Marco Vanoni

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6554077/publications.pdf

Version: 2024-02-01

107 papers	3,124 citations	136950 32 h-index	197818 49 g-index
114 all docs	114 docs citations	114 times ranked	4446 citing authors

#	Article	IF	Citations
1	Glutamine Deprivation Induces Abortive S-Phase Rescued by Deoxyribonucleotides in K-Ras Transformed Fibroblasts. PLoS ONE, 2009, 4, e4715.	2.5	131
2	Conglutin ?, a lupin seed protein, binds insulin in vitro and reduces plasma glucose levels of hyperglycemic rats. Journal of Nutritional Biochemistry, 2004, 15, 646-650.	4.2	129
3	5-Fluorouracil resistant colon cancer cells are addicted to OXPHOS to survive and enhance stem-like traits. Oncotarget, 2015, 6, 41706-41721.	1.8	103
4	Glucose Signaling-Mediated Coordination of Cell Growth and Cell Cycle in Saccharomyces Cerevisiae. Sensors, 2010, 10, 6195-6240.	3.8	102
5	Redox-Mediated Regulation of p21Waf1/Cip1 Expression Involves a Post-Transcriptional Mechanism and Activation of the Mitogen-Activated Protein Kinase Pathway. FEBS Journal, 1997, 245, 730-737.	0.2	97
6	Cell Size at S Phase Initiation: An Emergent Property of the G1/S Network. PLoS Computational Biology, 2007, 3, e64.	3.2	96
7	The Insulin-Like Growth Factor Receptor I Promotes Motility and Invasion of Bladder Cancer Cells through Akt- and Mitogen-Activated Protein Kinase-Dependent Activation of Paxillin. American Journal of Pathology, 2010, 176, 2997-3006.	3.8	91
8	Drought and frost contribute to abrupt growth decreases before tree mortality in nine temperate tree species. Forest Ecology and Management, 2016, 382, 51-63.	3.2	76
9	Tipifarnib as a Precision Therapy for HRAS-Mutant Head and Neck Squamous Cell Carcinomas. Molecular Cancer Therapeutics, 2020, 19, 1784-1796.	4.1	72
10	Integration of single-cell RNA-seq data into population models to characterize cancer metabolism. PLoS Computational Biology, 2019, 15, e1006733.	3.2	70
11	Expression of transforming K-Ras oncogene affects mitochondrial function and morphology in mouse fibroblasts. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1338-1356.	1.0	68
12	Analysis of protein distribution in budding yeast. Biotechnology and Bioengineering, 1983, 25, 1295-1310.	3.3	66
13	The yeast cyclin-dependent kinase inhibitor Sic1 and mammalian p27Kip1 are functional homologues with a structurally conserved inhibitory domain. Biochemical Journal, 2005, 387, 639-647.	3.7	66
14	Order propensity of an intrinsically disordered protein, the cyclinâ€dependentâ€kinase inhibitor Sic1. Proteins: Structure, Function and Bioinformatics, 2009, 76, 731-746.	2.6	64
15	A metabolic core model elucidates how enhanced utilization of glucose and glutamine, with enhanced glutamine-dependent lactate production, promotes cancer cell growth: The WarburQ effect. PLoS Computational Biology, 2017, 13, e1005758.	3.2	64
16	Rapamycin-mediated G1 arrest involves regulation of the Cdk inhibitor Sic1 in Saccharomyces cerevisiae. Molecular Microbiology, 2007, 63, 1482-1494.	2.5	63
17	Engineering an Environment for the Study of Fibrosis: A 3D Human Muscle Model with Endothelium Specificity and Endomysium. Cell Reports, 2018, 25, 3858-3868.e4.	6.4	56
18	Computational Strategies for a System-Level Understanding of Metabolism. Metabolites, 2014, 4, 1034-1087.	2.9	54

