GÃ¼rol M SÃ¼el

List of Publications by Year
in descending order

34 papers	4,738 citations	318942 23 h-index	425179 34 g-index
37 all docs	37 docs citations	37 times ranked	5937 citing authors

#	Article	IF	Citations
1	A segmentation clock patterns cellular differentiation in a bacterial biofilm. Cell, 2022, 185, 145-157.e13.	13.5	31
2	Localized electrical stimulation triggers cell-type-specific proliferation in biofilms. Cell Systems, 2022, 13, 488-498.e4.	2.9	8
3	IonoBiology: The functional dynamics of the intracellular metallome, with lessons from bacteria. Cell Systems, 2021, 12, 497-508.	2.9	15
4	Encoding Membrane-Potential-Based Memory within a Microbial Community. Cell Systems, 2020, 10, 417-423.e3.	2.9	71
5	Spiral Wave Propagation in Communities with Spatially Correlated Heterogeneity. Biophysical Journal, 2020, 118, 1721-1732.	0.2	3
6	Encoding Spatial Memory within a Bacterial Biofilm Community. Biophysical Journal, 2020, 118, 610a.	0.2	2
7	Metabolic basis of brain-like electrical signalling in bacterial communities. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180382.	1.8	38
8	Magnesium Flux Modulates Ribosomes to Increase Bacterial Survival. Cell, 2019, 177, 352-360.e13.	13.5	77
9	Statistics of correlated percolation in a bacterial community. PLoS Computational Biology, 2019, 15, e1007508.	1.5	5
10	Signal Percolation within a Bacterial Community. Cell Systems, 2018, 7, 137-145.e3.	2.9	77
11	Bistable emergence of oscillations in growing <i>Bacillus subtilis</i> biofilms. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8333-E8340.	3.3	41
12	Species-Independent Attraction to Biofilms through Electrical Signaling. Cell, 2017, 168, 200-209.e12.	13.5	232
13	Coupling between distant biofilms and emergence of nutrient time-sharing. Science, 2017, 356, 638-642.	6.0	192
14	SnapShot: Electrochemical Communication in Biofilms. Cell, 2017, 170, 214-214.e1.	13.5	40
15	Noise Expands the Response Range of the Bacillus subtilis Competence Circuit. PLoS Computational Biology, 2016, 12, e1004793.	1.5	20
16	Slowdown of growth controls cellularÂdifferentiation. Molecular Systems Biology, 2016, 12, 871.	3.2	33
17	Chromosomal Arrangement of Phosphorelay Genes Couples Sporulation and DNA Replication. Cell, 2015, 162, 328-337.	13.5	79
18	Metabolic co-dependence gives rise to collective oscillations within biofilms. Nature, 2015, 523, 550-554.	13.7	393

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19	Ion channels enable electrical communication in bacterial communities. Nature, 2015, 527, 59-63.	13.7	527
20	A Synthetic Quorum Sensing System Reveals a Potential Private Benefit for Public Good Production in a Biofilm. PLoS ONE, 2015, 10, e0132948.	1.1	24
21	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.	3.3	11
22	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.	3.3	19
23	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.	3.3	305
24	Identification of F-actin as the Dynamic Hub in a Microbial-Induced GTPase Polarity Circuit. Cell, 2012, 148, 803-815.	13.5	33
25	Temporal competition between differentiation programs determines cell fate choice. Molecular Systems Biology, 2011, 7, 557.	3.2	67
26	Use of Fluorescence Microscopy to Analyze Genetic Circuit Dynamics. Methods in Enzymology, 2011, 497, 275-293.	0.4	15
27	Reversible and Noisy Progression towards a Commitment Point Enables Adaptable and Reliable Cellular Decision-Making. PLoS Computational Biology, 2011, 7, e1002273.	1.5	35
28	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.	3.3	79
29	Capacity for stochastic self-renewal and differentiation in mammalian spermatogonial stem cells. Journal of Cell Biology, 2009, 187, 513-524.	2.3	29
30	Architecture-Dependent Noise Discriminates Functionally Analogous Differentiation Circuits. Cell, 2009, 139, 512-522.	13.5	242
31	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.	3.3	69
32	Tunability and Noise Dependence in Differentiation Dynamics. Science, 2007, 315, 1716-1719.	6.0	448
33	An excitable gene regulatory circuit induces transient cellular differentiation. Nature, 2006, 440, 545-550.	13.7	740
34	Evolutionarily conserved networks of residues mediate allosteric communication in proteins. Nature Structural Biology, 2003, 10, 59-69.	9.7	734