Cancer</i> , 2016 , 16, 650-62	31.3	419
940	Reprogramming glucose metabolism in cancer: can it be exploited for cancer therapy?. <i>Nature Reviews Cancer</i> , 2016 , 16, 635-49	31.3	505
939	Metabolic control of epigenetics in cancer. <i>Nature Reviews Cancer</i> , 2016 , 16, 694-707	31.3	220
938	Hepatocellular carcinoma redirects to ketolysis for progression under nutrition deprivation stress. 2016 , 26, 1112-1130		71
937	Creatine: a miserable life without it. 2016 , 48, 1739-50		15
936	Metabolic regulation of stem cell function in tissue homeostasis and organismal ageing. 2016 , 18, 823-32		150
935	Non-invasive metabolic imaging of brain tumours in the era of precision medicine. 2016 , 13, 725-739		64
934	Nuclear Magnetic Resonance metabolomics reveals an excretory metabolic signature of renal cell carcinoma. 2016 , 6, 37275		28
933	Metabolic reprogramming by folate restriction leads to a less aggressive cancer phenotype. 2016 ,		
932	Integrating immunometabolism and macrophage diversity. 2016 , 28, 417-424		85
931	Genome-culture coevolution promotes rapid divergence of killer whale ecotypes. 2016 , 7, 11693		161
930	Mitochondrial diseases. 2016 , 2, 16080		585
929	Fundamentals of cancer metabolism. 2016 , 2, e1600200		1280
928	Systematic investigation of metabolic reprogramming in different cancers based on tissue-specific metabolic models. 2016 , 14, 1644001		3
927	Measurement of Histone Methylation Dynamics by One-Carbon Metabolic Isotope Labeling and High-energy Collisional Dissociation Methylation Signature Ion Detection. 2016 , 6, 31537		5

926	Serine one-carbon catabolism with formate overflow. 2016 , 2, e1601273	72
925	LKB1 loss links serine metabolism to DNA methylation and tumorigenesis. 2016 , 539, 390-395	173
924	Novel multiple sclerosis susceptibility loci implicated in epigenetic regulation. 2016 , 2, e1501678	75
923	Multi-regression analysis revealed a relationship between l-serine and methionine, a component of one-carbon metabolism, in the normal control but not in the schizophrenia. 2016 , 15, 23	3
922	Components of One-carbon Metabolism Other than Folate and Colorectal Cancer Risk. 2016 , 27, 787-96	9
921	Association between ALDH1L1 gene polymorphism and neural tube defects in the Chinese Han population. 2016 , 37, 1049-54	7
920	Chromatin-Bound MDM2 Regulates Serine Metabolism and Redox Homeostasis Independently of p53. 2016 , 62, 890-902	69
919	ROS homeostasis and metabolism: a dangerous liason in cancer cells. 2016 , 7, e2253	619
918	Targeting MTHFD2 in acute myeloid leukemia. 2016 , 213, 1285-306	85
917	LIN28 Regulates Stem Cell Metabolism and Conversion to Primed Pluripotency. 2016 , 19, 66-80	192
916	Suppression of MTHFD2 in MCF-7 Breast Cancer Cells Increases Glycolysis, Dependency on Exogenous Glycine, and Sensitivity to Folate Depletion. 2016 , 15, 2618-25	23
915	Maternal prenatal intake of one-carbon metabolism nutrients and risk of childhood leukemia. 2016 , 27, 929-40	10
914	Metabolic Reprogramming and Dependencies Associated with Epithelial Cancer Stem Cells Independent of the Epithelial-Mesenchymal Transition Program. 2016 , 34, 1163-76	64
913	Give it or take it: the flux of one-carbon in cancer cells. 2016 , 283, 3695-3704	29
912	Nonessential amino acid metabolism in breast cancer. 2016 , 62, 11-17	59
911	Serine Metabolism Supports the Methionine Cycle and DNA/RNA Methylation through De Novo ATP Synthesis in Cancer Cells. 2016 , 61, 210-21	232
910	Metabolic control of methylation and acetylation. 2016 , 30, 52-60	159
909	Metabolic Control. 2016 ,	1

908	Oncometabolic Nuclear Reprogramming of Cancer Stemness. 2016 , 6, 273-83	28
907	mTORC1 induces purine synthesis through control of the mitochondrial tetrahydrofolate cycle. 2016 , 351, 728-733	402
906	Exploratory studies of the potential anti-cancer effects of creatine. 2016 , 48, 1993-2001	19
905	A mathematical model of microbial folate biosynthesis and utilisation: implications for antifolate development. 2016 , 12, 923-33	12
904	Cell intrinsic and extrinsic regulation of leukemia cell metabolism. 2016 , 103, 607-16	16
903	Betaine chemistry, roles, and potential use in liver disease. 2016 , 1860, 1098-106	109
902	Amino acids in the cultivation of mammalian cells. 2016 , 48, 1161-71	61
901	Methylthioadenosine (MTA) Regulates Liver Cells Proteome and Methylproteome: Implications in Liver Biology and Disease. 2016 , 15, 1498-510	24
900	Mitochondria and Cancer. 2016 , 61, 667-676	503
899	The PGC-1 β /ERR α Axis Represses One-Carbon Metabolism and Promotes Sensitivity to Anti-folate Therapy in Breast Cancer. 2016 , 14, 920-931	58
898	You Are What You Eat... or Are You?. 2016 , 36, 483-5	2
897	Non-DHFR-mediated effects of methotrexate in osteosarcoma cell lines: epigenetic alterations and enhanced cell differentiation. 2016 , 16, 14	12
896	Tissue amino acid profile could be used to differentiate advanced adenoma from colorectal cancer. 2016 , 118, 349-355	22
895	The Potential of Metabolic Imaging. 2016 , 46, 28-39	21
894	Pyruvate Kinase Isoform Switching and Hepatic Metabolic Reprogramming by the Environmental Contaminant 2,3,7,8-Tetrachlorodibenzo-p-Dioxin. 2016 , 149, 358-71	25
893	Metabolic rewiring in melanoma. 2017 , 36, 147-157	89
892	Heterogeneity in Cancer Metabolism: New Concepts in an Old Field. 2017 , 26, 462-485	105
891	Serine Is an Essential Metabolite for Effector T Cell Expansion. 2017 , 25, 345-357	254

890	Mitochondrial serine hydroxymethyltransferase 2 is a potential diagnostic and prognostic biomarker for human glioma. 2017 , 154, 28-33	24
889	Macrophage-Mediated Clofazimine Sequestration Is Accompanied by a Shift in Host Energy Metabolism. 2017 , 106, 1162-1174	15
888	Probing the metabolic phenotype of breast cancer cells by multiple tracer stable isotope resolved metabolomics. 2017 , 43, 125-136	36
887	Impact of a High-fat Diet on Tissue Acyl-CoA and Histone Acetylation Levels. 2017 , 292, 3312-3322	89
886	Arginine Deprivation Inhibits the Warburg Effect and Upregulates Glutamine Anaplerosis and Serine Biosynthesis in ASS1-Deficient Cancers. 2017 , 18, 991-1004	77
885	Metabolomic Identification of Subtypes of Nonalcoholic Steatohepatitis. 2017 , 152, 1449-1461.e7	139
884	Argininosuccinate lyase interacts with cyclin A2 in cytoplasm and modulates growth of liver tumor cells. 2017 , 37, 969-978	18
883	Epigenetic modification by dietary factors: Implications in metabolic syndrome. 2017 , 54, 58-70	36
882	Glutaminolysis: A Hallmark of Cancer Metabolism. 2017 , 19, 163-194	268
881	First-principles study of interaction of serine with nucleobases of DNA and RNA. 2017 , 43, 105-111	4
880	Cancer metabolism in space and time: Beyond the Warburg effect. 2017 , 1858, 556-572	104
879	Metagenomics approach to the study of the gut microbiome structure and function in zebrafish <i>Danio rerio</i> fed with gluten formulated diet. 2017 , 135, 69-76	22
878	Metabolic Reprogramming by Folate Restriction Leads to a Less Aggressive Cancer Phenotype. 2017 , 15, 189-200	28
877	Comprehensive Metaboproteomics of Burkitt's and Diffuse Large B-Cell Lymphoma Cell Lines and Primary Tumor Tissues Reveals Distinct Differences in Pyruvate Content and Metabolism. 2017 , 16, 1105-1120 ¹⁵	15
876	Review of metabolic pathways activated in cancer cells as determined through isotopic labeling and network analysis. 2017 , 43, 113-124	40
875	Untangling the role of one-carbon metabolism in colorectal cancer risk: a comprehensive Bayesian network analysis. 2017 , 7, 43434	16
874	The one-carbon metabolism pathway highlights therapeutic targets for gastrointestinal cancer (Review). 2017 , 50, 1057-1063	23
873	Essential amino acid mixtures drive cancer cells to apoptosis through proteasome inhibition and autophagy activation. 2017 , 284, 1726-1737	21

872	Review: Regulation of the cancer epigenome by long non-coding RNAs. 2017 , 407, 106-112	71
871	Molecular Pathways: Metabolic Control of Histone Methylation and Gene Expression in Cancer. 2017 , 23, 4004-4009	38
870	Host-Microbe Co-metabolism Dictates Cancer Drug Efficacy in <i>C. elegans</i> . 2017 , 169, 442-456.e18	131
869	Folate-dependent methylation of septins governs ciliogenesis during neural tube closure. 2017 , 31, 3622-3635	24
868	SLC25 Family Member Genetic Interactions Identify a Role for in Yeast Electron Transport Chain Stability. 2017 , 7, 1861-1873	3
867	ROS in Cancer: The Burning Question. 2017 , 23, 411-429	249
866	Modulating the therapeutic response of tumours to dietary serine and glycine starvation. 2017 , 544, 372-376	265
865	Thermal Shock Induces Host Proteostasis Disruption and Endoplasmic Reticulum Stress in the Model Symbiotic Cnidarian <i>Aiptasia</i> . 2017 , 16, 2121-2134	40
864	Modeling gene-wise dependencies improves the identification of drug response biomarkers in cancer studies. 2017 , 33, 1362-1369	9
863	One-carbon metabolism in cancer. 2017 , 116, 1499-1504	184
862	Mass spectrometry analysis shows the biosynthetic pathways supported by pyruvate carboxylase in highly invasive breast cancer cells. 2017 , 1863, 537-551	23
861	Crystal Structure of the Emerging Cancer Target MTHFD2 in Complex with a Substrate-Based Inhibitor. 2017 , 77, 937-948	37
860	PHGDH Defines a Metabolic Subtype in Lung Adenocarcinomas with Poor Prognosis. 2017 , 19, 2289-2303	78
859	Association of long-chain acyl-coenzyme A synthetase β expression in human breast cancer by estrogen receptor status and its clinical significance. 2017 , 37, 3253-3260	25
858	Serine and Functional Metabolites in Cancer. 2017 , 27, 645-657	76
857	Glycine metabolism in skeletal muscle: implications for metabolic homeostasis. 2017 , 20, 237-242	22
856	The Link Between Hyperhomocysteinemia and Hypomethylation: Implications for Cardiovascular Disease. 2017 , 5, 232640981769899	25
855	Folate Receptor Alpha Expression Is Associated With Increased Risk of Recurrence in Triple-negative Breast Cancer. 2017 , 17, 544-549	31

854	Rapid differentiating colorectal cancer and colorectal polyp using dried blood spot mass spectrometry metabolomic approach. 2017 , 69, 347-354	18
853	Quantitative proteomics by SWATH-MS reveals sophisticated metabolic reprogramming in hepatocellular carcinoma tissues. 2017 , 7, 45913	43
852	Glyceraldehyde-3-phosphate dehydrogenase promotes liver tumorigenesis by modulating phosphoglycerate dehydrogenase. 2017 , 66, 631-645	39
851	Enhancement of the Antitumor Effect of Methotrexate on Colorectal Cancer Cells via Lactate Calcium Salt Targeting Methionine Metabolism. 2017 , 69, 663-673	6
850	Non-invasive urinary metabolomic profiling discriminates prostate cancer from benign prostatic hyperplasia. 2017 , 13, 52	42
849	Serine hydroxymethyl transferase 1 stimulates pro-oncogenic cytokine expression through sialic acid to promote ovarian cancer tumor growth and progression. 2017 , 36, 4014-4024	20
848	The action of ̢-hydroxybutyrate on the growth, metabolism and global histone H3 acetylation of spontaneous mouse mammary tumours: evidence of a ̢-hydroxybutyrate paradox. 2017 , 5, 4	33
847	Metabolic Reprogramming in Brain Tumors. 2017 , 12, 515-545	56
846	Tumour microenvironment factors shaping the cancer metabolism landscape. 2017 , 116, 277-286	69
845	Direct evidence for cancer-cell-autonomous extracellular protein catabolism in pancreatic tumors. 2017 , 23, 235-241	199
844	Rational Design of Selective Allosteric Inhibitors of PHGDH and Serine Synthesis with Anti-tumor Activity. 2017 , 24, 55-65	77
843	Review: Effects of maternal micronutrient supplementation on placental function. 2017 , 54, 38-44	20
842	The Transcriptional Corepressor SIN3 Directly Regulates Genes Involved in Methionine Catabolism and Affects Histone Methylation, Linking Epigenetics and Metabolism. 2017 , 292, 1970-1976	20
841	The influence of a chronic L-carnitine administration on the plasma metabolome of male Fischer F344 rats. 2017 , 61, 1600651	13
840	Challenges and Opportunities in the Development of Serine Synthetic Pathway Inhibitors for Cancer Therapy. 2017 , 60, 1227-1237	31
839	A Missing Link to Vitamin B Metabolism. 2017 , 171, 736-737	5
838	Prioritizing Popular Proteins in Liver Cancer: Remodelling One-Carbon Metabolism. 2017 , 16, 4506-4514	12
837	Metabolomic Analysis of N-acetylcysteine Protection of Injury from Gadolinium-DTPA Contrast Agent in Rats with Chronic Renal Failure. 2017 , 21, 540-549	2

836	Bi-directional effects of vitamin B and methotrexate on <i>Daphnia magna</i> fitness and genomic methylation. 2017 , 7, 11872	10
835	Methionine metabolism is essential for SIRT1-regulated mouse embryonic stem cell maintenance and embryonic development. 2017 , 36, 3175-3193	39
834	The impact of cellular metabolism on chromatin dynamics and epigenetics. 2017 , 19, 1298-1306	236
833	An LC-MS chemical derivatization method for the measurement of five different one-carbon states of cellular tetrahydrofolate. 2017 , 409, 5955-5964	29
832	Global metabolic reprogramming of colorectal cancer occurs at adenoma stage and is induced by MYC. 2017 , 114, E7697-E7706	169
831	1-CMDb: A Curated Database of Genomic Variations of the One-Carbon Metabolism Pathway. 2017 , 20, 136-141	2
830	A Predictive Model for Selective Targeting of the Warburg Effect through GAPDH Inhibition with a Natural Product. 2017 , 26, 648-659.e8	102
829	Benzo[a]pyrene-induced metabolic shift from glycolysis to pentose phosphate pathway in the human bladder cancer cell line RT4. 2017 , 7, 9773	16
828	Tumor Dormancy and Recurrence. 2017 ,	0
827	Metabolism in Immune Cell Differentiation and Function. 2017 , 1011, 1-85	10
826	Metabolite availability as a window to view the early embryo microenvironment in vivo. 2017 , 84, 1027-1038	7
825	PI3K β and NOTCH1 Cross-Regulate Pathways That Define the T-cell Acute Lymphoblastic Leukemia Disease Signature. 2017 , 16, 2069-2082	4
824	EWS/FLI is a Master Regulator of Metabolic Reprogramming in Ewing Sarcoma. 2017 , 15, 1517-1530	26
823	Nutrients in one-carbon metabolism and urinary arsenic methylation in the National Health and Nutrition Examination Survey (NHANES) 2003-2004. 2017 , 607-608, 381-390	28
822	Human and Plasmodium serine hydroxymethyltransferases differ in rate-limiting steps and pH-dependent substrate inhibition behavior. 2017 , 630, 91-100	10
821	Critical roles of mTORC1 signaling and metabolic reprogramming for M-CSF-mediated myelopoiesis. 2017 , 214, 2629-2647	29
820	Biochemistry: A toxin that fuels metabolism. 2017 , 548, 533-534	2
819	Chemoenzymatic Assembly of Isotopically Labeled Folates. 2017 , 139, 13047-13054	2

