Karen Blyth

List of Publications by Year
in descending order

107 papers	8,180 citations	50244 46 h-index	53190 85 g-index
127 all docs	127 docs citations	127 times ranked	13565 citing authors

#	Article	IF	Citations
1	Serine starvation induces stress and p53-dependent metabolic remodelling in cancer cells. Nature, 2013, 493, 542-546.	13.7	773
2	Acetyl-CoA Synthetase 2 Promotes Acetate Utilization and Maintains Cancer Cell Growth under Metabolic Stress. Cancer Cell, 2015, 27, 57-71.	7.7	596
3	Modulating the therapeutic response of tumours to dietary serine and glycine starvation. Nature, 2017, 544, 372-376.	13.7	449
4	The runx genes: gain or loss of function in cancer. Nature Reviews Cancer, 2005, 5, 376-387.	12.8	418
5	Limited Mitochondrial Permeabilization Causes DNA Damage and Genomic Instability in the Absence of Cell Death. Molecular Cell, 2015, 57, 860-872.	4.5	341
6	Improving the metabolic fidelity of cancer models with a physiological cell culture medium. Science Advances, 2019, 5, eaau7314.	4.7	249
7	Pyruvate carboxylation enables growth of SDH-deficient cells by supporting aspartateÂbiosynthesis. Nature Cell Biology, 2015, 17, 1317-1326.	4.6	226
8	Fumarate induces redox-dependent senescence by modifying glutathione metabolism. Nature Communications, 2015, 6, 6001.	5.8	208
9	Acetate Recapturing by Nuclear Acetyl-CoA Synthetase 2 Prevents Loss of Histone Acetylation during Oxygen and Serum Limitation. Cell Reports, 2017, 18, 647-658.	2.9	202
10	Mitochondrial permeabilization engages NF-Î°B-dependent anti-tumour activity under caspaseÂdeficiency. Nature Cell Biology, 2017, 19, 1116-1129.	4.6	181
11	Dynamic ROS Control by TIGAR Regulates the Initiation and Progression of Pancreatic Cancer. Cancer Cell, 2020, 37, 168-182.e4.	7.7	159
12	TIGAR Is Required for Efficient Intestinal Regeneration and Tumorigenesis. Developmental Cell, 2013, 25, 463-477.	3.1	154
13	N-WASP coordinates the delivery and F-actinâ€“mediated capture of MT1-MMP at invasive pseudopods. Journal of Cell Biology, 2012, 199, 527-544.	2.3	151
14	CRISPR/Cas9-Mediated <i>Trp53</i> and <i>Brca2</i> Knockout to Generate Improved Murine Models of Ovarian High-Grade Serous Carcinoma. Cancer Research, 2016, 76, 6118-6129.	0.4	145
15	X-SCID transgene leukaemogenicity. Nature, 2006, 443, E5-E6.	13.7	144
16	Tumor matrix stiffness promotes metastatic cancer cell interaction with the endothelium. EMBO Journal, 2017, 36, 2373-2389.	3.5	144
17	Serine synthesis pathway inhibition cooperates with dietary serine and glycine limitation for cancer therapy. Nature Communications, 2021, 12, 366.	5.8	138
18	MCL-1 is a prognostic indicator and drug target in breast cancer. Cell Death and Disease, 2018, 9, 19.	2.7	134

#	Article	IF	Citations
19	<i>In vivo</i>models in breast cancer research: progress, challenges and future directions. DMM Disease Models and Mechanisms, 2017, 10, 359-371.	1.2	131
20	HIRA orchestrates a dynamic chromatin landscape in senescence and is required for suppression of neoplasia. Genes and Development, 2014, 28, 2712-2725.	2.7	128
21	Serine one-carbon catabolism with formate overflow. Science Advances, 2016, 2, e1601273.	4.7	128
22	Cancer-Specific Loss of p53 Leads to a Modulation of Myeloid and T Cell Responses. Cell Reports, 2020, 30, 481-496.e6.	2.9	111
