

Jose Berna

List of Publications by Year in descending order

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2,943
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218381

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2544
citing authors

#	ARTICLE	IF	CITATIONS
1	Modulating the catalytic activity by the mechanical bond: organocatalysis with polyamide [2]rotaxanes bearing a secondary amino function at the thread. <i>Organic Chemistry Frontiers</i> , 2022, 9, 2690-2696.	2.3	2
2	Mechanically interlocked molecules in metal-organic frameworks. <i>Chemical Society Reviews</i> , 2022, 51, 4949-4976.	18.7	27
3	4-Hydroxydibenzyl: a novel metabolite from the human gut microbiota after consuming resveratrol. <i>Food and Function</i> , 2022, 13, 7487-7493.	2.1	10
4	Cyclization of interlocked fumaramides into β -lactams: experimental and computational mechanistic assessment of the key intercomponent proton transfer and the stereocontrolling active pocket. <i>Chemical Science</i> , 2021, 12, 747-756.	3.7	15
5	Mechanical bonding activation in rotaxane-based organocatalysts. <i>Organic Chemistry Frontiers</i> , 2021, 8, 4202-4210.	2.3	11
6	Effective Encapsulation of C_{60} by Metal-Organic Frameworks with Polyamide Macrocyclic Linkers. <i>Angewandte Chemie</i> , 2021, 133, 10909-10914.	1.6	6
7	Effective Encapsulation of C_{60} by Metal-Organic Frameworks with Polyamide Macrocyclic Linkers. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10814-10819.	7.2	16
8	Mechanically Interlocked Profragrances for the Controlled Release of Scents. <i>Journal of Organic Chemistry</i> , 2021, 86, 15045-15054.	1.7	13
9	Coupling the Individual Motions of the Machine-like Components of Zirconium(IV) Organic Frameworks. <i>CheM</i> , 2021, 7, 14-16.	5.8	2
10	Maximizing the [2]daisy chain to lasso ratio through competitive self-templating clipping reactions. <i>Chemical Communications</i> , 2021, 58, 290-293.	2.2	10
11	Mechanically Interlocked Catalysts for Asymmetric Synthesis. <i>ACS Catalysis</i> , 2020, 10, 7719-7733.	5.5	66
12	Enhancing the selectivity of prolinamide organocatalysts using the mechanical bond in [2]rotaxanes. <i>Chemical Science</i> , 2020, 11, 3629-3635.	3.7	27
13	Copper-Linked Rotaxanes for the Building of Photoresponsive Metal Organic Frameworks with Controlled Cargo Delivery. <i>Journal of the American Chemical Society</i> , 2020, 142, 13442-13449.	6.6	36
14	Interlocking the Catalyst: Thread versus Rotaxane-Mediated Enantiodivergent Michael Addition of Ketones to β -Nitrostyrene. <i>Organic Letters</i> , 2019, 21, 5192-5196.	2.4	38
15	Homo and heteroassembly of amide-based [2]rotaxanes using β , β' -dimethyl-p-xylylenediamines. <i>Chemical Communications</i> , 2019, 55, 6787-6790.	2.2	7
16	Crystallization Mechanisms Applied to Understand the Crystal Formation of Rotaxanes. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 3451-3463.	1.2	20
17	Thermally and Photochemically Induced Dethreading of Fumaramide-Based Kinetically Stable Pseudo[2]rotaxanes. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 3480-3488.	1.2	26
18	Synthesis of an Adamantane-Based Tetralactam and Its Association with Dicarboxamides. <i>Proceedings (mdpi)</i> , 2019, 41, 65.	0.2	2

