Ron Milo

List of Publications by Year
in descending order

116 papers	22,808 citations	26630 56 h-index	24982 109 g-index
126 all docs	126 docs citations	126 times ranked	30024 citing authors

#	Article	IF	Citations
1	Effect of natalizumab treatment on the rate of No Evidence of Disease Activity in young adults with multiple sclerosis in relation to pubertal stage. Journal of the Neurological Sciences, 2022, 432, 120074.	0.6	3
2	Protection following BNT162b2 booster in adolescents substantially exceeds that of a fresh 2-dose vaccine. Nature Communications, 2022, 13, 1971.	12.8	10
3	Estimating disease severity of Omicron and Delta SARS-CoV-2 infections. Nature Reviews Immunology, 2022, 22, 267-269.	22.7	138
4	Humoral and Cellular Immune Responses to SARS-CoV-2 mRNA Vaccination in Patients with Multiple Sclerosis: An Israeli Multi-Center Experience Following 3 Vaccine Doses. Frontiers in Immunology, 2022, 13, 868915.	4.8	32
5	Association between cervical disc disease and lesions of multiple sclerosis. Neuroradiology Journal, 2021, 34, 200-204.	1.2	1
6	The distribution of cellular turnover in the human body. Nature Medicine, 2021, 27, 45-48.	30.7	205
7	The survival and function of IL-10-producing regulatory B cells are negatively controlled by SLAMF5. Nature Communications, 2021, 12, 1893.	12.8	23
8	Approaches and challenges in the diagnosis and management of secondary progressive multiple sclerosis: A Central Eastern European perspective from healthcare professionals. Multiple Sclerosis and Related Disorders, 2021, 50, 102778.	2.0	7
9	Photovoltaic-driven microbial protein production can use land and sunlight more efficiently than conventional crops. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	68
10	The total number and mass of SARS-CoV-2 virions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	187
11	The development and use of the European academy of neurology guideline on palliative care in advanced progressive multiple sclerosis. Journal of the Neurological Sciences, 2021, 429, 118026.	0.6	0
12	The temporal and causal relationship between inflammation and neurodegeneration in multiple sclerosis. Multiple Sclerosis Journal, 2020, 26, 876-886.	3.0	41
13	Global human-made mass exceeds all living biomass. Nature, 2020, 588, 442-444.	27.8	344
14	Familial Creutzfeldtâ€“Jakob disease homozygous to the E200K mutation: clinical characteristics and disease course. Journal of Neurology, 2020, 267, 2455-2458.	3.6	8
15	EAN Guideline on Palliative Care of People with Severe, Progressive Multiple Sclerosis. Journal of Palliative Medicine, 2020, 23, 1426-1443.	1.1	13
16	Palliative care in multiple sclerosis: European guideline. Multiple Sclerosis Journal, 2020, 26, 1009-1011.	3.0	2
17	Ofatumumab â€“ A Potential Subcutaneous B-cell Therapy for Relapsing Multiple Sclerosis. European Neurological Review, 2020, 15, 27.	0.5	3
18	SARS-CoV-2 (COVID-19) by the numbers. ELife, 2020, 9, .	6.0	826

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19	Revisiting Trade-offs between Rubisco Kinetic Parameters. Biochemistry, 2019, 58, 3365-3376.	2.5	142
20	Immunological Aspects of Approved MS Therapeutics. Frontiers in Immunology, 2019, 10, 1564.	4.8	117
21	Therapies for multiple sclerosis targeting B cells. Croatian Medical Journal, 2019, 60, 87-98.	0.7	44
22	JC virus identified in a patient with persistent and severe West Nile virus disease. Journal of NeuroVirology, 2019, 25, 608-611.	2.1	1
23	The global mass and average rate of rubisco. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4738-4743.	7.1	154
24	Towards a quantitative view of the global ubiquity of biofilms. Nature Reviews Microbiology, 2019, 17, 199-200.	28.6	20
25	B Cell-based Therapies for Multiple Sclerosis. RSC Drug Discovery Series, 2019, , 134-169.	0.3	1
26	A model for â€˜sustainableâ€™ US beef production. Nature Ecology and Evolution, 2018, 2, 81-85.	7.8	23
27	Mycosis fungoides â€“ A cutaneous lymphoproliferative disorder in a patient treated with fingolimod for multiple sclerosis. Journal of Clinical Neuroscience, 2018, 48, 102-103.	1.5	12
28	The biomass distribution on Earth. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6506-6511.	7.1	2,102
29	A retrospective analysis of the development of seizure frequency in patients with seizures during a period of military conflict. Seizure: the Journal of the British Epilepsy Association, 2018, 61, 119-121.	2.0	2
30	Progressive multifocal leukoencephalopathy in a patient with chronic lymphocytic leukemia after immunosuppressive treatment. Neurology and Clinical Neuroscience, 2017, 5, 29-31.	0.4	0
31	Daclizumab for the treatment of adults with relapsing forms of multiple sclerosis. Expert Review of Clinical Pharmacology, 2017, 10, 1037-1047.	3.1	3
32	Design principles of autocatalytic cycles constrain enzyme kinetics and force low substrate saturation at flux branch points. ELife, 2017, 6, .	6.0	70
33	Mutation in West Nile Virus Structural Protein prM during Human Infection. Emerging Infectious Diseases, 2016, 22, 1647-1649.	4.3	4
34	Spotlight on daclizumab: its potential in the treatment of multiple sclerosis. Degenerative Neurological and Neuromuscular Disease, 2016, Volume 6, 95-109.	1.3	2
35	Pyruvate Formate-Lyase Enables Efficient Growth of Escherichia coli on Acetate and Formate. Biochemistry, 2016, 55, 2423-2426.	2.5	57
36	Sugar Synthesis from CO2 in Escherichia coli. Cell, 2016, 166, 115-125.	28.9	272

