Brendan D Manning

List of Publications by Year
in descending order

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110 papers	33,648 citations	14655 66 h-index	24258 110 g-index
133 all docs	133 docs citations	133 times ranked	42930 citing authors

#	Article	IF	Citations
1	AKT/PKB Signaling: Navigating Downstream. Cell, 2007, 129, 1261-1274.	28.9	5,261
2	AKT/PKB Signaling: Navigating the Network. Cell, 2017, 169, 381-405.	28.9	2,454
3	Activation of a Metabolic Gene Regulatory Network Downstream of mTOR Complex 1. Molecular Cell, 2010, 39, 171-183.	9.7	1,598
4	Identification of the Tuberous Sclerosis Complex-2 Tumor Suppressor Gene Product Tuberin as a Target of the Phosphoinositide 3-Kinase/Akt Pathway. Molecular Cell, 2002, 10, 151-162.	9.7	1,376
5	Targeting the PI3K-Akt pathway in human cancer. Cancer Cell, 2003, 4, 257-262.	16.8	1,230
6	Regulation of mTOR function in response to hypoxia by REDD1 and the TSC1/TSC2 tumor suppressor complex. Genes and Development, 2004, 18, 2893-2904.	5.9	1,166
7	The PI3Kâ€"AKT network at the interface of oncogenic signalling and cancer metabolism. Nature Reviews Cancer, 2020, 20, 74-88.	28.4	1,087
8	Tuberous Sclerosis Complex Gene Products, Tuberin and Hamartin, Control mTOR Signaling by Acting as a GTPase-Activating Protein Complex toward Rheb. Current Biology, 2003, 13, 1259-1268.	3.9	1,047
9	The TSC1â€"TSC2 complex: a molecular switchboard controlling cell growth. Biochemical Journal, 2008, 412, 179-190.	3.7	1,045
10	The LKB1 tumor suppressor negatively regulates mTOR signaling. Cancer Cell, 2004, 6, 91-99.	16.8	956
11	Tuberous sclerosis complex-1 and -2 gene products function together to inhibit mammalian target of rapamycin (mTOR)-mediated downstream signaling. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13571-13576.	7.1	744
12	Spatial Control of the TSC Complex Integrates Insulin and Nutrient Regulation of mTORC1 at the Lysosome. Cell, 2014, 156, 771-785.	28.9	625
13	A complex interplay between Akt, TSC2 and the two mTOR complexes. Biochemical Society Transactions, 2009, 37, 217-222.	3.4	623
14	Stimulation of de Novo Pyrimidine Synthesis by Growth Signaling Through mTOR and S6K1. Science, 2013, 339, 1323-1328.	12.6	596
15	Signal integration by mTORC1 coordinates nutrient input with biosynthetic output. Nature Cell Biology, 2013, 15, 555-564.	10.3	595
16	mTORC1 induces purine synthesis through control of the mitochondrial tetrahydrofolate cycle. Science, 2016, 351, 728-733.	12.6	585
17	Selective VPS34 inhibitor blocks autophagy and uncovers a role for NCOA4 in ferritin degradation and iron homeostasis in vivo. Nature Cell Biology, 2014, 16, 1069-1079.	10.3	534
18	Akt Stimulates Hepatic SREBP1c and Lipogenesis through Parallel mTORC1-Dependent and Independent Pathways. Cell Metabolism, 2011, 14, 21-32.	16.2	511

