Roberto J Brea

List of Publications by Year
in descending order

31 papers	1,280 citations	331670 21 h-index	434195 31 g-index
37 all docs	37 docs citations	37 times ranked	1393 citing authors

#	Article	IF	Citations
1	Towards functional bionanomaterials based on self-assembling cyclic peptidenanotubes. Chemical Society Reviews, 2010, 39, 1448-1456.	38.1	246
2	A minimal biochemical route towards de novo formation of synthetic phospholipid membranes. Nature Communications, 2019, 10, 300.	12.8	82
3	Î±,Î³-Peptide Nanotube Templating of One-Dimensional Parallel Fullerene Arrangements. Journal of the American Chemical Society, 2009, 131, 11335-11337.	13.7	81
4	Methyl-Blocked Dimeric Î±,Î³-Peptide Nanotube Segments: Formation of a Peptide Heterodimer through Backbone-Backbone Interactions. Angewandte Chemie - International Edition, 2005, 44, 5710-5713.	13.8	69
5	Large-diameter self-assembled dimers of Î±,Î³-cyclic peptides, with the nanotubular solid-state structure of cyclo-[(l-Leu-d-MeN-Î³-Acp)4-]Â·4CHCl2COOH. Chemical Communications, 2007, , 3267.	4.1	69
6	Controlling Multiple Fluorescent Signal Output in Cyclic Peptide-Based Supramolecular Systems. Journal of the American Chemical Society, 2007, 129, 1653-1657.	13.7	65
7	In Situ Vesicle Formation by Native Chemical Ligation. Angewandte Chemie - International Edition, 2014, 53, 14102-14105.	13.8	64
8	Electron transfer in Me-blocked heterodimeric Â,Â-peptide nanotubular donor-acceptor hybrids. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5291-5294.	7.1	56
9	Lipids: chemical tools for their synthesis, modification, and analysis. Chemical Society Reviews, 2020, 49, 4602-4614.	38.1	54
10	Nonenzymatic biomimetic remodeling of phospholipids in synthetic liposomes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8589-8594.	7.1	45
11	De novovesicle formation and growth: an integrative approach to artificial cells. Chemical Science, 2017, 8, 7912-7922.	7.4	44
12	Towards Selfâ€Assembled Hybrid Artificial Cells: Novel Bottomâ€Up Approaches to Functional Synthetic Membranes. Chemistry - A European Journal, 2015, 21, 12564-12570.	3.3	40
13	Biomimetic Generation and Remodeling of Phospholipid Membranes by Dynamic Imine Chemistry. Journal of the American Chemical Society, 2018, 140, 8388-8391.	13.7	40
14	The Smallest Î±,Î³-Peptide Nanotubulet Segments:â€‰ Cyclic Î±,Î³-Tetrapeptide Dimers. Organic Letters, 2005, 7, 4681-4684.	4.6	37
15	In Situ Reconstitution of the Adenosine A2A Receptor in Spontaneously Formed Synthetic Liposomes. Journal of the American Chemical Society, 2017, 139, 3607-3610.	13.7	34
16	Synthesis of Ï‰-(Hetero)arylalkynylated Î±-Amino Acid by Sonogashira-Type Reactions in Aqueous Media. Journal of Organic Chemistry, 2006, 71, 7870-7873.	3.2	30
17	Spontaneous Reconstitution of Functional Transmembrane Proteins During Bioorthogonal Phospholipid Membrane Synthesis. Angewandte Chemie - International Edition, 2015, 54, 12738-12742.	13.8	30
18	Regioisomeric Control Induced by DABCO Coordination to Rotatable Selfâ€Assembled Bisâ€•and Tetraporphyrin Î±,Î³â€Cyclic Octapeptide Dimers. Chemistry - A European Journal, 2011, 17, 1220-1229.	3.3	27

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19	Self-assembling properties of all Î³-cyclic peptides containing sugar amino acid residues. Organic and Biomolecular Chemistry, 2012, 10, 8762.	2.8	23
20	Highly Stable Artificial Cells from Galactopyranose-Derived Single-Chain Amphiphiles. Journal of the American Chemical Society, 2018, 140, 17356-17360.	13.7	23
21	Highly Efficient and Directional Homoâ€•and Heterodimeric Energy Transfer Materials Based on Fluorescently Derivatized Î±,Î³â€Cyclic Octapeptides. Chemistry - an Asian Journal, 2011, 6, 110-121.	3.3	21
22	Single-Chain Î²-<scp>d</scp>-Glycopyranosylamides of Unsaturated Fatty Acids: Self-Assembly Properties and Applications to Artificial Cell Development. Journal of Physical Chemistry B, 2019, 123, 3711-3720.	2.6	20
23	Amphiphile-Mediated Depalmitoylation of Proteins in Living Cells. Journal of the American Chemical Society, 2018, 140, 17374-17378.	13.7	14
24	Chemoenzymatic Generation of Phospholipid Membranes Mediated by Type I Fatty Acid Synthase. Journal of the American Chemical Society, 2021, 143, 8533-8537.	13.7	13
25	In Situ Lipid Membrane Formation Triggered by Intramolecular Photoinduced Electron Transfer. Langmuir, 2018, 34, 750-755.	3.5	10
26	Traceless native chemical ligation of lipid-modified peptide surfactants by mixed micelle formation. Nature Communications, 2020, 11, 2793.	12.8	10
27	Expression of Fatty Acyl-CoA Ligase Drives One-Pot De Novo Synthesis of Membrane-Bound Vesicles in a Cell-Free Transcription-Translation System. Journal of the American Chemical Society, 2021, 143, 11235-11242.	13.7	10
28	Rapid and Sequential Dual Oxime Ligation Enables De Novo Formation of Functional Synthetic Membranes from Waterâ€Soluble Precursors. Angewandte Chemie - International Edition, 2022, 61, .	13.8	4
29	Temperature-Dependent Reversible Morphological Transformations in N-Oleoyl Î²-d-Galactopyranosylamine. Journal of Physical Chemistry B, 2020, 124, 5426-5433.	2.6	1
30	Supramolecular Assembly and Mesophase Behavior of Glycopyranose-Derived Single-Chain Amphiphiles. ACS Symposium Series, 2020, , 15-30.	0.5	0
31	Rapid and Sequential Dual Oxime Ligation Enables De Novo Formation of Functional Synthetic Membranes from Waterâ€Soluble Precursors. Angewandte Chemie, 0, , .	2.0	0