GÃ¼rol M SÃ¼el

List of Publications by Year
in descending order

34 papers	4,738 citations	279798 23 h-index	377865 34 g-index
37 all docs	37 docs citations	37 times ranked	5171 citing authors

#	Article	IF	Citations
1	An excitable gene regulatory circuit induces transient cellular differentiation. Nature, 2006, 440, 545-550.	27.8	740
2	Evolutionarily conserved networks of residues mediate allosteric communication in proteins. Nature Structural Biology, 2003, 10, 59-69.	9.7	734
3	Ion channels enable electrical communication in bacterial communities. Nature, 2015, 527, 59-63.	27.8	527
4	Tunability and Noise Dependence in Differentiation Dynamics. Science, 2007, 315, 1716-1719.	12.6	448
5	Metabolic co-dependence gives rise to collective oscillations within biofilms. Nature, 2015, 523, 550-554.	27.8	393
6	Localized cell death focuses mechanical forces during 3D patterning in a biofilm. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18891-18896.	7.1	305
7	Architecture-Dependent Noise Discriminates Functionally Analogous Differentiation Circuits. Cell, 2009, 139, 512-522.	28.9	242
8	Species-Independent Attraction to Biofilms through Electrical Signaling. Cell, 2017, 168, 200-209.e12.	28.9	232
9	Coupling between distant biofilms and emergence of nutrient time-sharing. Science, 2017, 356, 638-642.	12.6	192
10	Biological role of noise encoded in a genetic network motif. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13300-13305.	7.1	79
11	Chromosomal Arrangement of Phosphorelay Genes Couples Sporulation and DNA Replication. Cell, 2015, 162, 328-337.	28.9	79
12	Signal Percolation within a Bacterial Community. Cell Systems, 2018, 7, 137-145.e3.	6.2	77
13	Magnesium Flux Modulates Ribosomes to Increase Bacterial Survival. Cell, 2019, 177, 352-360.e13.	28.9	77
14	Encoding Membrane-Potential-Based Memory within a Microbial Community. Cell Systems, 2020, 10, 417-423.e3.	6.2	71
15	A genetic timer through noise-induced stabilization of an unstable state. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15732-15737.	7.1	69
16	Temporal competition between differentiation programs determines cell fate choice. Molecular Systems Biology, 2011, 7, 557.	7.2	67
17	Bistable emergence of oscillations in growing Bacillus subtilis biofilms. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8333-E8340.	7.1	41
18	SnapShot: Electrochemical Communication in Biofilms. Cell, 2017, 170, 214-214.e1.	28.9	40

#	Article	IF	Citations
19	Metabolic basis of brain-like electrical signalling in bacterial communities. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180382.	4.0	38
20	Reversible and Noisy Progression towards a Commitment Point Enables Adaptable and Reliable Cellular Decision-Making. PLoS Computational Biology, 2011, 7, e1002273.	3.2	35
21	Identification of F-actin as the Dynamic Hub in a Microbial-Induced GTPase Polarity Circuit. Cell, 2012, 148, 803-815.	28.9	33
22	Slowdown of growth controls cellularÂdifferentiation. Molecular Systems Biology, 2016, 12, 871.	7.2	33
23	A segmentation clock patterns cellular differentiation in a bacterial biofilm. Cell, 2022, 185, 145-157.e13.	28.9	31
24	Capacity for stochastic self-renewal and differentiation in mammalian spermatogonial stem cells. Journal of Cell Biology, 2009, 187, 513-524.	5.2	29
25	A Synthetic Quorum Sensing System Reveals a Potential Private Benefit for Public Good Production in a Biofilm. PLoS ONE, 2015, 10, e0132948.	2.5	24
26	Noise Expands the Response Range of the Bacillus subtilis Competence Circuit. PLoS Computational Biology, 2016, 12, e1004793.	3.2	20
27	Circuit-level input integration in bacterial gene regulation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7091-7096.	7.1	19
28	Use of Fluorescence Microscopy to Analyze Genetic Circuit Dynamics. Methods in Enzymology, 2011, 497, 275-293.	1.0	15
29	IonoBiology: The functional dynamics of the intracellular metallome, with lessons from bacteria. Cell Systems, 2021, 12, 497-508.	6.2	15
30	Inverse Gillespie for inferring stochastic reaction mechanisms from intermittent samples. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12990-12995.	7.1	11
31	Localized electrical stimulation triggers cell-type-specific proliferation in biofilms. Cell Systems, 2022, 13, 488-498.e4.	6.2	8
32	Statistics of correlated percolation in a bacterial community. PLoS Computational Biology, 2019, 15, e1007508.	3.2	5
33	Spiral Wave Propagation in Communities with Spatially Correlated Heterogeneity. Biophysical Journal, 2020, 118, 1721-1732.	0.5	3
34	Encoding Spatial Memory within a Bacterial Biofilm Community. Biophysical Journal, 2020, 118, 610a.	0.5	2