#	Article	IF	Citations
19	The role of hexose transport and phosphorylation in cAMP signalling in the yeastSaccharomyces cerevisiae. FEMS Yeast Research, 2001, 1, 33-45.	2.3	49
20	A cell sizer network involving Cln3 and Far1 controls entrance into S phase in the mitotic cycle of budding yeast. Journal of Cell Biology, 2004, 167, 433-443.	5.2	49
21	Cell growth and cell cycle in Saccharomyces cerevisiae: Basic regulatory design and proteinâ€“protein interaction network. Biotechnology Advances, 2012, 30, 52-72.	11.7	48
22	Quantifying the effects of drought on abrupt growth decreases of major tree species in Switzerland. Ecology and Evolution, 2016, 6, 3555-3570.	1.9	45
23	The CK2 phosphorylation of catalytic domain of Cdc34 modulates its activity at the G₁to S transition inSaccharomyces cerevisiae. Cell Cycle, 2008, 7, 1391-1401.	2.6	44
24	Regulation of MAL gene expression in yeast: Gene dosage effects. Molecular Genetics and Genomics, 1987, 209, 508-517.	2.4	43
25	Mutations of the CK2 phosphorylation site of Sic1 affect cell size and S-Cdk kinase activity in Saccharomyces cerevisiae. Molecular Microbiology, 2004, 51, 447-460.	2.5	41
26	Macromolecular syntheses in the cell cycle mutant cdc25 of budding yeast. FEBS Journal, 1984, 144, 205-210.	0.2	38
27	Systems Biology and the Molecular Circuits of Cancer. ChemBioChem, 2004, 5, 1322-1333.	2.6	38
28	Methotrexate inhibits SARSâ€CoVâ€2 virus replication â€œin vitroâ€• Journal of Medical Virology, 2021, 93, 1780-1785.	5.0	38
29	Towards a systems biology approach to mammalian cell cycle: modeling the entrance into S phase of quiescent fibroblasts after serum stimulation. BMC Bioinformatics, 2009, 10, S16.	2.6	37
30	Analysis and modeling of growing budding yeast populations at the single cell level. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2009, 75A, 114-120.	1.5	37
31	Molecular networks and system-level properties. Journal of Biotechnology, 2009, 144, 224-233.	3.8	37
32	First experimental identification of Ras-inhibitor binding interface using a water-soluble Ras ligand. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 4217-4222.	2.2	36
33	Zooming-in on cancer metabolic rewiring with tissue specific constraint-based models. Computational Biology and Chemistry, 2016, 62, 60-69.	2.3	36
34	Systems metabolomics: from metabolomic snapshots to design principles. Current Opinion in Biotechnology, 2020, 63, 190-199.	6.6	36
35	Selective cytotoxicity of a bicyclic Ras inhibitor in cancer cells expressing K-RasG13D. Biochemical and Biophysical Research Communications, 2009, 386, 593-597.	2.1	35
36	Whi5 phosphorylation embedded in the G1/S network dynamically controls critical cell size and cell fate. Nature Communications, 2016, 7, 11372.	12.8	35