23	Runx2: A novel oncogenic effector revealed by in vivo complementation and retroviral tagging. Oncogene, 2001, 20, 295-302.	2.6	101
24	Runx2 and MYC Collaborate in Lymphoma Development by Suppressing Apoptotic and Growth Arrest Pathways In vivo. Cancer Research, 2006, 66, 2195-2201.	0.4	98
25	Mutant p53s generate pro-invasive niches by influencing exosome podocalyxin levels. Nature Communications, 2018, 9, 5069.	5.8	91
26	Increased formate overflow is a hallmark of oxidative cancer. Nature Communications, 2018, 9, 1368.	5.8	90
27	Reversed argininosuccinate lyase activity in fumarate hydratase-deficient cancer cells. Cancer & Metabolism, 2013, 1, 12.	2.4	87
28	Opposing effects of TIGAR- and RAC1-derived ROS on Wnt-driven proliferation in the mouse intestine. Genes and Development, 2016, 30, 52-63.	2.7	87
29	A full-length Cbfa1 gene product perturbs T-cell development and promotes lymphomagenesis in synergy with MYC. Oncogene, 1999, 18, 7124-7134.	2.6	83
30	Runx2 in normal tissues and cancer cells: A developing story. Blood Cells, Molecules, and Diseases, 2010, 45, 117-123.	0.6	81
31	Secreted CLIC3 drives cancer progression through its glutathione-dependent oxidoreductase activity. Nature Communications, 2017, 8, 14206.	5.8	81
32	Expression of RUNX1 Correlates with Poor Patient Prognosis in Triple Negative Breast Cancer. PLoS ONE, 2014, 9, e100759.	1.1	80
33	Enforced Expression of<i>Runx2</i>Perturbs T Cell Development at a Stage Coincident with î²-Selection. Journal of Immunology, 2002, 169, 2866-2874.	0.4	71
34	CRISPR/Cas9-derived models of ovarian high grade serous carcinoma targeting Brca1, Pten and Nf1, and correlation with platinum sensitivity. Scientific Reports, 2017, 7, 16827.	1.6	68
35	RUNX2 in mammary gland development and breast cancer. Journal of Cellular Physiology, 2013, 228, 1137-1142.	2.0	66
36	Glutaminolysis drives membrane trafficking to promote invasiveness of breast cancer cells. Nature Communications, 2017, 8, 2255.	5.8	65

#	Article	IF	Citations
37	Runx1 Deficiency Protects Against Adverse Cardiac Remodeling After Myocardial Infarction. Circulation, 2018, 137, 57-70.	1.6	65
38	Wnt signaling potentiates nevogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16009-16014.	3.3	61
39	The Initiator Methionine tRNA Drives Secretion of Type II Collagen from Stromal Fibroblasts to Promote Tumor Growth and Angiogenesis. Current Biology, 2016, 26, 755-765.	1.8	57
40	Proviral insertion indicates a dominant oncogenic role for Runx1/AML-1 in T-cell lymphoma. Cancer Research, 2002, 62, 7181-5.	0.4	56
41	Activated Mutant NRasQ61K Drives Aberrant Melanocyte Signaling, Survival, and Invasiveness via a Rac1-Dependent Mechanism. Journal of Investigative Dermatology, 2012, 132, 2610-2621.	0.3	55
42	Immune-regulated IDO1-dependent tryptophan metabolism is source of one-carbon units for pancreatic cancer and stellate cells. Molecular Cell, 2021, 81, 2290-2302.e7.	4.5	54
43	The Runx genes as dominant oncogenes. Blood Cells, Molecules, and Diseases, 2003, 30, 194-200.	0.6	53
44	RUNX2 in subtype specific breast cancer and mammary gland differentiation. DMM Disease Models and Mechanisms, 2014, 7, 525-34.	1.2	53