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19	Stereocontrol in the Synthesis of β -Lactams Arising from the Interlocked Structure of Benzylfumaramide-Based Hydrogen-Bonded [2]Rotaxanes. <i>Synlett</i> , 2019, 30, 893-902.	1.0	18
20	Enantioselective Formation of 2-Azetidinones by Ring-Assisted Cyclization of Interlocked <i>N</i> -(1-Methyl)benzyl Fumaramides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6563-6567.	7.2	37
21	Enantioselective Formation of 2-Azetidinones by Ring-Assisted Cyclization of Interlocked <i>N</i> -(1-Methyl)benzyl Fumaramides. <i>Angewandte Chemie</i> , 2018, 130, 6673-6677.	1.6	19
22	Titelbild: Photoinduced Pedal-Type Motion in an Azodicarboxamide-Based Molecular Switch (Angew.) <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1792-1796.	1.6	0
23	Action of tyrosinase on caffeic acid and its n-nonyl ester. Catalysis and suicide inactivation. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 2650-2659.	3.6	11
24	Photoinduced Pedal-Type Motion in an Azodicarboxamide-Based Molecular Switch. <i>Angewandte Chemie</i> , 2018, 130, 1810-1814.	1.6	7
25	Photoinduced Pedal-Type Motion in an Azodicarboxamide-Based Molecular Switch. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1792-1796.	7.2	21
26	Light-driven exchange between extended and contracted lasso-like isomers of a bistable [1]rotaxane. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 6980-6987.	1.5	26
27	Conformer Distribution in Rotaxanes Containing Nonsymmetric Threads: A Systematic Approach. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 4978-4990.	1.2	12
28	Photoswitchable interlocked thiodiglycolamide as a cocatalyst of a chalcogeno-Baylis-Hillman reaction. <i>Chemical Science</i> , 2017, 8, 3775-3780.	3.7	68
29	Action of 2,4-tetrahydroxybenzophenone in the biosynthesis pathway of melanin. <i>International Journal of Biological Macromolecules</i> , 2017, 98, 622-629.	3.6	18
30	Study of the inhibition of 3-/4-aminoacetophenones on tyrosinase. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2017, 120, 1-13.	0.8	6
31	Remote Photoregulated Ring Gliding in a [2]Rotaxane via a Molecular Effector. <i>Organic Letters</i> , 2017, 19, 154-157.	2.4	26
32	Competition between the donor and acceptor hydrogen bonds of the threads in the formation of [2]rotaxanes by clipping reaction. <i>New Journal of Chemistry</i> , 2017, 41, 13303-13318.	1.4	13
33	Density Functional Theory and Quantum Theory of Atoms in Molecules Analysis: Influence of Intramolecular Interactions on Pirouetting Movement in Tetraalkylsuccinamide[2]rotaxanes. <i>Crystal Growth and Design</i> , 2017, 17, 5845-5857.	1.4	19
34	Effects on Rotational Dynamics of Azo and Hydrazodicarboxamide-Based Rotaxanes. <i>Molecules</i> , 2017, 22, 1078.	1.7	9
35	Action of tyrosinase on alpha and beta-arbutin: A kinetic study. <i>PLoS ONE</i> , 2017, 12, e0177330.	1.1	52
36	Structural and kinetic considerations on the catalysis of deoxyarbutin by tyrosinase. <i>PLoS ONE</i> , 2017, 12, e0187845.	1.1	8

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37	Stereocontrolled Synthesis of β -Lactams within [2]Rotaxanes: Showcasing the Chemical Consequences of the Mechanical Bond. <i>Journal of the American Chemical Society</i> , 2016, 138, 8726-8729.	6.6	71
38	Conformational Exchange Triggered by Molecular Recognition in a Di(acylamino)pyridine-Based Molecular Shuttle Containing Two Pyridine Rings at the Macrocyclic. <i>ChemPhysChem</i> , 2016, 17, 1920-1926.	1.0	17
39	Characterization of the action of tyrosinase on resorcinols. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 4434-4443.	1.4	18
40	4- <i>n</i> -butylresorcinol, a depigmenting agent used in cosmetics, reacts with tyrosinase. <i>IUBMB Life</i> , 2016, 68, 663-672.	1.5	14
41	Action of ellagic acid on the melanin biosynthesis pathway. <i>Journal of Dermatological Science</i> , 2016, 82, 115-122.	1.0	36
42	Further insight into the pH effect on the catalysis of mushroom tyrosinase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016, 125, 6-15.	1.8	20
43	Kinetic characterization of oxyresveratrol as a tyrosinase substrate. <i>IUBMB Life</i> , 2015, 67, 828-836.	1.5	14
44	Light-responsive peptide [2]rotaxanes as gatekeepers of mechanised nanocontainers. <i>Chemical Communications</i> , 2015, 51, 14501-14504.	2.2	34
45	Tyrosinase-Catalyzed Hydroxylation of 4-Hexylresorcinol, an Antibrowning and Depigmenting Agent: A Kinetic Study. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 7032-7040.	2.4	20
46	Identification of <i>p</i> -hydroxybenzyl alcohol, tyrosol, phloretin and its derivative phloridzin as tyrosinase substrates. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 3738-3746.	1.4	16
47	Dethreading of Tetraalkylsuccinamide-Based [2]Rotaxanes for Preparing Benzylic Amide Macrocycles. <i>Journal of Organic Chemistry</i> , 2015, 80, 10049-10059.	1.7	39
48	Versatile control of the submolecular motion of di(acylamino)pyridine-based [2]rotaxanes. <i>Chemical Science</i> , 2015, 6, 3087-3094.	3.7	34
49	Catalysis and inactivation of tyrosinase in its action on hydroxyhydroquinone. <i>IUBMB Life</i> , 2014, 66, 122-127.	1.5	7
50	Competitive binding for triggering a fluorescence response in a hydrazodicarboxamide-based [2]rotaxane. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 474-478.	1.5	29
51	Action of tyrosinase on hydroquinone in the presence of catalytic amounts of <i>o</i> -diphenol. A kinetic study. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2014, 112, 305-320.	0.8	17
52	Small-Molecule Recognition for Controlling Molecular Motion in Hydrogen-Bond-Assembled Rotaxanes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6762-6767.	7.2	39
53	Catalysis and inactivation of tyrosinase in its action on <i>o</i> -diphenols, <i>o</i> -aminophenols and <i>o</i> -phenyldiamines: Potential use in industrial applications. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013, 91, 17-24.	1.8	10
54	Hydrogen Peroxide Helps in the Identification of Monophenols as Possible Substrates of Tyrosinase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2013, 77, 2383-2388.	0.6	17