#	Article	IF	Citations
37	In CK2 inactivated cells the cyclin dependent kinase inhibitor Sic1 is involved in cell-cycle arrest before the onset of S phase. Biochemical and Biophysical Research Communications, 2007, 359, 921-927.	2.1	31
38	Snf1/AMPK promotes S-phase entrance by controllingCLB5transcription in budding yeast. Cell Cycle, 2010, 9, 2189-2200.	2.6	30
39	An Acidic Loop and Cognate Phosphorylation Sites Define a Molecular Switch That Modulates Ubiquitin Charging Activity in Cdc34-Like Enzymes. PLoS Computational Biology, 2011, 7, e1002056.	3.2	29
40	A dominant negative RAS-specific guanine nucleotide exchange factor reverses neoplastic phenotype in K-ras transformed mouse fibroblasts. Oncogene, 2000, 19, 2147-2154.	5.9	27
41	RAS and PKA pathways in cancer: new insight from transcriptional analysis. Frontiers in Bioscience - Landmark, 2008, Volume, 5257.	3.0	27
42	Loop 7 of E2 Enzymes: An Ancestral Conserved Functional Motif Involved in the E2-Mediated Steps of the Ubiquitination Cascade. PLoS ONE, 2012, 7, e40786.	2.5	26
43	Subcellular Localization of the Cyclin Dependent Kinase Inhibitor Sic1 is Modulated by the Carbon Source in Budding Yeast. Cell Cycle, 2005, 4, 1798-1807.	2.6	25
44	Sic1 is phosphorylated by CK2 on Ser201 in budding yeast cells. Biochemical and Biophysical Research Communications, 2006, 346, 786-793.	2.1	24
45	Cancer cell growth and survival as a system-level property sustained by enhanced glycolysis and mitochondrial metabolic remodeling. Frontiers in Physiology, 2012, 3, 362.	2.8	24
46	INTEGRATE: Model-based multi-omics data integration to characterize multi-level metabolic regulation. PLoS Computational Biology, 2022, 18, e1009337.	3.2	24
47	A Computer algorithm for the analysis of protein distribution in budding yeast. Cytometry, 1984, 5, 81-85.	1.8	23
48	Overexpression of the CDC25 gene, an upstream element of the ras/adenylyl cyclase pathway in Saccharomyces cerevisiae, allows immunological identification and characterization of its gene product. Biochemical and Biophysical Research Communications, 1990, 172, 61-69.	2.1	23
49	Glucoseâ€Derived Ras Pathway Inhibitors: Evidence of Rasâ€“Ligand Binding and Rasâ€“GEF (Cdc25) Interaction Inhibition. ChemBioChem, 2007, 8, 1376-1379.	2.6	23
50	The Ras GDP/GTP cycle is regulated by oxidizing agents at the level of Ras regulators and effectors. FEBS Letters, 2001, 492, 139-145.	2.8	22
51	The Sso7d DNA-binding protein fromSulfolobus solfataricushas ribonuclease activity. FEBS Letters, 2001, 497, 131-136.	2.8	22
52	Comparative analysis of the molecular mechanisms controlling the initiation of chromosomal DNA replication in yeast and in mammalian cells. Biotechnology Advances, 2012, 30, 73-98.	11.7	22
53	Proteomic and biochemical analyses unveil tight interaction of ataxin-3 with tubulin. International Journal of Biochemistry and Cell Biology, 2009, 41, 2485-2492.	2.8	21
54	A microphysiological early metastatic niche on a chip reveals how heterotypic cell interactions and inhibition of integrin subunit Î²₃ impact breast cancer cell extravasation. Lab on A Chip, 2021, 21, 1061-1072.	6.0	21

#	Article	IF	Citations
55	Molecular cloning, nucleotide sequence and expression of aSulfolobus solfataricusgene encoding a class II fumarase. FEBS Letters, 1994, 337, 93-98.	2.8	19
56	Identification of Gene encoding a Putative RNA-Helicase, Homologous to SKI2, in Chromosome VII ofSaccharomyces cerevisiae. Yeast, 1997, 13, 391-397.	1.7	19
57	Novel RasGRF1-derived Tat-fused peptides inhibiting Ras-dependent proliferation and migration in mouse and human cancer cells. Biotechnology Advances, 2012, 30, 233-243.	11.7	19
58	Interactions of ataxin-3 with its molecular partners in the protein machinery that sorts protein aggregates to the aggresome. International Journal of Biochemistry and Cell Biology, 2014, 51, 58-64.	2.8	18
59	An ensemble evolutionary constraint-based approach to understand the emergence of metabolic phenotypes. Natural Computing, 2014, 13, 321-331.	3.0	18
60	Effects of temperature on the yeast cell cycle analyzed by flow cytometry. Cytometry, 1984, 5, 530-533.	1.8	17
61	A comparative study of Whi5 and retinoblastoma proteins: from sequence and structure analysis to intracellular networks. Frontiers in Physiology, 2013, 4, 315.	2.8	17
62	How Epigallocatechinâ€3â€gallate and Tetracycline Interact with the Josephin Domain of Ataxinâ€3 and Alter Its Aggregation Mode. Chemistry - A European Journal, 2015, 21, 18383-18393.	3.3	17
63	How do tree mortality models from combined tree-ring and inventory data affect projections of forest succession?. Forest Ecology and Management, 2019, 433, 606-617.	3.2	17
64	Single-cell Digital Twins for Cancer Preclinical Investigation. Methods in Molecular Biology, 2020, 2088, 331-343.	0.9	17
65	In Saccharomyces cerevisiae a short amino acid sequence facilitates excretion in the growth medium of periplasmic proteins. Molecular Microbiology, 1997, 23, 997-1007.	2.5	16
66	Binding properties and biological characterization of new sugar-derived Ras ligands. MedChemComm, 2011, 2, 396.	3.4	16
67	The driving role of the Cdk5/Tln1/FAKS732 axis in cancer cell extravasation dissected by human vascularized microfluidic models. Biomaterials, 2021, 276, 120975.	11.4	16
68	CK2 regulates in vitro the activity of the yeast cyclin-dependent kinase inhibitor Sic1. Biochemical and Biophysical Research Communications, 2005, 336, 1040-1048.	2.1	15
69	Proteomic Analysis of a Nutritional Shift-up in Saccharomyces cerevisiae Identifies Gvp36 as a BAR-containing Protein Involved in Vesicular Traffic and Nutritional Adaptation. Journal of Biological Chemistry, 2008, 283, 4730-4743.	3.4	15
70	Approaches to Ras signaling modulation and treatment of Ras-dependent disorders: a patent review (2007 â€“ present). Expert Opinion on Therapeutic Patents, 2012, 22, 1263-1287.	5.0	15
71	Profiling and Targeting of Energy and Redox Metabolism in Grade 2 Bladder Cancer Cells with Different Invasiveness Properties. Cells, 2020, 9, 2669.	4.1	15
72	CK2 activity is modulated by growth rate in Saccharomyces cerevisiae. Biochemical and Biophysical Research Communications, 2010, 398, 44-50.	2.1	12

