Francesc Posas

List of Publications by Year
in descending order

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118 papers	10,768 citations	36203 51 h-index	32761 100 g-index
123 all docs	123 docs citations	123 times ranked	9006 citing authors

#	Article	IF	Citations
1	Data-driven identification of inherent features of eukaryotic stress-responsive genes. NAR Genomics and Bioinformatics, 2022, 4, lqac018.	1.5	1
2	The HOG pathway and the regulation of osmoadaptive responses in yeast. FEMS Yeast Research, 2022, 22, .	1.1	23
3	Understanding Retinoblastoma Post-Translational Regulation for the Design of Targeted Cancer Therapies. Cancers, 2022, 14, 1265.	1.7	7
4	LRRC8A-containing chloride channel is crucial for cell volume recovery and survival under hypertonic conditions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	23
5	The regulation of Net1/Cdc14 by the Hog1 MAPK upon osmostress unravels a new mechanism regulating mitosis. Cell Cycle, 2020, 19, 2105-2118.	1.3	6
6	The p38 Pathway: From Biology to Cancer Therapy. International Journal of Molecular Sciences, 2020, 21, 1913.	1.8	206
7	A genetic analysis reveals novel histone residues required for transcriptional reprogramming upon stress. Nucleic Acids Research, 2020, 48, 3455-3475.	6.5	14
8	Hog1 activation delays mitotic exit via phosphorylation of Net1. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8924-8933.	3.3	11
9	Shaping the Transcriptional Landscape through MAPK Signaling. , 2019, , .		2
10	Functional Network Analysis Reveals the Relevance of SKIIP in the Regulation of Alternative Splicing by p38 SAPK. Cell Reports, 2019, 27, 847-859.e6.	2.9	15
11	Rapid reversible changes in compartments and local chromatin organization revealed by hyperosmotic shock. Genome Research, 2019, 29, 18-28.	2.4	40
12	Sensitive high-throughput single-cell RNA-seq reveals within-clonal transcript correlations in yeast populations. Nature Microbiology, 2019, 4, 683-692.	5.9	61
13	Yeast Single-cell RNA-seq, Cell by Cell and Step by Step. Bio-protocol, 2019, 9, e3359.	0.2	4
14	Osteoblast-Secreted Factors Mediate Dormancy of Metastatic Prostate Cancer in the Bone via Activation of the TGFÎ²RIIIâ€"p38MAPKâ€"pS249/T252RB Pathway. Cancer Research, 2018, 78, 2911-2924.	0.4	117
15	Plug-and-Play Multicellular Circuits with Time-Dependent Dynamic Responses. ACS Synthetic Biology, 2018, 7, 1095-1104.	1.9	17
16	Multiple signaling kinases target Mrc1 to prevent genomic instability triggered by transcription-replication conflicts. Nature Communications, 2018, 9, 379.	5.8	32
17	Activation of the Hog1MAPKby the Ssk2/Ssk22MAP3Ks, in the absence of the osmosensors, is not sufficient to trigger osmostress adaptation inSaccharomyces cerevisiae. FEBS Journal, 2018, 285, 1079-1096.	2.2	9
18	Timing of gene expression in a cellâ€fate decisionÂsystem. Molecular Systems Biology, 2018, 14, e8024.	3.2	31