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37	Are We Really Vastly Outnumbered? Revisiting the Ratio of Bacterial to Host Cells in Humans. Cell, 2016, 164, 337-340.	28.9	1,463
38	Global characterization of in vivo enzyme catalytic rates and their correspondence to in vitro k _{cat} measurements. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3401-3406.	7.1	212
39	SnapShot: Timescales in Cell Biology. Cell, 2016, 164, 1302-1302.e1.	28.9	173
40	Therapeutic strategies targeting B-cells in multiple sclerosis. Autoimmunity Reviews, 2016, 15, 714-718.	5.8	65
41	A Minimalistic Resource Allocation Model to Explain Ubiquitous Increase in Protein Expression with Growth Rate. PLoS ONE, 2016, 11, e0153344.	2.5	18
42	Effectiveness of multiple sclerosis treatment with current immunomodulatory drugs. Expert Opinion on Pharmacotherapy, 2015, 16, 659-673.	1.8	21
43	Reply to Tichenor: Proposed update to beef greenhouse gas footprint is numerically questionable and well within current uncertainty bounds. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E822-E823.	7.1	0
44	The Moderately Efficient Enzyme: Futile Encounters and Enzyme Floppiness. Biochemistry, 2015, 54, 4969-4977.	2.5	89
45	Role of a Novel Human Leukocyte Antigen-DQA1*01:02;DRB1*15:01 Mixed Isotype Heterodimer in the Pathogenesis of â€œHumanizedâ€•Multiple Sclerosis-like Disease. Journal of Biological Chemistry, 2015, 290, 15260-15278.	3.4	7
46	Noise in gene expression is coupled to growth rate. Genome Research, 2015, 25, 1893-1902.	5.5	83
47	An In Vivo Metabolic Approach for Deciphering the Product Specificity of Glycerate Kinase Proves that Both E. coliâ€™s Glycerate Kinases Generate 2-Phosphoglycerate. PLoS ONE, 2015, 10, e0122957.	2.5	15
48	The efficacy and safety of daclizumab and its potential role in the treatment of multiple sclerosis. Therapeutic Advances in Neurological Disorders, 2014, 7, 7-21.	3.5	34
49	Noise Genetics: Inferring Protein Function by Correlating Phenotype with Protein Levels and Localization in Individual Human Cells. PLoS Genetics, 2014, 10, e1004176.	3.5	20
50	Pathway Thermodynamics Highlights Kinetic Obstacles in Central Metabolism. PLoS Computational Biology, 2014, 10, e1003483.	3.2	249
51	Visual account of protein investment in cellular functions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8488-8493.	7.1	304
52	Revised diagnostic criteria of multiple sclerosis. Autoimmunity Reviews, 2014, 13, 518-524.	5.8	238
53	The quantified cell. Molecular Biology of the Cell, 2014, 25, 3497-3500.	2.1	44
54	Reply to Metson et al.: The importance of phosphorus perturbations. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4908-E4908.	7.1	0