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19	TBC1D7 Is a Third Subunit of the TSC1-TSC2 Complex Upstream of mTORC1. Molecular Cell, 2012, 47, 535-546.	9.7	509
20	mTORC1 signaling and the metabolic control of cell growth. Current Opinion in Cell Biology, 2017, 45, 72-82.	5.4	465
21	The TSC-mTOR pathway regulates macrophage polarization. Nature Communications, 2013, 4, 2834.	12.8	459
22	Balancing Akt with S6K. Journal of Cell Biology, 2004, 167, 399-403.	5.2	450
23	The TSC1-TSC2 Complex Is Required for Proper Activation of mTOR Complex 2. Molecular and Cellular Biology, 2008, 28, 4104-4115.	2.3	444
24	Rheb fills a GAP between TSC and TOR. Trends in Biochemical Sciences, 2003, 28, 573-576.	7.5	443
25	Loss of the Tuberous Sclerosis Complex Tumor Suppressors Triggers the Unfolded Protein Response to Regulate Insulin Signaling and Apoptosis. Molecular Cell, 2008, 29, 541-551.	9.7	389
26	Characterization of Rictor Phosphorylation Sites Reveals Direct Regulation of mTOR Complex 2 by S6K1. Molecular and Cellular Biology, 2009, 29, 5657-5670.	2.3	388
27	Tuberous sclerosis: a GAP at the crossroads of multiple signaling pathways. Human Molecular Genetics, 2005, 14, R251-R258.	2.9	343
28	Akt-mTORC1 signaling regulates Acly to integrate metabolic input to control of macrophage activation. ELife, 2016, 5, .	6.0	324
29	Insulin Stimulates Adipogenesis through the Akt-TSC2-mTORC1 Pathway. PLoS ONE, 2009, 4, e6189.	2.5	306
30	Coordinated regulation of protein synthesis and degradation by mTORC1. Nature, 2014, 513, 440-443.	27.8	292
31	Metformin Inhibits Hepatic mTORC1 Signaling via Dose-Dependent Mechanisms Involving AMPK and the TSC Complex. Cell Metabolism, 2017, 25, 463-471.	16.2	281
32	mTOR couples cellular nutrient sensing to organismal metabolic homeostasis. Trends in Endocrinology and Metabolism, 2011, 22, 94-102.	7.1	280
33	Oncogenic EGFR Signaling Activates an mTORC2â€“NF-ÎºB Pathway That Promotes Chemotherapy Resistance. Cancer Discovery, 2011, 1, 524-538.	9.4	275
34	NF2/Merlin Is a Novel Negative Regulator of mTOR Complex 1, and Activation of mTORC1 Is Associated with Meningioma and Schwannoma Growth. Molecular and Cellular Biology, 2009, 29, 4250-4261.	2.3	264
35	S6K1 Regulates GSK3 under Conditions of mTOR-Dependent Feedback Inhibition of Akt. Molecular Cell, 2006, 24, 185-197.	9.7	260
36	Exploiting Cancer Cell Vulnerabilities to Develop a Combination Therapy for Ras-Driven Tumors. Cancer Cell, 2011, 20, 400-413.	16.8	231

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37	Amino Acid Restriction Triggers Angiogenesis via GCN2/ATF4 Regulation of VEGF and H2S Production. Cell, 2018, 173, 117-129.e14.	28.9	229
38	The multifaceted role of mTORC1 in the control of lipid metabolism. EMBO Reports, 2013, 14, 242-251.	4.5	219
39	Feedback inhibition of Akt signaling limits the growth of tumors lacking Tsc2. Genes and Development, 2005, 19, 1773-1778.	5.9	216
40	Sin1 phosphorylation impairs mTORC2 complex integrity and inhibits downstream Akt signalling to suppress tumorigenesis. Nature Cell Biology, 2013, 15, 1340-1350.	10.3	216
41	United at last: the tuberous sclerosis complex gene products connect the phosphoinositide 3-kinase/Akt pathway to mammalian target of rapamycin (mTOR) signalling. Biochemical Society Transactions, 2003, 31, 573-578.	3.4	204
42	Molecular logic of mTORC1 signalling as a metabolic rheostat. Nature Metabolism, 2019, 1, 321-333.	11.9	197
43	Oncogenic PI3K and K-Ras stimulate de novo lipid synthesis through mTORC1 and SREBP. Oncogene, 2016, 35, 1250-1260.	5.9	189
44	The TSC2/mTOR pathway drives endothelial cell transformation induced by the Kaposi's sarcoma-associated herpesvirus G protein-coupled receptor. Cancer Cell, 2006, 10, 133-143.	16.8	180
45	Genomic complexity and plasticity ofBurkholderia cepacia. FEMS Microbiology Letters, 1996, 144, 117-128.	1.8	174
46	mTOR links oncogenic signaling to tumor cell metabolism. Journal of Molecular Medicine, 2011, 89, 221-228.	3.9	158
47	Chronic Activation of mTOR Complex 1 Is Sufficient to Cause Hepatocellular Carcinoma in Mice. Science Signaling, 2012, 5, ra24.	3.6	157
48	Splicing factor 1 modulates dietary restriction and TORC1 pathway longevity in C. elegans. Nature, 2017, 541, 102-106.	27.8	152
49	The mTORC1 Signaling Network Senses Changes in Cellular Purine Nucleotide Levels. Cell Reports, 2017, 21, 1331-1346.	6.4	149
50	A growing role for mTOR in promoting anabolic metabolism. Biochemical Society Transactions, 2013, 41, 906-912.	3.4	148
51	mTORC1-dependent AMD1 regulation sustains polyamine metabolism in prostate cancer. Nature, 2017, 547, 109-113.	27.8	142
52	Transcriptional Control of Cellular Metabolism by mTOR Signaling. Cancer Research, 2011, 71, 2815-2820.	0.9	135
53	Metabolic and Functional Genomic Studies Identify Deoxythymidylate Kinase as a Target in <i>LKB1</i>-Mutant Lung Cancer. Cancer Discovery, 2013, 3, 870-879.	9.4	127
54	A relative quantitative positive/negative ion switching method for untargeted lipidomics via high resolution LC-MS/MS from any biological source. Metabolomics, 2017, 13, 1.	3.0	124

