Ivan Topisirovic

List of Publications by Year
in descending order

122 papers	15,640 citations	30070 54 h-index	19749 117 g-index
157 all docs	157 docs citations	157 times ranked	28307 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	9.1	4,701
2	mTORC1 Controls Mitochondrial Activity and Biogenesis through 4E-BP-Dependent Translational Regulation. Cell Metabolism, 2013, 18, 698-711.	16.2	647
3	Targeting the translation machinery in cancer. Nature Reviews Drug Discovery, 2015, 14, 261-278.	46.4	628
4	mTORC1-Mediated Cell Proliferation, But Not Cell Growth, Controlled by the 4E-BPs. Science, 2010, 328, 1172-1176.	12.6	624
5	mTOR coordinates protein synthesis, mitochondrial activity and proliferation. Cell Cycle, 2015, 14, 473-480.	2.6	397
6	Dissecting the role of mTOR: Lessons from mTOR inhibitors. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 433-439.	2.3	389
7	Cap and capâ€binding proteins in the control of gene expression. Wiley Interdisciplinary Reviews RNA, 2011, 2, 277-298.	6.4	338
8	Ribavirin suppresses eIF4E-mediated oncogenic transformation by physical mimicry of the 7-methyl guanosine mRNA cap. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 18105-18110.	7.1	267
9	mTOR Controls Mitochondrial Dynamics and Cell Survival via MTFP1. Molecular Cell, 2017, 67, 922-935.e5.	9.7	249
10	eIF4E is a central node of an RNA regulon that governs cellular proliferation. Journal of Cell Biology, 2006, 175, 415-426.	5.2	246
11	mTOR as a central regulator of lifespan and aging. F1000Research, 2019, 8, 998.	1.6	244
12	Signaling Pathways Involved in the Regulation of mRNA Translation. Molecular and Cellular Biology, 2018, 38, .	2.3	236
13	Phosphorylation of the Eukaryotic Translation Initiation Factor eIF4E Contributes to Its Transformation and mRNA Transport Activities. Cancer Research, 2004, 64, 8639-8642.	0.9	226
14	Aberrant Eukaryotic Translation Initiation Factor 4E-Dependent mRNA Transport Impedes Hematopoietic Differentiation and Contributes to Leukemogenesis. Molecular and Cellular Biology, 2003, 23, 8992-9002.	2.3	198
15	Translational control of immune responses: from transcripts to translatomes. Nature Immunology, 2014, 15, 503-511.	14.5	193
16	nanoCAGE reveals 5â€² UTR features that define specific modes of translation of functionally related MTOR-sensitive mRNAs. Genome Research, 2016, 26, 636-648.	5.5	177
17	S6K1 Plays a Critical Role in Early Adipocyte Differentiation. Developmental Cell, 2010, 18, 763-774.	7.0	171
18	Distinct perturbation of the translatome by the antidiabetic drug metformin. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8977-8982.	7.1	169

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19	eIF4E promotes nuclear export of cyclin D1 mRNAs via an element in the 3â€²UTR. Journal of Cell Biology, 2005, 169, 245-256.	5.2	166
20	A Novel 4EHP-GIGYF2 Translational Repressor Complex Is Essential for Mammalian Development. Molecular and Cellular Biology, 2012, 32, 3585-3593.	2.3	164
21	The proline-rich homeodomain protein, PRH, is a tissue-specific inhibitor of eIF4E-dependent cyclin D1 mRNA transport and growth. EMBO Journal, 2003, 22, 689-703.	7.8	153
22	Leishmania Repression of Host Translation through mTOR Cleavage Is Required for Parasite Survival and Infection. Cell Host and Microbe, 2011, 9, 331-341.	11.0	153
23	Polysome Fractionation and Analysis of Mammalian Translatomes on a Genome-wide Scale. Journal of Visualized Experiments, 2014, , .	0.3	153
24	Regulation of mRNA Translation by Signaling Pathways. Cold Spring Harbor Perspectives in Biology, 2012, 4, a012252-a012252.	5.5	146