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19	The Hog1p kinase regulates Aft1p transcription factor to control iron accumulation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 61-70.	1.2	16
20	A novel mechanism for the prevention of transcription replication conflicts. Molecular and Cellular Oncology, 2018, 5, e1451233.	0.3	2
21	An RB insensitive to CDK regulation. Molecular and Cellular Oncology, 2017, 4, e1268242.	0.3	5
22	Interaction Dynamics Determine Signaling and Output Pathway Responses. Cell Reports, 2017, 19, 136-149.	2.9	15
23	Role of the Sln1â€phosphorelay pathway in the response to hyperosmotic stress in the yeast <i>Kluyveromyces lactis</i>. Molecular Microbiology, 2017, 104, 822-836.	1.2	12
24	A Clb/Cdk1-mediated regulation of Fkh2 synchronizes CLB expression in the budding yeast cell cycle. Npj Systems Biology and Applications, 2017, 3, 7.	1.4	32
25	Yeast Cip1 is activated by environmental stress to inhibit Cdk1â€“G1 cyclins via Mcm1 and Msn2/4. Nature Communications, 2017, 8, 56.	5.8	30
26	Regulation of transcription elongation in response to osmostress. PLoS Genetics, 2017, 13, e1007090.	1.5	19
27	Untargeted metabolomics unravels functionalities of phosphorylation sites in Saccharomyces cerevisiae. BMC Systems Biology, 2016, 10, 104.	3.0	15
28	Synthetic biology: insights into biological computation. Integrative Biology (United Kingdom), 2016, 8, 518-532.	0.6	21
29	3D-printing of transparent bio-microfluidic devices in PEG-DA. Lab on A Chip, 2016, 16, 2287-2294.	3.1	216
30	The N-Terminal Phosphorylation of RB by p38 Bypasses Its Inactivation by CDKs and Prevents Proliferation in Cancer Cells. Molecular Cell, 2016, 64, 25-36.	4.5	82
31	A Synthetic Multicellular Memory Device. ACS Synthetic Biology, 2016, 5, 862-873.	1.9	48
32	Evolution of protein phosphorylation across 18 fungal species. Science, 2016, 354, 229-232.	6.0	93
33	Implementation of Complex Biological Logic Circuits Using Spatially Distributed Multicellular Consortia. PLoS Computational Biology, 2016, 12, e1004685.	1.5	59
34	Osmostressâ€induced gene expression â€“ a model to understand how stressâ€activated protein kinases (<scp>SAPK</scp>s) regulate transcription. FEBS Journal, 2015, 282, 3275-3285.	2.2	87
35	Parallel feedback loops control the basal activity of the HOG MAPK signaling cascade. Integrative Biology (United Kingdom), 2015, 7, 412-422.	0.6	29
36	The Hog1 stress-activated protein kinase targets nucleoporins to control mRNA export upon stress.. Journal of Biological Chemistry, 2015, 290, 2301.	1.6	0

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37	H3K4 monomethylation dictates nucleosome dynamics and chromatin remodeling at stress-responsive genes. Nucleic Acids Research, 2015, 43, 4937-4949.	6.5	34
38	Hog1 Targets Whi5 and Msa1 Transcription Factors To Downregulate Cyclin Expression upon Stress. Molecular and Cellular Biology, 2015, 35, 1606-1618.	1.1	44
39	A novel role for lncRNAs in cell cycle control during stress adaptation. Current Genetics, 2015, 61, 299-308.	0.8	42
40	Control of Cdc28 CDK1 by a Stress-Induced lncRNA. Molecular Cell, 2014, 53, 549-561.	4.5	85
41	Cell Cycle Control and HIV-1 Susceptibility Are Linked by CDK6-Dependent CDK2 Phosphorylation of SAMHD1 in Myeloid and Lymphoid Cells. Journal of Immunology, 2014, 193, 1988-1997.	0.4	118
42	Coordinated control of replication and transcription by a SAPK protects genomic integrity. Nature, 2013, 493, 116-119.	13.7	76
43	The Hog1 Stress-activated Protein Kinase Targets Nucleoporins to Control mRNA Export upon Stress. Journal of Biological Chemistry, 2013, 288, 17384-17398.	1.6	35
44	Dealing with Transcriptional Outbursts during S Phase to Protect Genomic Integrity. Journal of Molecular Biology, 2013, 425, 4745-4755.	2.0	14
45	Initiation of the transcriptional response to hyperosmotic shock correlates with the potential for volume recovery. FEBS Journal, 2013, 280, 3854-3867.	2.2	9
46	The p57 CDKi integrates stress signals into cell-cycle progression to promote cell survival upon stress. EMBO Journal, 2012, 31, 2952-2964.	3.5	49
47	A novel G₁ checkpoint mediated by the p57 CDK inhibitor and p38 SAPK promotes cell survival upon stress. Cell Cycle, 2012, 11, 3339-3340.	1.3	14
48	The Hog1 SAPK controls the Rtg1/Rtg3 transcriptional complex activity by multiple regulatory mechanisms. Molecular Biology of the Cell, 2012, 23, 4286-4296.	0.9	51
49	Response to Hyperosmotic Stress. Genetics, 2012, 192, 289-318.	1.2	427
50	Hog1 bypasses stress-mediated down-regulation of transcription by RNA polymerase II redistribution and chromatin remodeling. Genome Biology, 2012, 13, R106.	13.9	50
51	Sic1 plays a role in timing and oscillatory behaviour of B-type cyclins. Biotechnology Advances, 2012, 30, 108-130.	6.0	29
52	The p38 and Hog1 SAPKs control cell cycle progression in response to environmental stresses. FEBS Letters, 2012, 586, 2925-2931.	1.3	52
53	Validation of regulated protein phosphorylation events in yeast by quantitative mass spectrometry analysis of purified proteins. Proteomics, 2012, 12, 3030-3043.	1.3	30
54	Distributed computation: the new wave of synthetic biology devices. Trends in Biotechnology, 2012, 30, 342-349.	4.9	84