818	Polo-like kinase 1 (PLK1)-dependent phosphorylation of methylenetetrahydrofolate reductase (MTHFR) regulates replication via histone methylation. 2017 , 16, 1933-1942	7
817	Phosphoserine Phosphatase Is Required for Serine and One-Carbon Unit Synthesis in <i>Hydrogenobacter thermophilus</i> . 2017 , 199,	7
816	Comprehensive Mapping of Pluripotent Stem Cell Metabolism Using Dynamic Genome-Scale Network Modeling. 2017 , 21, 2965-2977	41
815	Melanoma Therapeutic Strategies that Select against Resistance by Exploiting MYC-Driven Evolutionary Convergence. 2017 , 21, 2796-2812	46
814	Mitochondrial DNA and Diseases. 2017 ,	4
813	Metabolic Regulation in Mitochondria and Drug Resistance. 2017 , 1038, 149-171	23
812	Partitioning of One-Carbon Units in Folate and Methionine Metabolism Is Essential for Neural Tube Closure. 2017 , 21, 1795-1808	45
811	Metabolism of Formaldehyde In Vivo. 2017 , 21-46	
810	Nutrigenetics in practice: little is better than nothing. 2017 , 16, 114-119	1
809	Identification of putative biomarkers for leptomeningeal invasion in B-cell non-Hodgkin lymphoma by NMR metabolomics. 2017 , 13, 1	4
808	SAMTOR is an -adenosylmethionine sensor for the mTORC1 pathway. 2017 , 358, 813-818	235
807	One-Carbon Metabolism Biomarkers and Cognitive Decline in the Very Old: The Newcastle 85+ Study. 2017 , 18, 806.e19-806.e27	15
806	Subinhibitory Concentrations of Trimethoprim and Sulfamethoxazole Prevent Biofilm Formation by <i>Acinetobacter baumannii</i> through Inhibition of Csu Pilus Expression. 2017 , 61,	24
805	Mediterranean diet-gene interactions: A targeted metabolomics study in Greek-Cypriot women. 2017 , 61, 1600558	13
804	The Two Faces of Reactive Oxygen Species in Cancer. 2017 , 1, 79-98	238
803	Understanding metabolism with flux analysis: From theory to application. 2017 , 43, 94-102	47
802	A novel mechanism of mTORC1-mediated serine/glycine metabolism in osteosarcoma development. 2017 , 29, 107-114	17
801	Metabolic interactions with cancer epigenetics. 2017 , 54, 50-57	28

800	One-Carbon Metabolism in Health and Disease. 2017 , 25, 27-42	722
799	Serine-Dependent Sphingolipid Synthesis Is a Metabolic Liability of Aneuploid Cells. 2017 , 21, 3807-3818	30
798	Maternal and infant genetic variants, maternal periconceptional use of selective serotonin reuptake inhibitors, and risk of congenital heart defects in offspring: population based study. 2017 , 356, j832	16
797	Dysregulated metabolic enzymes and metabolic reprogramming in cancer cells. 2018 , 8, 3-10	37
796	Systematic assessment of cervical cancer initiation and progression uncovers genetic panels for deep learning-based early diagnosis and proposes novel diagnostic and prognostic biomarkers. 2017 , 8, 109436-109456	25
795	Possible Role of Phosphatidylcholine and Sphingomyelin on Fumonisin B1-mediated Toxicity. 2017 , 5, 75-97	4
794	Low-Dose Paclitaxel Inhibits Tumor Cell Growth by Regulating Glutaminolysis in Colorectal Carcinoma Cells. 2017 , 8, 244	19
793	Nutrients in Energy and One-Carbon Metabolism: Learning from Metformin Users. 2017 , 9,	21
792	Integrins and Cell Metabolism: An Intimate Relationship Impacting Cancer. 2017 , 18,	78
791	Targeting the Metabolic Reprogramming That Controls Epithelial-to-Mesenchymal Transition in Aggressive Tumors. 2017 , 7, 40	76
790	Metabolic Alterations of Thyroid Cancer as Potential Therapeutic Targets. 2017 , 2017, 2545031	21
789	Alcohol Exposure and the Alteration of Histone Marks in the Developing Fetus: An Epigenetic Phenomenon of Maternal Drinking. 2017 , 13, 1100-1108	18
788	Dietary energy drives the dynamic response of bovine rumen viral communities. 2017 , 5, 155	38
787	Bortezomib resistance in multiple myeloma is associated with increased serine synthesis. 2017 , 5, 7	69
786	Molecular features that predict the response to antimetabolite chemotherapies. 2017 , 5, 8	11
785	Clarifying the molecular mechanism associated with carfilzomib resistance in human multiple myeloma using microarray gene expression profile and genetic interaction network. 2017 , 10, 1327-1334	11
784	Metabolomic Profiling of the Synergistic Effects of Melittin in Combination with Cisplatin on Ovarian Cancer Cells. 2017 , 7,	25
783	The Association of Arsenic Metabolism with Cancer, Cardiovascular Disease, and Diabetes: A Systematic Review of the Epidemiological Evidence. 2017 , 125, 087001	167

782	Dietary polyphenols influence antimetabolite agents: methotrexate, 6-mercaptopurine and 5-fluorouracil in leukemia cell lines. 2017 , 8, 104877-104893	7
781	Folate cycle enzyme MTHFD1L confers metabolic advantages in hepatocellular carcinoma. 2017 , 127, 1856-1872	64
780	Natural Variation in and Underlie Condition-Specific Growth Defects in. 2018 , 8, 239-251	7
779	Recent advances in cancer metabolism: a technological perspective. 2018 , 50, 1-16	34
778	A guide to C metabolic flux analysis for the cancer biologist. 2018 , 50, 1-13	96
777	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. 2018 , 57, 7508-7512	103
776	Increased formate overflow is a hallmark of oxidative cancer. 2018 , 9, 1368	47
775	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. 2018 , 130, 7630-7634	41
774	Dietary intake of nutrients involved in one-carbon metabolism and risk of urothelial cell carcinoma: A prospective cohort study. 2018 , 143, 298-306	11
773	Intracellular response of CHO cells to oxidative stress and its influence on metabolism and antibody production. 2018 , 133, 12-20	17
772	Advances in computational metabolomics and databases deepen the understanding of metabolisms. 2018 , 54, 10-17	58
771	AhR and SHP regulate phosphatidylcholine and S-adenosylmethionine levels in the one-carbon cycle. 2018 , 9, 540	25
770	Disruption of De Novo Serine Synthesis in Müller Cells Induced Mitochondrial Dysfunction and Aggravated Oxidative Damage. 2018 , 55, 7025-7037	31
769	Mechanisms of redox metabolism and cancer cell survival during extracellular matrix detachment. 2018 , 293, 7531-7537	44
768	Fructose metabolism and noncommunicable diseases: recent findings and new research perspectives. 2018 , 21, 214-222	26
767	Prediction of Chemotherapeutic Efficacy in Non-Small Cell Lung Cancer by Serum Metabolomic Profiling. 2018 , 24, 2100-2109	28
766	Metabolism in Pluripotent Stem Cells and Early Mammalian Development. 2018 , 27, 332-338	58
765	Connections Between Metabolism and Epigenetics in Programming Cellular Differentiation. 2018 , 36, 221-246	58

764	Use of 5-azacytidine in a proof-of-concept study to evaluate the impact of pre-natal and post-natal exposures, as well as within generation persistent DNA methylation changes in Daphnia. 2018 , 27, 556-568	20
763	Serine Availability Influences Mitochondrial Dynamics and Function through Lipid Metabolism. 2018 , 22, 3507-3520	100
762	Adaptive remodeling of skeletal muscle energy metabolism in high-altitude hypoxia: Lessons from AltitudeOmics. 2018 , 293, 6659-6671	31
761	The role of mitochondrial folate enzyme MTHFD1L in esophageal squamous cell carcinoma. 2018 , 53, 533-540	15
760	Serum homocysteine, arsenic methylation, and arsenic-induced skin lesion incidence in Bangladesh: A one-carbon metabolism candidate gene study. 2018 , 113, 133-142	16
759	Hallmarks of Pulmonary Hypertension: Mesenchymal and Inflammatory Cell Metabolic Reprogramming. 2018 , 28, 230-250	48
758	Epigenetics, nutrition and mental health. Is there a relationship?. 2018 , 21, 602-613	16
757	Circulating Folate, Vitamin B6, and Methionine in Relation to Lung Cancer Risk in the Lung Cancer Cohort Consortium (LC3). 2018 , 110,	30
756	Metformin regulates global DNA methylation via mitochondrial one-carbon metabolism. 2018 , 37, 963-970	65
755	Low-folate stress reprograms cancer stem cell-like potentials and bioenergetics metabolism through activation of mTOR signaling pathway to promote in vitro invasion and in vivo tumorigenicity of lung cancers. 2018 , 53, 28-38	14
754	Inhibition of Phosphoglycerate Dehydrogenase Attenuates Bleomycin-induced Pulmonary Fibrosis. 2018 , 58, 585-593	31
753	The spectrum of T cell metabolism in health and disease. 2018 , 18, 19-34	202
752	Metabolic interactions in cancer: cellular metabolism at the interface between the microenvironment, the cancer cell phenotype and the epigenetic landscape. 2018 , 10, e1397	40
751	The Regulation of NRF2 by Nutrient-Responsive Signaling and Its Role in Anabolic Cancer Metabolism. 2018 , 29, 1774-1791	41
750	Analysis of the expression of metabolism-related genes and histopathology of the hepatopancreas of white shrimp <i>Litopenaeus vannamei</i> fed with aflatoxin B1. 2018 , 485, 191-196	13
749	Reverse engineering the cancer metabolic network using flux analysis to understand drivers of human disease. 2018 , 45, 95-108	27
748	Mitochondrial diseases: the contribution of organelle stress responses to pathology. 2018 , 19, 77-92	214
747	The Pentose Phosphate Pathway as a Potential Target for Cancer Therapy. 2018 , 26, 29-38	77

746	Biological role of metabolic reprogramming of cancer cells during epithelial-mesenchymal transition (Review). 2019 , 41, 727-741	7
745	Post-hepatectomy liver regeneration in the context of bile acid homeostasis and the gut-liver signaling axis. 2018 , 4, 1-46	11
744	PGC-1 α is a Pivotal Factor in Lipid and Metabolic Regulation. 2018 , 19,	134
743	Hyperhomocysteinemia as a Risk Factor for Vascular Contributions to Cognitive Impairment and Dementia. 2018 , 10, 350	54
742	Glycine: a non-invasive imaging biomarker to aid magnetic resonance spectroscopy in the prediction of survival in paediatric brain tumours. 2018 , 9, 18858-18868	4
741	Mitochondrial One-Carbon Pathway Supports Cytosolic Folate Integrity in Cancer Cells. 2018 , 175, 1546-1560.e47	47
740	Colorectal Cancer and Metabolism. 2018 , 14, 226-241	46
739	The E3 ligase VHL controls alveolar macrophage function via metabolic-epigenetic regulation. 2018 , 215, 3180-3193	19
738	Polyamine flux suppresses histone lysine demethylases and enhances expression in cancer stem cells. 2018 , 4, 104	7
737	GCSH antisense regulation determines breast cancer cells' viability. 2018 , 8, 15399	7
736	SFXN1 is a mitochondrial serine transporter required for one-carbon metabolism. 2018 , 362,	90
735	Spectral Comparison of Pass-By Traffic Noise. 2018 ,	2
734	In Vivo Ultraslow MAS 2H/13C NMR Emphasizes Metabolites in Dynamic Flux. 2018 , 3, 17023-17035	9
733	Key regulator of cellular metabolism, estrogen-related receptor β a new therapeutic target in endocrine-related gynecological tumor. 2018 , 10, 6887-6895	7
732	Drug discovery of anticancer drugs targeting methylenetetrahydrofolate dehydrogenase 2. 2018 , 4, e01021	15
731	Serine synthesis through PHGDH coordinates nucleotide levels by maintaining central carbon metabolism. 2018 , 9, 5442	73
730	Glutamine Metabolism in Cancer Cells. 2018 ,	0
729	SHMT2 Overexpression Predicts Poor Prognosis in Intrahepatic Cholangiocarcinoma. 2018 , 2018, 4369253	25

728	Protein interaction and functional data indicate MTHFD2 involvement in RNA processing and translation. 2018 , 6, 12	17
727	Methylomic changes in response to micronutrient supplementation and MTHFR genotype. 2018 , 10, 1201-1214	6
726	Loss of pyruvate kinase M2 limits growth and triggers innate immune signaling in endothelial cells. 2018 , 9, 4077	34
725	Deacetylation of serine hydroxymethyl-transferase 2 by SIRT3 promotes colorectal carcinogenesis. 2018 , 9, 4468	62
724	Methionine and choline supply alter transmethylation, transsulfuration, and cytidine 5'-diphosphocholine pathways to different extents in isolated primary liver cells from dairy cows. 2018 , 101, 11384-11395	14
723	Regulatory mechanism of fatty acid-CoA metabolic enzymes under endoplasmic reticulum stress in lung cancer. 2018 , 40, 2674-2682	12
722	Alcohol and Cancer. 2018 ,	
721	ALDH1L1 and ALDH1L2 Folate Regulatory Enzymes in Cancer. 2018 , 1032, 127-143	25
720	Hepatic metabolite profiling of polychlorinated biphenyl (PCB)-resistant and sensitive populations of Atlantic killifish (<i>Fundulus heteroclitus</i>). 2018 , 205, 114-122	5
719	Targeting Tumor Metabolism with Plant-Derived Natural Products: Emerging Trends in Cancer Therapy. 2018 , 66, 10663-10685	51
718	Liver cancer-associated changes to the proteome: what deserves clinical focus?. 2018 , 15, 749-756	6
717	Double genetic disruption of lactate dehydrogenases A and B is required to ablate the "Warburg effect" restricting tumor growth to oxidative metabolism. 2018 , 293, 15947-15961	88
716	Methionine metabolism influences genomic architecture and gene expression through H3K4me3 peak width. 2018 , 9, 1955	60
715	Quantification of Cellular Folate Species by LC-MS after Stabilization by Derivatization. 2018 , 90, 7349-7356	6
714	L-Phenylalanine-Templated Platinum Catalyst with Enhanced Performance for Oxygen Reduction Reaction. 2018 , 10, 21321-21327	12
713	Key Transport and Ammonia Recycling Genes Involved in Aphid Symbiosis Respond to Host-Plant Specialization. 2018 , 8, 2433-2443	10
712	Overexpression of folate receptor alpha is an independent prognostic factor for outcomes of pancreatic cancer patients. 2018 , 51, 237-243	7
711	Cancer Metabolism: Current Understanding and Therapies. 2018 , 118, 6893-6923	89