45	Tumours derived from HTLV-Itax transgenic mice are characterized by enhanced levels of apoptosis and oncogene expression. Journal of Pathology, 1998, 186, 209-214.	2.1	51
46	Tiam1-Rac Signaling Counteracts Eg5 during Bipolar Spindle Assembly to Facilitate Chromosome Congression. Current Biology, 2010, 20, 669-675.	1.8	51
47	RUNX1 transformation of primary embryonic fibroblasts is revealed in the absence of p53. Oncogene, 2004, 23, 5476-5486.	2.6	49
48	Runx1 promotes B-cell survival and lymphoma development. Blood Cells, Molecules, and Diseases, 2009, 43, 12-19.	0.6	47
49	Insertional Mutagenesis Reveals Progression Genes and Checkpoints in MYC/Runx2 Lymphomas. Cancer Research, 2007, 67, 5126-5133.	0.4	44
50	The initiator methionine tRNA drives cell migration and invasion leading to increased metastatic potential in melanoma. Biology Open, 2016, 5, 1371-1379.	0.6	44
51	BRD4-mediated repression of p53 is a target for combination therapy in AML. Nature Communications, 2021, 12, 241.	5.8	43
52	<i>Runx2</i> Disruption Promotes Immortalization and Confers Resistance to Oncogene-Induced Senescence in Primary Murine Fibroblasts. Cancer Research, 2007, 67, 11263-11271.	0.4	42
53	Sensitivity to myc-induced apoptosis is retained in spontaneous and transplanted lymphomas of CD2-mycERTM mice. Oncogene, 2000, 19, 773-782.	2.6	41
54	Condensin II mutation causes T-cell lymphoma through tissue-specific genome instability. Genes and Development, 2016, 30, 2173-2186.	2.7	41

#	Article	IF	Citations
55	Migration through physical constraints is enabled by MAPK-induced cell softening via actin cytoskeleton re-organization. Journal of Cell Science, 2019, 132, .	1.2	37
56	Recurrent MLK4 Loss-of-Function Mutations Suppress JNK Signaling to Promote Colon Tumorigenesis. Cancer Research, 2016, 76, 724-735.	0.4	36
57	Polyamine pathway activity promotes cysteine essentiality in cancer cells. Nature Metabolism, 2020, 2, 1062-1076.	5.1	35
58	iRFP is a sensitive marker for cell number and tumor growth in high-throughput systems. Cell Cycle, 2014, 13, 220-226.	1.3	34
59	RUNX1 marks a luminal castration-resistant lineage established at the onset of prostate development. ELife, 2020, 9, .	2.8	34
60	Formate induces a metabolic switch in nucleotide and energy metabolism. Cell Death and Disease, 2020, 11, 310.	2.7	31
61	Runx2 contributes to the regenerative potential of the mammary epithelium. Scientific Reports, 2015, 5, 15658.	1.6	30
62	Oncogene-Expressing Senescent Melanocytes Up-Regulate MHC Class II, aÂCandidate Melanoma Suppressor Function. Journal of Investigative Dermatology, 2017, 137, 2197-2207.	0.3	30
63	A Novel Model of SCID-X1 Reconstitution Reveals Predisposition to Retrovirus-induced Lymphoma but No Evidence of Î³C Gene Oncogenicity. Molecular Therapy, 2009, 17, 1031-1038.	3.7	29
64	Breast cancer dependence on MCL-1 is due to its canonical anti-apoptotic function. Cell Death and Differentiation, 2021, 28, 2589-2600.	5.0	28
65	Apoptotic stress-induced FGF signalling promotes non-cell autonomous resistance to cell death. Nature Communications, 2021, 12, 6572.	5.8	28
66	In-Depth Proteomics Identifies a Role for Autophagy in Controlling Reactive Oxygen Species Mediated Endothelial Permeability. Journal of Proteome Research, 2016, 15, 2187-2197.	1.8	22