25	eIF4E/4E-BP Ratio Predicts the Efficacy of mTOR Targeted Therapies. Cancer Research, 2012, 72, 6468-6476.	0.9	140
26	Controlling Gene Expression through RNA Regulons: The Role of the Eukaryotic Translation Initiation Factor eIF4E. Cell Cycle, 2007, 6, 65-69.	2.6	136
27	A Unique ISR Program Determines Cellular Responses to Chronic Stress. Molecular Cell, 2017, 68, 885-900.e6.	9.7	135
28	The oncometabolite 2-hydroxyglutarate activates the mTOR signalling pathway. Nature Communications, 2016, 7, 12700.	12.8	134
29	Copper bioavailability is a KRAS-specific vulnerability in colorectal cancer. Nature Communications, 2020, 11, 3701.	12.8	128
30	Molecular dissection of the eukaryotic initiation factor 4E (eIF4E) export-competent RNP. EMBO Journal, 2009, 28, 1087-1098.	7.8	120
31	RNA G-quadruplexes and their potential regulatory roles in translation. Translation, 2016, 4, e1244031.	2.9	118
32	METTL13 Methylation of eEF1A Increases Translational Output to Promote Tumorigenesis. Cell, 2019, 176, 491-504.e21.	28.9	117
33	Control of Cell Survival and Proliferation by Mammalian Eukaryotic Initiation Factor 4B. Molecular and Cellular Biology, 2010, 30, 1478-1485.	2.3	116
34	Translational control of the activation of transcription factor NF-Î°B and production of type I interferon by phosphorylation of the translation factor eIF4E. Nature Immunology, 2012, 13, 543-550.	14.5	114
35	Serine Deprivation Enhances Antineoplastic Activity of Biguanides. Cancer Research, 2014, 74, 7521-7533.	0.9	113
36	p53-Dependent Translational Control of Senescence and Transformation via 4E-BPs. Cancer Cell, 2009, 16, 439-446.	16.8	104

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37	Oncogenic Activities of IDH1/2 Mutations: From Epigenetics to Cellular Signaling. Trends in Cell Biology, 2017, 27, 738-752.	7.9	99
38	Regulation of p53 Localization and Activity by Ubc13. Molecular and Cellular Biology, 2006, 26, 8901-8913.	2.3	96
39	Translation Initiation Factors: Reprogramming Protein Synthesis in Cancer. Trends in Cell Biology, 2016, 26, 918-933.	7.9	96
40	Cross-talk between protein synthesis, energy metabolism and autophagy in cancer. Current Opinion in Genetics and Development, 2018, 48, 104-111.	3.3	92
41	Cap-free structure of eIF4E suggests a basis for conformational regulation by its ligands. EMBO Journal, 2006, 25, 5138-5149.	7.8	88
42	Stability of Eukaryotic Translation Initiation Factor 4E mRNA Is Regulated by HuR, and This Activity Is Dysregulated in Cancer. Molecular and Cellular Biology, 2009, 29, 1152-1162.	2.3	87
43	Eukaryotic Translation Initiation Factor 4E Activity Is Modulated by HOXA9 at Multiple Levels. Molecular and Cellular Biology, 2005, 25, 1100-1112.	2.3	85
44	Further evidence that ribavirin interacts with eIF4E. Rna, 2005, 11, 1762-1766.	3.5	83
45	Aven recognition of RNA G-quadruplexes regulates translation of the mixed lineage leukemia protooncogenes. ELife, 2015, 4, .	6.0	83
46	Translational control of breast cancer plasticity. Nature Communications, 2020, 11, 2498.	12.8	80
47	mRNA Translation and Energy Metabolism in Cancer: The Role of the MAPK and mTORC1 Pathways. Cold Spring Harbor Symposia on Quantitative Biology, 2011, 76, 355-367.	1.1	77
48	Oxygen sufficiency controls TOP mRNA translation via the TSC-Rheb-mTOR pathway in a 4E-BP-independent manner. Journal of Molecular Cell Biology, 2014, 6, 255-266.	3.3	77
49	mTORC1 and CK2 coordinate ternary and eIF4F complex assembly. Nature Communications, 2016, 7, 11127.	12.8	75
50	Generally applicable transcriptome-wide analysis of translation using anota2seq. Nucleic Acids Research, 2019, 47, e70-e70.	14.5	70
