Interplay between metabolic identities in the intestinal

Nature

543, 424-427

DOI: 10.1038/nature21673

Citation Report

#	Article	IF	Citations
1	Beyond growth signaling: Paneth cells metabolically support ISCs. Cell Research, 2017, 27, 851-852.	5.7	8
2	Metabolic Teamwork in the Stem Cell Niche. Cell Metabolism, 2017, 25, 993-994.	7.2	13
3	A case of metabolic identity in the intestinal crypt. Nature Reviews Gastroenterology and Hepatology, 2017, 14, 259-259.	8.2	1
4	Cancer stem cells revisited. Nature Medicine, 2017, 23, 1124-1134.	15.2	1,895
5	A novel biosensor based on intestinal 3D organoids for detecting the function of BCRP. Drug Delivery, 2017, 24, 1453-1459.	2.5	16
6	Mitochondrial OXPHOS Induced by RB1 Deficiency in Breast Cancer: Implications for Anabolic Metabolism, Stemness, and Metastasis. Trends in Cancer, 2017, 3, 768-779.	3.8	98
7	Live cell imaging of mouse intestinal organoids reveals heterogeneity in their oxygenation. Biomaterials, 2017, 146, 86-96.	5.7	59
8	The intricate connection between diet, microbiota, and cancer: A jigsaw puzzle. Seminars in Immunology, 2017, 32, 35-42.	2.7	19
9	Lymphocyte Fate and Metabolism: A Clonal Balancing Act. Trends in Cell Biology, 2017, 27, 946-954.	3.6	11
10	Control of intestinal stem cell function and proliferation by mitochondrial pyruvate metabolism. Nature Cell Biology, 2017, 19, 1027-1036.	4.6	238
11	Cell fate decisions: emerging roles for metabolic signals and cell morphology. EMBO Reports, 2017, 18, 2105-2118.	2.0	91
12	The Organoid Reconstitution Assay (ORA) for the Functional Analysis of Intestinal Stem and Niche Cells. Journal of Visualized Experiments, 2017, , .	0.2	4
13	C3a Enhances the Formation of Intestinal Organoids through C3aR1. Frontiers in Immunology, 2017, 8, 1046.	2.2	24
14	Defining the role of Lgr5+ stem cells in colorectal cancer: from basic research to clinical applications. Genome Medicine, 2017, 9, 66.	3.6	11
15	Recent Advances in Lgr5 + Stem Cell Research. Trends in Cell Biology, 2018, 28, 380-391.	3.6	99
16	Metabo-Devo: A metabolic perspective of development. Mechanisms of Development, 2018, 154, 12-23.	1.7	28
17	The role of mitochondria in stem cell fate and aging. Development (Cambridge), 2018, 145, .	1.2	199
18	Metabolic features of cancer stem cells: the emerging role of lipid metabolism. Oncogene, 2018, 37, 2367-2378.	2.6	101

#	Article	IF	Citations
19	Stereotypical architecture of the stem cell niche is spatiotemporally established by miR-125-dependent coordination of Notch and steroid signaling. Development (Cambridge), 2018, 145, .	1.2	29
20	Digesting recent stem cell advances in the gut. Nature Reviews Gastroenterology and Hepatology, 2018, 15, 78-80.	8.2	0
21	Intestinal Stem Cells Live Off the Fat of the Land. Cell Stem Cell, 2018, 22, 611-612.	5.2	5
22	TFAM is required for maturation of the fetal and adult intestinal epithelium. Developmental Biology, 2018, 439, 92-101.	0.9	23
23	The Intestinal Epithelium: Central Coordinator of Mucosal Immunity. Trends in Immunology, 2018, 39, 677-696.	2.9	569
24	The Force Is Strong with This One: Metabolism (Over)powers Stem Cell Fate. Trends in Cell Biology, 2018, 28, 551-559.	3.6	32
25	MALDI Mass Spectrometry Imaging for Evaluation of Therapeutics in Colorectal Tumor Organoids. Journal of the American Society for Mass Spectrometry, 2018, 29, 516-526.	1.2	71
26	Mechanisms and function of autophagy in intestinal disease. Autophagy, 2018, 14, 216-220.	4.3	64
27	2D- and 3D-Based Intestinal Stem Cell Cultures for Personalized Medicine. Cells, 2018, 7, 225.	1.8	29
28	Colorectal Cancer and Metabolism. Current Colorectal Cancer Reports, 2018, 14, 226-241.	1.0	88
29	A novel and safe small molecule enhances hair follicle regeneration by facilitating metabolic reprogramming. Experimental and Molecular Medicine, 2018, 50, 1-15.	3.2	23
30	Combination of a thioxodihydroquinazolinone with cisplatin eliminates ovarian cancer stem cell-like cells (CSC-LCs) and shows preclinical potential. Oncotarget, 2018, 9, 6042-6054.	0.8	4
31	Microbiota-Derived Lactate Accelerates Intestinal Stem-Cell-Mediated Epithelial Development. Cell Host and Microbe, 2018, 24, 833-846.e6.	5.1	277
32	Revisiting the role of metabolism during development. Development (Cambridge), 2018, 145, .	1.2	136
33	The Citrobacter rodentium type III secretion system effector EspO affects mucosal damage repair and antimicrobial responses. PLoS Pathogens, 2018, 14, e1007406.	2.1	23
34	Stem Cell Intrinsic Hexosamine Metabolism Regulates Intestinal Adaptation to Nutrient Content. Developmental Cell, 2018, 47, 112-121.e3.	3.1	34
35	Modeling Host-Pathogen Interactions in the Context of the Microenvironment: Three-Dimensional Cell Culture Comes of Age. Infection and Immunity, 2018, 86, .	1.0	108
36	Nutritional Regulation of Intestinal Stem Cells. Annual Review of Nutrition, 2018, 38, 273-301.	4.3	44