#	Article	IF	Citations
73	Respiratory metabolism and calorie restriction relieve persistent endoplasmic reticulum stress induced by calcium shortage in yeast. Scientific Reports, 2016, 6, 27942.	3.3	11
74	A Systems Biology Road Map for the Discovery of Drugs Targeting Cancer Cell Metabolism. Current Pharmaceutical Design, 2014, 20, 2648-2666.	1.9	11
75	In Saccharomyces cerevisiae an unbalanced level of tyrosine phosphorylation down-regulates the Ras/PKA pathway. International Journal of Biochemistry and Cell Biology, 2006, 38, 444-460.	2.8	10
76	Nutritional Limitation Sensitizes Mammalian Cells to GSK-3Î² Inhibitors and Leads to Growth Impairment. American Journal of Pathology, 2011, 178, 1814-1823.	3.8	10
77	K-Ras Activation Induces Differential Sensitivity to Sulfur Amino Acid Limitation and Deprivation and to Oxidative and Anti-Oxidative Stress in Mouse Fibroblasts. PLoS ONE, 2016, 11, e0163790.	2.5	10
78	Disruption of redox homeostasis for combinatorial drug efficacy in K-Ras tumors as revealed by metabolic connectivity profiling. Cancer & Metabolism, 2020, 8, 22.	5.0	10
79	Transcriptomics and Metabolomics Integration Reveals Redox-Dependent Metabolic Rewiring in Breast Cancer Cells. Cancers, 2021, 13, 5058.	3.7	10
80	An Optimized Workflow for the Analysis of Metabolic Fluxes in Cancer Spheroids Using Seahorse Technology. Cells, 2022, 11, 866.	4.1	10
81	Mutations at position 1122 in the catalytic domain of the mouse ras-specific guanine nucleotide exchange factor CDC25Mmoriginate both loss-of-function and gain-of-function proteins. FEBS Letters, 1998, 440, 291-296.	2.8	9
82	Functional coupling of the mammalian EGF receptor to the Ras/cAMP pathway in the yeast Saccharomyces cerevisiae. Current Genetics, 2008, 53, 153-162.	1.7	9
83	The isolated catalytic hairpin of the Ras-specific guanine nucleotide exchange factor Cdc25Mmretains nucleotide dissociation activity but has impaired nucleotide exchange activity. FEBS Letters, 2005, 579, 6851-6858.	2.8	8
84	Catalytic competence of the Ras-GEF domain of hSos1 requires intra-REM domain interactions mediated by Phenylalanine 577. FEBS Letters, 2006, 580, 6322-6328.	2.8	8
85	Regulation of hSos1 activity is a system-level property generated by its multi-domain structure. Biotechnology Advances, 2012, 30, 154-168.	11.7	8
86	Overexpression of Far1, a cyclin-dependent kinase inhibitor, induces a large transcriptional reprogramming in which RNA synthesis senses Far1 in a Sfp1-mediated way. Biotechnology Advances, 2012, 30, 185-201.	11.7	8
87	Natural Products Attenuating Biosynthesis, Processing, and Activity of Ras Oncoproteins: State of the Art and Future Perspectives. Biomolecules, 2020, 10, 1535.	4.0	8
88	1H-NMR and photo-CIDNP spectroscopies show a possible role for Trp23and Phe31in nucleic acid binding by P2 ribonuclease from the archaeonSulfolobus solfataricus. FEBS Letters, 1995, 372, 135-139.	2.8	7
89	The Multi-Level Mechanism of Action of a Pan-Ras Inhibitor Explains its Antiproliferative Activity on Cetuximab-Resistant Cancer Cells. Frontiers in Molecular Biosciences, 2021, 8, 625979.	3.5	7
90	Structure Determination and Dynamics of Peptides Overlapping the Catalytic Hairpin of the Ras-Specific GEF Cdc25Mmâ€. Biochemistry, 2003, 42, 12154-12162.	2.5	6