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55	Control of Ubp3 ubiquitin protease activity by the Hog1 SAPK modulates transcription upon osmostress. EMBO Journal, 2011, 30, 3274-3284.	3.5	41
56	Sir2 histone deacetylase prevents programmed cell death caused by sustained activation of the Hog1 stressâ€activated protein kinase. EMBO Reports, 2011, 12, 1062-1068.	2.0	45
57	Design, Synthesis and Characterization of a Highly Effective Inhibitor for Analog-Sensitive (as) Kinases. PLoS ONE, 2011, 6, e20789.	1.1	7
58	Gene expression profiling of yeasts overexpressing wild type or misfolded Pma1 variants reveals activation of the Hog1 MAPK pathway. Molecular Microbiology, 2011, 79, 1339-1352.	1.2	6
59	The stressâ€activated protein kinase Hog1 develops a critical role after resting state. Molecular Microbiology, 2011, 80, 423-435.	1.2	13
60	Controlling gene expression in response to stress. Nature Reviews Genetics, 2011, 12, 833-845.	7.7	563
61	Distributed biological computation with multicellular engineered networks. Nature, 2011, 469, 207-211.	13.7	303
62	Transient Activation of the HOG MAPK Pathway Regulates Bimodal Gene Expression. Science, 2011, 332, 732-735.	6.0	134
63	Time-Dependent Quantitative Multicomponent Control of the G ₁ -S Network by the Stress-Activated Protein Kinase Hog1 upon Osmostress. Science Signaling, 2011, 4, ra63.	1.6	48
64	Elongating under Stress. Genetics Research International, 2011, 2011, 1-7.	2.0	5
65	Sir2 plays a key role in cell fate determination upon SAPK activation. Aging, 2011, 3, 1163-1168.	1.4	4
66	Biophysical properties of Saccharomyces cerevisiae and their relationship with HOG pathway activation. European Biophysics Journal, 2010, 39, 1547-1556.	1.2	90
67	Whole genome analysis of p38 SAPK-mediated gene expression upon stress. BMC Genomics, 2010, 11, 144.	1.2	55
68	The Rpd3L HDAC complex is essential for the heat stress response in yeast. Molecular Microbiology, 2010, 76, 1049-1062.	1.2	70
69	Multilayered control of gene expression by stress-activated protein kinases. EMBO Journal, 2010, 29, 4-13.	3.5	132
70	The HOG Pathway Dictates the Short-Term Translational Response after Hyperosmotic Shock. Molecular Biology of the Cell, 2010, 21, 3080-3092.	0.9	67
71	The p38 SAPK Is Recruited to Chromatin via Its Interaction with Transcription Factors. Journal of Biological Chemistry, 2010, 285, 31819-31828.	1.6	39
72	Cooperation between the INO80 Complex and Histone Chaperones Determines Adaptation of Stress Gene Transcription in the Yeast <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2009, 29, 4994-5007.	1.1	53