#	Article	IF	Citations
37	Mitochondrial function â€" gatekeeper of intestinal epithelial cell homeostasis. Nature Reviews Gastroenterology and Hepatology, 2018, 15, 497-516.	8.2	190
38	Cellular and epigenetic drivers of stem cell ageing. Nature Reviews Molecular Cell Biology, 2018, 19, 594-610.	16.1	196
39	Lactate enhanced the effect of parathyroid hormone on osteoblast differentiation via GPR81-PKC-Akt signaling. Biochemical and Biophysical Research Communications, 2018, 503, 737-743.	1.0	26
40	Integrative multiâ€omics analysis of intestinal organoid differentiation. Molecular Systems Biology, 2018, 14, e8227.	3.2	106
41	Radical and lunatic fringes modulate notch ligands to support mammalian intestinal homeostasis. ELife, 2018, 7, .	2.8	23
42	Neuroimmunophysiology of the gut: advances and emerging concepts focusing on the epithelium. Nature Reviews Gastroenterology and Hepatology, 2018, 15, 765-784.	8.2	82
43	Signaling in the stem cell niche: regulating cell fate, function and plasticity. Development (Cambridge), 2018, 145, .	1.2	143
44	Stem Cell Metabolism in Cancer and Healthy Tissues: Pyruvate in the Limelight. Frontiers in Pharmacology, 2017, 8, 958.	1.6	40
45	Metabolic reprogramming in the pathogenesis of chronic lung diseases, including BPD, COPD, and pulmonary fibrosis. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 314, L544-L554.	1.3	78
46	Targeting cancer stem cells and their niche: perspectives for future therapeutic targets and strategies. Seminars in Cancer Biology, 2018, 53, 139-155.	4.3	94
47	Cancer Stem Cell Metabolism and Potential Therapeutic Targets. Frontiers in Oncology, 2018, 8, 203.	1.3	170
48	Harnessing single-cell genomics to improve the physiological fidelity of organoid-derived cell types. BMC Biology, 2018, 16, 62.	1.7	35
49	The Rac1 splice form Rac1b favors mouse colonic mucosa regeneration and contributes to intestinal cancer progression. Oncogene, 2018, 37, 6054-6068.	2.6	14
50	Colorectal Cancer: Genetic Abnormalities, Tumor Progression, Tumor Heterogeneity, Clonal Evolution and Tumor-Initiating Cells. Medical Sciences (Basel, Switzerland), 2018, 6, 31.	1.3	167
51	Metabolic traits of cancer stem cells. DMM Disease Models and Mechanisms, 2018, 11, .	1.2	63
52	Multitasking Paneth Cells in the Intestinal Stem Cell Niche. Advances in Stem Cells and Their Niches, 2018, 2, 41-75.	0.1	2
53	Intestinal Stem Cells and Their Niche at Homeostasis and Under Stress. Advances in Stem Cells and Their Niches, 2018, 2, 77-97.	0.1	1
54	Intestinal Stem Cells and Their Defining Niche. Advances in Stem Cells and Their Niches, 2018, 2, 1-40.	0.1	2

#	Article	IF	Citations
55	Advancing insights into stem cell niche complexities with next-generation technologies. Current Opinion in Cell Biology, 2018, 55, 87-95.	2.6	24
56	Live imaging of cell division in 3D stem-cell organoid cultures. Methods in Cell Biology, 2018, 145, 91-106.	0.5	17
57	Ketone Body Signaling Mediates Intestinal Stem Cell Homeostasis and Adaptation to Diet. Cell, 2019, 178, 1115-1131.e15.	13.5	231
58	Exploring single cells in space and time during tissue development, homeostasis and regeneration. Development (Cambridge), 2019, 146, .	1.2	51
59	Oral administration of hydroxylated-graphene quantum dots induces intestinal injury accompanying the loss of intestinal stem cells and proliferative progenitor cells. Nanotoxicology, 2019, 13, 1409-1421.	1.6	33
60	The paradox of metabolism in quiescent stem cells. FEBS Letters, 2019, 593, 2817-2839.	1.3	54
61	Characterization of in vitro Mrp2 transporter model based on intestinal organoids. Regulatory Toxicology and Pharmacology, 2019, 108, 104449.	1.3	5
62	Epithelial Cells as a Transmitter of Signals From Commensal Bacteria and Host Immune Cells. Frontiers in Immunology, 2019, 10, 2057.	2.2	47
63	PRDM16 Maintains Homeostasis of the Intestinal Epithelium by Controlling Region-Specific Metabolism. Cell Stem Cell, 2019, 25, 830-845.e8.	5.2	62
64	Regulation of Ketogenic Enzyme HMGCS2 by Wnt/Î²-catenin/PPARÎ³ Pathway in Intestinal Cells. Cells, 2019, 8, 1106.	1.8	43
65	The vanillin derivative VND3207 protects intestine against radiation injury by modulating p53/NOXA signaling pathway and restoring the balance of gut microbiota. Free Radical Biology and Medicine, 2019, 145, 223-236.	1.3	46
66	Anti-LRP5/6 VHHs promote differentiation of Wnt-hypersensitive intestinal stem cells. Nature Communications, 2019, 10, 365.	5.8	53
67	Lactate Promotes Cancer Stem-like Property of Oral Sequamous Cell Carcinoma. Current Medical Science, 2019, 39, 403-409.	0.7	16
68	Paneth cell ablation increases the small intestinal injury during acute necrotizing pancreatitis in rats. Molecular Medicine Reports, 2019, 20, 473-484.	1.1	7
69	CEA expression heterogeneity and plasticity confer resistance to the CEA-targeting bispecific immunotherapy antibody cibisatamab (CEA-TCB) in patient-derived colorectal cancer organoids. , 2019, 7, 101.		65
70	How Viral and Intracellular Bacterial Pathogens Reprogram the Metabolism of Host Cells to Allow Their Intracellular Replication. Frontiers in Cellular and Infection Microbiology, 2019, 9, 42.	1.8	149
71	Enteroids for Nutritional Studies. Molecular Nutrition and Food Research, 2019, 63, 1801143.	1.5	23
72	Wnt Signaling Mediates the Aging-Induced Differentiation Impairment of Intestinal Stem Cells. Stem Cell Reviews and Reports, 2019, 15, 448-455.	5.6	37