710	Metabolic reprogramming for cancer cells and their microenvironment: Beyond the Warburg Effect. 2018 , 1870, 51-66	117
709	Inflammation-induced metabolic derangements or adaptation: An immunometabolic perspective. 2018 , 43, 47-53	12
708	One-carbon metabolism biomarkers and genetic variants in relation to colorectal cancer risk by KRAS and BRAF mutation status. 2018 , 13, e0196233	5
707	Beyond the Warburg Effect: How Do Cancer Cells Regulate One-Carbon Metabolism?. 2018 , 6, 90	48
706	Anti-Folate Receptor Alpha-Directed Antibody Therapies Restrict the Growth of Triple-negative Breast Cancer. 2018 , 24, 5098-5111	41
705	Metabolic Signaling to the Nucleus in Cancer. 2018 , 71, 398-408	78
704	Identification of serum biomarkers of chemoradiosensitivity in esophageal cancer via the targeted metabolomics approach. 2018 , 12, 827-840	9
703	One-Carbon Metabolism: Biological Players in Epithelial Ovarian Cancer. 2018 , 19,	15
702	Integrated approach of eco-epigenetics and eco-metabolomics on the stress response of bisphenol-A exposure in the aquatic midge <i>Chironomus riparius</i> . 2018 , 163, 111-116	16
701	Signaling Pathways Regulating Redox Balance in Cancer Metabolism. 2018 , 8, 126	40
700	Inhibiting Glycine Decarboxylase Suppresses Pyruvate-to-Lactate Metabolism in Lung Cancer Cells. 2018 , 8, 196	7
699	Histidine metabolism boosts cancer therapy. 2018 , 559, 484-485	8
698	Metabolic Alterations in Cancer Cells and the Emerging Role of Oncometabolites as Drivers of Neoplastic Change. 2018 , 7,	20
697	Metabolic Reprogramming and the Recovery of Physiological Functionality in 3D Cultures in Micro-Bioreactors. 2018 , 5,	18
696	Metabolic Features of Multiple Myeloma. 2018 , 19,	27
695	Hidden features: exploring the non-canonical functions of metabolic enzymes. 2018 , 11,	25
694	Metabolic adaptation of cancer and immune cells mediated by hypoxia-inducible factors. 2018 , 1870, 15-22	90
693	Amino Acid Transporters and Glutamine Metabolism in Breast Cancer. 2018 , 19,	49

692	Metabolomics of oncogene-specific metabolic reprogramming during breast cancer. 2018 , 6, 5	30
691	The Recombinant and Reconstituted Novel Albumin-Lidamycin Conjugate Shows Lasting Tumor Imaging and Intensively Enhanced Therapeutic Efficacy. 2018 , 29, 3104-3112	9
690	Targeting Glutamine Metabolism for Cancer Treatment. 2018 , 26, 19-28	154
689	Identification of a co-target for enhancing efficacy of sorafenib in HCC through a quantitative modeling approach. 2018 , 285, 3977-3992	4
688	Mitochondrial Complex I Activity Is Required for Maximal Autophagy. 2018 , 24, 2404-2417.e8	48
687	Analysis of the Myc-induced pancreatic cell islet tumor microenvironment using imaging ToF-SIMS. 2018 , 13, 06D402	6
686	Links between Serine Biosynthesis Pathway and Epigenetics in Cancer Metabolism. 2018 , 7, 153-160	8
685	Early behavioral and metabolomic change after mild to moderate traumatic brain injury in the developing brain. 2018 , 120, 75-86	16
684	Dietary intake of one-carbon metabolism nutrients and DNA methylation in peripheral blood. 2018 , 108, 611-621	24
683	Potential Mechanisms Connecting Purine Metabolism and Cancer Therapy. 2018 , 9, 1697	115
682	EWS-FLI1 reprograms the metabolism of Ewing sarcoma cells via positive regulation of glutamine import and serine-glycine biosynthesis. 2018 , 57, 1342-1357	25
681	Metabolomics and Lipidomics of Ischemic Stroke. 2018 , 85, 31-69	39
680	Chromatin and Metabolism. 2018 , 87, 27-49	23
679	The Endosomal Protein CEMIP Links WNT Signaling to MEK1-ERK1/2 Activation in Selumetinib-Resistant Intestinal Organoids. 2018 , 78, 4533-4548	19
678	One-carbon metabolite ratios as functional B-vitamin markers and in relation to colorectal cancer risk. 2019 , 144, 947-956	4
677	Overview of the Development of Glutaminase Inhibitors: Achievements and Future Directions. 2019 , 62, 1096-1115	50
676	The Multiple Roles and Therapeutic Potential of Molecular Chaperones in Prostate Cancer. 2019 , 11,	21
675	Balancing cancer immunotherapy and immune-related adverse events: The emerging role of regulatory T cells. 2019 , 104, 102310	27

674	One-Carbon Metabolism Supports S-Adenosylmethionine and Histone Methylation to Drive Inflammatory Macrophages. 2019 , 75, 1147-1160.e5	84
673	Metabolomics for Investigating Physiological and Pathophysiological Processes. 2019 , 99, 1819-1875	196
672	Detecting Functional and Accessible Folate Receptor Expression in Cancer and Polycystic Kidneys. 2019 , 16, 3985-3995	5
671	Clustering co-abundant genes identifies components of the gut microbiome that are reproducibly associated with colorectal cancer and inflammatory bowel disease. 2019 , 7, 110	17
670	Codoping Enhanced Radioluminescence of Nanoscintillators for X-ray-Activated Synergistic Cancer Therapy and Prognosis Using Metabolomics. 2019 , 13, 10419-10433	30
669	Glycine decarboxylase is a transcriptional target of MYCN required for neuroblastoma cell proliferation and tumorigenicity. 2019 , 38, 7504-7520	6
668	Serine and one-carbon metabolism, a bridge that links mTOR signaling and DNA methylation in cancer. 2019 , 149, 104352	17
667	Exploiting metabolic vulnerabilities for personalized therapy in acute myeloid leukemia. 2019 , 17, 57	18
666	MTHFD2 links RNA methylation to metabolic reprogramming in renal cell carcinoma. 2019 , 38, 6211-6225	45
665	Serine hydroxymethyltransferase from the silkworm <i>Bombyx mori</i> : Identification, distribution, and biochemical characterization. 2019 , 102, e21594	1
664	Purine auxotrophy: Possible applications beyond genetic marker. 2019 , 36, 649-656	3
663	The role of Wnt signaling pathway in tumor metabolic reprogramming. 2019 , 10, 3789-3797	61
662	Hepatitis C Virus as a Unique Human Model Disease to Define Differences in the Transcriptional Landscape of T Cells in Acute versus Chronic Infection. 2019 , 11,	4
661	Intracellular Trapping of the Selective Phosphoglycerate Dehydrogenase (PHGDH) Inhibitor Disrupts Serine Biosynthesis. 2019 , 62, 7976-7997	32
660	Dietary methionine influences therapy in mouse cancer models and alters human metabolism. 2019 , 572, 397-401	227
659	Metabolic Dysregulations and Epigenetics: A Bidirectional Interplay that Drives Tumor Progression. 2019 , 8,	18
658	Nutrient availability shapes methionine metabolism in p16/-deleted cells. 2019 , 5, eaav7769	12
657	Combinatorial targeting of MTHFD2 and PAICS in purine synthesis as a novel therapeutic strategy. 2019 , 10, 786	7

656	The Microenvironment Is a Critical Regulator of Muscle Stem Cell Activation and Proliferation. 2019 , 7, 254	9
655	Methionine at the Heart of Anabolism and Signaling: Perspectives From Budding Yeast. 2019 , 10, 2624	9
654	A concise review on cancer treatment methods and delivery systems. 2019 , 54, 101350	36
653	Identifying Metabolic Perturbations and Toxic Effects of -Metalaxyl and Metalaxyl-M in Mice Using Integrative NMR and UPLC-MS/MS Based Metabolomics. 2019 , 20,	5
652	Active pyruvate dehydrogenase and impaired gluconeogenesis in orthotopic hepatomas of rats. 2019 , 101, 153993	6
651	Investigation Of Small Molecular Substances As Potential Biomarkers For Discrimination Of Gastric Tumor. 2019 , 12, 8587-8594	
650	Peroxiredoxin 6 Down-Regulation Induces Metabolic Remodeling and Cell Cycle Arrest in HepG2 Cells. 2019 , 8,	7
649	Epigenetic, transcriptional and phenotypic responses in two generations of exposed to the DNA methylation inhibitor 5-azacytidine. 2019 , 5, dvz016	16
648	Modern Perspective on Metabolic Reprogramming in Malignant Neoplasms. 2019 , 84, 1129-1142	6
647	Study of SHMT2 Inhibitors and Their Binding Mechanism by Computational Alanine Scanning. 2019 , 59, 3871-3878	12
646	TRPML1 Promotes Protein Homeostasis in Melanoma Cells by Negatively Regulating MAPK and mTORC1 Signaling. 2019 , 28, 2293-2305.e9	20
645	Drugging cancer metabolism: Expectations vs. reality. 2019 , 347, 1-26	12
644	DSM 17938 feeding of healthy newborn mice regulates immune responses while modulating gut microbiota and boosting beneficial metabolites. 2019 , 317, G824-G838	22
643	Fluorescent probes for bioactive detection and imaging of phase II metabolic enzymes. 2019 , 399, 213026	25
642	The Dual Roles of the Atypical Protein Kinase Cs in Cancer. 2019 , 36, 218-235	25
641	Methionine metabolism in health and cancer: a nexus of diet and precision medicine. <i>Nature Reviews Cancer</i> , 2019 , 19, 625-637	31.3 120
640	Phosphoethanolamine Accumulation Protects Cancer Cells under Glutamine Starvation through Downregulation of PCYT2. 2019 , 29, 89-103.e7	12
639	Proteomics of PTI and Two ETI Immune Reactions in Potato Leaves. 2019 , 20,	9

638	Responses in the crucian carp (<i>Carassius auratus</i>) exposed to environmentally relevant concentration of 17 β -Ethinylestradiol based on metabolomics. 2019 , 183, 109501	13
637	TDCIPP exposure affects <i>Artemia franciscana</i> growth and osmoregulation. 2019 , 694, 133486	5
636	Elimination of human folypolyglutamate synthetase alters programming and plasticity of somatic cells. 2019 , 33, 13747-13761	3
635	2-Deoxy-d-Glucose-Induced Metabolic Alteration in Human Oral Squamous SCC15 Cells: Involvement of N-Glycosylation of Axl and Met. 2019 , 9,	9
634	Canonical Wnt is inhibited by targeting one-carbon metabolism through methotrexate or methionine deprivation. 2019 , 116, 2987-2995	30
633	Interplay Between Maternal Micronutrients, DNA Methylation, and Brain Development. 2019 , 1193-1215	
632	[The underestimated coding potential of mitochondrial DNA]. 2019 , 35, 46-54	0
631	S-adenosylmethionine biosynthesis is a targetable metabolic vulnerability of cancer stem cells. 2019 , 175, 39-50	27
630	Prostate cancer-specific hallmarks of amino acids metabolism: Towards a paradigm of precision medicine. 2019 , 1871, 248-258	14
629	Regulatory T Cells and Their Clinical Applications in Antitumor Immunotherapy. 2019 , 5, 132-139	3
628	Probabilistic controllability approach to metabolic fluxes in normal and cancer tissues. 2019 , 10, 2725	4
627	HSP90 Molecular Chaperones, Metabolic Rewiring, and Epigenetics: Impact on Tumor Progression and Perspective for Anticancer Therapy. 2019 , 8,	36
626	Gluconeogenesis in cancer cells - Repurposing of a starvation-induced metabolic pathway?. 2019 , 1872, 24-36	65
625	Association of transcriptional levels of folate-mediated one-carbon metabolism-related genes in cancer cell lines with drug treatment response. 2019 , 237, 19-38	13
624	Recent advances in the study of regulatory T cells in gastric cancer. 2019 , 73, 560-567	13
623	Transcriptional and metabolic rewiring of colorectal cancer cells expressing the oncogenic KRAS mutation. 2019 , 121, 37-50	22
622	Consolidated Biochemical Profile of Subacute Stage Traumatic Brain Injury in Early Development. 2019 , 13, 431	4
621	Selenium Deficiency Is Associated with Pro-longevity Mechanisms. 2019 , 27, 2785-2797.e3	35

620	Metabolic Infrastructure of Pregnant Women With Trisomy 21 Fetuses; Metabolomic Analysis. 2019 , 223, 297-303	11
619	Protein Covalent Modification by Homocysteine: Consequences and Clinical Implications. 2019 , 281-311	1
618	Tobacco carcinogens and the methionine metabolism in human bladder cancer. 2019 , 782, 108281	3
617	Co-delivery of paclitaxel and curcumin to foliate positive cancer cells using Pluronic-coated iron oxide nanoparticles. 2019 , 8, 155-168	18
616	Development of methionine methylation profiling and relative quantification in human breast cancer cells based on metabolic stable isotope labeling. 2019 , 144, 3988-3998	2
615	mTORC1 amplifies the ATF4-dependent de novo serine-glycine pathway to supply glycine during TGF- β -induced collagen biosynthesis. 2019 , 12,	59
614	Evaluating sub-lethal stress from Roundup exposure in <i>Artemia franciscana</i> using ^1H NMR and GC-MS. 2019 , 212, 77-87	3
613	The combination of ^{13}N -ammonia and ^{18}F -FDG PET/CT in the identification of metabolic phenotype of primary human brain tumors. 2019 , 58, 272-278	4
612	The Diverse Functions of Non-Essential Amino Acids in Cancer. 2019 , 11,	67
611	Immunometabolism: A new target for improving cancer immunotherapy. 2019 , 143, 195-253	15
610	Multi-Omics Analyses Detail Metabolic Reprogramming in Lipids, Carnitines, and Use of Glycolytic Intermediates between Prostate Small Cell Neuroendocrine Carcinoma and Prostate Adenocarcinoma. 2019 , 9,	13
609	Inferring cancer dependencies on metabolic genes from large-scale genetic screens. 2019 , 17, 37	11
608	Using Caffeine and Free Amino Acids To Enhance the Transepithelial Transport of Catechins in Caco-2 Cells. 2019 , 67, 5477-5485	5
607	MicroRNA-3162-5p-Mediated Crosstalk between Kallikrein Family Members Including Prostate-Specific Antigen in Prostate Cancer. 2019 , 65, 771-780	8
606	Metformin and Breast Cancer: Molecular Targets. 2019 , 24, 111-123	29
605	Dietary Intake of Nutrients Involved in One-Carbon Metabolism and Risk of Gastric Cancer: A Prospective Study. 2019 , 71, 605-614	13
604	NADPH production by the oxidative pentose-phosphate pathway supports folate metabolism. 2019 , 1, 404-415	92
603	Metabolomics Contributions to the Discovery of Prostate Cancer Biomarkers. 2019 , 9,	29