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73	Dynamic Signaling in the Hog1 MAPK Pathway Relies on High Basal Signal Transduction. Science Signaling, 2009, 2, ra13.	1.6	112
74	The Stress-activated Protein Kinase Hog1 Mediates S Phase Delay in Response to Osmostress. Molecular Biology of the Cell, 2009, 20, 3572-3582.	0.9	57
75	Recruitment of a chromatin remodelling complex by the Hog1 MAP kinase to stress genes. EMBO Journal, 2009, 28, 326-336.	3.5	104
76	Recruitment of a chromatin remodelling complex by the Hog1 MAP kinase to stress genes. EMBO Journal, 2009, 28, 1191-1191.	3.5	1
77	The Sequential Activation of the Yeast HOG and SLT2 Pathways Is Required for Cell Survival to Cell Wall Stress. Molecular Biology of the Cell, 2008, 19, 1113-1124.	0.9	183
78	Selective Requirement for SAGA in Hog1-Mediated Gene Expression Depending on the Severity of the External Osmostress Conditions. Molecular and Cellular Biology, 2007, 27, 3900-3910.	1.1	82
79	Regulation of gene expression in response to osmostress by the yeast stress-activated protein kinase Hog1. Topics in Current Genetics, 2007, , 81-97.	0.7	4
80	Control of Cell Cycle in Response to Osmostress: Lessons from Yeast. Methods in Enzymology, 2007, 428, 63-76.	0.4	55
81	Mucins, osmosensors in eukaryotic cells?. Trends in Cell Biology, 2007, 17, 571-574.	3.6	28
82	The Stress-Activated Hog1 Kinase Is a Selective Transcriptional Elongation Factor for Genes Responding to Osmotic Stress. Molecular Cell, 2006, 23, 241-250.	4.5	140
83	Phosphorylation of Hsl1 by Hog1 leads to a G2 arrest essential for cell survival at high osmolarity. EMBO Journal, 2006, 25, 2338-2346.	3.5	127
84	The MAPK Hog1p Modulates Fps1p-dependent Arsenite Uptake and Tolerance in Yeast. Molecular Biology of the Cell, 2006, 17, 4400-4410.	0.9	177
85	The mRNA Export Factor Sus1 Is Involved in Spt/Ada/Gcn5 Acetyltransferase-mediated H2B Deubiquitinylation through Its Interaction with Ubp8 and Sgf11. Molecular Biology of the Cell, 2006, 17, 4228-4236.	0.9	115
86	Control of Cell Cycle Progression by the Stress-Activated Hog1 MAPK. Cell Cycle, 2005, 4, 6-7.	1.3	30
87	Expression of the HXT1 Low Affinity Glucose Transporter Requires the Coordinated Activities of the HOG and Glucose Signalling Pathways. Journal of Biological Chemistry, 2004, 279, 22010-22019.	1.6	44
88	Hog1 mediates cell-cycle arrest in G1 phase by the dual targeting of Sic1. Nature Cell Biology, 2004, 6, 997-1002.	4.6	212
89	The MAPK Hog1 recruits Rpd3 histone deacetylase to activate osmoresponsive genes. Nature, 2004, 427, 370-374.	13.7	295
90	Osmostress-induced transcription by Hot1 depends on a Hog1-mediated recruitment of the RNA Pol II. EMBO Journal, 2003, 22, 2433-2442.	3.5	166