#	Article	IF	Citations
73	BNIP3L/NIX and FUNDC1-mediated mitophagy is required for mitochondrial network remodeling during cardiac progenitor cell differentiation. Autophagy, 2019, 15, 1182-1198.	4.3	197
74	FXR Regulates Intestinal Cancer Stem Cell Proliferation. Cell, 2019, 176, 1098-1112.e18.	13.5	291
75	Erythroid differentiation displays a peak of energy consumption concomitant with glycolytic metabolism rearrangements. PLoS ONE, 2019, 14, e0221472.	1.1	26
76	Three-dimensional analysis of single molecule FISH in human colon organoids. Biology Open, 2019, 8, .	0.6	9
77	Generating an Artificial Intestine for the Treatment of Short Bowel Syndrome. Gastroenterology Clinics of North America, 2019, 48, 585-605.	1.0	7
78	Muscleâ€secreted granulocyte colonyâ€stimulating factor functions as metabolic niche factor ameliorating loss of muscle stem cells in aged mice. EMBO Journal, 2019, 38, e102154.	3.5	35
79	Brain Endothelial Cells Maintain Lactate Homeostasis and Control Adult Hippocampal Neurogenesis. Cell Stem Cell, 2019, 25, 754-767.e9.	5.2	79
80	From single cells to tissue selfâ€organization. FEBS Journal, 2019, 286, 1495-1513.	2.2	52
81	Recent advances in metal-organic frameworks for separation and enrichment in proteomics analysis. TrAC - Trends in Analytical Chemistry, 2019, 110, 66-80.	5.8	53
82	Tales from the crypt: new insights into intestinal stem cells. Nature Reviews Gastroenterology and Hepatology, 2019, 16, 19-34.	8.2	597
83	A Unique Nonsaccharide Mimetic of Heparin Hexasaccharide Inhibits Colon Cancer Stem Cells via p38 MAP Kinase Activation. Molecular Cancer Therapeutics, 2019, 18, 51-61.	1.9	39
84	Intestinal renewal across the animal kingdom: comparing stem cell activity in mouse and Drosophila. American Journal of Physiology - Renal Physiology, 2019, 316, G313-G322.	1.6	36
85	Metabolic pathways regulating colorectal cancer initiation and progression. Seminars in Cell and Developmental Biology, 2020, 98, 63-70.	2.3	203
86	Gut bacteria signaling to mitochondria in intestinal inflammation and cancer. Gut Microbes, 2020, 11, 285-304.	4.3	148
87	Adapt and conquer: Metabolic flexibility in cancer growth, invasion and evasion. Molecular Metabolism, 2020, 33, 83-101.	3.0	93
88	Mitochondria and autophagy in adult stem cells: proliferate or differentiate. Journal of Muscle Research and Cell Motility, 2020, 41, 355-362.	0.9	10
89	Wnt Signaling in 3D: Recent Advances in the Applications of Intestinal Organoids. Trends in Cell Biology, 2020, 30, 60-73.	3.6	64
90	Estimation of the Mitochondrial Membrane Potential Using Fluorescence Lifetime Imaging Microscopy. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 471-482.	1.1	28

#	Article	IF	Citations
91	Regulatory network analysis of Paneth cell and goblet cell enriched gut organoids using transcriptomics approaches. Molecular Omics, 2020, 16, 39-58.	1.4	31
92	LKB1 Represses ATOH1 via PDK4 and Energy Metabolism and Regulates Intestinal Stem Cell Fate. Gastroenterology, 2020, 158, 1389-1401.e10.	0.6	29
93	Mevalonate Pathway Provides Ubiquinone to Maintain Pyrimidine Synthesis and Survival in p53-Deficient Cancer Cells Exposed to Metabolic Stress. Cancer Research, 2020, 80, 189-203.	0.4	53
94	Vitamin D and the nutritional environment in functions of intestinal stem cells: Implications for tumorigenesis and prevention. Journal of Steroid Biochemistry and Molecular Biology, 2020, 198, 105556.	1.2	13
95	HNF4 Regulates Fatty Acid Oxidation and Is Required for Renewal of Intestinal Stem Cells in Mice. Gastroenterology, 2020, 158, 985-999.e9.	0.6	115
96	The emerging roles of lactate as a redox substrate and signaling molecule in adipose tissues. Journal of Physiology and Biochemistry, 2020, 76, 241-250.	1.3	26
97	Gut stem cell aging is driven by mTORC1 via a p38 MAPK-p53 pathway. Nature Communications, 2020, 11, 37.	5.8	87
98	Ageing, metabolism and the intestine. EMBO Reports, 2020, 21, e50047.	2.0	92
99	Green tea derivative (â˜)-epigallocatechin-3-gallate (EGCG) confers protection against ionizing radiation-induced intestinal epithelial cell death both in vitro and in vivo. Free Radical Biology and Medicine, 2020, 161, 175-186.	1.3	88
100	Loss of aryl hydrocarbon receptor potentiates FoxM1 signaling to enhance selfâ€renewal of colonic stem and progenitor cells. EMBO Journal, 2020, 39, e104319.	3.5	30
101	A Cellular Mechanism to Detect and Alleviate Reductive Stress. Cell, 2020, 183, 46-61.e21.	13.5	85
102	Differentiated cancer cell-originated lactate promotes the self-renewal of cancer stem cells in patient-derived colorectal cancer organoids. Cancer Letters, 2020, 493, 236-244.	3.2	28
103	The role of stem cell niche in intestinal aging. Mechanisms of Ageing and Development, 2020, 191, 111330.	2.2	20
104	Combined nanomedicines targeting colorectal cancer stem cells and cancer cells. Journal of Controlled Release, 2020, 326, 387-395.	4.8	20
105	Visualization of Stem Cell Niche by Fluorescence Lifetime Imaging Microscopy. Methods in Molecular Biology, 2020, 2171, 65-97.	0.4	8
106	The role of the stem cell epigenome in normal aging and rejuvenative therapy. Human Molecular Genetics, 2020, 29, R236-R247.	1.4	4
107	Plasticity of Paneth cells and their ability to regulate intestinal stem cells. Stem Cell Research and Therapy, 2020, 11, 349.	2.4	32
108	Metabolic programming of nephron progenitor cell fate. Pediatric Nephrology, 2020, 36, 2155-2164.	0.9	5