602	Drugging in the absence of p53. 2019 , 11, 255-264	6
601	Glycine promotes longevity in <i>Caenorhabditis elegans</i> in a methionine cycle-dependent fashion. 2019 , 15, e1007633	21
600	Critical role of ASCT2-mediated amino acid metabolism in promoting leukaemia development and progression. 2019 , 1, 390-403	32
599	Integrative Analysis of Dysfunctional Modules Driven by Genomic Alterations at System Level Across 11 Cancer Types. 2018 , 21, 771-783	2
598	Therapeutic Targeting of Non-oncogene Dependencies in High-risk Neuroblastoma. 2019 , 25, 4063-4078	10
597	Upregulation of phosphoserine phosphatase contributes to tumor progression and predicts poor prognosis in non-small cell lung cancer patients. 2019 , 10, 1203-1212	3
596	Epigenetics of Dietary Methyl-Group Donor Deficiency and Liver Cancer. 2019 , 1023-1038	
595	Nutritional and Epigenetics Implications in Esophageal Cancer. 2019 , 1535-1553	
594	Design strategy for serine hydroxymethyltransferase probes based on retro-aldol-type reaction. 2019 , 10, 876	17
593	Methyl Donor Nutrients in Chronic Kidney Disease: Impact on the Epigenetic Landscape. 2019 , 149, 372-380	13
592	Metabolic Profiling of Live Cancer Tissues Using NAD(P)H Fluorescence Lifetime Imaging. 2019 , 1928, 365-387	6
591	Methionine Supply During Late-Gestation Triggers Offspring Sex-Specific Divergent Changes in Metabolic and Epigenetic Signatures in Bovine Placenta. 2019 , 149, 6-17	18
590	A highly sensitive DNA aptamer-based fluorescence assay for sarcosine detection down to picomolar levels. 2019 , 129, 91-97	9
589	Tricarboxylic acid cycle metabolites in the control of macrophage activation and effector phenotypes. 2019 , 106, 359-367	17
588	Intrathecal Delivery of Folate Conjugated near-Infrared Quantum Dots for Targeted in Vivo Imaging of Gliomas in Mice Brains.. 2019 , 2, 1432-1439	6
587	Disturbed homocysteine metabolism is associated with cancer. 2019 , 51, 1-13	58
586	The Metabolic Landscape of Prostate Cancer. 2019 , 2, 28-36	33
585	Overview of Glutamine Dependency and Metabolic Rescue Protocols. 2019 , 1928, 427-439	3

584	Serine Metabolism Supports Macrophage IL-1 β Production. 2019 , 29, 1003-1011.e4	89
583	Preoperative Metabolic Signatures of Prostate Cancer Recurrence Following Radical Prostatectomy. 2019 , 18, 1316-1327	19
582	The Role of Single-Nucleotide Polymorphisms in the Function of Candidate Tumor Suppressor ALDH1L1. 2019 , 10, 1013	5
581	Mass spectrometric analysis of PTM dynamics using stable isotope labeled metabolic precursors in cell culture. 2019 , 144, 6812-6833	3
580	An intramolecular charge transfer and excited state intramolecular proton transfer based fluorescent probe for highly selective detection and imaging of formaldehyde in living cells. 2019 , 144, 6922-6927	7
579	Metabolomics facilitates the discovery of metabolic biomarkers and pathways for ischemic stroke: a systematic review. 2019 , 15, 152	26
578	SHMT2 Promotes Liver Regeneration Through Glycine-activated Akt/mTOR Pathway. 2019 , 103, e188-e197	8
577	Short-term treatment with a peroxisome proliferator-activated receptor δ agonist influences plasma one-carbon metabolites and B-vitamin status in rats. 2019 , 14, e0226069	3
576	Global metabolomic profiling of trastuzumab resistant gastric cancer cells reveals major metabolic pathways and metabolic signatures based on UHPLC-Q exactive-MS/MS.. 2019 , 9, 41192-41208	7
575	Topotecan induces apoptosis via ASCT2 mediated oxidative stress in gastric cancer. 2019 , 57, 117-128	16
574	Toward a better understanding of folate metabolism in health and disease. 2019 , 216, 253-266	44
573	Amino acid metabolism-related gene expression-based risk signature can better predict overall survival for glioma. 2019 , 110, 321-333	20
572	Mitochondrial function and abnormalities implicated in the pathogenesis of ASD. 2019 , 92, 83-108	33
571	Role of amino acid metabolism in angiogenesis. 2019 , 112, 17-23	9
570	Two-carbon folate cycle of commensal <i>Lactobacillus reuteri</i> 6475 gives rise to immunomodulatory ethionine, a source for histone ethylation. 2019 , 33, 3536-3548	15
569	Crosstalk between Estrogen Signaling and Breast Cancer Metabolism. 2019 , 30, 25-38	46
568	Identification of a natural inhibitor of methionine adenosyltransferase 2A regulating one-carbon metabolism in keratinocytes. 2019 , 39, 575-590	10
567	Metabolic rewiring beyond Warburg in chronic lymphocytic leukemia: How much do we actually know?. 2019 , 134, 65-70	12

566	Sirtuins in Metabolic and Epigenetic Regulation of Stem Cells. 2019 , 30, 177-188	24
565	Interconnection between Metabolism and Cell Cycle in Cancer. 2019 , 44, 490-501	100
564	Metabolic Stress Signaling and Metabolic Adaptation. 2019 , 139-148	1
563	Cancer stem-like properties and gefitinib resistance are dependent on purine synthetic metabolism mediated by the mitochondrial enzyme MTHFD2. 2019 , 38, 2464-2481	36
562	Cancer Metabolism. 2020 , 127-138.e4	2
561	Silencing NID2 by DNA Hypermethylation Promotes Lung Cancer. 2020 , 26, 801-811	3
560	Red carbon dots as label-free two-photon fluorescent nanoprobes for imaging of formaldehyde in living cells and zebrafishes. 2020 , 31, 759-763	16
559	Formate metabolism in health and disease. 2020 , 33, 23-37	46
558	Roles of vitamins in stem cells. 2020 , 77, 1771-1791	11
557	The serine transporter SdaC prevents cell lysis upon glucose depletion in Escherichia coli. 2020 , 9, e960	3
556	The PI3K-AKT network at the interface of oncogenic signalling and cancer metabolism. <i>Nature Reviews Cancer</i> , 2020 , 20, 74-88	313 434
555	The complexity of the serine glycine one-carbon pathway in cancer. 2020 , 219,	30
554	Depends on l-Serine Biosynthesis for Intracellular Proliferation. 2020 , 88,	4
553	Metabolomics studies in gastrointestinal cancer: a systematic review. 2020 , 14, 9-25	9
552	Comprehensive and quantitative profiling of B vitamins and related compounds in the mammalian liver. 2020 , 1136, 121884	5
551	A complex interplay between SAM synthetase and the epigenetic regulator SIN3 controls metabolism and transcription. 2020 , 295, 375-389	4
550	One-carbon metabolism for cancer diagnostic and therapeutic approaches. 2020 , 470, 141-148	9
549	ILF3 is a substrate of SPOP for regulating serine biosynthesis in colorectal cancer. 2020 , 30, 163-178	17

548	Distinct RNA demethylation pathways catalyzed by nonheme iron ALKBH5 and FTO enzymes enable regulation of formaldehyde release rates. 2020 , 117, 25284-25292	13
547	The emerging role of targeting cancer metabolism for cancer therapy. 2020 , 42, 1010428320965284	14
546	Sulfur Dioxide: An Endogenous Protector Against Myocardial Injury. 2020 , 76, 389-396	3
545	Dissecting the Crosstalk between NRF2 Signaling and Metabolic Processes in Cancer. 2020 , 12,	17
544	Nuclear metabolism and the regulation of the epigenome. 2020 , 2, 1190-1203	26
543	Mind your media. 2020 , 2, 1369-1372	13
542	EGF Relays Signals to COP1 and Facilitates FOXO4 Degradation to Promote Tumorigenesis. 2020 , 7, 2000681	8
541	The Roles of Mitochondrial Folate Metabolism in Supporting Mitochondrial DNA Synthesis, Oxidative Phosphorylation, and Cellular Function. 2020 , 4, nzaa153	8
540	Enhanced silk yield in transgenic silkworm (<i>Bombyx mori</i>) via ectopic expression of BmGT1-L in the posterior silk gland. 2020 , 29, 452-465	0
539	TGF- β Promotes Metabolic Reprogramming in Lung Fibroblasts via mTORC1-dependent ATF4 Activation. 2020 , 63, 601-612	14
538	Prognostic Role of Serum Amino Acids in Head and Neck Cancer. 2020 , 2020, 2291759	3
537	Placental energy metabolism in health and disease-significance of development and implications for preeclampsia. 2020 ,	10
536	Receptor-mediated targeted drug delivery systems for treatment of inflammatory bowel disease: Opportunities and emerging strategies. 2021 , 11, 2798-2818	11
535	Metabolic Plasticity Is an Essential Requirement of Acquired Tyrosine Kinase Inhibitor Resistance in Chronic Myeloid Leukemia. 2020 , 12,	1
534	MTHFD2 Blockade Enhances the Efficacy of Elapachone Chemotherapy With Ionizing Radiation in Head and Neck Squamous Cell Cancer. 2020 , 10, 536377	3
533	Methionine metabolism in chronic liver diseases: an update on molecular mechanism and therapeutic implication. 2020 , 5, 280	9
532	Astrocyte deletion of β -Na/K ATPase triggers episodic motor paralysis in mice via a metabolic pathway. 2020 , 11, 6164	4
531	MiR-22, regulated by MeCP2, suppresses gastric cancer cell proliferation by inducing a deficiency in endogenous S-adenosylmethionine. 2020 , 9, 99	8

530	Reshaping circadian metabolism in the suprachiasmatic nucleus and prefrontal cortex by nutritional challenge. 2020 , 117, 29904-29913	9
529	Glucose Starvation-Induced Rapid Death of Nrf1-Deficient, but Not Nrf2-Deficient, Hepatoma Cells Results from Its Fatal Defects in the Redox Metabolism Reprogramming. 2020 , 2020, 4959821	4
528	The RNA-binding protein SERBP1 functions as a novel oncogenic factor in glioblastoma by bridging cancer metabolism and epigenetic regulation. 2020 , 21, 195	23
527	RidA Proteins Protect against Metabolic Damage by Reactive Intermediates. 2020 , 84,	13
526	Acetylation Stabilizes Phosphoglycerate Dehydrogenase by Disrupting the Interaction of E3 Ligase RNF5 to Promote Breast Tumorigenesis. 2020 , 32, 108021	11
525	Targeting Tumor Metabolism to Overcome Radioresistance. 2020 , 219-263	2
524	Hyperhomocysteinemia: Clinical Insights. 2020 , 12, 1179573520962230	19
523	Metabolic heterogeneity in cancer: An overview and therapeutic implications. 2020 , 1874, 188421	8
522	Effects of chronic hyperinsulinemia on metabolic pathways and insulin signaling in the fetal liver. 2020 , 319, E721-E733	4
521	Therapeutic Targeting of Mitochondrial One-Carbon Metabolism in Cancer. 2020 , 19, 2245-2255	14
520	Oncogenic Mechanisms and Therapeutic Targeting of Metabolism in Leukemia and Lymphoma. 2021 , 11,	1
519	Metabolic Potential of Cancer Cells in Context of the Metastatic Cascade. 2020 , 9,	6
518	Use of encapsulated L-lysine-HCl and DL-methionine improves postprandial amino acid balance in laying hens. 2020 , 98,	3
517	Folic Acid Supplementation in Patients with Elevated Homocysteine Levels. 2020 , 37, 4149-4164	12
516	Serine Supports IL-1 β Production in Macrophages Through mTOR Signaling. 2020 , 11, 1866	7
515	The Role of Pi, Glutamine and the Essential Amino Acids in Modulating the Metabolism in Diabetes and Cancer. 2020 , 19, 1731-1775	1
514	Exploitable metabolic dependencies in MLL-ENL-induced leukemia. 2020 , 4, 3626-3638	1
513	Allosteric inhibition of MTHFR prevents futile SAM cycling and maintains nucleotide pools in one-carbon metabolism. 2020 , 295, 16037-16057	3

512	Comparative Metabolomics Study Revealed Difference in Central Carbon Metabolism between Sika Deer and Red Deer Antler. 2020 , 2020, 7192896	1
511	Association between Metabolites and the Risk of Lung Cancer: A Systematic Literature Review and Meta-Analysis of Observational Studies. 2020 , 10,	6
510	Molecular Targeted Radiosensitizers. 2020 ,	
509	Cisplatin inhibits SIRT3-deacetylation MTHFD2 to disturb cellular redox balance in colorectal cancer cell. 2020 , 11, 649	12
508	Genetic Variants in One-Carbon Metabolism Pathway Predict Survival Outcomes of Early-Stage Non-Small Cell Lung Cancer. 2020 , 98, 897-904	0
507	Integrated Phytochemical Analysis Based on UPLC-MS and Network Pharmacology Approaches to Explore the Quality Control Markers for the Quality Assessment of L. 2020 , 25,	5
506	S-adenosyl-l-homocysteine hydrolase links methionine metabolism to the circadian clock and chromatin remodeling. 2020 , 6,	20
505	Reprogrammed Epigenetic Landscape-Prophesied Functions of Bioactive Polysaccharides in Alleviating Diseases: A Pilot Study of DNA Methylome Remodeling in Polysaccharide (APS)-Improved Osteoporosis in a Rat Model. 2020 , 68, 15449-15459	6
504	Research progress and perspective in metabolism and metabolomics of psoriasis. 2020 , 133, 2976-2986	4
503	Structure-based dynamic analysis of the glycine cleavage system suggests key residues for control of a key reaction step. 2020 , 3, 756	8
502	Redox Homeostasis and Metabolism in Cancer: A Complex Mechanism and Potential Targeted Therapeutics. 2020 , 21,	22
501	Folate-appended cyclodextrin carrier targets ovarian cancer cells expressing the proton-coupled folate transporter. 2020 , 111, 1794-1804	3
500	How DNA methylation affects the Warburg effect. 2020 , 16, 2029-2041	5
499	Targeting PHGDH Upregulation Reduces Glutathione Levels and Resensitizes Resistant NRAS-Mutant Melanoma to MAPK Kinase Inhibition. 2020 , 140, 2242-2252.e7	11
498	Glycine metabolomic changes induced by anticancer agents in A549 cells. 2020 , 52, 793-809	5
497	Large scale analyses of genotype-phenotype relationships of glycine decarboxylase mutations and neurological disease severity. 2020 , 16, e1007871	3
496	High expression of folate cycle enzyme MTHFD1L correlates with poor prognosis and increased proliferation and migration in colorectal cancer. 2020 , 11, 4213-4221	7
495	H NMR-Based Urine Metabolomics Reveals Signs of Enhanced Carbon and Nitrogen Recycling in Prostate Cancer. 2020 , 19, 2419-2428	14

494	Paternal restraint stress affects offspring metabolism via ATF-2 dependent mechanisms in <i>Drosophila melanogaster</i> germ cells. 2020 , 3, 208	5
493	Serine catabolism produces ROS, sensitizes cells to actin dysfunction, and suppresses cell growth in fission yeast. 2020 , 73, 574-580	2
492	Methotrexate elicits pro-respiratory and anti-growth effects by promoting AMPK signaling. 2020 , 10, 7838	7
491	EWS-FLI1-regulated Serine Synthesis and Exogenous Serine are Necessary for Ewing Sarcoma Cellular Proliferation and Tumor Growth. 2020 , 19, 1520-1529	13
490	Common biochemical properties of metabolic genes recurrently dysregulated in tumors. 2020 , 8, 5	5
489	Influenza infection rewires energy metabolism and induces browning features in adipose cells and tissues. 2020 , 3, 237	12
488	Prognostic impact of B-vitamins involved in one-carbon metabolism in patients with diffuse large B-cell lymphoma. 2020 , 38, 456-466	0
487	Macular Disorders. 2020 ,	
486	The Molecular Link from Diet to Cancer Cell Metabolism. 2020 , 78, 1034-1044	22
485	Metabolic Traits in Cutaneous Melanoma. 2020 , 10, 851	6
484	Immunometabolism: new insights and lessons from antigen-directed cellular immune responses. 2020 , 42, 279-313	16
483	A multi-omics analysis reveals the unfolded protein response regulon and stress-induced resistance to folate-based antimetabolites. 2020 , 11, 2936	19
482	Targeting MDM2-dependent serine metabolism as a therapeutic strategy for liposarcoma. 2020 , 12,	9
481	Plasma metabolomic profile in prostatic intraepithelial neoplasia and prostate cancer and associations with the prostate-specific antigen and the Gleason score. 2020 , 16, 74	6
480	Energy Metabolism Regulates Stem Cell Pluripotency. 2020 , 8, 87	55
479	Mitochondrial Redox Hubs as Promising Targets for Anticancer Therapy. 2020 , 10, 256	21
478	O-GlcNAcylation regulates the methionine cycle to promote pluripotency of stem cells. 2020 , 117, 7755-7763	5
477	Dietary restriction of amino acids for Cancer therapy. 2020 , 17, 20	16