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91	Targeting the MEF2-Like Transcription Factor Smp1 by the Stress-Activated Hog1 Mitogen-Activated Protein Kinase. Molecular and Cellular Biology, 2003, 23, 229-237.	1.1	148
92	The Serine/Threonine Kinase Cmk2 Is Required for Oxidative Stress Response in Fission Yeast. Journal of Biological Chemistry, 2002, 277, 17722-17727.	1.6	52
93	Dealing with osmostress through MAP kinase activation. EMBO Reports, 2002, 3, 735-740.	2.0	198
94	Regulation of the Sko1 transcriptional repressor by the Hog1 MAP kinase in response to osmotic stress. EMBO Journal, 2001, 20, 1123-1133.	3.5	188
95	Okadaic acidâ€sensitive activation of Maxi Cl â^' channels by triphenylethylene antioestrogens in C1300 mouse neuroblastoma cells. Journal of Physiology, 2001, 536, 79-88.	1.3	44
96	Multiple Levels of Control Regulate the Yeast cAMP-response Element-binding Protein Repressor Sko1p in Response to Stress. Journal of Biological Chemistry, 2001, 276, 37373-37378.	1.6	61
97	Yeast Cdc42 GTPase and Ste20 PAK-like kinase regulate Sho1-dependent activation of the Hog1 MAPK pathway. EMBO Journal, 2000, 19, 4623-4631.	3.5	244
98	The Transcriptional Response of Yeast to Saline Stress. Journal of Biological Chemistry, 2000, 275, 17249-17255.	1.6	353
99	Rck2 Kinase Is a Substrate for the Osmotic Stress-Activated Mitogen-Activated Protein Kinase Hog1. Molecular and Cellular Biology, 2000, 20, 3887-3895.	1.1	132
100	Regulated nucleo/cytoplasmic exchange of HOG1 MAPK requires the importin beta homologs NMD5 and XPO1. EMBO Journal, 1998, 17, 5606-5614.	3.5	381
101	Signal transduction by MAP kinase cascades in budding yeast. Current Opinion in Microbiology, 1998, 1, 175-182.	2.3	154
102	Activation of the yeast SSK2 MAP kinase kinase kinase by the SSK1 two-component response regulator. EMBO Journal, 1998, 17, 1385-1394.	3.5	265
103	The Search for the Biological Function of Novel Yeast Ser/Thr Phosphatases. , 1998, 93, 305-313.		2
104	Requirement of STE50 for Osmostress-Induced Activation of the STE11 Mitogen-Activated Protein Kinase Kinase Kinase in the High-Osmolarity Glycerol Response Pathway. Molecular and Cellular Biology, 1998, 18, 5788-5796.	1.1	129
105	The yeast halotolerance determinant Hal3p is an inhibitory subunit of the Ppz1p Ser/Thr protein phosphatase. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 7357-7362.	3.3	106
106	Osmotic Activation of the HOG MAPK Pathway via Ste11p MAPKKK: Scaffold Role of Pbs2p MAPKK. Science, 1997, 276, 1702-1705.	6.0	545
107	A human homolog of the yeast Ssk2/Ssk22 MAP kinase kinase kinases, MTK1, mediates stress-induced activation of the p38 and JNK pathways. EMBO Journal, 1997, 16, 4973-4982.	3.5	172
108	Yeast HOG1 MAP Kinase Cascade Is Regulated by a Multistep Phosphorelay Mechanism in the SLN1â€“YPD1â€“SSK1 â€œTwo-Componentâ€• Osmosensor. Cell, 1996, 86, 865-875.	13.5	839

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109	The NH2-terminal Extension of Protein Phosphatase PPZ1 Has an Essential Functional Role. Journal of Biological Chemistry, 1996, 271, 26349-26355.	1.6	59
110	Role of Protein Phosphatase 2A in the Control of Glycogen Metabolism in Yeast. FEBS Journal, 1995, 229, 207-214.	0.2	28
111	The PPZ Protein Phosphatases Are Important Determinants of Salt Tolerance in Yeast Cells. Journal of Biological Chemistry, 1995, 270, 13036-13041.	1.6	138
112	Biochemical characterization of recombinant yeast PPZ1, a protein phosphatase involved in salt tolerance. FEBS Letters, 1995, 368, 39-44.	1.3	28
113	Protein phosphatases in higher plants: multiplicity of type 2A phosphatases in Arabidopsis thaliana. Plant Molecular Biology, 1993, 21, 475-485.	2.0	75
114	The PPZ protein phosphatases are involved in the maintenance of osmotic stability of yeast cells. FEBS Letters, 1993, 318, 282-286.	1.3	87
115	Saccharomyces cerevisiaegene SIT4 is involved in the control of glycogen metabolism. FEBS Letters, 1991, 279, 341-345.	1.3	36
116	The gene DIS2S1 is essential in Saccharomyces cerevisiae and is involved in glycogen phosphorylase activation. Current Genetics, 1991, 19, 339-342.	0.8	47
117	Nucleotide sequence of a rat heart cDNA encoding the isotype Î² of the catalytic subunit of protein phosphatase 2A. Nucleic Acids Research, 1989, 17, 8370-8370.	6.5	4
118	Nucleotide sequence of a rat heart cDNA encoding the isotype Î± of the catalytic subunit of protein phosphatase 2A. Nucleic Acids Research, 1989, 17, 8369-8369.	6.5	3