#	Article	IF	Citations
109	Stem Cell Metabolism and Diet. Current Stem Cell Reports, 2020, 6, 119-125.	0.7	1
110	Age-associated mitochondrial DNA mutations cause metabolic remodeling that contributes to accelerated intestinal tumorigenesis. Nature Cancer, 2020, 1, 976-989.	5.7	69
111	NRF2-Independent Regulation of Intestinal Constitutive Androstane Receptor by the Pro-Oxidants Cadmium and Isothiocyanate inhUGT1Mice. Drug Metabolism and Disposition, 2020, 48, 25-30.	1.7	6
112	Intestinal Regeneration: Regulation by the Microenvironment. Developmental Cell, 2020, 54, 435-446.	3.1	91
113	Mitochondria Define Intestinal Stem Cell Differentiation Downstream of a FOXO/Notch Axis. Cell Metabolism, 2020, 32, 889-900.e7.	7.2	90
114	Selective Alanine Transporter Utilization Creates a Targetable Metabolic Niche in Pancreatic Cancer. Cancer Discovery, 2020, 10, 1018-1037.	7.7	104
115	Fatty Acid and Carnitine Metabolism Are Dysregulated in Systemic Sclerosis Patients. Frontiers in Immunology, 2020, 11, 822.	2.2	18
116	Fully synthetic matrices for in vitro culture of primary human intestinal enteroids and endometrial organoids. Biomaterials, 2020, 254, 120125.	5.7	106
117	Designing immunogenic nanotherapeutics for photothermal-triggered immunotherapy involving reprogramming immunosuppression and activating systemic antitumor responses. Biomaterials, 2020, 255, 120153.	5.7	68
118	Rapid Crypt Cell Remodeling Regenerates the Intestinal Stem Cell Niche after Notch Inhibition. Stem Cell Reports, 2020, 15, 156-170.	2.3	18
119	Stem cell aging: The upcoming era of proteins and metabolites. Mechanisms of Ageing and Development, 2020, 190, 111288.	2.2	16
120	Oxygen battle in the gut: Hypoxia and hypoxia-inducible factors in metabolic and inflammatory responses in the intestine. Journal of Biological Chemistry, 2020, 295, 10493-10505.	1.6	170
121	Rac1 Signaling: From Intestinal Homeostasis to Colorectal Cancer Metastasis. Cancers, 2020, 12, 665.	1.7	50
122	Intracellular ATP levels influence cell fates in Dictyostelium discoideum differentiation. Genes To Cells, 2020, 25, 312-326.	0.5	7
123	Impact of the Monocarboxylate Transporter-1 (MCT1)-Mediated Cellular Import of Lactate on Stemness Properties of Human Pancreatic Adenocarcinoma Cells. Cancers, 2020, 12, 581.	1.7	22
124	Cancer associated fibroblast FAK regulates malignant cell metabolism. Nature Communications, 2020, 11, 1290.	5.8	95
125	Innate immune receptor NOD2 mediates LGR5 ⁺ intestinal stem cell protection against ROS cytotoxicity via mitophagy stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1994-2003.	3.3	63
126	Metabolic and immunologic control of intestinal cell function by mTOR. International Immunology, 2020, 32, 455-465.	1.8	10

#	Article	IF	Citations
127	Restraining colorectal cancer with Î±KG. Nature Cancer, 2020, 1, 267-269.	5.7	0
128	Mitochondrial impairment drives intestinal stem cell transition into dysfunctional Paneth cells predicting Crohnâ€™s disease recurrence. Gut, 2020, 69, 1939-1951.	6.1	100
129	Bile acids elevated by high-fat feeding induce endoplasmic reticulum stress in intestinal stem cells and contribute to mucosal barrier damage. Biochemical and Biophysical Research Communications, 2020, 529, 289-295.	1.0	18
130	Metabolic Adaptations in Cancer Stem Cells. Frontiers in Oncology, 2020, 10, 1010.	1.3	100
131	Autophagy Reprograms Alveolar Progenitor Cell Metabolism in Response to Lung Injury. Stem Cell Reports, 2020, 14, 420-432.	2.3	33
132	From gut to glutes: The critical role of niche signals in the maintenance and renewal of adult stem cells. Current Opinion in Cell Biology, 2020, 63, 88-101.	2.6	11
133	Uridine inhibits the stemness of intestinal stem cells in 3D intestinal organoids and mice. RSC Advances, 2020, 10, 6377-6387.	1.7	8
134	A deeper understanding of intestinal organoid metabolism revealed by combining fluorescence lifetime imaging microscopy (FLIM) and extracellular flux analyses. Redox Biology, 2020, 30, 101420.	3.9	71
135	SIRT2 Contributes to the Regulation of Intestinal Cell Proliferation and Differentiation. Cellular and Molecular Gastroenterology and Hepatology, 2020, 10, 43-57.	2.3	38
136	Transmissible gastroenteritis virus targets Paneth cells to inhibit the self-renewal and differentiation of Lgr5 intestinal stem cells via Notch signaling. Cell Death and Disease, 2020, 11, 40.	2.7	32
137	Metabolic Regulation of Cell Fate and Function. Trends in Cell Biology, 2020, 30, 201-212.	3.6	51
138	Metabolic Regulation of Tissue Stem Cells. Trends in Cell Biology, 2020, 30, 566-576.	3.6	49
139	Stem and progenitor cells of the gastrointestinal tract: applications for tissue engineering the intestine. , 2020, , 709-721.		0
140	A Metformin-Responsive Metabolic Pathway Controls Distinct Steps in Gastric Progenitor Fate Decisions and Maturation. Cell Stem Cell, 2020, 26, 910-925.e6.	5.2	37
141	Mitochondrial dysfunction during loss of prohibitin 1 triggers Paneth cell defects and ileitis. Gut, 2020, 69, 1928-1938.	6.1	69
142	Dietary Choices Modulate Colorectal Cancer Stem Cells: A Role of FXR Nuclear Receptor. Nutrition and Cancer, 2021, 73, 1253-1260.	0.9	5
143	Metabolic Coordination of Cell Fate by Î±-Ketoglutarate-Dependent Dioxygenases. Trends in Cell Biology, 2021, 31, 24-36.	3.6	63
144	Gut bioengineering strategies for regenerative medicine. American Journal of Physiology - Renal Physiology, 2021, 320, G1-G11.	1.6	4