476	Glucose Metabolism on Tumor Plasticity, Diagnosis, and Treatment. 2020 , 10, 317	26
475	Drosha-independent miR-6778-5p strengthens gastric cancer stem cell stemness via regulation of cytosolic one-carbon folate metabolism. 2020 , 478, 8-21	14
474	Induced DNA hypomethylation by Folic Acid Deprivation in Bovine Fibroblast Donor Cells Improves Reprogramming of Somatic Cell Nuclear Transfer Embryos. 2020 , 10, 5076	3
473	Hypoxic activation of glucose-6-phosphate dehydrogenase controls the expression of genes involved in the pathogenesis of pulmonary hypertension through the regulation of DNA methylation. 2020 , 318, L773-L786	15
472	The Intersection of Serine Metabolism and Cellular Dysfunction in Retinal Degeneration. 2020 , 9,	8
471	Glycolate is a Novel Marker of Vitamin B Deficiency Involved in Gut Microbe Metabolism in Mice. 2020 , 12,	6
470	Identification of introduced and stably inherited DNA methylation variants in soybean associated with soybean cyst nematode parasitism. 2020 , 227, 168-184	14
469	LncRNAs regulate metabolism in cancer. 2020 , 16, 1194-1206	37
468	Acquisition of Cisplatin Resistance Shifts Head and Neck Squamous Cell Carcinoma Metabolism toward Neutralization of Oxidative Stress. 2020 , 12,	12
467	Metabolic Adaptations in Cancer Stem Cells. 2020 , 10, 1010	55
466	Targeting Altered Energy Metabolism in Colorectal Cancer: Oncogenic Reprogramming, the Central Role of the TCA Cycle and Therapeutic Opportunities. 2020 , 12,	11
465	Cancer Cells Don't Live Alone: Metabolic Communication within Tumor Microenvironments. 2020 , 54, 183-195	42
464	Interplay between Metabolism, Nutrition and Epigenetics in Shaping Brain DNA Methylation, Neural Function and Behavior. 2020 , 11,	9
463	Starve a cold, and perhaps a cancer. 2020 , 22, 755-757	
462	Targeting metabolic dependencies in pediatric cancer. 2020 , 32, 26-34	2
461	One-carbon metabolites, B vitamins and associations with systemic inflammation and angiogenesis biomarkers among colorectal cancer patients: results from the ColoCare Study. 2020 , 123, 1187-1200	3
460	Metabolic Profiling in Blastocoel Fluid and Blood Plasma of Diabetic Rabbits. 2020 , 21,	1
459	Glycine by MR spectroscopy is an imaging biomarker of glioma aggressiveness. 2020 , 22, 1018-1029	13

458	Codon and amino acid content are associated with mRNA stability in mammalian cells. 2020 , 15, e0228730	19
457	Multiple Levels of PGC-1 β Dysregulation in Heart Failure. 2020 , 7, 2	17
456	Modulation of dysregulated cancer metabolism by plant secondary metabolites: A mechanistic review. 2020 ,	28
455	Serine-glycine-one-carbon metabolism: vulnerabilities in MYCN-amplified neuroblastoma. 2020 , 9, 14	7
454	Macrophages induce malignant traits in mammary epithelium via IKK α /TBK1 kinases and the serine biosynthesis pathway. 2020 , 12, e10491	9
453	Amino acids in cancer. 2020 , 52, 15-30	158
452	Structure-Activity Relationships (SARs) of β -Ketothioamides as Inhibitors of Phosphoglycerate Dehydrogenase (PHGDH). 2020 , 13,	8
451	Multi-platform NMR Study of Pluripotent Stem Cells Unveils Complementary Metabolic Signatures towards Differentiation. 2020 , 10, 1622	6
450	Design and synthesis of a folate-receptor targeted diazepine-ring-opened pyrrolobenzodiazepine prodrug conjugate. 2020 , 30, 126987	4
449	Regulation of immune cell metabolism by cancer cell oncogenic mutations. 2020 , 147, 307-316	1
448	Metabolic infrastructure of pregnant women with methylenetetrahydrofolate reductase polymorphisms: A metabolomic analysis. 2020 , 34, e4842	4
447	The role of transporters in cancer redox homeostasis and cross-talk with nanomedicines. 2020 , 15, 145-157	12
446	Unveiling dynamic metabolic signatures in human induced pluripotent and neural stem cells. 2020 , 16, e1007780	3
445	MYC and the unfolded protein response in cancer: synthetic lethal partners in crime?. 2020 , 12, e11845	20
444	Human Melanoma-Cell Metabolic Profiling: Identification of Novel Biomarkers Indicating Metastasis. 2020 , 21,	8
443	Effects of L-Serine Against Cisplatin-Mediated Reactive Oxygen Species Generation in Zebrafish Vestibular Tissue Culture and HEI-OC1 Auditory Hybridoma Cells. 2021 , 39, 36-41	1
442	Identification of three new compounds that directly target human serine hydroxymethyltransferase 2. 2021 , 97, 221-230	2
441	Finding distinctions between oral cancer and periodontitis using saliva metabolites and machine learning. 2021 , 27, 484-493	13

440	l-Serine links metabolism with neurotransmission. 2021 , 197, 101896	11
439	Small molecule-based bioluminescence and chemiluminescence probes for sensing and imaging of reactive species. 2021 , 134, 116129	9
438	Nuclear magnetic resonance and surface-assisted laser desorption/ionization mass spectrometry-based metabolome profiling of urine samples from kidney cancer patients. 2021 , 193, 113752	5
437	One Carbon Metabolism and Mammalian Pregnancy Outcomes. 2021 , 65, e2000734	6
436	Folate-mediated one-carbon metabolism: a targeting strategy in cancer therapy. 2021 , 26, 817-825	10
435	Tumor Reliance on Cytosolic versus Mitochondrial One-Carbon Flux Depends on Folate Availability. 2021 , 33, 190-198.e6	10
434	Reducing Fatty Acid Oxidation Improves Cancer-free Survival in a Mouse Model of Li-Fraumeni Syndrome. 2021 , 14, 31-40	1
433	Non-coding RNAs: the new central dogma of cancer biology. 2021 , 64, 22-50	24
432	Serine Metabolism Controls Dental Pulp Stem Cell Aging by Regulating the DNA Methylation of p16. 2021 , 100, 90-97	4
431	Lipid Metabolism in Tumor-Associated B Cells. 2021 , 1316, 133-147	1
430	An integrated mass spectrometry imaging and digital pathology workflow for objective detection of colorectal tumours by unique atomic signatures. 2021 , 12, 10321-10333	5
429	Mechanisms of chemoresistance and approaches to overcome its impact in gynecologic cancers. 2021 , 77-126	
428	Serum metabolite profiling of a 4-Nitroquinoline-1-oxide-induced experimental oral carcinogenesis model using gas chromatography-mass spectrometry. 2021 , 9, e10619	2
427	An Evolutionary Systems Biology View on Metabolic System Structure and Dynamics. 2021 , 159-196	
426	Glioma cells require one-carbon metabolism to survive glutamine starvation. 2021 , 9, 16	8
425	Metabolism of Amino Acids in Cancer. 2020 , 8, 603837	36
424	One-Carbon Metabolism and Development of the Conceptus During Pregnancy: Lessons from Studies with Sheep and Pigs. 2021 , 1285, 1-15	10
423	Dimerization of PHGDH via the catalytic unit is essential for its enzymatic function. 2021 , 296, 100572	3

422	Sirtuins in metabolic and epigenetic regulation of stem cells. 2021 , 25-37	2
421	Redox Regulation of Metabolic Enzymes in Cancer. 2021 , 263-275	
420	Targeted Chinese Medicine Delivery by A New Family of Biodegradable Pseudo-Protein Nanoparticles for Treating Triple-Negative Breast Cancer: and Study. 2020 , 10, 600298	1
419	Sphingosine kinase 1 downregulation is required for adaptation to serine deprivation. 2021 , 35, e21284	2
418	Metabolic control of cancer progression as novel targets for therapy. 2021 , 152, 103-177	1
417	From Embryo to Adult: One Carbon Metabolism in Stem Cells. 2021 , 16, 175-188	1
416	One-carbon metabolism in cancer cells: a critical review based on a core model of central metabolism. 2021 , 49, 1-15	3
415	Phosphatase of regenerating liver-3 regulates cancer cell metabolism in multiple myeloma. 2021 , 35, e21344	6
414	Metabolism and chromatin: A dynamic duo that regulates development and ageing: Elucidating the metabolism-chromatin axis in bone-marrow mesenchymal stem cell fate decisions. 2021 , 43, e2000273	1
413	Associations of one-carbon metabolism-related gene polymorphisms with breast cancer risk are modulated by diet, being higher when adherence to the Mediterranean dietary pattern is low. 2021 , 187, 793-804	2
412	1-C Metabolism-Serine, Glycine, Folates-In Acute Myeloid Leukemia. 2021 , 14,	0
411	Consequences of aneuploidy in human fibroblasts with trisomy 21. 2021 , 118,	9
410	Structural basis for selective inhibition of human serine hydroxymethyltransferase by secondary bile acid conjugate. 2021 , 24, 102036	
409	Exogenous and Endogenous Sources of Serine Contribute to Colon Cancer Metabolism, Growth, and Resistance to 5-Fluorouracil. 2021 , 81, 2275-2288	15
408	Cutting edge: Metabolic immune reprogramming, reactive oxygen species, and cancer. 2021 , 236, 6168-6189	3
407	Correlation between semiquantitative and volumetric 18F-FDG PET/computed tomography parameters and Ki-67 expression in breast cancer. 2021 , 42, 656-664	4
406	Glycolate combats massive oxidative stress by restoring redox potential in <i>Caenorhabditis elegans</i> . 2021 , 4, 151	3
405	Linking Metabolic Reprogramming, Plasticity and Tumor Progression. 2021 , 13,	7

404	Genomic analyses of glycine decarboxylase neurogenic mutations yield a large-scale prediction model for prenatal disease. 2021 , 17, e1009307	0
403	LONP1 and ClpP cooperatively regulate mitochondrial proteostasis for cancer cell survival. 2021 , 10, 18	8
402	The SARS-CoV-2 induced targeted amino acid profiling in patients at hospitalized and convalescent stage. 2021 , 41,	6
401	The Serine Biosynthesis of WLY78 Is Regulated by the T-Box Riboswitch. 2021 , 22,	0
400	Improved redox homeostasis owing to the up-regulation of one-carbon metabolism and related pathways is crucial for yeast heterosis at high temperature. 2021 , 31, 622-634	2
399	Phosphoglycerate dehydrogenase (PHGDH) inhibitors: a comprehensive review 2015-2020. 2021 , 31, 597-608	4
398	A Review of Small-Molecule Inhibitors of One-Carbon Enzymes: SHMT2 and MTHFD2 in the Spotlight. 2021 , 4, 624-646	8
397	PSPH promotes melanoma growth and metastasis by metabolic deregulation-mediated transcriptional activation of NR4A1. 2021 , 40, 2448-2462	2
396	Fueling the Revolution: Targeting Metabolism to Enhance Immunotherapy. 2021 , 9, 255-260	4
395	Linking Serine/Glycine Metabolism to Radiotherapy Resistance. 2021 , 13,	4
394	A novel metabolic gene signature-based nomogram to predict overall survival in breast cancer. 2021 , 9, 367	2
393	Energy stress-induced linc01564 activates the serine synthesis pathway and facilitates hepatocellular carcinogenesis. 2021 , 40, 2936-2951	6
392	Therapeutic targeting of the mitochondrial one-carbon pathway: perspectives, pitfalls, and potential. 2021 , 40, 2339-2354	7
391	Targeting one-carbon metabolism requires mTOR inhibition: a new therapeutic approach in osteosarcoma. 2021 , 8, 1902250	
390	A monolithic single-chip point-of-care platform for metabolomic prostate cancer detection. 2021 , 7, 21	2
389	Metabolic supervision by PPIP5K, an inositol pyrophosphate kinase/phosphatase, controls proliferation of the HCT116 tumor cell line. 2021 , 118,	2
388	3-Phosphoglycerate dehydrogenase: a potential target for cancer treatment. 2021 , 44, 541-556	2
387	Trojan Horse Delivery of 4,4'-Dimethoxychalcone for Parkinsonian Neuroprotection. 2021 , 8, 2004555	10

386	The Causal Role of Lipoxidative Damage in Mitochondrial Bioenergetic Dysfunction Linked to Alzheimer's Disease Pathology. 2021 , 11,	3
385	A pro-metastatic tRNA fragment drives Nucleolin oligomerization and stabilization of bound metabolic mRNAs.	0
384	Application of Metabolomics in Pediatric Asthma: Prediction, Diagnosis and Personalized Treatment. 2021 , 11,	9
383	Dose-Related Urinary Metabolic Alterations of a Combination of Quercetin and Resveratrol-Treated High-Fat Diet Fed Rats. 2021 , 12, 655563	1
382	Mitochondrial NADP is essential for proline biosynthesis during cell growth. 2021 , 3, 571-585	20
381	The landscape of metabolic pathway dependencies in cancer cell lines. 2021 , 17, e1008942	1
380	miR-146 connects stem cell identity with metabolism and pharmacological resistance in breast cancer. 2021 , 220,	3
379	Huntingtin-mediated axonal transport requires arginine methylation by PRMT6. 2021 , 35, 108980	3
378	Metabolic and Amino Acid Alterations of the Tumor Microenvironment. 2021 , 28, 1270-1289	5
377	Metabolic Classification and Intervention Opportunities for Tumor Energy Dysfunction. 2021 , 11,	4
376	Amino Acid Metabolism. 2021 , 13,	6
375	A retrospective overview of PHGDH and its inhibitors for regulating cancer metabolism. 2021 , 217, 113379	5
374	Study of the metabolic alterations in patulin-induced neoplastic transformation in normal intestinal cells. 2021 , 10, 592-600	1
373	Attenuation of doxorubicin-induced oxidative damage in rat brain by regulating amino acid homeostasis with Astragali Radix. 2021 , 53, 893-901	1
372	Development and validation of a novel mRNA signature for predicting early relapse in non-small cell lung cancer. 2021 , 51, 1277-1286	1
371	Maternal germline factors associated with aneuploid pregnancy loss: a systematic review. 2021 , 27, 866-884	1
370	mTORC1 stimulates cell growth through SAM synthesis and mA mRNA-dependent control of protein synthesis. 2021 , 81, 2076-2093.e9	16
369	Palaeopathology and amino acid $\delta^{13}C$ analysis: Investigating pre-Columbian individuals with tuberculosis at Pica 8, northern Chile (1050-500 BP). 2021 , 129, 105367	2