#	Article	IF	Citations
91	Data recovery and integration from public databases uncovers transformation-specific transcriptional downregulation of cAMP-PKA pathway-encoding genes. BMC Bioinformatics, 2009, 10, S1.	2.6	6
92	Systems biology for biomedical innovation. Biotechnology Advances, 2012, 30, 1-3.	11.7	6
93	A modular systems biology analysis of cell cycle entrance into S-phase. Topics in Current Genetics, 2005, , 325-347.	0.7	5
94	Identification and in silico analysis of a new group of double-histone fold-containing proteins. Journal of Molecular Modeling, 2005, 12, 76-84.	1.8	3
95	An Integrated Model Quantitatively Describing Metabolism, Growth and Cell Cycle in Budding Yeast. Communications in Computer and Information Science, 2018, , 165-180.	0.5	3
96	Systems Biology and the Molecular Circuits of Cancer. ChemInform, 2004, 35, no.	0.0	2
97	Modeling Biological Timing and Synchronization Mechanisms by Means of Interconnections of Stochastic Switches. , 2018, 2, 19-24.		2
98	InSaccharomyces cerevisiae overexpression of hybrid Virus-Like-Particles correlates with altered cell volume distributions. Biotechnology Letters, 1994, 16, 1131-1134.	2.2	1
99	Qualitative behavior of a coarse-grain growth model. , 2019, , .		1
100	Integration of Single-Cell RNA-Sequencing Data into Flux Balance Cellular Automata. Lecture Notes in Computer Science, 2020, , 207-215.	1.3	1
101	Isolation and characterization of maltose non utilizing (mnu) mutants mapping outside theMAL1locus inSaccharomyces cerevisiae. FEMS Microbiology Letters, 1991, 77, 233-236.	1.8	0
102	Archaean Serine Proteases. , 2013, , 3224-3233.		0
103	The Influence of Nutrients Diffusion on a Metabolism-driven Model of a Multi-cellular System. Fundamenta Informaticae, 2019, 171, 279-295.	0.4	0
104	Editorial overview: Network analysis and experimental models for the understanding of multifactorial human diseases. Current Opinion in Biotechnology, 2020, 63, vi-viii.	6.6	0
105	Abstract 5057: The insulin-like growth factor receptor I promotes motility and invasion of bladder cancer cells through Akt- and MAPK-dependent activation of paxillin. , 2010, , .		0
106	An ensemble approach to the study of the emergence of metabolic and proliferative disorders via Flux Balance Analysis. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 130, 92-97.	0.8	0
107	Profiling Metabolic and Signaling Phenotype of Bladder Cancer Cell Lines. FASEB Journal, 2022, 36, .	0.5	0