#	Article	IF	Citations
145	Paneth cells: Maintaining dynamic microbiomeâ€host homeostasis, protecting against inflammation and cancer. BioEssays, 2021, 43, e2000180.	1.2	11
147	Epithelial cell dysfunction in coeliac disease. International Review of Cell and Molecular Biology, 2021, 358, 133-164.	1.6	8
148	3D Co-culture of Cancer-Associated Fibroblast with Oral Cancer Organoids. Journal of Dental Research, 2021, 100, 201-208.	2.5	35
149	Cell fate specification and differentiation in the adult mammalian intestine. Nature Reviews Molecular Cell Biology, 2021, 22, 39-53.	16.1	306
150	Metabolic Regulation of Stem Cells and Differentiation: A Forkhead Box O Transcription Factor Perspective. Antioxidants and Redox Signaling, 2021, 34, 1004-1024.	2.5	28
151	A diet-microbial metabolism feedforward loop modulates intestinal stem cell renewal in the stressed gut. Nature Communications, 2021, 12, 271.	5.8	47
152	Regulation of Gastrointestinal Immunity by Metabolites. Nutrients, 2021, 13, 167.	1.7	26
153	Autophagy and Cancer: Current Biology and Drug Development. Physiology in Health and Disease, 2021, , 349-376.	0.2	0
154	Paneth cells mediated the response of intestinal stem cells at the early stage of intestinal inflammation in the chicken. Poultry Science, 2021, 100, 615-622.	1.5	7
155	Portrait of Cancer Stem Cells on Colorectal Cancer: Molecular Biomarkers, Signaling Pathways and miRNAome. International Journal of Molecular Sciences, 2021, 22, 1603.	1.8	14
156	Stem cell quiescence: the challenging path to activation. Development (Cambridge), 2021, 148, .	1.2	54
157	Oxygen regulates epithelial stem cell proliferation via RhoA-actomyosin-YAP/TAZ signal in mouse incisor. Development (Cambridge), 2021, 148, .	1.2	10
158	Transit-Amplifying Cells Coordinate Changes in Intestinal Epithelial Cell-Type Composition. Developmental Cell, 2021, 56, 356-365.e9.	3.1	28
159	Subversion of Niche-Signalling Pathways in Colorectal Cancer: What Makes and Breaks the Intestinal Stem Cell. Cancers, 2021, 13, 1000.	1.7	20
160	Metabolic Requirements for Spermatogonial Stem Cell Establishment and Maintenance In Vivo and In Vitro. International Journal of Molecular Sciences, 2021, 22, 1998.	1.8	11
161	Mitochondrial dynamics in cancer stem cells. Cellular and Molecular Life Sciences, 2021, 78, 3803-3816.	2.4	27
162	Signaling pathways in intestinal homeostasis and colorectal cancer: KRAS at centre stage. Cell Communication and Signaling, 2021, 19, 31.	2.7	19
163	Mitochondria as Signaling Organelles Control Mammalian Stem Cell Fate. Cell Stem Cell, 2021, 28, 394-408.	5.2	151

#	Article	IF	Citations
164	Emc3 maintains intestinal homeostasis by preserving secretory lineages. Mucosal Immunology, 2021, 14, 873-886.	2.7	9
165	Acidic pH transiently prevents the silencing of self-renewal and dampens microRNA function in embryonic stem cells. Science Bulletin, 2021, 66, 1319-1329.	4.3	4
166	Challenges in Studying Stem Cell Metabolism. Cell Stem Cell, 2021, 28, 409-423.	5.2	19
167	Functional States in Tumor-Initiating Cell Differentiation in Human Colorectal Cancer. Cancers, 2021, 13, 1097.	1.7	11
168	Protocol to profile the bioenergetics of organoids using Seahorse. STAR Protocols, 2021, 2, 100386.	0.5	25
169	Metabolic Regulation of Stem Cells in Aging. Current Stem Cell Reports, 2021, 7, 72-84.	0.7	3
170	Reactive Oxygen Species in intestinal stem cell metabolism, fate and function. Free Radical Biology and Medicine, 2021, 166, 140-146.	1.3	25
171	How autophagy controls the intestinal epithelial barrier. Autophagy, 2022, 18, 86-103.	4.3	125
172	Regulation of SIRT2 by Wnt/Î²-catenin signaling pathway in colorectal cancer cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118966.	1.9	13
173	Tools and approaches for analyzing the role of mitochondria in health, development and disease using human cerebral organoids. Developmental Neurobiology, 2021, 81, 591-607.	1.5	4
174	Recent advances in organoid development and applications in disease modeling. Biochimica Et Biophysica Acta: Reviews on Cancer, 2021, 1875, 188527.	3.3	35
176	Luminescence lifetime imaging of three-dimensional biological objects. Journal of Cell Science, 2021, 134, 1-17.	1.2	30
177	Lactate Reprograms Energy and Lipid Metabolism in Glucose-Deprived Oxidative Glioma Stem Cells. Metabolites, 2021, 11, 325.	1.3	11
178	Dickkopf-2 regulates the stem cell marker LGR5 in colorectal cancer via HNF4Î±1. IScience, 2021, 24, 102411.	1.9	7
179	The Intestinal Epithelium â€“ Fluid Fate and Rigid Structure From Crypt Bottom to Villus Tip. Frontiers in Cell and Developmental Biology, 2021, 9, 661931.	1.8	27
180	Metabolic Regulation of Intestinal Stem Cell Homeostasis. Trends in Cell Biology, 2021, 31, 325-327.	3.6	11
181	High-fat diet-activated fatty acid oxidation mediates intestinal stemness and tumorigenicity. Cell Reports, 2021, 35, 109212.	2.9	85
183	The FOXO signaling axis displays conjoined functions in redox homeostasis and stemness. Free Radical Biology and Medicine, 2021, 169, 224-237.	1.3	12