67	The enigmatic role of <scp>RUNX</scp>1 in femaleâ€related cancers â€“ current knowledge & future perspectives. FEBS Journal, 2017, 284, 2345-2362.	2.2	22
68	RUNX1 Is a Driver of Renal Cell Carcinoma Correlating with Clinical Outcome. Cancer Research, 2020, 80, 2325-2339.	0.4	21
69	Increased T-cell Infiltration Elicited by <i>Erk5</i> Deletion in a <i>Pten</i>-Deficient Mouse Model of Prostate Carcinogenesis. Cancer Research, 2017, 77, 3158-3168.	0.4	20
70	Dual G9A/EZH2 Inhibition Stimulates Antitumor Immune Response in Ovarian High-Grade Serous Carcinoma. Molecular Cancer Therapeutics, 2022, 21, 522-534.	1.9	20
71	Acute Inhibition of MEK Suppresses Congenital Melanocytic Nevus Syndrome in a Murine Model Driven by Activated NRAS and Wnt Signaling. Journal of Investigative Dermatology, 2015, 135, 2093-2101.	0.3	19
72	Development of an inducible mouse model of iRFP713 to track recombinase activity and tumour development in vivo. Scientific Reports, 2017, 7, 1837.	1.6	19

#	Article	IF	Citations
73	An ARF GTPase module promoting invasion and metastasis through regulating phosphoinositide metabolism. Nature Communications, 2021, 12, 1623.	5.8	18
74	The Sharing Experimental Animal Resources, Coordinating Holdings (SEARCH) Framework: Encouraging Reduction, Replacement, and Refinement in Animal Research. PLoS Biology, 2017, 15, e2000719.	2.6	18
75	Runx Genes in Breast Cancer and the Mammary Lineage. Advances in Experimental Medicine and Biology, 2017, 962, 353-368.	0.8	16
76	RIPK3 promotes adenovirus type 5 activity. Cell Death and Disease, 2017, 8, 3206.	2.7	16
77	RUNX1 Dosage in Development and Cancer. Molecules and Cells, 2020, 43, 126-138.	1.0	16
78	The MSPâ€RON axis stimulates cancer cell growth in models of triple negative breast cancer. Molecular Oncology, 2020, 14, 1868-1880.	2.1	15
79	Complex Interplay between the RUNX Transcription Factors and Wnt/Î²-Catenin Pathway in Cancer: A Tango in the Night. Molecules and Cells, 2020, 43, 188-197.	1.0	15
80	Frequent Infection of Human Cancer Xenografts with Murine Endogenous Retroviruses in Vivo. Viruses, 2015, 7, 2014-2029.	1.5	13
81	Annexin A8 Identifies a Subpopulation of Transiently Quiescent c-Kit Positive Luminal Progenitor Cells of the Ductal Mammary Epithelium. PLoS ONE, 2015, 10, e0119718.	1.1	13
82	p53-mediated redox control promotes liver regeneration and maintains liver function in response to CCl4. Cell Death and Differentiation, 2022, 29, 514-526.	5.0	13
83	Selection for Loss of p53 Function in T-Cell Lymphomagenesis Is Alleviated by Moloney Murine Leukemia Virus Infection in myc Transgenic Mice. Journal of Virology, 2001, 75, 9790-9798.	1.5	12
84	SEARCHBreast: a new resource to locate and share surplus archival material from breast cancer animal models to help address the 3Rs. Breast Cancer Research and Treatment, 2016, 156, 447-452.	1.1	11
85	Increasing the bactofection capacity of a mammalian expression vector by removal of the f1 ori. Cancer Gene Therapy, 2019, 26, 183-194.	2.2	11
86	Loss of RAF kinase inhibitor protein is involved in myelomonocytic differentiation and aggravates RAS-driven myeloid leukemogenesis. Haematologica, 2020, 105, 375-386.	1.7	11
87	A role for CBFÎ² in maintaining the metastatic phenotype of breast cancer cells. Oncogene, 2020, 39, 2624-2637.	2.6	11