51	Distinct Translational Control in CD4+ T Cell Subsets. PLoS Genetics, 2013, 9, e1003494.	3.5	69
52	Adaptation to mitochondrial stress requires CHOP-directed tuning of ISR. Science Advances, 2021, 7, .	10.3	68
53	Activation Loop Phosphorylation of ERK3/ERK4 by Group I p21-activated Kinases (PAKs) Defines a Novel PAK-ERK3/4-MAPK-activated Protein Kinase 5 Signaling Pathway. Journal of Biological Chemistry, 2011, 286, 6470-6478.	3.4	65
54	Competition between translation initiation factor eIF5 and its mimic protein 5MP determines non-AUG initiation rate genome-wide. Nucleic Acids Research, 2017, 45, 11941-11953.	14.5	63

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55	RACK1 Function in Cell Motility and Protein Synthesis. Genes and Cancer, 2013, 4, 369-377.	1.9	62
56	MNK1/2 inhibition limits oncogenicity and metastasis of KIT-mutant melanoma. Journal of Clinical Investigation, 2017, 127, 4179-4192.	8.2	62
57	Translational and HIF-1Î±-Dependent Metabolic Reprogramming Underpin Metabolic Plasticity and Responses to Kinase Inhibitors and Biguanides. Cell Metabolism, 2018, 28, 817-832.e8.	16.2	61
58	Translational reprogramming marks adaptation to asparagine restriction in cancer. Nature Cell Biology, 2019, 21, 1590-1603.	10.3	61
59	Degradation of Newly Synthesized Polypeptides by Ribosome-Associated RACK1/c-Jun N-Terminal Kinase/Eukaryotic Elongation Factor 1A2 Complex. Molecular and Cellular Biology, 2013, 33, 2510-2526.	2.3	58
60	mTOR-sensitive translation: Cleared fog reveals more trees. RNA Biology, 2017, 14, 1299-1305.	3.1	56
61	Gamma Interferon and Cadmium Treatments Modulate Eukaryotic Initiation Factor 4E-Dependent mRNA Transport of Cyclin D1 in a PML-Dependent Manner. Molecular and Cellular Biology, 2002, 22, 6183-6198.	2.3	55
62	Enhanced translation expands the endo-lysosome size and promotes antigen presentation during phagocyte activation. PLoS Biology, 2019, 17, e3000535.	5.6	49
63	Control of Translation and miRNA-Dependent Repression by a Novel Poly(A) Binding Protein, hnRNP-Q. PLoS Biology, 2013, 11, e1001564.	5.6	47
64	Control of p53 multimerization by Ubc13 is JNK-regulated. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12676-12681.	7.1	44
65	Estrogen receptor alpha drives proliferation in PTEN-deficient prostate carcinoma by stimulating survival signaling, MYC expression and altering glucose sensitivity. Oncotarget, 2015, 6, 604-616.	1.8	43
66	Cancer Plasticity: The Role of mRNA Translation. Trends in Cancer, 2021, 7, 134-145.	7.4	42
67	Arenavirus Z protein as an antiviral target: virus inactivation and protein oligomerization by zinc finger-reactive compounds. Journal of General Virology, 2006, 87, 1217-1228.	2.9	40
68	FXR1P Limits Long-Term Memory, Long-Lasting Synaptic Potentiation, and De Novo GluA2 Translation. Cell Reports, 2014, 9, 1402-1416.	6.4	40
69	Carbon Source and Myc Expression Influence the Antiproliferative Actions of Metformin. Cancer Research, 2012, 72, 6257-6267.	0.9	39
70	Frequency analysis and clinical characterization of different types of spinocerebellar ataxia in Serbian patients. Movement Disorders, 2006, 21, 187-191.	3.9	35
71	Dysregulation of mRNA translation and energy metabolism in cancer. Advances in Biological Regulation, 2018, 67, 30-39.	2.3	35
72	Inhibiting the MNK1/2-eIF4E axis impairs melanoma phenotype switching and potentiates antitumor immune responses. Journal of Clinical Investigation, 2021, 131, .	8.2	35

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73	Cell size homeostasis is maintained by CDK4-dependent activation of p38 MAPK. Developmental Cell, 2021, 56, 1756-1769.e7.	7.0	35