#	Article	IF	Citations
184	Lactate Fluxes and Plasticity of Adipose Tissues: A Redox Perspective. Frontiers in Physiology, 2021, 12, 689747.	1.3	26
185	High Glucose Exposure Impairs L-Cell Differentiation in Intestinal Organoids: Molecular Mechanisms and Clinical Implications. International Journal of Molecular Sciences, 2021, 22, 6660.	1.8	17
186	Beyond the Lactate Paradox: How Lactate and Acidity Impact T Cell Therapies against Cancer. Antibodies, 2021, 10, 25.	1.2	24
187	The Role of Organelles in Intestinal Function, Physiology, and Disease. Trends in Cell Biology, 2021, 31, 485-499.	3.6	12
188	Genetic and biological hallmarks of colorectal cancer. Genes and Development, 2021, 35, 787-820.	2.7	159
189	Cell Tracking for Organoids: Lessons From Developmental Biology. Frontiers in Cell and Developmental Biology, 2021, 9, 675013.	1.8	9
190	Mechanical compartmentalization of the intestinal organoid enables crypt folding and collective cell migration. Nature Cell Biology, 2021, 23, 745-757.	4.6	112
191	SpaceM reveals metabolic states of single cells. Nature Methods, 2021, 18, 799-805.	9.0	170
192	Stem/progenitor cells in fetuses and newborns: overview of immunohistochemical markers. Cell Regeneration, 2021, 10, 22.	1.1	1
193	Delta-like 1â€“Expressing Cells at the Gland Base Promote Proliferation of Gastric Antral Stem Cells in Mouse. Cellular and Molecular Gastroenterology and Hepatology, 2022, 13, 275-287.	2.3	13
194	Chemotherapy-Induced Intestinal Microbiota Dysbiosis Impairs Mucosal Homeostasis by Modulating Toll-like Receptor Signaling Pathways. International Journal of Molecular Sciences, 2021, 22, 9474.	1.8	38
195	Translation initiation factor eIF2Bβ promotes Wnt-mediated clonogenicity and global translation in intestinal epithelial cells. Stem Cell Research, 2021, 55, 102499.	0.3	2
196	Gutsy science: In vitro systems of the human intestine to model oral drug disposition. , 2022, 230, 107962.		4
197	Identifying Cellâ€Typeâ€Specific Metabolic Signatures Using Transcriptome and Proteome Analyses. Current Protocols, 2021, 1, e245.	1.3	3
198	The cellular niche for intestinal stem cells: a team effort. Cell Regeneration, 2021, 10, 1.	1.1	46
199	Secretory Sorcery: Paneth Cell Control of Intestinal Repair and Homeostasis. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 1239-1250.	2.3	40
200	Early Life Antibiotics Influence InÂVivo and InÂVitro Mouse Intestinal Epithelium Maturation and Functioning. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 943-981.	2.3	17
201	Diversity and versatility of p38 kinase signalling in health and disease. Nature Reviews Molecular Cell Biology, 2021, 22, 346-366.	16.1	253

#	Article	IF	Citations
202	Mitochondrial Metabolism in the Intestinal Stem Cell Nicheâ€"Sensing and Signaling in Health and Disease. Frontiers in Cell and Developmental Biology, 2020, 8, 602814.	1.8	26
203	Strategies for Measuring Induction of Fatty Acid Oxidation in Intestinal Stem and Progenitor Cells. Methods in Molecular Biology, 2020, 2171, 53-64.	0.4	3
204	Jejunum: The understudied meeting place of dietary lipids and the microbiota. Biochimie, 2020, 178, 124-136.	1.3	44
205	Mitochondria, the gut microbiome and ROS. Cellular Signalling, 2020, 75, 109737.	1.7	65
206	A Metabolic Roadmap for Somatic Stem Cell Fate. Cell Metabolism, 2020, 31, 1052-1067.	7.2	66
209	Hallmarks of intestinal stem cells. Development (Cambridge), 2020, 147, .	1.2	39
210	Integrative metabolomics as emerging tool to study autophagy regulation. Microbial Cell, 2017, 4, 240-258.	1.4	18
211	Carbon Nanotubes Promote the Development of Intestinal Organoids through Regulating Extracellular Matrix Viscoelasticity and Intracellular Energy Metabolism. ACS Nano, 2021, 15, 15858-15873.	7.3	20
212	IFN-Î³ mediates Paneth cell death via suppression of mTOR. ELife, 2021, 10, .	2.8	23
213	Drivers of transcriptional variance in human intestinal epithelial organoids. Physiological Genomics, 2021, 53, 486-508.	1.0	17
214	Mitochondria and Inflammatory Bowel Diseases: Toward a Stratified Therapeutic Intervention. Annual Review of Physiology, 2022, 84, 435-459.	5.6	40
215	Papers of note in Nature 543 (7645). Science Signaling, 2017, 10, .	1.6	0
216	Defining the Intestinal Stem Cell Niche for Tissue Engineering and Disease Modeling. , 2018, , 375-375.		0
225	Lactobacillus salivarius and Lactobacillus agilis feeding regulates intestinal stem cells activity by modulating crypt niche in hens. Applied Microbiology and Biotechnology, 2021, 105, 8823-8835.	1.7	13
227	Intestinal epithelial plasticity and regeneration via cell dedifferentiation. Cell Regeneration, 2020, 9, 14.	1.1	6
229	Identification, Characterization, and Transcriptional Reprogramming of Epithelial Stem Cells and Intestinal Enteroids in Simian Immunodeficiency Virus Infected Rhesus Macaques. Frontiers in Immunology, 2021, 12, 769990.	2.2	2
230	MLL1 is required for maintenance of intestinal stem cells. PLoS Genetics, 2021, 17, e1009250.	1.5	5
231	Dietary excess regulates absorption and surface of gut epithelium through intestinal PPARÎ±. Nature Communications, 2021, 12, 7031.	5.8	32