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55	Land, irrigation water, greenhouse gas, and reactive nitrogen burdens of meat, eggs, and dairy production in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11996-12001.	7.1	375
56	A note on the kinetics of enzyme action: A decomposition that highlights thermodynamic effects. FEBS Letters, 2013, 587, 2772-2777.	2.8	108
57	Design and analysis of metabolic pathways supporting formatotrophic growth for electricity-dependent cultivation of microbes. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 1039-1047.	1.0	150
58	Quantifying Translational Coupling in E. coli Synthetic Operons Using RBS Modulation and Fluorescent Reporters. ACS Synthetic Biology, 2013, 2, 327-336.	3.8	100
59	EcoTimeâ€"An intuitive quantitative sustainability indicator utilizing a time metric. Ecological Indicators, 2013, 24, 240-245.	6.3	5
60	What is the total number of protein molecules per cell volume? A call to rethink some published values. BioEssays, 2013, 35, 1050-1055.	2.5	477
61	Consistent Estimation of Gibbs Energy Using Component Contributions. PLoS Computational Biology, 2013, 9, e1003098.	3.2	231
62	Spanning high-dimensional expression space using ribosome-binding site combinatorics. Nucleic Acids Research, 2013, 41, e98-e98.	14.5	165
63	Promoters maintain their relative activity levels under different growth conditions. Molecular Systems Biology, 2013, 9, 701.	7.2	181
64	Glycolytic strategy as a tradeoff between energy yield and protein cost. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10039-10044.	7.1	446
65	Steady-State Metabolite Concentrations Reflect a Balance between Maximizing Enzyme Efficiency and Minimizing Total Metabolite Load. PLoS ONE, 2013, 8, e75370.	2.5	67
66	Prediction of Microbial Growth Rate versus Biomass Yield by a Metabolic Network with Kinetic Parameters. PLoS Computational Biology, 2012, 8, e1002575.	3.2	148
67	An integrated open framework for thermodynamics of reactions that combines accuracy and coverage. Bioinformatics, 2012, 28, 2037-2044.	4.1	108
68	eQuilibrator--the biochemical thermodynamics calculator. Nucleic Acids Research, 2012, 40, D770-D775.	14.5	483
69	Achieving Diversity in the Face of Constraints: Lessons from Metabolism. Science, 2012, 336, 1663-1667.	12.6	61
70	Rethinking glycolysis: on the biochemical logic of metabolic pathways. Nature Chemical Biology, 2012, 8, 509-517.	8.0	211
71	Thermodynamic constraints shape the structure of carbon fixation pathways. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1646-1659.	1.0	126
72	A proof for loop-law constraints in stoichiometric metabolic networks. BMC Systems Biology, 2012, 6, 140.	3.0	21

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73	A survey of carbon fixation pathways through a quantitative lens. Journal of Experimental Botany, 2012, 63, 2325-2342.	4.8	212
74	Efficiency in Evolutionary Trade-Offs. Science, 2012, 336, 1114-1115.	12.6	22
75	Dynamic Proteomics of Human Protein Level and Localization across the Cell Cycle. PLoS ONE, 2012, 7, e48722.	2.5	17
76	Abstract P282: First-ever Ischemic Stroke in the Very Elderly: Trends, Characteristics and Outcome in a National Registry. Circulation, 2012, 125, .	1.6	0
77	Cell-to-cell spread of HIV permits ongoing replication despite antiretroviral therapy. Nature, 2011, 477, 95-98.	27.8	502
78	The Moderately Efficient Enzyme: Evolutionary and Physicochemical Trends Shaping Enzyme Parameters. Biochemistry, 2011, 50, 4402-4410.	2.5	810
79	Reconstructing a puzzle: existence of cyanophages containing both photosystemâ€I and photosystemâ€II gene suites inferred from oceanic metagenomic datasets. Environmental Microbiology, 2011, 13, 24-32.	3.8	46
80	Combination therapy in multiple sclerosis. Journal of Neuroimmunology, 2011, 231, 23-31.	2.3	25
81	The increasing incidence and prevalence of female multiple sclerosisâ€"A critical analysis of potential environmental factors. Autoimmunity Reviews, 2011, 10, 495-502.	5.8	174
82	Tau and 14-3-3 of genetic and sporadic Creutzfeldtâ€"Jakob disease patients in Israel. Journal of Neurology, 2011, 258, 255-262.	3.6	32
83	Robust Control of PEP Formation Rate in the Carbon Fixation Pathway of C4 Plants by a Bi-functional Enzyme. BMC Systems Biology, 2011, 5, 171.	3.0	10
84	Multiple sclerosis and chronic cerebrospinal venous insufficiency: a critical review. Therapeutic Advances in Neurological Disorders, 2011, 4, 231-235.	3.5	5
85	Hydrophobicity and Charge Shape Cellular Metabolite Concentrations. PLoS Computational Biology, 2011, 7, e1002166.	3.2	65
86	Multiple sclerosis: Geoepidemiology, genetics and the environment. Autoimmunity Reviews, 2010, 9, A387-A394.	5.8	521
87	Cross-species analysis traces adaptation of Rubisco toward optimality in a low-dimensional landscape. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3475-3480.	7.1	249
88	BioNumbersâ€"the database of key numbers in molecular and cell biology. Nucleic Acids Research, 2010, 38, D750-D753.	14.5	859
89	Translational Research in Neurology and Neuroscience 2010. Archives of Neurology, 2010, 67, 1307-15.	4.5	11
90	Central Carbon Metabolism as a Minimal Biochemical Walk between Precursors for Biomass and Energy. Molecular Cell, 2010, 39, 809-820.	9.7	208