368	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
367	Metabolomics in cancer research and emerging applications in clinical oncology. 2021 , 71, 333-358	55
366	The loss of SHMT2 mediates 5-fluorouracil chemoresistance in colorectal cancer by upregulating autophagy. 2021 , 40, 3974-3988	6
365	Stimuli responsive and receptor targeted iron oxide based nanoplatfoms for multimodal therapy and imaging of cancer: Conjugation chemistry and alternative therapeutic strategies. 2021 , 333, 188-245	10
364	Vincetoxicum arnottianum modulates motility features and metastatic marker expression in pediatric rhabdomyosarcoma by stabilizing the actin cytoskeleton. 2021 , 21, 136	2
363	Mitochondrial One-Carbon Flux has a Growth-Independent Role in Promoting Breast Cancer Metastasis.	0
362	Crystal Packing-Guided Construction of Hetero-Oligomeric Peptidic Ensembles as Synthetic 3-in-1 Transporters. 2021 , 60, 12924-12930	2
361	Serine catabolism generates NADPH to support hepatic lipogenesis.	
360	Crystal Packing-Guided Construction of Hetero-Oligomeric Peptidic Ensembles as Synthetic 3-in-1 Transporters. 2021 , 133, 13034-13040	0
359	Metabolic reprogramming and epigenetic modifications on the path to cancer. 2021 , 1	25
358	Serine metabolism antagonizes antiviral innate immunity by preventing ATP6V0d2-mediated YAP lysosomal degradation. 2021 , 33, 971-987.e6	13
357	FMO rewires metabolism to promote longevity through tryptophan and one carbon metabolism.	
356	Measuring the metabolic evolution of glioblastoma throughout tumor development, regression, and recurrence with hyperpolarized magnetic resonance.	1
355	Integration of transcriptomics and metabolomics reveals anlotinib-induced cytotoxicity in colon cancer cells. 2021 , 786, 145625	2
354	A three-sodium-to-glycine stoichiometry shapes the structural relationships of ATB0,+ with GlyT2 and GlyT1 in the SLC6 family.	1
353	Global analysis of protein arginine methylation.. 2021 , 1, 100016	4
352	The Concept of Folic Acid in Health and Disease. 2021 , 26,	10
351	Targeted NMR-based serum metabolic profiling of serine, glycine and methionine in acute-on-chronic liver failure patients: Possible insights into mitochondrial dysfunction.	2

350	One carbon metabolism in human lung cancer. 2021 , 10, 2523-2538	2
349	SLC1A5 provides glutamine and asparagine necessary for bone development in mice.	0
348	Nitric Oxide Modulates Metabolic Processes in the Tumor Immune Microenvironment. 2021 , 22,	4
347	Genetic and biological hallmarks of colorectal cancer. 2021 , 35, 787-820	8
346	Phytochemicals Targeting Metabolic Reprogramming in Cancer: An Assessment of Role, Mechanisms, Pathways, and Therapeutic Relevance. 2021 ,	2
345	Stress-Mediated Reprogramming of Prostate Cancer One-Carbon Cycle Drives Disease Progression. 2021 , 81, 4066-4078	3
344	Identification of a novel PHGDH covalent inhibitor by chemical proteomics and phenotypic profiling.. 2022 , 12, 246-261	3
343	Extraction of chlorophyll and carotenoids loaded into chitosan as potential targeted therapy and bio imaging agents for breast carcinoma. 2021 , 182, 1150-1160	12
342	NMDARs, Coincidence Detectors of Astrocytic and Neuronal Activities. 2021 , 22,	1
341	Serum metabolite signatures of epithelial ovarian cancer based on targeted metabolomics. 2021 , 518, 59-69	1
340	Epidemiology of 40 blood biomarkers of one-carbon metabolism, vitamin status, inflammation, and renal and endothelial function among cancer-free older adults. 2021 , 11, 13805	1
339	Impact of One-Carbon Metabolism-Driving Epitranscriptome as a Therapeutic Target for Gastrointestinal Cancer. 2021 , 22,	1
338	Metabolic landscapes in sarcomas. 2021 , 14, 114	1
337	Serine hydroxymethyltransferase 2: a novel target for human cancer therapy. 2021 , 39, 1671-1681	0
336	Biochemical Mechanisms Associating Alcohol Use Disorders with Cancers. 2021 , 13,	1
335	Metabolic Controls on Epigenetic Reprogramming in Regulatory T Cells. 2021 , 12, 728783	1
334	Metformin Is a Pyridoxal-5'-phosphate (PLP)-Competitive Inhibitor of SHMT2. 2021 , 13,	3
333	A planetary health perspective on synthetic methionine. 2021 , 5, e560-e569	10

332	Xanthine Derivatives Reveal an Allosteric Binding Site in Methylenetetrahydrofolate Dehydrogenase 2 (MTHFD2). 2021 , 64, 11288-11301	1
331	Targeting serine hydroxymethyltransferases 1 and 2 for T-cell acute lymphoblastic leukemia therapy. 2021 ,	1
330	Metabolite Biomarkers of Response (BoRs): Towards a fingerprint for the evolution of metastatic breast cancer. 2021 , 165, 8-18	
329	Metabolic reprogramming by traditional Chinese medicine and its role in effective cancer therapy. 2021 , 170, 105728	11
328	CircMYH9 drives colorectal cancer growth by regulating serine metabolism and redox homeostasis in a p53-dependent manner. 2021 , 20, 114	6
327	Vitamin B6 and Related Inborn Errors of Metabolism.	
326	Methionine restriction exposes a targetable redox vulnerability of triple-negative breast cancer cells by inducing thioredoxin reductase. 2021 , 190, 373-387	0
325	Multi-omic profiling of histone variant H3.3 lysine 27 methylation reveals a distinct role from canonical H3 in stem cell differentiation.	0
324	Association of dietary intakes of vitamin B12, vitamin B6, folate, and methionine with the risk of esophageal cancer: the Japan Public Health Center-based (JPHC) prospective study. 2021 , 21, 982	1
323	L-Serine, an Endogenous Amino Acid, Is a Potential Neuroprotective Agent for Neurological Disease and Injury. 2021 , 14, 726665	1
322	Glutamine anaplerosis is required for amino acid biosynthesis in human meningiomas. 2021 ,	1
321	Glucose Metabolism and Glucose Transporters in Breast Cancer. 2021 , 9, 728759	12
320	Identification and Validation of a Nine-Gene Amino Acid Metabolism-Related Risk Signature in HCC. 2021 , 9, 731790	6
319	Blood-based untargeted metabolomics in Relapsing-Remitting Multiple Sclerosis revealed the testable therapeutic target.	
318	Systemic impact of the expression of the mitochondrial alternative oxidase on Drosophila development.	1
317	Nrf2 activation does not affect adenoma development in a mouse model of colorectal cancer. 2021 , 4, 1081	0
316	Increased plasma and milk short-chain acylcarnitine concentrations reflect systemic LPS response in mid-lactation dairy cows. 2021 , 321, R429-R440	0
315	ATF3 promotes the serine synthesis pathway and tumor growth under dietary serine restriction. 2021 , 36, 109706	1

314	Oocyte metabolites are heritable factors that drive metabolic reprogramming of the progeny. 2021 , 3, 1148-1149	0
313	Rapid analysis of S-adenosylmethionine (SAM) and S-adenosylhomocysteine (SAH) isotopologues in stable isotope-resolved metabolomics (SIRM) using direct infusion nano-electrospray ultra-high-resolution Fourier transform mass spectrometry (DI-nESI-UHR-FTMS). 2021 , 1181, 338873	0
312	Multiplexed analysis of amino acids in mice brain microdialysis samples using isobaric labeling and liquid chromatography-high resolution tandem mass spectrometry. 2021 , 1656, 462537	0
311	Metabolomics of prostate cancer: Knock-in versus knock-out prostate. 2021 , 205, 114333	0
310	Brain on food: The neuroepigenetics of nutrition. 2021 , 149, 105099	2
309	Measuring the Metabolic Evolution of Glioblastoma throughout Tumor Development, Regression, and Recurrence with Hyperpolarized Magnetic Resonance. 2021 , 10,	0
308	Global analysis of protein arginine methylation.	
307	Comparison of Amino Acid Metabolisms in Normal Prostate (PNT-1A) and Cancer Cells (PC-3). 2021 , 23, 105-117	1
306	Comparable metabolism in pregnancy and cancer: A universal role of the Warburg effect. 2021 , 233-242	
305	Mitochondrial dysfunction in kidney diseases. 2021 , 119-154	
304	Role of NMR Metabolomics and MR Imaging in Colon Cancer. 2021 , 43-66	
303	Cytoplasmic SHMT2 drives the progression and metastasis of colorectal cancer by inhibiting E-catenin degradation. 2021 , 11, 2966-2986	8
302	Serine synthesis pathway inhibition cooperates with dietary serine and glycine limitation for cancer therapy. 2021 , 12, 366	31
301	The Metabolic Mechanisms of Breast Cancer Metastasis. 2020 , 10, 602416	19
300	Mitochondrial metabolism and carcinogenesis. 2021 , 119-163	
299	Peaceful Existence of Tumor Cells with Their Non-malignant Neighbors: The Trade of Tumor Cells with Tumor Microenvironment. 2021 , 14, 228-239	1
298	The ins and outs of serine and glycine metabolism in cancer. 2021 , 3, 131-141	8
297	Metabolites and the tumour microenvironment: from cellular mechanisms to systemic metabolism. 2021 , 3, 21-32	62

296	Epigenetics of Dietary Methyl-Group Donor Deficiency and Liver Cancer. 2017 , 1-16	1
295	Biological and Clinical Evidence for Metabolic Dormancy in Solid Tumors Post Therapy. 2017 , 17-29	1
294	Metabolic Fluxes in Cancer Metabolism. 2015 , 315-348	4
293	Enzymes in Metabolic Anticancer Therapy. 2019 , 1148, 173-199	11
292	Reprogramming of serine, glycine and one-carbon metabolism in cancer. 2020 , 1866, 165841	13
291	Inverse Data-Driven Modeling and Multiomics Analysis Reveals Phgdh as a Metabolic Checkpoint of Macrophage Polarization and Proliferation. 2020 , 30, 1542-1552.e7	17
290	A Metabolic Roadmap for Somatic Stem Cell Fate. 2020 , 31, 1052-1067	21
289	Metabolic cell communication within tumour microenvironment: models, methods and perspectives. 2020 , 63, 210-219	3
288	Dietary serine-microbiota interaction enhances chemotherapeutic toxicity without altering drug conversion. 2020 , 11, 2587	18
287	Network-based metabolic characterization of renal cell carcinoma. 2020 , 10, 5955	22
286	Bioinformatics analysis of key biomarkers and potential molecular mechanisms in hepatocellular carcinoma induced by hepatitis B virus. 2020 , 99, e20302	6
285	The role of MTHFDL in mediating intracellular lipogenesis in oleaginous. 2020 , 166, 617-623	2
284	Translational control of methionine and serine metabolic pathways underpin the paralog-specific phenotypes of Rpl22 ribosomal protein mutants in cell division and replicative longevity.	1
283	Targeting serine hydroxymethyltransferases 1 and 2 for T-cell acute lymphoblastic leukemia therapy.	3
282	Repurposing the antidepressant sertraline as SHMT inhibitor to suppress serine/glycine synthesis addicted breast tumor growth.	1
281	Metabolic adaptations underlie epigenetic vulnerabilities in chemoresistant breast cancer.	2
280	Environmental factors shape methionine metabolism in p16/MTAP deleted cells.	1
279	Clustering co-abundant genes identifies components of the gut microbiome that are reproducibly associated with colorectal cancer and inflammatory bowel disease.	4

278	Dietary methionine restriction targets one carbon metabolism in humans and produces broad therapeutic responses in cancer.	5
277	Repurposing the Antidepressant Sertraline as SHMT Inhibitor to Suppress Serine/Glycine Synthesis-Addicted Breast Tumor Growth. 2021 , 20, 50-63	12
276	Glycine decarboxylase deficiency-induced motor dysfunction in zebrafish is rescued by counterbalancing glycine synaptic level. 2018 , 3,	3
275	Leveraging and manufacturing in vitro multicellular spheroid-based tumor cell model as a preclinical tool for translating dysregulated tumor metabolism into clinical targets and biomarkers. 2020 , 7,	5
274	Methylenetetrahydrofolate Dehydrogenase 1 (MTHFD1) is Underexpressed in Clear Cell Renal Cell Carcinoma Tissue and Transfection and Overexpression in Caki-1 Cells Inhibits Cell Proliferation and Increases Apoptosis. 2018 , 24, 8391-8400	2
273	Differences in Serum Amino Acid Phenotypes Among Patients with Diabetic Nephropathy, Hypertensive Nephropathy, and Chronic Nephritis. 2019 , 25, 7235-7242	2
272	Glycine and Folate Ameliorate Models of Congenital Sideroblastic Anemia. 2016 , 12, e1005783	42
271	Sarcosine Up-Regulates Expression of Genes Involved in Cell Cycle Progression of Metastatic Models of Prostate Cancer. 2016 , 11, e0165830	35
270	Investigation of discriminant metabolites in tamoxifen-resistant and choline kinase-alpha-downregulated breast cancer cells using 1H-nuclear magnetic resonance spectroscopy. 2017 , 12, e0179773	5
269	Lipids contribute to epigenetic control via chromatin structure and functions.	2
268	Lipids contribute to epigenetic control via chromatin structure and functions.	1
267	Phosphoserine Phosphatase Promotes Lung Cancer Progression through the Dephosphorylation of IRS-1 and a Noncanonical L-Serine-Independent Pathway. 2019 , 42, 604-616	4
266	Activation of the methylation cycle in cells reprogrammed into a stem cell-like state. 2015 , 2, 958-967	24
265	One-carbon metabolism and nucleotide biosynthesis as attractive targets for anticancer therapy. 2017 , 8, 23955-23977	67
264	Metabolic heterogeneity signature of primary treatment-naïve prostate cancer. 2017 , 8, 25928-25941	12
263	Glycolytic reprogramming through PCK2 regulates tumor initiation of prostate cancer cells. 2017 , 8, 83602-83618	18
262	Plasma-derived extracellular vesicle proteins as a source of biomarkers for lung adenocarcinoma. 2017 , 8, 95466-95480	50
261	Serum NMR metabolomics to differentiate haematologic malignancies. 2018 , 9, 24414-24427	7

260	Bioinformatics analysis of the serine and glycine pathway in cancer cells. 2014 , 5, 11004-13	59
259	Distinct pattern of one-carbon metabolism, a nutrient-sensitive pathway, in invasive breast cancer: A metabolomic study. 2020 , 11, 1637-1652	1
258	Apolipoprotein A-I anti-tumor activity targets cancer cell metabolism. 2020 , 11, 1777-1796	2
257	Global metabolic profile identifies choline kinase alpha as a key regulator of glutathione-dependent antioxidant cell defense in ovarian carcinoma. 2015 , 6, 11216-30	15
256	MYCN amplification confers enhanced folate dependence and methotrexate sensitivity in neuroblastoma. 2015 , 6, 15510-23	11
255	Oncometabolic mutation IDH1 R132H confers a metformin-hypersensitive phenotype. 2015 , 6, 12279-96	41
254	NF-Y activates genes of metabolic pathways altered in cancer cells. 2016 , 7, 1633-50	31
253	Translational and HIF1-Dependent Metabolic Reprogramming Underpin Oncometabolome Plasticity and Synergy Between Oncogenic Kinase Inhibitors and Biguanides.	1
252	Huntingtin-Mediated Axonal Transport Requires Arginine Methylation by PRMT6.	2
251	Staging of colorectal cancer using serum metabolomics with HNMR Spectroscopy. 2017 , 20, 835-840	13
250	Serine catabolism is essential to maintain mitochondrial respiration in mammalian cells. 2018 , 1, e201800036	31
249	Mitochondrial spongiotic brain disease: astrocytic stress and harmful rapamycin and ketosis effect. 2020 , 3,	5
248	Nuclear magnetic resonance-based metabolomics and metabolic pathway networks from patient-matched esophageal carcinoma, adjacent noncancerous tissues and urine. 2019 , 25, 3218-3230	6
247	Identification and Characterization of Glycine Decarboxylase as a Direct Target of Snail in the Epithelial-Mesenchymal Transition of Cancer Cells. 2021 , 1, 55-62	2
246	Translational control of one-carbon metabolism underpins ribosomal protein phenotypes in cell division and longevity. 2020 , 9,	9
245	methionine/S-adenosylmethionine cycle activity is sensed and adjusted by a nuclear hormone receptor. 2020 , 9,	7
244	Neonatal encephalopathy plasma metabolites are associated with neurodevelopmental outcomes. 2021 ,	
243	Metabolic trends of Chinese hamster ovary cells in biopharmaceutical production under batch and fed-batch conditions. 2021 , e3220	1