#	Article	IF	Citations
232	Microenvironmental Metabolites in the Intestine: Messengers between Health and Disease. Metabolites, 2022, 12, 46.	1.3	4
233	Intestinal epithelial plasticity and regeneration via cell dedifferentiation. Cell Regeneration, 2020, 9, 14.	1.1	37
234	Injury-Induced Cellular Plasticity Drives Intestinal Regeneration. Cellular and Molecular Gastroenterology and Hepatology, 2022, 13, 843-856.	2.3	23
235	Integrity of the Intestinal Barrier: The Involvement of Epithelial Cells and Microbiotaâ€"A Mutual Relationship. Animals, 2022, 12, 145.	1.0	53
236	Chewing the Fat with Microbes: Lipid Crosstalk in the Gut. Nutrients, 2022, 14, 573.	1.7	4
237	A Special Network Comprised of Macrophages, Epithelial Cells, and Gut Microbiota for Gut Homeostasis. Cells, 2022, 11, 307.	1.8	8
238	Anti-miR-135/SPOCK1 axis antagonizes the influence of metabolism on drug response in intestinal/colon tumour organoids. Oncogenesis, 2022, 11, 4.	2.1	6
239	Lung cancer organoids, a promising model still with long way to go. Critical Reviews in Oncology/Hematology, 2022, 171, 103610.	2.0	9
240	Paneth cells and their multiple functions. Cell Biology International, 2022, 46, 701-710.	1.4	16
241	A High-Fat Diet Activates the BAs-FXR Axis and Triggers Cancer-Associated Fibroblast Properties in the Colon. Cellular and Molecular Gastroenterology and Hepatology, 2022, 13, 1141-1159.	2.3	15
242	Intertwined Relationship of Mitochondrial Metabolism, Gut Microbiome and Exercise Potential. International Journal of Molecular Sciences, 2022, 23, 2679.	1.8	16
243	FoxO transcription factors in mitochondrial homeostasis. Biochemical Journal, 2022, 479, 525-536.	1.7	18
244	A non-dividing cell population with high pyruvate dehydrogenase kinase activity regulates metabolic heterogeneity and tumorigenesis in the intestine. Nature Communications, 2022, 13, 1503.	5.8	22
247	Regenerative nutrition and gut microbiota signaling in skeletal muscle metabolism: a concise systematic review. International Journal of Nutrology, 2022, 15, .	0.0	0
248	Gut microbiota drives macrophage-dependent self-renewal of intestinal stem cells via niche enteric serotonergic neurons. Cell Research, 2022, 32, 555-569.	5.7	26
249	Cell-intrinsic Aryl Hydrocarbon Receptor signalling is required for the resolution of injury-induced colonic stem cells. Nature Communications, 2022, 13, 1827.	5.8	25
250	Paneth cells and intestinal health. World Chinese Journal of Digestology, 2021, 29, 1362-1372.	0.0	0
251	Metabolic regulation of somatic stem cells in vivo. Nature Reviews Molecular Cell Biology, 2022, 23, 428-443.	16.1	35

#	Article	IF	Citations
252	Mechanisms of mucosal healing: treating inflammatory bowel disease without immunosuppression?. Nature Reviews Gastroenterology and Hepatology, 2022, 19, 493-507.	8.2	55
254	Reactive Oxygen Species in Modulating Intestinal Stem Cell Dynamics and Function. Stem Cell Reviews and Reports, 2022, 18, 2328-2350.	1.7	10
255	Intestinal epithelial cell metabolism at the interface of microbial dysbiosis and tissue injury. Mucosal Immunology, 2022, 15, 595-604.	2.7	36
256	Metabolic Studies in Organoids: Current Applications, Opportunities and Challenges. Organoids, 2022, 1, 85-105.	1.8	7
257	The metabolic impact of bacterial infection in the gut. FEBS Journal, 2023, 290, 3928-3945.	2.2	2
258	SIRT4 Loss Reprograms Intestinal Nucleotide Metabolism to Support Proliferation and Survival Following Perturbation of Homeostasis. SSRN Electronic Journal, 0, , .	0.4	0
259	Mitochondrial function in intestinal epithelium homeostasis and modulation in diet-induced obesity. Molecular Metabolism, 2022, 63, 101546.	3.0	27
260	Acetyl-CoA-Carboxylase 1-mediated de novo fatty acid synthesis sustains Lgr5+ intestinal stem cell function. Nature Communications, 2022, 13, .	5.8	18
261	Thyroid hormone signaling in the intestinal stem cells and their niche. Cellular and Molecular Life Sciences, 2022, 79, .	2.4	2
262	Ribosome impairment regulates intestinal stem cell identity via ZAKÉ‘ activation. Nature Communications, 2022, 13, .	5.8	8
263	NCOA4-mediated ferritinophagy is involved in ionizing radiation-induced ferroptosis of intestinal epithelial cells. Redox Biology, 2022, 55, 102413.	3.9	38
264	Gut microbiota in systemic lupus erythematosus: A fuse and a solution. Journal of Autoimmunity, 2022, 132, 102867.	3.0	22
265	Modeling Human Organ Development and Diseases With Fetal Tissueâ€“Derived Organoids. Cell Transplantation, 2022, 31, 096368972211244.	1.2	2
266	Polyphenolsâ€“Gutâ€“Heart: An Impactful Relationship to Improve Cardiovascular Diseases. Antioxidants, 2022, 11, 1700.	2.2	6
268	Inâ€depth analysis of the relationship between bovine intestinal organoids and enteroids based on morphology and transcriptome. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 1032-1046.	1.3	4
269	Metabolic Pathways Regulating Colorectal Cancer: A Potential Therapeutic Approach. Current Pharmaceutical Design, 2022, 28, 2995-3009.	0.9	10
270	Balance between the cell viability and death in 3D. Seminars in Cell and Developmental Biology, 2023, 144, 55-66.	2.3	4
271	Maternal exercise improves epithelial development of fetal intestine by enhancing apelin signaling and oxidative metabolism. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2022, 323, R728-R738.	0.9	4