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91	SnapShot: Key Numbers in Biology. Cell, 2010, 141, 1262-1262.e1.	28.9	206
92	Design and analysis of synthetic carbon fixation pathways. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8889-8894.	7.1	402
93	Protein Dynamics in Individual Human Cells: Experiment and Theory. PLoS ONE, 2009, 4, e4901.	2.5	54
94	Local corticosteroid treatment for carpal tunnel syndrome: A 6-month clinical and electrophysiological follow-up study. Journal of Back and Musculoskeletal Rehabilitation, 2009, 22, 59-64.	1.1	11
95	A feeling for the numbers in biology. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21465-21471.	7.1	100
96	What governs the reaction center excitation wavelength of photosystems I and II?. Photosynthesis Research, 2009, 101, 59-67.	2.9	23
97	Weizmann Young PI Forum: The Power of Peer Support. Molecular Cell, 2009, 36, 913-915.	9.7	5
98	HSP90 affects the expression of genetic variation and developmental stability in quantitative traits. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2963-2968.	7.1	167
99	A paxillin tyrosine phosphorylation switch regulates the assembly and form of cell-matrix adhesions. Journal of Cell Science, 2007, 120, 137-148.	2.0	402
100	Inputâ€“output robustness in simple bacterial signaling systems. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19931-19935.	7.1	170
101	The relationship between evolutionary and physiological variation in hemoglobin. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16998-17003.	7.1	37
102	Dynamic proteomics in mammalian cells: capabilities and challenges. Molecular BioSystems, 2007, 3, 542.	2.9	1
103	A central role for Necl4 (SynCAM4) in Schwann cellâ€“axon interaction and myelination. Nature Neuroscience, 2007, 10, 861-869.	14.8	178
104	Generation of a fluorescently labeled endogenous protein library in living human cells. Nature Protocols, 2007, 2, 1515-1527.	12.0	62
105	Dynamic proteomics in individual human cells uncovers widespread cell-cycle dependence of nuclear proteins. Nature Methods, 2006, 3, 525-531.	19.0	125
106	Variability and memory of protein levels in human cells. Nature, 2006, 444, 643-646.	27.8	526
107	RECURRING HARMONIC WALKS AND NETWORK MOTIFS IN WESTERN MUSIC. International Journal of Modeling, Simulation, and Scientific Computing, 2006, 09, 121-132.	1.4	5
108	Oscillations and variability in the p53 system. Molecular Systems Biology, 2006, 2, 2006.0033.	7.2	539

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109	Coarse-graining and self-dissimilarity of complex networks. Physical Review E, 2005, 71, 016127.	2.1	92
110	Network motifs in integrated cellular networks of transcription-regulation and protein-protein interaction. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5934-5939.	7.1	479
111	Superfamilies of Evolved and Designed Networks. Science, 2004, 303, 1538-1542.	12.6	1,182
112	Network motifs in the transcriptional regulation network of Escherichia coli. Nature Genetics, 2002, 31, 64-68.	21.4	2,603
113	Glatiramer Acetate or Interferon-?? for Multiple Sclerosis?. CNS Drugs, 1999, 11, 289-306.	5.9	11
114	Effect of Propranolol and IFN-Î² on the Induction of MHC Class II Expression and Cytokine Production by IFN-Î³ in THP-1 Human Monocytic Cells. Immunopharmacology and Immunotoxicology, 1998, 20, 39-61.	2.4	16
115	Specific inhibition by the synthetic copolymer COP-1 of human T cell lines specific to myelin basic protein. Journal of Neuroimmunology, 1991, 35, 72.	2.3	0
116	Tiapride as Treatment for Certain Patients with Idiopathic Torsion Dystonia. European Neurology, 1991, 31, 356-359.	1.4	5