- 242 Biomarkers related to fatty acid oxidative capacity are predictive for continued weight loss in cachectic cancer patients. **2021**, 2
- 241 Glycinergic Signaling in Macrophages and Its Application in Macrophage-Associated Diseases. **2021**, 12, 762564 0
- 240 Quantitative Acetylomics Revealed Acetylation-Mediated Molecular Pathway Network Changes in Human Nonfunctional Pituitary Neuroendocrine Tumors. **2021**, 12, 753606 1
- 239 Microenvironmental Reactive Oxygen Species in Colorectal Cancer: Involved Processes and Therapeutic Opportunities. **2021**, 13, 3
- 238 Integrative modeling of tumor DNA methylation identifies a role for metabolism.
- 237 Nutritional and Epigenetics Implications in Esophageal Cancer. **2017**, 1-19
- 236 Interplay Between Maternal Micronutrients, DNA Methylation, and Brain Development. **2017**, 1-23
- 235 Translational and HIF1 β -dependent metabolic reprogramming underpin oncometabolome plasticity and synergy between oncogenic kinase inhibitors and biguanides.
- 234 Cancer Metabolism. **2018**, 129-154
- 233 Identification of Cancer-Associated Metabolic Vulnerabilities by Modeling Multi-objective Optimality in Metabolism.
- 232 Metabolic Dysregulation in Environmental Carcinogenesis and Toxicology. 511-606
- 231  MDM2   **2018**, 805-808
- 230 Methionine metabolism influences the genomic architecture of H3K4me3 with the link to gene expression encoded in peak width.
- 229 Detoxification of endogenous serine prevents cell lysis upon glucose depletion in bacteria.
- 228 Glycine promotes longevity in *Caenorhabditis elegans* in a methionine cycle-dependent fashion.
- 227 The Positive Clinical Consequence of Early Intervention of Combined Therapy (Omega 3 Fatty Acids and B12 Vitamin) in Children Under 5 with Variable Forms of Cerebral Palsy. **2018**, 1,
- 226 CHAPTER 12: Nutrition, Epigenetics and Cancer Prevention. **2019**, 183-206
- 225 Free radical destruction of hydroxyl-containing amino acids. **2019**, 3-13

224	Loss of SHMT2 mediates 5-FU chemoresistance by inducing autophagy in colorectal cancer.	
223	Large scale analyses of genotype-phenotype relationships of glycine decarboxylase mutations and neurological disease severity.	
222	Glucose starvation to rapid death of Nrf1, but not Nrf2, deficient hepatoma cells from its fatal defects in the redox metabolism reprogramming.	
221	<i>C. elegans</i> methionine/S-adenosylmethionine cycle activity is sensed and adjusted by a nuclear hormone receptor.	
220	Open Source ImmGen: network perspective on metabolic diversity among mononuclear phagocytes.	0
219	Machine Learning Strategies to Distinguish Oral Cancer from Periodontitis Using Salivary Metabolites. 2021 , 511-526	0
218	Consequences of aneuploidy in human fibroblasts with trisomy 21.	
217	The impact of physiological metabolite levels on serine uptake, synthesis and utilization in cancer cells. 2021 , 12, 6176	2
216	Serine and one-carbon metabolisms bring new therapeutic venues in prostate cancer.. 2021 , 12, 45	1
215	Cul4A-DDB1-mediated monoubiquitination of phosphoglycerate dehydrogenase promotes colorectal cancer metastasis via increased S-adenosylmethionine. 2021 , 131,	4
214	Expression-Based Inference of Cancer Metabolic Flux Differences.	
213	Macular Telangiectasis Type 2. 2020 , 73-84	
212	Targeting Metabolic Reprogramming of Colorectal Cancer. 2020 , 81-92	0
211	OXCT1 Enhances Gemcitabine Resistance Through NF- κ B Pathway in Pancreatic Ductal Adenocarcinoma. 2021 , 11, 698302	0
210	Genomic analyses of glycine decarboxylase neurogenic mutations, yield a large scale prediction model for prenatal disease.	
209	The landscape of metabolic pathway dependencies in cancer cell lines.	
208	Metastatic Melanoma Induced Metabolic Changes in C57BL/6J Mouse Stomach Measured by ¹ H NMR Spectroscopy. 2014 , 4,	4
207	NADPH production by the oxidative pentose-phosphate pathway supports folate metabolism. 2019 , 1, 404-415	63

206	Methionine restriction activates the integrated stress response in triple-negative breast cancer cells by a GCN2- and PERK-independent mechanism. 2019 , 9, 1766-1775	6
205	Urinary metabolites for urological cancer detection: a review on the application of volatile organic compounds for cancers. 2019 , 7, 232-248	7
204	PLC γ knockdown prevents serine/glycine metabolism and proliferation of prostate cancer by suppressing YAP. 2020 , 10, 196-210	3
203	Can the Mitochondrial Metabolic Theory Explain Better the Origin and Management of Cancer than Can the Somatic Mutation Theory?. 2021 , 11,	2
202	Cancer metabolism and tumor microenvironment: fostering each other?. 2021 , 1	3
201	Gene expression and epigenetic responses of the marine Cladoceran, , and the copepod, , to elevated CO ₂ . 2021 , 11, 16776-16785	0
200	Supplemental folic acid and/or multivitamins in pregnancy is associated with a decreased risk of childhood and adolescent nasopharyngeal carcinoma. 2021 , 1-6	
199	Association of B vitamins and methionine intake with the risk of gastric cancer: The Japan Public Health Center-based Prospective Study. 2021 ,	0
198	Molecular Profile Study of Extracellular Vesicles for the Identification of Useful Small Molecule Cancer Diagnosis. 2021 , 11, 10787	0
197	Evolutionary metabolic landscape from preneoplasia to invasive lung adenocarcinoma. 2021 , 12, 6479	3
196	Serine catabolism generates liver NADPH and supports hepatic lipogenesis. 2021 ,	2
195	1-deoxysphinganine initiates adaptive responses to serine and glycine starvation in cancer cells via proteolysis of sphingosine kinase. 2021 , 100154	2
194	The protein kinase activity of NME7 activates Wnt/ β Catenin signaling to promote one-carbon metabolism in hepatocellular carcinoma. 2021 ,	1
193	Histone N-terminal acetyltransferase NAA40 links one-carbon metabolism to chemoresistance. 2021 ,	2
192	Reduction of Rapid Proliferating Tumour Cell Lines by Inhibition of the Specific Glycine Transporter GLYT1.. 2021 , 9,	0
191	Targeting cancer metabolism in the era of precision oncology. 2021 ,	32
190	Antibody-drug conjugates: Resurgent anticancer agents with multi-targeted therapeutic potential.. 2022 , 236, 108106	3
189	Identification of proteins associated with treatment response of neoadjuvant chemoradiotherapy in rectal mucinous adenocarcinoma by co-expression network analysis based on proteomic analysis.. 2022 , 254, 104472	

188	Can the Mitochondrial Metabolic Theory Explain Better the Origin and Management of Cancer than Can the Somatic Mutation Theory?. 2021 , 11, 572	5
187	Development of a Standardized MRM Method for the Quantification of One Carbon Metabolism Enzymes.. 2022 , 2420, 159-175	0
186	Multi-omic profiling of histone variant H3.3 lysine 27 methylation reveals a distinct role from canonical H3 in stem cell differentiation.. 2022 ,	
185	Pathophysiological Integration of Metabolic Reprogramming in Breast Cancer.. 2022 , 14,	1
184	Stimulated Raman scattering imaging of cancer metabolism: New avenue to precision medicine. 2022 , 463-473	0
183	The association of arsenic exposure and arsenic metabolism with all-cause, cardiovascular and cancer mortality in the Strong Heart Study. 2021 , 159, 107029	0
182	The long noncoding RNA glycoLINC assembles a lower glycolytic metabolon to promote glycolysis.. 2022 ,	3
181	Reduced nicotinamide adenine dinucleotide phosphate in redox balance and diseases: a friend or foe?. 2022 ,	1
180	Reaction-based fluorescent and chemiluminescent probes for formaldehyde detection and imaging.. 2022 ,	1
179	Metabolic reprogramming in the arsenic carcinogenesis.. 2021 , 229, 113098	2
178	Effect of hyperthermia on cell viability, amino acid transfer, and milk protein synthesis in bovine mammary epithelial cells.. 2022 , 64, 110-122	
177	Mitochondrial protein import determines lifespan through metabolic reprogramming and de novo serine biosynthesis.. 2022 , 13, 651	2
176	mTOR Signaling and Potential Therapeutic Targeting in Meningioma.. 2022 , 23,	0
175	Connections between metabolism and epigenetic modifications in cancer. 2022 ,	2
174	Interplay Among Metabolism, Epigenetic Modifications, and Gene Expression in Cancer.. 2021 , 9, 793428	6
173	Targeting metabolism with herbal therapy: A preventative approach toward cancer. 2022 , 557-578	0
172	PERK is a critical metabolic hub for immunosuppressive function in macrophages.. 2022 ,	3
171	De novo serine synthesis regulates chondrocyte proliferation during bone development and repair.. 2022 , 10, 14	0

170	PI3K-AKT Pathway Modulation by Thymoquinone Limits Tumor Growth and Glycolytic Metabolism in Colorectal Cancer.. 2022 , 23,	2
169	Serum Metabolomic Analysis of Male Patients with Cannabis or Amphetamine Use Disorder.. 2022 , 12,	0
168	The role of SHMT2 in modulating lipid metabolism in hepatocytes via glycine-mediated mTOR activation.. 2022 , 1	0
167	Targeting Reductive Metabolic Shifts by T315I Mutation in BCR-ABL Myeloid Leukemia for Therapy.	0
166	Gain-of-function genetic screens in human cells identify SLC transporters overcoming environmental nutrient restrictions.	0
165	Perfluorooctanoic acid alters the developmental trajectory of female germ cells and embryos in rodents and its potential mechanism.. 2022 , 236, 113467	1
164	Downregulation of SHMT2 promotes the prostate cancer proliferation and metastasis by inducing epithelial-mesenchymal transition.. 2022 , 415, 113138	0
163	Pharmacokinetics and toxicity profiling of 4-(methylthio)butyl isothiocyanate with special reference to pre-clinical safety assessment studies.. 2022 , 212, 19-33	0
162	The Metabolic Relationship Between Viral Infection and Cancer. 2022 , 6,	0
161	Folate Transport and One-Carbon Metabolism in Targeted Therapies of Epithelial Ovarian Cancer.. 2021 , 14,	0
160	De novo serine biosynthesis from glucose predicts sex-specific response to antifolates in non-small cell lung cancer cell lines.	0
159	Monitoring one-carbon metabolism by mass spectrometry to assess liver function and disease.. 2021 , 78, 229	0
158	Pharmacological targeting of MTHFD2 suppresses acute myeloid leukemia by inducing thymidine depletion and replication stress.. 2022 , 3, 156-172	2
157	Metabolic Vulnerabilities in Multiple Myeloma.. 2022 , 14,	1
156	Nutritional Epigenetics in Cancer.. 2022 ,	0
155	Application of zebrafish in the study of the gut microbiome.. 2022 ,	0
154	Microbiomes of Urine and the Prostate Are Linked to Human Prostate Cancer Risk Groups.. 2022 ,	2
153	Combined multivariate statistical and flux balance analyses uncover media bottlenecks to the growth and productivity of Chinese hamster ovary cell cultures.. 2022 ,	0

152	Changes in serum amino acid levels in non-small cell lung cancer: a case-control study in Chinese population.. 2022 , 10, e13272	0
151	Pre-diagnosis Dietary One-Carbon Metabolism Micronutrients Consumption and Ovarian Cancer Survival: A Prospective Cohort Study.. 2022 , 9, 873249	0
150	Data_Sheet_1.docx. 2020 ,	
149	image_1.tif. 2018 ,	
148	table_1.docx. 2018 ,	
147	Table_1.DOCX. 2019 ,	
146	Metabolic pathways utilized by the porcine conceptus, uterus, and placenta.. 2022 ,	1
145	How previous treatment changes the metabolomic profile in patients with metastatic breast cancer.. 2022 , 1	0
144	Cystine uptake inhibition potentiates front-line therapies in acute myeloid leukemia.. 2022 ,	1
143	Exploring the Role of Metabolites in Cancer and the Associated Nerve Crosstalk.. 2022 , 14,	0
142	The Association between Serum Serine and Glycine and Related-Metabolites with Pancreatic Cancer in a Prospective Cohort Study.. 2022 , 14,	0
141	Effect of Methionine Deficiency on the Growth Performance, Serum Amino Acids Concentrations, Gut Microbiota and Subsequent Laying Performance of Layer Chicks.. 2022 , 9, 878107	
140	Regulation of Nucleotide Metabolism with Nutrient-Sensing Nanodrugs for Cancer Therapy.. 2022 , e2200482	1
139	Loss of PRMT7 reprograms glycine metabolism to selectively eradicate leukemia stem cells in CML.. 2022 ,	0
138	Mitochondria preserve an autarkic one-carbon cycle to confer growth-independent cancer cell migration and metastasis.. 2022 , 13, 2699	2
137	Targeting the DNA damage response and repair in cancer through nucleotide metabolism.. 2022 ,	1
136	Prior infection of Galleria mellonella with sublethal dose of Bt elicits immune priming responses but incurs metabolic changes. 2022 , 139, 104401	2
135	A pro-metastatic tRNA fragment drives Nucleolin oligomerization and stabilization of its bound metabolic mRNAs. 2022 ,	1

134	Proteomic Characterization of a Candidate Polygenic Driver of Metabolism in Non-small Cell Lung Cancer. 2022 , 434, 167636	0
133	Blood-based untargeted metabolomics in relapsing-remitting multiple sclerosis revealed the testable therapeutic target. 2022 , 119,	4
132	Methyltransferases, functions and applications.	3
131	PRMT7: a survive-or-die switch in cancer stem cells. 2022 , 21,	0
130	Serine hydroxymethyltransferase as a potential target of antibacterial agents acting synergistically with one-carbon metabolism-related inhibitors. 2022 , 5,	1
129	Kir2.1-mediated membrane potential promotes nutrient acquisition and inflammation through regulation of nutrient transporters. 2022 , 13,	0
128	MicroRNAs in the Regulation of Solute Carrier Proteins Behind Xenobiotic and Nutrient Transport in Cells. 9,	
127	Obesity, the other pandemic: linking diet and carcinogenesis by epigenetic mechanisms. 2022 , 109092	
126	Acinar-ductal metaplasia in the pancreas requires a glycolytic switch and functional mitochondria.	
125	SHMT2 promotes the tumorigenesis of renal cell carcinoma by regulating the m6A modification of PPAT. 2022 , 114, 110424	0
124	MicroRNA-21 guide and passenger strand regulation of adenylosuccinate lyase-mediated purine metabolism promotes transition to an EGFR-TKI-tolerant persister state.	1
123	Sex-related differences in plasma amino acids of patients with ST-elevation myocardial infarction and glycine as risk marker of acute heart failure with preserved ejection fraction.	
122	Proteomics and Metabolomics Unveil Codonopsis pilosula (Franch.) Nannf. Ameliorates Gastric Precancerous Lesions via Regulating Energy Metabolism. 13,	1
121	The crosstalk of the human microbiome in breast and colon cancer: A metabolomics analysis. 2022 , 176, 103757	1
120	Structural dynamics and in silico design of pyrazolopyran-based inhibitors against Plasmodium serine hydroxymethyltransferases. 2022 , 362, 119737	
119	Cancer Biology and Implications for the Perioperative Period. 2023 , 24-45	
118	Inhibition of SHMT2 mRNA translation increases embryonic mortality in sheep.	0
117	H2S biogenesis by cystathionine beta-synthase: mechanism of inhibition by aminoxyacetic acid and unexpected role of serine. 2022 , 79,	2