74	Translational offsetting as a mode of estrogen receptor Î±â€dependent regulation of geneÂexpression. EMBO Journal, 2019, 38, e101323.	7.8	33
75	Selective inhibitors of mTORC1 activate 4EBP1 and suppress tumor growth. Nature Chemical Biology, 2021, 17, 1065-1074.	8.0	33
76	Largen: A Molecular Regulator of Mammalian Cell Size Control. Molecular Cell, 2014, 53, 904-915.	9.7	30
77	Biomedical Potential of mTOR Modulation by Nanoparticles. Trends in Biotechnology, 2016, 34, 349-353.	9.3	30
78	The Proline-Rich Homeodomain (PRH/HEX) Protein Is Down-Regulated in Liver during Infection with Lymphocytic Choriomeningitis Virus. Journal of Virology, 2005, 79, 2461-2473.	3.4	28
79	Translational Control by the Eukaryotic Ribosome. Cell, 2011, 145, 333-334.	28.9	28
80	SBI-0640756 Attenuates the Growth of Clinically Unresponsive Melanomas by Disrupting the eIF4F Translation Initiation Complex. Cancer Research, 2015, 75, 5211-5218.	0.9	28
81	The eukaryotic translation initiation factor 4E (eIF4E) and HuR RNA operons collaboratively regulate the expression of survival and proliferative genes. Cell Cycle, 2009, 8, 959-964.	2.6	26
82	An antiviral disulfide compound blocks interaction between arenavirus Z protein and cellular promyelocytic leukemia protein. Biochemical and Biophysical Research Communications, 2010, 393, 625-630.	2.1	24
83	The Role of eIF4E in Response and Acquired Resistance to Vemurafenib in Melanoma. Journal of Investigative Dermatology, 2015, 135, 1368-1376.	0.7	24
84	An ErbB2/c-Src axis links bioenergetics with PRC2 translation to drive epigenetic reprogramming and mammary tumorigenesis. Nature Communications, 2019, 10, 2901.	12.8	24
85	STAT1 potentiates oxidative stress revealing a targetable vulnerability that increases phenformin efficacy in breast cancer. Nature Communications, 2021, 12, 3299.	12.8	24
86	A hydride transfer complex reprograms NAD metabolism and bypasses senescence. Molecular Cell, 2021, 81, 3848-3865.e19.	9.7	24
87	The integrated stress response is tumorigenic and constitutes a therapeutic liability in KRAS-driven lung cancer. Nature Communications, 2021, 12, 4651.	12.8	22
88	Regulation of gene expression via translational buffering. Biochimica Et Biophysica Acta - Molecular Cell Research, 2022, 1869, 119140.	4.1	22
89	Hepatic posttranscriptional network comprised of CCR4â€"NOT deadenylase and FGF21 maintains systemic metabolic homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7973-7981.	7.1	21
90	Deadenylase-dependent mRNA decay of GDF15 and FGF21 orchestrates food intake and energy expenditure. Cell Metabolism, 2022, 34, 564-580.e8.	16.2	21

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91	Genetic and clinical analysis of spinocerebellar ataxia typeâ€ƒ8 repeat expansion in Yugoslavia. Clinical Genetics, 2002, 62, 321-324.	2.0	20
92	PRDM15 is a key regulator of metabolism critical to sustain B-cell lymphomagenesis. Nature Communications, 2020, 11, 3520.	12.8	20
93	The role of GSK3 in metabolic pathway perturbations in cancer. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 119059.	4.1	20
94	mTOR inhibitor efficacy is determined by the eIF4E/4E-BP ratio. Oncotarget, 2012, 3, 1491-1492.	1.8	20
95	The ShcA adaptor activates AKT signaling to potentiate breast tumor angiogenesis by stimulating VEGF mRNA translation in a 4E-BP-dependent manner. Oncogene, 2015, 34, 1729-1735.	5.9	19
96	Inactive C-terminal telomerase reverse transcriptase insertion splicing variants are dominant-negative inhibitors of telomerase. Biochimie, 2014, 101, 93-103.	2.6	18
