

# Raphaël R Plasson

## List of Publications by Year in descending order

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33  
papers

1,406  
citations

361413

20  
h-index

454955

30  
g-index

36  
all docs

36  
docs citations

36  
times ranked

1379  
citing authors

#	ARTICLE	IF	CITATIONS
1	Programming an <i>in vitro</i> DNA oscillator using a molecular networking strategy. <i>Molecular Systems Biology</i> , 2011, 7, 466.	7.2	236
2	Emergence of homochirality in far-from-equilibrium systems: Mechanisms and role in prebiotic chemistry. <i>Chirality</i> , 2007, 19, 589-600.	2.6	163
3	Pathways for the formation and evolution of peptides in prebiotic environments. <i>Chemical Society Reviews</i> , 2012, 41, 5416.	38.1	163
4	Recycling Frank: Spontaneous emergence of homochirality in noncatalytic systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 16733-16738.	7.1	126
5	The Pencil Code, a modular MPI code for partial differential equations and particles: multipurpose and multiuser-maintained. <i>Journal of Open Source Software</i> , 2021, 6, 2807.	4.6	92
6	Autocatalyses. <i>Journal of Physical Chemistry A</i> , 2011, 115, 8073-8085.	2.5	80
7	Prebiotic synthesis of sequential peptides on the Hadean beach by a molecular engine working with nitrogen oxides as energy sources. <i>Polymer International</i> , 2002, 51, 661-665.	3.1	66
8	2-Hydroxyazobenzenes to Tailor pH Pulses and Oscillations with Light. <i>Chemistry - A European Journal</i> , 2010, 16, 8822-8831.	3.3	46
9	The inclusion complex of rosmarinic acid into beta-cyclodextrin: A thermodynamic and structural analysis by NMR and capillary electrophoresis. <i>Food Chemistry</i> , 2016, 208, 258-263.	8.2	40
10	5-Hydroxymethyl Oxazolones as Intermediates in the Carbodiimide- and Cyanamide-Promoted Peptide Activations in Aqueous Solution. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 611-614.	13.8	36
11	Programming an <i>in vitro</i> DNA oscillator using a molecular networking strategy. <i>Molecular Systems Biology</i> , 2011, 7, .	7.2	35
12	Dynamic Co-evolution of Peptides and Chemical Energetics, a Gateway to the Emergence of Homochirality and the Catalytic Activity of Peptides. <i>Origins of Life and Evolution of Biospheres</i> , 2004, 34, 35-55.	1.9	33
13	Energetic and Entropic Analysis of Mirror Symmetry Breaking Processes in a Recycled Microreversible Chemical System. <i>Journal of Physical Chemistry B</i> , 2009, 113, 3477-3490.	2.6	29
14	Kinetic study of the polymerization of $\alpha$ -amino acid N-carboxyanhydrides in aqueous solution using capillary electrophoresis. <i>Journal of Chromatography A</i> , 2002, 952, 239-248.	3.7	28
15	Energy propagation throughout chemical networks. <i>Chemical Communications</i> , 2014, 50, 6189-6195.	4.1	26
16	Homochirality and the Need for Energy. <i>Origins of Life and Evolution of Biospheres</i> , 2010, 40, 93-110.	1.9	24
17	Autocatalysis: At the Root of Self-Replication. <i>Artificial Life</i> , 2011, 17, 219-236.	1.3	24
18	Comment on "Re-Examination of Reversibility in Reaction Models for the Spontaneous Emergence of Homochirality". <i>Journal of Physical Chemistry B</i> , 2008, 112, 9550-9552.	2.6	23

#	ARTICLE	IF	CITATIONS
19	Determination of Homopolypeptide Conformational Changes by the Modeling of Electrophoretic Mobilities. <i>Analytical Chemistry</i> , 2005, 77, 6047-6054.	6.5	22
20	Determination and Modeling of Peptide pK <sub>a</sub> by Capillary Zone Electrophoresis. <i>Analytical Chemistry</i> , 2006, 78, 5394-5402.	6.5	22
21	An Experimental Investigation of the Evolution of Chirality in a Potential Dynamic Peptide System: <i>α</i> -Terminal Epimerization and Degradation into Diketopiperazine. <i>Astrobiology</i> , 2010, 10, 651-662.	3.0	21
22	Three-Dimensional Description of the Spontaneous Onset of Homochirality on the Surface of a Conglomerate Crystal Phase. <i>Journal of Physical Chemistry B</i> , 2006, 110, 8481-8487.	2.6	17
23	Energy Propagation Through a Protometabolism Leading to the Local Emergence of Singular Stationary Concentration Profiles. <i>Chemistry - A European Journal</i> , 2012, 18, 14375-14383.	3.3	17
24	Determination of synthetic polypeptide conformations and molecular geometrical parameters by nonaqueous CE. <i>Electrophoresis</i> , 2007, 28, 3617-3624.	2.4	10
25	Encapsulation of phenolic acids into cyclodextrins: A global statistical analysis of the effects of pH, temperature and concentrations on binding constants measured by ACE methods. <i>Electrophoresis</i> , 2022, 43, 2290-2301.	2.4	6
26	Experimental evidence and theoretical analysis for the chiral symmetry breaking in the growth front of conglomerate crystal phase of 1,1[ <sup>sup</sup> É <sup>1</sup> ]-binaphthyl. <i>Chaos</i> , 2006, 16, 037116.	2.5	4
27	Reactivity of Alanylalanine Diastereoisomers in Neutral and Acid Aqueous Solutions: a Versatile Stereoselectivity. <i>Origins of Life and Evolution of Biospheres</i> , 2011, 41, 413-435.	1.9	4
28	A chemically encoded timer for dual molecular delivery at tailored ranges and concentrations. <i>Chemical Communications</i> , 2018, 54, 6396-6399.	4.1	3
29	Determination and Modeling of Peptide pK <sub>a</sub> by Capillary Zone Electrophoresis. <i>Analytical Chemistry</i> , 2007, 79, 3020-3020.	6.5	2
30	Homochirality as Fixed Point of Prebiotic Chemistry. , 2004, , 478-483.		0
31	Molecular Origins of Life: Homochirality as a Consequence of the Dynamic Co-Emergence and Co-Evolution of Peptides and Chemical Energetics. , 2004, , 49-64.		0
32	Self-Replication. , 2014, , 1-4.		0
33	Self-Replication. , 2015, , 2242-2245.		0