#	Article	IF	Citations
272	NOX1 is essential for TNFÎ±-induced intestinal epithelial ROS secretion and inhibits M cell signatures. Gut, 2023, 72, 654-662.	6.1	15
274	Aspartate Alleviates Colonic Epithelial Damage by Regulating Intestinal Stem Cell Proliferation and Differentiation via Mitochondrial Dynamics. Molecular Nutrition and Food Research, 2022, 66, .	1.5	3
275	Approaches to investigating metabolism in human neurodevelopment using organoids: insights from intestinal and cancer studies. Development (Cambridge), 2022, 149, .	1.2	1
276	Chromatin as a sensor of metabolic changes during early development. Frontiers in Cell and Developmental Biology, 0, 10, .	1.8	1
277	Molecular regulation after mucosal injury and regeneration in ulcerative colitis. Frontiers in Molecular Biosciences, 0, 9, .	1.6	6
278	Major approaches to melatonin and nutrients regulation in the bone regeneration process with exosomes and microRNAs: a systematic review. International Journal of Nutrology, 2022, 15, .	0.0	0
279	PGC-1Î± in mediating mitochondrial biogenesis and intestinal epithelial differentiation promoted by purple potato extract. Journal of Functional Foods, 2022, 98, 105291.	1.6	7
280	Metabolism and Colorectal Cancer. Annual Review of Pathology: Mechanisms of Disease, 2023, 18, 467-492.	9.6	30
281	Intra-Amniotic Administrationâ€"An Emerging Method to Investigate Necrotizing Enterocolitis, In Vivo (Gallus gallus). Nutrients, 2022, 14, 4795.	1.7	2
282	Autophagy in the Intestinal Stem Cells. Pancreatic Islet Biology, 2023, , 169-192.	0.1	0
283	Mutation accumulation in mtDNA of cancers resembles mutagenesis in normal stem cells. IScience, 2022, 25, 105610.	1.9	1
284	Intestinal plasticity and metabolism as regulators of organismal energy homeostasis. Nature Metabolism, 2022, 4, 1444-1458.	5.1	8
285	Advancing intestinal organoid technology to decipher nano-intestine interactions and treat intestinal disease. Nano Research, 2023, 16, 3976-3990.	5.8	2
287	Paneth cells as the cornerstones of intestinal and organismal health: a primer. EMBO Molecular Medicine, 2023, 15, .	3.3	18
288	Lactobacillus salivarius Promotion of Intestinal Stem Cell Activity in Hens Is Associated with Succinate-Induced Mitochondrial Energy Metabolism. MSystems, 2022, 7, .	1.7	4
289	Regulation and function of the mammalian tricarboxylic acidÂcycle. Journal of Biological Chemistry, 2023, 299, 102838.	1.6	53
291	Upper Gastrointestinal Motility, Disease and Potential of Stem Cell Therapy. Advances in Experimental Medicine and Biology, 2022, , 319-328.	0.8	0
292	Enteroendocrine Cells Protect the Stem Cell Niche by Regulating Crypt Metabolism in Response to Nutrients. Cellular and Molecular Gastroenterology and Hepatology, 2023, 15, 1293-1310.	2.3	6

#	Article	IF	Citations
293	Mitochondrial DNA Mutations and Ageing. Sub-Cellular Biochemistry, 2023, , 77-98.	1.0	1
294	Organoid Cultures In Silico: Tools or Toys?. Bioengineering, 2023, 10, 50.	1.6	2
295	Glycolytic Regulation of Intestinal Stem Cell Self-Renewal and Differentiation. Cellular and Molecular Gastroenterology and Hepatology, 2023, 15, 931-947.	2.3	12
296	Noncoding <scp>RNA</scp>circBtnl1 suppresses selfâ€renewal of intestinal stem cells via disruption of Atf4 <scp>mRNA</scp> stability. EMBO Journal, 2023, 42, .	3.5	6
297	Interaction between Butyrate and Tumor Necrosis Factor Î± in Primary Rat Colonocytes. Biomolecules, 2023, 13, 258.	1.8	0
298	Hydrogel oxygen reservoirs increase functional integration of neural stem cell grafts by meeting metabolic demands. Nature Communications, 2023, 14, .	5.8	13
299	Sports nutrology and gut microbiota. International Journal of Nutrology, 2023, 16, .	0.0	0
300	The pyruvate dehydrogenase complex: Lifeâ€™s essential, vulnerable and druggable energy homeostat. Mitochondrion, 2023, 70, 59-102.	1.6	8
301	Intestinal stem cell aging at singleâ€cell resolution: Transcriptional perturbations alter cell developmental trajectory reversed by gerotherapeutics. Aging Cell, 2023, 22, .	3.0	5
304	From birth to death: The hardworking life of Paneth cell in the small intestine. Frontiers in Immunology, 0, 14, .	2.2	11
305	Multifaceted involvements of Paneth cells in various diseases within intestine and systemically. Frontiers in Immunology, 0, 14, .	2.2	4
306	IEC-intrinsic IL-1R signaling holds dual roles in regulating intestinal homeostasis and inflammation. Journal of Experimental Medicine, 2023, 220, .	4.2	6
307	Regulative Roles of Metabolic Plasticity Caused by Mitochondrial Oxidative Phosphorylation and Glycolysis on the Initiation and Progression of Tumorigenesis. International Journal of Molecular Sciences, 2023, 24, 7076.	1.8	3
319	Differentiated Epithelial Cells of the Gut. Methods in Molecular Biology, 2023, , 3-16.	0.4	1
321	Increased Intestinal Permeability: An Avenue for the Development of Autoimmune Disease?. Exposure and Health, 0, , .	2.8	2
334	FOXO transcription factors as mediators of stress adaptation. Nature Reviews Molecular Cell Biology, 2024, 25, 46-64.	16.1	5
341	Molecular mechanisms of cellular metabolic homeostasis in stem cells. International Journal of Oral Science, 2023, 15, .	3.6	0
347	Emerging roles of mitochondrial functions and epigenetic changes in the modulation of stem cell fate. Cellular and Molecular Life Sciences, 2024, 81, .	2.4	0

#	Article	IF	Citations