Kepa Ruiz-Mirazo

List of Publications by Year
in descending order

59	2,288	304743	233421
papers	citations	22 h-index	45 g-index

63	63	63	1866
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Definitions of life as epistemic tools that reflect and foster the advance of biological knowledge. SynthÃˆse, 2021, 198, 10565-10585.	1.1	6
2	Editorial: â€˜Inter-identities' in Life, Mind, and Society. Frontiers in Psychology, 2021, 12, 704772.	2.1	0
3	â€œMinimal metabolismâ€: A key concept to investigate the origins and nature of biological systems. BioEssays, 2021, 43, e2100103.	2.5	11
4	Boundary versus enabling conditions for the origins of life. Physics of Life Reviews, 2020, 34-35, 96-98.	2.8	4
5	The Construction of Biological â€˜Inter-Identityâ€™ as the Outcome of a Complex Process of Protocell Development in Prebiotic Evolution. Frontiers in Physiology, 2020, 11, 530.	2.8	3
6	Reaction: A Plea for Hypothesis-Driven Research in Prebiotic Systems Chemistry. CheM, 2019, 5, 1920-1922.	11.7	3
7	Soft and dispersed interface-rich aqueous systems that promote and guide chemical reactions. Nature Reviews Chemistry, 2018, 2, 306-327.	30.2	92
8	Polyamine-RNA-membrane interactions: From the past to the future in biology. Colloids and Surfaces B: Biointerfaces, 2017, 155, 173-181.	5.0	3
9	Permeability-driven selection in a semi-empirical protocell model: the roots of prebiotic systems evolution. Scientific Reports, 2017, 7, 3141.	3.3	30
10	Chemical roots of biological evolution: the origins of life as a process of development of autonomous functional systems. Open Biology, 2017, 7, 170050.	3.6	71
11	Framing major prebiotic transitions as stages of protocell development: three challenges for origins-of-life research. Beilstein Journal of Organic Chemistry, 2017, 13, 1388-1395.	2.2	13
12	Fatty acids' double role in the prebiotic formation of a hydrophobic dipeptide. Chemical Science, 2016, 7, 3406-3413.	7.4	47
13	Biological regulation: controlling the system from within. Biology and Philosophy, 2016, 31, 237-265.	1.4	91
14	La biologÃa sintÃ©tica como desafÃo para comprender la autonomÃa de lo vivo. Isegoria, 2016, , 551.	0.1	1
15	The systems perspective at the crossroads between chemistry and biology. Journal of Theoretical Biology, 2015, 381, 11-22.	1.7	37
16	Emergent Chemical Behavior in Variable-Volume Protocells. Life, 2015, 5, 181-211.	2.4	16
17	Thermally-induced aggregation and fusion of protein-free lipid vesicles. Colloids and Surfaces B: Biointerfaces, 2015, 136, 545-552.	5.0	7
18	Reflections on the origin of life: More than an 'evolutionary' problem. Metode, 2015, .	0.1	1

#	Article	IF	Citations
19	Systems Biology. , 2015, , 2458-2460.		0
20	Organizational requirements for multicellular autonomy: insights from a comparative case study. Biology and Philosophy, 2014, 29, 851-884.	1.4	31
21	Prebiotic Systems Chemistry: New Perspectives for the Origins of Life. Chemical Reviews, 2014, 114, 285-366.	47.7	674
22	Ether- versus Ester-Linked Phospholipid Bilayers Containing either Linear or Branched Apolar Chains. Biophysical Journal, 2014, 107, 1364-1374.	0.5	27
23	Modelling Lipid Competition Dynamics in Heterogeneous Protocell Populations. Scientific Reports, 2014, 4, 5675.	3.3	23
24	Synthetic Biology: Challenging Life in Order to Grasp, Use, or Extend It. Biological Theory, 2013, 8, 376-382.	1.5	19
25	Theoretical conditions for the stationary reproduction of model protocells. Integrative Biology (United Kingdom), 2013, 5, 324-341.	1.3	37
26	Self-Organization. , 2013, , 1915-1919.		1
27	Model Systems of Precursor Cellular Membranes: Long-Chain Alcohols Stabilize Spontaneously Formed Oleic Acid Vesicles. Biophysical Journal, 2012, 102, 278-286.	0.5	52
28	Viability Conditions for a Compartmentalized Protometabolic System: A Semi-Empirical Approach. PLoS ONE, 2012, 7, e39480.	2.5	23
29	Autonomy in evolution: from minimal to complex life. SynthÃˆse, 2012, 185, 21-52.	1.1	77
30	The Impact of the Paradigm of Complexity on the Foundational Frameworks of Biology and Cognitive Science. , 2011, , 311-333.		27
31	Stochastic Simulations of Mixed-Lipid Compartments: From Self-Assembling Vesicles to Self-Producing Protocells. Advances in Experimental Medicine and Biology, 2011, 696, 689-696.	1.6	4
32	Protocell. , 2011, , 1353-1354.		9
33	On the Transition from Prebiotic to Proto-biological Membranes: From â€˜Self-assemblyâ€™ to â€˜Self-productionâ€™. Lecture Notes in Computer Science, 2011, , 256-264.	1.3	0
34	The Need for a Universal Definition of Life in Twenty-first-century Biology. , 2011, , 3-24.		0
35	The Informational Nature of Biological Causality. , 2011, , 157-176.		1
36	Defining Life or Bringing Biology to Life. Origins of Life and Evolution of Biospheres, 2010, 40, 203-213.	1.9	22