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55	Identification of potential drug targets for tuberous sclerosis complex by synthetic screens combining CRISPR-based knockouts with RNAi. Science Signaling, 2015, 8, rs9.	3.6	113
56	ZBTB7A acts as a tumor suppressor through the transcriptional repression of glycolysis. Genes and Development, 2014, 28, 1917-1928.	5.9	109
57	mTORC1 Couples Nucleotide Synthesis to Nucleotide Demand Resulting in a Targetable Metabolic Vulnerability. Cancer Cell, 2017, 32, 624-638.e5.	16.8	109
58	Ex vivo and in vivo stable isotope labelling of central carbon metabolism and related pathways with analysis by LCâ€“MS/MS. Nature Protocols, 2019, 14, 313-330.	12.0	106
59	The mTORC1-mediated activation of ATF4 promotes protein and glutathione synthesis downstream of growth signals. ELife, 2021, 10, .	6.0	105
60	Signaling Events Downstream of Mammalian Target of Rapamycin Complex 2 Are Attenuated in Cells and Tumors Deficient for the Tuberous Sclerosis Complex Tumor Suppressors. Cancer Research, 2009, 69, 6107-6114.	0.9	102
61	Differential Regulation of the Kar3p Kinesin-related Protein by Two Associated Proteins, Cik1p and Vik1p. Journal of Cell Biology, 1999, 144, 1219-1233.	5.2	100
62	Emerging Role of mTOR in the Response to Cancer Therapeutics. Trends in Cancer, 2016, 2, 241-251.	7.4	95
63	The Rho-GEF Rom2p Localizes to Sites of Polarized Cell Growth and Participates in Cytoskeletal Functions in<i>Saccharomyces cerevisiae</i>. Molecular Biology of the Cell, 1997, 8, 1829-1844.	2.1	94
64	Hitting the Target: Emerging Technologies in the Search for Kinase Substrates. Science Signaling, 2002, 2002, pe49-pe49.	3.6	85
65	Direct stimulation of NADP ⁺ synthesis through Akt-mediated phosphorylation of NAD kinase. Science, 2019, 363, 1088-1092.	12.6	85
66	mTORC1 signaling activates NRF1 to increase cellular proteasome levels. Cell Cycle, 2015, 14, 2011-2017.	2.6	76
67	Low-dose radiation exposure induces a HIF-1-mediated adaptive and protective metabolic response. Cell Death and Differentiation, 2014, 21, 836-844.	11.2	75
68	Fibroblastic reticular cells enhance T cell metabolism and survival via epigenetic remodeling. Nature Immunology, 2019, 20, 1668-1680.	14.5	53
69	The Kar3p Kinesin-related Protein Forms a Novel Heterodimeric Structure with Its Associated Protein Cik1p. Molecular Biology of the Cell, 2000, 11, 2373-2385.	2.1	51
70	Challenges and Opportunities in Defining the Essential Cancer Kinome. Science Signaling, 2009, 2, pe15.	3.6	47
71	Molecular Basis of Giant Cells in Tuberous Sclerosis Complex. New England Journal of Medicine, 2014, 371, 778-780.	27.0	47
72	The TSC Complex Is Required for the Benefits of Dietary Protein Restriction on Stress Resistance InÂVivo. Cell Reports, 2014, 8, 1160-1170.	6.4	47