116	Mechanism and application of nonessential amino acid deprivation associated with tumor therapy. 2022 , 1,	1
115	Methyl Group Metabolism in Differentiation, Aging, and Cancer. 2022 , 23, 8378	
114	m6A-related metabolism molecular classification with distinct prognosis and immunotherapy response in soft tissue sarcoma. 13,	
113	Connections between metabolism and epigenetics: mechanisms and novel anti-cancer strategy. 13,	1
112	Metabolic transitions define spermatogonial stem cell maturation.	1
111	Targeted Proteomics for Monitoring One-Carbon Metabolism in Liver Diseases. 2022 , 12, 779	
110	Intradermal Glycine Detection with a Wearable Microneedle Biosensor: The First In Vivo Assay.	0
109	MYCN and Metabolic Reprogramming in Neuroblastoma. 2022 , 14, 4113	0
108	MicroRNA-mediated reprogramming of glucose, fatty acid and amino acid metabolism in cancer.	
107	Pan-cancer analysis of the angiotensin II receptor-associated protein as a prognostic and immunological gene predicting immunotherapy responses in pan-cancer. 10,	
106	A synthetic BBB-permeable tripeptide GCF confers neuroprotection by increasing glycine in the ischemic brain. 13,	
105	Integrated network pharmacology and hepatic metabolomics to reveal the mechanism of <i>Acanthopanax senticosus</i> against major depressive disorder. 10,	0
104	Metabolomics and integrated network pharmacology analysis reveal that ginkgolides act as potential active anticancer components by regulating one-carbon metabolism. 2022 , 298, 115609	2
103	Control of cell metabolism by the epidermal growth factor receptor. 2022 , 1869, 119359	1
102	The Effect of Oxidative Nutritional Products on Cancer. 2022 , 637-651	0
101	Metabolic dysregulation in cancer progression. 2022 , 1-39	0
100	Tumor cell metabolism and autophagy as therapeutic targets. 2022 , 73-107	0
99	Signaling pathways in metabolic dysregulation in solid tumors. 2022 , 119-140	0

98	Effects of Rumen-Protected Methionine on Lipid Profiles of the Preimplantation Embryo and Endometrial Tissue of Holstein Cows.	0
97	The Effect of Oxidative Nutritional Products on Cancer. 2022 , 1-15	0
96	Dual contribution of the mTOR pathway and of the metabolism of amino acids in prostate cancer.	1
95	Implications of regulatory T cells in anti-cancer immunity: from pathogenesis to therapeutics. 2022 , 8, e10450	0
94	MicroRNAs as Regulators of Cancer Cell Energy Metabolism. 2022 , 12, 1329	0
93	Gain-of-function genetic screens in human cells identify SLC transporters overcoming environmental nutrient restrictions. 2022 , 5, e202201404	0
92	On the Relevance of Soft Tissue Sarcomas Metabolic Landscape Mapping. 2022 , 23, 11430	0
91	Carbon stable isotope analysis of amino acids and glucose - A new technique to study the nutrient flow in host-parasite systems..	0
90	Biomimetic S-adenosylmethionine regeneration for nucleophilic and radical alkylation reactions and aminopropyltransfer.	1
89	Association of COVID-19 with hepatic metabolic dysfunction. 11, 237-251	1
88	Serum Metabolomics Profiling Reveals Metabolic Alterations Prior to a Diagnosis with Non-Small Cell Lung Cancer among Chinese Community Residents: A Prospective Nested Case-Control Study. 2022 , 12, 906	0
87	Metabolic remodeling of pyrimidine synthesis pathway and serine synthesis pathway in human glioblastoma. 2022 , 12,	0
86	Drug Metabolite Cluster Centers-based Strategy for Comprehensive Profiling of Neomangiferin Metabolites in vivo and in vitro and Network Pharmacology Study on Anti-inflammatory Mechanism. 2022 , 104268	1
85	Serine metabolism orchestrates macrophage polarization by regulating the IGF1β38 axis.	0
84	Chronic activation of pDCs in autoimmunity is linked to dysregulated ER stress and metabolic responses. 2022 , 219,	2
83	Thymidylate synthase accelerates Men1-mediated pancreatic tumor progression and reduces survival.	1
82	Novel amino acid metabolism-related gene signature to predict prognosis in clear cell renal cell carcinoma. 13,	0
81	The iron-sulfur cluster assembly (ISC) protein Iba57 executes a tetrahydrofolate-independent function in mitochondrial [4Fe-4S] protein maturation. 2022 , 298, 102465	1

80	3D in vitro cancer models for drug screening: A study of glucose metabolism and drug response in 2D and 3D culture models. 2021 ,	0
79	The LncRNA FEZF1-AS1 promotes tumor proliferation in colon cancer by regulating the mitochondrial protein PCK2. 2021 , 29, 201-215	0
78	Reprogramming Carbohydrate Metabolism in Cancer and Its Role in Regulating the Tumor Microenvironment. 2022 , 3-65	0
77	Metabolism-epigenetic interactions on in vitro produced embryos. 2022 ,	0
76	The Mechanism of Interaction Between Gold Nanoparticles and Human Dermal Fibroblasts Based on Integrative Analysis of Transcriptomics and Metabolomics Data. 2022 , 18, 1562-1576	0
75	Crosstalk between metabolic reprogramming and epigenetics in cancer: updates on mechanisms and therapeutic opportunities.	1
74	Druggable Metabolic Vulnerabilities Are Exposed and Masked during Progression to Castration Resistant Prostate Cancer. 2022 , 12, 1590	0
73	Inhibition of Phosphoglycerate Dehydrogenase Radiosensitizes Human Colorectal Cancer Cells under Hypoxic Conditions. 2022 , 14, 5060	1
72	NeRD: a multichannel neural network to predict cellular response of drugs by integrating multidimensional data. 2022 , 20,	0
71	One-carbon metabolic enzymes are regulated during cell division and make distinct contributions to the metabolome and cell cycle progression in <i>Saccharomyces cerevisiae</i> .	0
70	Rerouting the drug response: Overcoming metabolic adaptation in KRAS-mutant cancers. 2022 , 15,	0
69	De novo serine biosynthesis from glucose predicts sex-specific response to antifolates in non-small cell lung cancer cell lines. 2022 , 25, 105339	0
68	Integrated transcriptomic and metabolic analysis response in gills, hepatopancreas, and muscle metabolism in oriental river prawn <i>Macrobrachium nipponense</i> in response to acute high salinity stress. 2022 , 27, 101358	0
67	DDIT3 regulates key enzymes in the methionine cycle and flux during embryonic development. 2023 , 111, 109176	0
66	Serine and glycine metabolism-related gene expression signature stratifies immune profiles of brain gliomas, and predicts prognosis and responses to immunotherapy. 13,	0
65	Amino acid profiles in the tissue and serum of patients with liver cancer. 2022 , 17, 1797-1802	1
64	HIV-1 replication and latency are balanced by mTOR-driven cell metabolism. 12,	1
63	Radiosynthesis, Preclinical, and Clinical Positron Emission Tomography Studies of Carbon-11 Labeled Endogenous and Natural Exogenous Compounds.	2

- 62 Metabolic Reprogramming in Cancer. **2022**, 841-892 ○
- 61 The dual detection of formaldehydes and sulfenic acids with a reactivity fluorescent probe in cells and in plants. **2023**, 1239, 340734 ○
- 60 Intertwined regulation between RNA m6A modification and cancer metabolism. **2023**, 2, 100075 ○
- 59 Folate Metabolism in Hepatocellular Carcinoma. What Do We Know So Far?. **2022**, 21, 153303382211444 ○
- 58 Amino Acids in Cancer and Cachexia: An Integrated View. **2022**, 14, 5691 ○
- 57 Antcin A, a phytosterol regulates SARS-CoV -2 spike protein-mediated metabolic alteration in THP -1 cells explored by the 1 H-NMR -based metabolomics approach. ○
- 56 Protein targeting by the itaconate family in immunity and inflammation. **2022**, 479, 2499-2510 ○
- 55 4EBP1 senses extracellular glucose deprivation and initiates cell death signaling in lung cancer. **2022**, 13, ○
- 54 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 ○
- 53 Metabolic modulation of transcription: The role of one-carbon metabolism. **2022**, 29, 1664-1679 ○
- 52 Extracellular serine empowers epidermal proliferation and psoriasis-like symptoms. **2022**, 8, ○
- 51 Serum metabolic traits reveal therapeutic toxicities and responses of neoadjuvant chemoradiotherapy in patients with rectal cancer. **2022**, 13, ○
- 50 Overview of Cancer Metabolism and Signaling Transduction. **2023**, 24, 12 1
- 49 Selenium Deficiency Dysregulates One-Carbon Metabolism in Nutritional Muscular Dystrophy of Chicks. **2022**, ○
- 48 One-Carbon and Polyamine Metabolism as Cancer Therapy Targets. **2022**, 12, 1902 ○
- 47 Alterations in cellular metabolisms after TKI therapy for Philadelphia chromosome-positive leukemia in children: A review. 12, ○
- 46 Erwinia asparaginase (crisantaspase) increases plasma levels of serine and glycine. 12, ○
- 45 Metabolic reprogramming of cancer as a therapeutic target. **2022**, 130301 ○

- 44 X-Ray-Responsive Zeolitic Imidazolate Framework-Capped Nanotherapeutics for Cervical Cancer-Targeting Radiosensitization. 2213364 ○
- 43 Discovery of Novel Drug-like PHGDH Inhibitors to Disrupt Serine Biosynthesis for Cancer Therapy. **2023**, 66, 285-305 ○
- 42 Serine metabolism contributes to cell survival by regulating extracellular pH and providing an energy source in *Saccharomyces cerevisiae*. ○
- 41 One-carbon metabolic enzymes are regulated during cell division and make distinct contributions to the metabolome and cell cycle progression in *Saccharomyces cerevisiae*. ○
- 40 FOXK2 affects cancer cell response to chemotherapy by promoting nucleotide de novo synthesis. **2023**, 100926 ○
- 39 Glycine homeostasis requires reverse SHMT flux. ○
- 38 The role of serine metabolism in lung cancer: From oncogenesis to tumor treatment. 13, ○
- 37 A new technique to study nutrient flow in host-parasite systems by carbon stable isotope analysis of amino acids and glucose. **2023**, 13, ○
- 36 ¹H NMR-based metabolomics of paired tissue, serum and urine samples reveals an optimized panel of biofluids metabolic biomarkers for esophageal cancer. 13, ○
- 35 Metabolic reprogramming in colorectal cancer: regulatory networks and therapy. **2023**, 13, ○
- 34 PHGDH arginine methylation by PRMT1 promotes serine synthesis and represents a therapeutic vulnerability in hepatocellular carcinoma. **2023**, 14, ○
- 33 Screening and Analysis for Inhibitors of SHMT2 Enzyme Protein. ○
- 32 Maternal Dietary Deficiencies in Folic Acid and Choline Result in Larger Damage Volume, Reduced Neuro-Degeneration and -Inflammation and Changes in Choline Metabolites after Ischemic Stroke in Middle-Aged Offspring. **2023**, 15, 1556 ○
- 31 The role of amino acid metabolism alterations in pancreatic cancer: From mechanism to application. **2023**, 1878, 188893 ○
- 30 From antiepileptic therapy to promising adjuvant in medical oncology: A historical view of the ketogenic diet. **2023**, 24, 100340 ○
- 29 Metabolic changes underlying drug resistance in the multiple myeloma tumor microenvironment. 13, ○
- 28 Network analysis of large-scale ImmGen and Tabula Muris datasets highlights metabolic diversity of tissue mononuclear phagocytes. **2023**, 42, 112046 ○
- 27 Identification of biomarkers for risk assessment of arsenicosis based on untargeted metabolomics and machine learning algorithms. **2023**, 870, 161861 ○

- 26 Vitamin B9: Folic Acid. **2018**, 249-274 ○
- 25 Integration of parallel metabolomics and transcriptomics reveals metabolic patterns in porcine oocytes during maturation. **2023**, 14, ○
- 24 FMO rewires metabolism to promote longevity through tryptophan and one carbon metabolism in *C. elegans*. **2023**, 14, ○
- 23 Nutrient transporters: connecting cancer metabolism to therapeutic opportunities. **2023**, 42, 711-724 ○
- 22 Maternal dietary deficiencies in one-carbon metabolism during early neurodevelopment result in larger damage volume, reduced neurodegeneration and neuroinflammation and changes in choline metabolites after ischemic stroke in middle-aged offspring. ○
- 21 The Superoncogene Myc at the Crossroad between Metabolism and Gene Expression in Glioblastoma Multiforme. **2023**, 24, 4217 ○
- 20 Glutamine metabolism in breast cancer and possible therapeutic targets. **2023**, 210, 115464 ○
- 19 Downregulation of phosphoserine phosphatase potentiates tumor immune environments to enhance immune checkpoint blockade therapy. **2023**, 11, e005986 ○
- 18 The Role of Reprogrammed Glucose Metabolism in Cancer. **2023**, 13, 345 1
- 17 Data-Driven Screening to Infer Metabolic Modulators of the Cancer Epigenome. ○
- 16 Diversity and potential function of pig gut DNA viruses. **2023**, 9, e14020 ○
- 15 O-GlcNAc Signaling Increases Neuron Regeneration Through One-Carbon Metabolism in *Caenorhabditis elegans*. ○
- 14 Glutamine Starvation Affects Cell Cycle, Oxidative Homeostasis and Metabolism in Colorectal Cancer Cells. **2023**, 12, 683 ○
- 13 Transcriptome Analysis on Hepatopancreas Reveals the Metabolic Dysregulation Caused by *Vibrio parahaemolyticus* Infection in *Litopenaeus vannamei*. **2023**, 12, 417 ○
- 12 Nitric oxide regulates metabolism in murine stress erythroid progenitors to promote recovery during inflammatory anemia. ○
- 11 Sirtuin-dependent metabolic and epigenetic regulation of macrophages during tuberculosis. **2023**, 14, ○
- 10 Metabolic Reprogramming and Potential Therapeutic Targets in Lymphoma. **2023**, 24, 5493 ○
- 9 Biomimetic S-Adenosylmethionine Regeneration Starting from Multiple Byproducts Enables Biocatalytic Alkylation with Radical SAM Enzymes**. ○

- 8 Serine and one-carbon metabolism sustain non-melanoma skin cancer progression. **2023**, 9, ○
- 7 Enhanced cell growth, production, and mAb quality produced in Chinese hamster ovary-K1 cells by supplementing polyamine in the media. **2023**, 107, 2855-2870 ○
- 6 A nomogram based on metabolic profiling to discriminate lung cancer among patients with lung nodules. **2023**, 51, 030006052311612 ○
- 5 Co-inhibition of glutaminolysis and one carbon metabolism promotes ROS accumulation leading to enhancement of chemotherapeutic efficacy in anaplastic thyroid cancer. ○
- 4 Formate overflow drives toxic folate trapping in MTHFD1 inhibited cancer cells. ○
- 3 Excessive serine from the bone marrow microenvironment impairs megakaryopoiesis and thrombopoiesis in Multiple Myeloma. **2023**, 14, ○
- 2 Association between Micronutrients and Hyperhomocysteinemia: A Case-Control Study in Northeast China. **2023**, 15, 1895 ○
- 1 Genetic basis of metabolism and inflammation in PCOS. **2023**, 531-563 ○