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37	A universal definition of life: autonomy and open-ended evolution. , 2010, , 310-325.		1
38	ENVIRONMENT: a computational platform to stochastically simulate reacting and self-reproducing lipid compartments. Physical Biology, 2010, 7, 036002.	1.8	30
39	In Search for Conceptual Bridges: A Review of â€œFunctions in Biological and Artificial Worldsâ€• Functions in Biological and Artificial Worlds. Comparative Philosophical Perspectives. U. Krohs and P. Kroes (Eds.). Vienna Series in Theoretical Biology. (2009, MIT Press.) 302 pages.. Artificial Life, 2010, 16, 337-340.	1.3	0
40	The problem of the emergence of functional diversity in prebiotic evolution. Biology and Philosophy, 2009, 24, 585-605.	1.4	30
41	The challenging biology of transients. EMBO Reports, 2009, 10, S33-6.	4.5	6
42	On the way towards â€˜basic autonomous agentsâ€™: Stochastic simulations of minimal lipidâ€“peptide cells. BioSystems, 2008, 91, 374-387.	2.0	55
43	Modelling autonomy: Simulating the essence of life and cognition. BioSystems, 2008, 91, 295-304.	2.0	21
44	Stochastic simulations of minimal self-reproducing cellular systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1789-1802.	4.0	56
45	Question 8: Bridging the Gap Between In Silico and In Vitro Approaches to Minimal Cells. Origins of Life and Evolution of Biospheres, 2007, 37, 455-458.	1.9	2
46	Question 7: Modelling Minimal â€˜Lipid-Peptideâ€™ Cells. Origins of Life and Evolution of Biospheres, 2007, 37, 433-437.	1.9	3
47	Enabling conditions for â€˜open-ended evolutionâ€™. Biology and Philosophy, 2007, 23, 67-85.	1.4	51
48	Simulation Model for Functionalized Vesicles: Lipid-Peptide Integration in Minimal Protocells. , 2007, , 32-41.		11
49	Lysozyme Effect on Oleic Acid/Oleate Vesicles. Journal of Liposome Research, 2006, 16, 143-154.	3.3	8
50	On the Origins of Information and Its Relevance for Biological Complexity. Biological Theory, 2006, 1, 227-229.	1.5	7
51	Basic Autonomy as a Fundamental Step in the Synthesis of Life. Artificial Life, 2004, 10, 235-259.	1.3	158
52	A Universal Definition of Life: Autonomy and Open-Ended Evolution. Origins of Life and Evolution of Biospheres, 2004, 34, 323-346.	1.9	282
53	Key Issues Regarding the Origin, Nature, and Evolution of Complexity in Nature: Information as a Central Concept to Understand Biological Organization. Emergence: Complexity and Organization, 2002, 4, 63-76.	0.1	2
54	Key Issues Regarding the Origin, Nature, and Evolution of Complexity in Nature: Information as a Central Concept to Understand Biological Organization. Emergence: Complexity and Organization, 2002, 4, 63-76.	0.1	4

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55	Organisms and their place in biology. Theory in Biosciences, 2000, 119, 209.	1.4	40
56	Metabolism and the problem of its universalization. BioSystems, 1999, 49, 45-61.	2.0	57
57	Steady state analysis of a vesicle bioreactor with mechanosensitive channels. , 0, , .		1
58	Autonomy as a property that characterizes organisms among other multicellular systems. Contrastes, 0, , .	0.1	0
59	A New View of Protocell Metabolism. , 0, , .		0