97	Genome-Wide Screens Reveal that Resveratrol Induces Replicative Stress in Human Cells. Molecular Cell, 2020, 79, 846-856.e8.	9.7	18
98	Perturbations of cancer cell metabolism by the antidiabetic drug canagliflozin. Neoplasia, 2021, 23, 391-399.	5.3	18
99	Adaptive translational pausing is a hallmark of the cellular response to severe environmental stress. Molecular Cell, 2021, 81, 4191-4208.e8.	9.7	18
100	The mTORC1/S6K/PDCD4/eIF4A Axis Determines Outcome of Mitotic Arrest. Cell Reports, 2020, 33, 108230.	6.4	17
101	Distinctive tRNA Repertoires in Proliferating versus Differentiating Cells. Cell, 2014, 158, 1238-1239.	28.9	14
102	Cancer as an ecomolecular disease and a neoplastic consortium. Biochimica Et Biophysica Acta: Reviews on Cancer, 2017, 1868, 484-499.	7.4	14
103	SPANX Control of Lamin A/C Modulates Nuclear Architecture and Promotes Melanoma Growth. Molecular Cancer Research, 2020, 18, 1560-1573.	3.4	13
104	Burn Out or Fade Away?. Science, 2010, 327, 1210-1211.	12.6	11
105	Co-translational mechanisms of quality control of newly synthesized polypeptides. Translation, 2014, 2, e28109.	2.9	10
106	Translation and cancer. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2015, 1849, 751-752.	1.9	10
107	Downregulation of PERK activity and eIF2Î± serine 51 phosphorylation by mTOR complex 1 elicits pro-oxidant and pro-death effects in tuberous sclerosis-deficient cells. Cell Death and Disease, 2018, 9, 254.	6.3	10
108	Interplay between ShcA Signaling and PGC-1Î± Triggers Targetable Metabolic Vulnerabilities in Breast Cancer. Cancer Research, 2018, 78, 4826-4838.	0.9	10

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109	Oncogenic kinases and perturbations in protein synthesis machinery and energetics in neoplasia. Journal of Molecular Endocrinology, 2019, 62, R83-R103.	2.5	9
110	A mechanism of nucleocytoplasmic trafficking for the homeodomain protein PRH. Molecular and Cellular Biochemistry, 2009, 332, 173-181.	3.1	7
111	RITA requires eIF2Î±-dependent modulation of mRNA translation for its anti-cancer activity. Cell Death and Disease, 2019, 10, 845.	6.3	7
112	Is the 31 CAG repeat allele of the spinocerebellar ataxia 1 (SCA1) gene locus non-specifically associated with trinucleotide expansion diseases?. Psychiatric Genetics, 2001, 11, 201-205.	1.1	5
113	Nucleus to Mitochondria: Lost in Transcription, Found in Translation. Developmental Cell, 2016, 37, 490-492.	7.0	5
114	c-Myc steers translation in lymphoma. Journal of Experimental Medicine, 2019, 216, 1471-1473.	8.5	4
115	Trans-HSF1 Express. Science, 2013, 341, 242-243.	12.6	2
116	Mitochondrial complex IV defects induce metabolic and signaling perturbations that expose potential vulnerabilities in HCT116 cells. FEBS Open Bio, 2022, 12, 959-982.	2.3	2
117	4Eâ€BPs at the crossroads of oncogenic MAPK and AKT signaling. Pigment Cell and Melanoma Research, 2010, 23, 585-586.	3.3	1
118	eIF4E Phosphorylation Downstream of MAPK Pathway. , 2014, , 363-374.		1
119	Arginylâ€tRNAâ€protein transferase 1 (ATE1) promotes melanoma cell growth and migration. FEBS Letters, 2022, 596, 1468-1480.	2.8	1
120	Translation Links Nutrient Availability with Inflammation. Trends in Biochemical Sciences, 2018, 43, 849-852.	7.5	0
121	Abstract 3575: Integration of estradiol signaling at the translational and transcriptional level in prostate cancer cells.. , 2013, , .		0
122	mTORâ€dependent selective translation rapidly expands lysosome biogenesis, volume and retention capacity during phagocyte activatio. FASEB Journal, 2018, 32, 542.6.	0.5	0