88	Brf1 loss and not overexpression disrupts tissues homeostasis in the intestine, liver and pancreas. Cell Death and Differentiation, 2019, 26, 2535-2550.	5.0	10
89	BRF1 accelerates prostate tumourigenesis and perturbs immune infiltration. Oncogene, 2020, 39, 1797-1806.	2.6	10
90	MICAL1 regulates actin cytoskeleton organization, directional cell migration and the growth of human breast cancer cells as orthotopic xenograft tumours. Cancer Letters, 2021, 519, 226-236.	3.2	10

#	Article	IF	Citations
91	Increased apoptotic sensitivity of glioblastoma enables therapeutic targeting by BH3-mimetics. Cell Death and Differentiation, 2022, 29, 2089-2104.	5.0	10
92	SEARCHBreast Workshop Proceedings: 3D Modelling of Breast Cancer. ATLA Alternatives To Laboratory Animals, 2015, 43, 367-375.	0.7	7
93	Selection of established tumour cells through narrow diameter micropores enriches for elevated Ras/Raf/MEK/ERK MAPK signalling and enhanced tumour growth. Small GTPases, 2021, 12, 294-310.	0.7	7
94	Differential requirements for MDM2 E3 activity during embryogenesis and in adult mice. Genes and Development, 2021, 35, 117-132.	2.7	6
95	The right time, the right place: will targeting human cancer-associated mutations to the mouse provide the perfect preclinical model?. Current Opinion in Genetics and Development, 2012, 22, 28-35.	1.5	5
96	Loss of RAF Kinase Inhibitor Protein Is a Frequent Event In Acute Myeloid Leukemia with a Monocytic Phenotype and Cooperates with Mutant RAS In Malignant Transformation. Blood, 2010, 116, 4185-4185.	0.6	5
97	DNMT3B Oncogenic Activity in Human Intestinal Cancer Is Not Linked to CIMP or BRAFV600E Mutation. IScience, 2020, 23, 100838.	1.9	4
98	NUPR1 protects liver from lipotoxic injury by improving the endoplasmic reticulum stress response. FASEB Journal, 2021, 35, e21395.	0.2	4
99	A noninvasive iRFP713 p53 reporter reveals dynamic p53 activity in response to irradiation and liver regeneration in vivo. Science Signaling, 2022, 15, eabd9099.	1.6	4
100	Impact of Formate Supplementation on Body Weight and Plasma Amino Acids. Nutrients, 2020, 12, 2181.	1.7	3
101	SEARCHBreast: a new online resource to make surplus material from in vivo models of breast cancer visible and accessible to researchers. Breast Cancer Research, 2016, 18, 59.	2.2	2
102	BET Inhibitors Potentiate Activation of p53 and Killing of AML By MDM2 Inhibitors â€" a Candidate Combination Therapy. Blood, 2018, 132, 3912-3912.	0.6	2
103	Introducing SEARCHBreast: a virtual resource to facilitate sharing of surplus animal material developed for breast cancer research. Npj Breast Cancer, 2016, 2, 16020.	2.3	1
104	Somatic base editing to model oncogenic drivers in breast cancer. Lab Animal, 2020, 49, 115-116.	0.2	1
105	SEARCHBreast: An online resource designed to increase the efficiency of using materials derived from breast cancer studies in animals. Journal of Pathology, 2016, 240, 120-120.	2.1	0
106	Role of innate immune responses in the effectiveness of oncolytic adenovirus as an anticancer agent. Lancet, The, 2017, 389, S61.	6.3	0
107	The SEARCHBreast Portal: A Virtual Bioresource to Facilitate the Sharing of Surplus Animal Materials Derived from Breast Cancer Studies. Open Journal of Bioresources, 2016, 3, .	1.5	0