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73	Advances and Future Directions for Tuberous Sclerosis Complex Research: Recommendations From the 2015 Strategic Planning Conference. Pediatric Neurology, 2016, 60, 1-12.	2.1	43
74	Drivers and passengers wanted! The role of kinesin-associated proteins. Trends in Cell Biology, 2000, 10, 281-289.	7.9	37
75	mTORC1 Status Dictates Tumor Response to Targeted Therapeutics. Science Signaling, 2013, 6, pe31.	3.6	34
76	Tuberous Sclerosis Complex 2 Loss Increases Lysophosphatidylcholine Synthesis in Lymphangioleiomyomatosis. American Journal of Respiratory Cell and Molecular Biology, 2015, 53, 33-41.	2.9	30
77	Nutrient Sensing in Cancer. Annual Review of Cancer Biology, 2018, 2, 251-269.	4.5	29
78	Game of TOR â€" The Target of Rapamycin Rules Four Kingdoms. New England Journal of Medicine, 2017, 377, 1297-1299.	27.0	27
79	Cancer Signaling Drives Cancer Metabolism: AKT and the Warburg Effect. Cancer Research, 2021, 81, 4896-4898.	0.9	27
80	A Molecular Link between AKT Regulation and Chemotherapeutic Response. Cancer Cell, 2009, 16, 178-180.	16.8	26
81	Chewing the Fat on Tumor Cell Metabolism. Cell, 2010, 140, 28-30.	28.9	26
82	Insulin Signaling: Inositol Phosphates Get into the Akt. Cell, 2010, 143, 861-863.	28.9	26
83	Sterol Regulatory Element Binding Protein Regulates the Expression and Metabolic Functions of Wild-Type and Oncogenic <i>IDH1</i>. Molecular and Cellular Biology, 2016, 36, 2384-2395.	2.3	25
84	Purine nucleotide depletion prompts cell migration by stimulating the serine synthesis pathway. Nature Communications, 2022, 13, 2698.	12.8	25
85	Therapeutic Trial of Metformin and Bortezomib in a Mouse Model of Tuberous Sclerosis Complex (TSC). PLoS ONE, 2012, 7, e31900.	2.5	24
86	Phosphatidylcholine Transfer Protein Interacts with Thioesterase Superfamily Member 2 to Attenuate Insulin Signaling. Science Signaling, 2013, 6, ra64.	3.6	23
87	The Mammalian Target of Rapamycin Complex 1 Regulates Leptin Biosynthesis in Adipocytes at the Level of Translation: The Role of the 5â€²-Untranslated Region in the Expression of Leptin Messenger Ribonucleic Acid. Molecular Endocrinology, 2008, 22, 2260-2267.	3.7	20
88	IMPDH inhibitors for antitumor therapy in tuberous sclerosis complex. JCI Insight, 2020, 5, .	5.0	20
89	Adaptation to Starvation: Translating a Matter of Life or Death. Cancer Cell, 2013, 23, 713-715.	16.8	18
90	Hepatic mTORC1 signaling activates ATF4 as part of its metabolic response to feeding and insulin. Molecular Metabolism, 2021, 53, 101309.	6.5	16

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91	CASTORing New Light on Amino Acid Sensing. Cell, 2016, 165, 15-17.	28.9	14
92	Comment on â€œA Dynamic Network Model of mTOR Signaling Reveals TSC-Independent mTORC2 Regulationâ€: Building a Model of the mTOR Signaling Network with a Potentially Faulty Tool. Science Signaling, 2012, 5, lc3; author reply lc4.	3.6	11
93	Zhang & Manning reply. Nature, 2016, 529, E2-E3.	27.8	11
94	Nutrient sensing lost in cancer. Nature, 2013, 498, 444-445.	27.8	9
95	mTORC1 suppresses PIM3 expression via miR-33 encoded by the SREBP loci. Scientific Reports, 2017, 7, 16112.	3.3	9
96	Improved detection of synthetic lethal interactions in <i>Drosophila</i> cells using variable dose analysis (VDA). Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10755-E10762.	7.1	8
97	Lysosomal catch-and-release controls mTORC1. Nature Cell Biology, 2018, 20, 996-997.	10.3	5
98	The TSC1â€“TSC2 Complex. The Enzymes, 2010, 28, 21-48.	1.7	4
99	Late-Onset Pharmacological or Dietary Interventions Improve Healthspan and Lifespan in Male and Female Mice. Innovation in Aging, 2020, 4, 125-125.	0.1	4
100	Mechanisms and consequences of hepatic regulation of mTORC1 by metformin. Cancer & Metabolism, 2014, 2, .	5.0	3
101	mTORC1 stimulates nucleotide synthesis through both transcriptional and post-translational mechanisms. Cancer & Metabolism, 2014, 2, .	5.0	3
102	Signalling protein protects the heart muscle from pressure-related stress. Nature, 2019, 566, 187-188.	27.8	3
103	The non-essential TSC complex component TBC1D7 restricts tissue mTORC1 signaling and brain and neuron growth. Cell Reports, 2022, 39, 110824.	6.4	3
104	Correction: Balancing Akt with S6K. Journal of Cell Biology, 2004, 167, 1255-1255.	5.2	2
105	IMPROVED HEALTHSPAN AND LIFESPAN WITH LATE ONSET PHARMACOLOGICAL OR DIETARY INTERVENTIONS IN MICE. Innovation in Aging, 2019, 3, S875-S875.	0.1	1
106	Oncogenic signaling upstream of mTORC1 drives lipogenesis and proliferation through SREBP. Cancer & Metabolism, 2014, 2, .	5.0	0
107	James R. Mitchell (1971â€“2020). Cell Metabolism, 2021, 33, 458-461.	16.2	0
108	Abstract SY29-02: The TSC-mTOR pathway and control of anabolic tumor cell metabolism. , 2012, , .		0

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109	Abstract IA07: The TSC complex links PI3K to mTOR and cancer metabolism. , 2015, , .		0
110	Longevity-Extending MetAP2 Inhibitors Induce Caloric Restriction Through P53-Dependent Induction of GDF-15. Innovation in Aging, 2020, 4, 125-126.	0.1	0