Erin K O'shea

List of Publications by Year
in descending order

41 papers	5,070 citations	172457 29 h-index	276875 41 g-index
48 all docs	48 docs citations	48 times ranked	5792 citing authors

#	Article	IF	Citations
1	Control of Stochasticity in Eukaryotic Gene Expression. Science, 2004, 304, 1811-1814.	12.6	1,321
2	Ordered Phosphorylation Governs Oscillation of a Three-Protein Circadian Clock. Science, 2007, 318, 809-812.	12.6	352
3	Signal-dependent dynamics of transcription factor translocation controls gene expression. Nature Structural and Molecular Biology, 2012, 19, 31-39.	8.2	275
4	Chromatin decouples promoter threshold from dynamic range. Nature, 2008, 453, 246-250.	27.8	226
5	Light-Driven Changes in Energy Metabolism Directly Entrain the Cyanobacterial Circadian Oscillator. Science, 2011, 331, 220-223.	12.6	205
6	Phosphate Transport and Sensing in Saccharomyces cerevisiae. Genetics, 2001, 159, 1491-1499.	2.9	205
7	Structure and function of a transcriptional network activated by the MAPK Hog1. Nature Genetics, 2008, 40, 1300-1306.	21.4	197
8	Promoter sequences direct cytoplasmic localization and translation of mRNAs during starvation in yeast. Nature, 2014, 514, 117-121.	27.8	191
9	Oscillations in supercoiling drive circadian gene expression in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22564-22568.	7.1	163
10	Promoter decoding of transcription factor dynamics involves a tradeâ€off between noise and control of gene expression. Molecular Systems Biology, 2013, 9, 704.	7.2	138
11	Circadian Control of Global Gene Expression by the Cyanobacterial Master Regulator RpaA. Cell, 2013, 155, 1396-1408.	28.9	134
12	A quantitative model of transcription factorâ€“activated gene expression. Nature Structural and Molecular Biology, 2008, 15, 1192-1198.	8.2	133
13	An Integrated Approach Reveals Regulatory Controls on Bacterial Translation Elongation. Cell, 2014, 159, 1200-1211.	28.9	131
14	Translational Control through Differential Ribosome Pausing during Amino Acid Limitation in Mammalian Cells. Molecular Cell, 2018, 71, 229-243.e11.	9.7	123
15	Positive Feedback Regulates Switching of Phosphate Transporters in S. cerevisiae. Molecular Cell, 2007, 27, 1005-1013.	9.7	111
16	Limits on information transduction through amplitude and frequency regulation of transcription factor activity. ELife, 2015, 4, .	6.0	106
17	Integrated Approaches Reveal Determinants of Genome-wide Binding and Function of the Transcription Factor Pho4. Molecular Cell, 2011, 42, 826-836.	9.7	101
18	Two Antagonistic Clock-Regulated Histidine Kinases Time the Activation of Circadian Gene Expression. Molecular Cell, 2013, 50, 288-294.	9.7	101

#	Article	IF	Citations
19	Robust Circadian Oscillations in Growing Cyanobacteria Require Transcriptional Feedback. Science, 2013, 340, 737-740.	12.6	98
20	High-throughput microfluidics to control and measure signaling dynamics in single yeast cells. Nature Protocols, 2015, 10, 1181-1197.	12.0	84
21	A Systematic High-Throughput Screen of a Yeast Deletion Collection for Mutants Defective in PHO5 Regulation. Genetics, 2005, 169, 1859-1871.	2.9	60
22	Mechanisms of organelle biogenesis govern stochastic fluctuations in organelle abundance. ELife, 2014, 3, e02678.	6.0	51
23	A proposal for the future of scientific publishing in the life sciences. PLoS Biology, 2019, 17, e3000116.	5.6	49
24	Cyanobacteria Maintain Constant Protein Concentration despite Genome Copy-Number Variation. Cell Reports, 2017, 19, 497-504.	6.4	46
25	Encoding four gene expression programs in the activation dynamics of a single transcription factor. Current Biology, 2016, 26, R269-R271.	3.9	44
26	The anticancer natural product ophiobolin A induces cytotoxicity by covalent modification of phosphatidylethanolamine. ELife, 2016, 5, .	6.0	44
27	Identification of a transporter complex responsible for the cytosolic entry of nitrogen-containing bisphosphonates. ELife, 2018, 7, .	6.0	42
28	Inference and Evolutionary Analysis of Genome-Scale Regulatory Networks in Large Phylogenies. Cell Systems, 2017, 4, 543-558.e8.	6.2	40
29	Switching of metabolic programs in response to light availability is an essential function of the cyanobacterial circadian output pathway. ELife, 2017, 6, .	6.0	40
30	cis Determinants of Promoter Threshold and Activation Timescale. Cell Reports, 2015, 12, 1226-1233.	6.4	39
31	The LRRK2 G2019S mutation alters astrocyte-to-neuron communication via extracellular vesicles and induces neuron atrophy in a human iPSC-derived model of Parkinsonâ€™s disease. ELife, 2021, 10, .	6.0	36
32	ppGpp Controls Global Gene Expression in Light and in Darkness in S.Âelongatus. Cell Reports, 2017, 21, 3155-3165.	6.4	34
33	Dynamical localization of a thylakoid membrane binding protein is required for acquisition of photosynthetic competency. Molecular Microbiology, 2018, 108, 16-31.	2.5	27
34	Natural changes in light interact with circadian regulation at promoters to control gene expression in cyanobacteria. ELife, 2017, 6, .	6.0	25
35	A systematic genetic screen for genes involved in sensing inorganic phosphate availability in Saccharomyces cerevisiae. PLoS ONE, 2017, 12, e0176085.	2.5	25
36	Evolution of reduced co-activator dependence led to target expansion of a starvation response pathway. ELife, 2017, 6, .	6.0	18

#	Article	IF	Citations
37	An RpaA-Dependent Sigma Factor Cascade Sets the Timing of Circadian Transcriptional Rhythms in Synechococcus elongatus. Cell Reports, 2018, 25, 2937-2945.e3.	6.4	16
38	A computational approach to map nucleosome positions and alternative chromatin states with base pair resolution. ELife, 2016, 5, .	6.0	16
39	An Unstable Singularity Underlies Stochastic Phasing of the Circadian Clock in Individual Cyanobacterial Cells. Molecular Cell, 2017, 67, 659-672.e12.	9.7	13
40	Not just Salk. Science, 2017, 357, 1105-1106.	12.6	4
41	Looking back and looking forward at Janelia. ELife, 2019, 8, .	6.0	4