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55	Redox divergent conversion of a [2]rotaxane into two distinct degenerate partners with different shuttling dynamics. <i>Chemical Science</i> , 2012, 3, 2314.	3.7	45
56	Kinetic characterisation of o-aminophenols and aromatic o-diamines as suicide substrates of tyrosinase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2012, 1824, 647-655.	1.1	10
57	Hydroxylation of p-substituted phenols by tyrosinase: Further insight into the mechanism of tyrosinase activity. <i>Biochemical and Biophysical Research Communications</i> , 2012, 424, 228-233.	1.0	22
58	Dampened circumrotation by CH \cdots N interactions in hydrogen bonded [2]rotaxanes. <i>Chemical Communications</i> , 2012, 48, 5677.	2.2	35
59	Unravelling the suicide inactivation of tyrosinase: A discrimination between mechanisms. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 75, 11-19.	1.8	23
60	Comparative inhibitory activity of the stilbenes resveratrol and oxyresveratrol on African swine fever virus replication. <i>Antiviral Research</i> , 2011, 91, 57-63.	1.9	77
61	Bimodal dynamics of mechanically constrained hydrogen bonds revealed by vibrational photon echoes. <i>Journal of Chemical Physics</i> , 2011, 134, 134504.	1.2	8
62	Synthesis and Molecular Structure of β -Phosphinoyl Carboxamides: An Unexpected Case of Chiral Discrimination of Hydrogen-Bonded Dimers in the Solid State. <i>Chemistry - A European Journal</i> , 2010, 16, 3728-3735.	1.7	13
63	A Dynamic Molecular Shuttle. <i>Synfacts</i> , 2010, 2010, 1139-1139.	0.0	0
64	Azodicarboxamides as Template Binding Motifs for the Building of Hydrogen-Bonded Molecular Shuttles. <i>Journal of the American Chemical Society</i> , 2010, 132, 10741-10747.	6.6	100
65	Cadiot-Chodkiewicz Active Template Synthesis of Rotaxanes and Switchable Molecular Shuttles with Weak Intercomponent Interactions. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 4392-4396.	7.2	101
66	Core level photoemission of rotaxanes: A summary on binding energies. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2008, 165, 42-45.	0.8	6
67	Component exchange as a synthetically advantageous strategy for the preparation of bicyclic cage compounds. <i>Chemical Communications</i> , 2008, , 2337.	2.2	10
68	Palladium-Catalyzed Synthesis of Rotaxanes. <i>Synfacts</i> , 2007, 2007, 1158-1158.	0.0	2
69	Amide-based molecular shuttles (2001-2006). <i>Pure and Applied Chemistry</i> , 2007, 79, 39-54.	0.9	60
70	The class of molecules with mobile parts: Catenanes and rotaxanes for nonlinear optical applications. , 2007, , .		1
71	Catalytic β -Active-Metal-Template Synthesis of [2]Rotaxanes, [3]Rotaxanes, and Molecular Shuttles, and Some Observations on the Mechanism of the Cu(I)-Catalyzed Azide-Alkyne 1,3-Cycloaddition. <i>Journal of the American Chemical Society</i> , 2007, 129, 11950-11963.	6.6	248
72	A rotaxane mimic of the photoactive yellow protein chromophore environment: effects of hydrogen bonding and mechanical interlocking on a coumaric amide derivative. <i>Chemical Communications</i> , 2007, , 1910.	2.2	17

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73	Helical Chirality Transmission through a p-Phenylene Fragment in a Hexa- λ^5 -phosphazene. <i>Organic Letters</i> , 2007, 9, 4631-4634.	2.4	7
74	A Catalytic Palladium Active-Metal Template Pathway to [2]Rotaxanes. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 5709-5713.	7.2	100
75	Macrobicyclic triphosphazides and tri- λ^5 -phosphazenes derived from PhC(CH ₂ PPh ₂) ₃ . Two propeller-shaped diastereoisomers in the crystals. <i>Tetrahedron</i> , 2007, 63, 2078-2083.	1.0	9
76	Modulating the propeller-like shape of a tripodal C(CH ₂ PPh ₂) ₃ fragment by the size of the substituent at the pivotal carbon atom in macrobicyclic tri- λ^5 -phosphazenes. <i>Tetrahedron</i> , 2007, 63, 4450-4458.	1.0	9
77	Center-to-propeller and propeller-to-propeller stereocontrol in a series of macrobicyclic tri- λ^5 -phosphazenes. <i>Tetrahedron Letters</i> , 2007, 48, 3583-3586.	0.7	3
78	Linear and nonlinear optical properties of a rotaxane molecule. , 2006, , .		2
79	New macrobicyclic triphosphazides and triphosphazenes formed by self-assembly of tripodal triazides with triphosphanes. <i>Tetrahedron</i> , 2006, 62, 6190-6202.	1.0	16
80	On the protonation of a macrobicyclic cage: an inert tribenzylamine fragment and three robust aminophosphonium units. <i>Tetrahedron Letters</i> , 2006, 47, 5405-5408.	0.7	3
81	Macroscopic transport by synthetic molecular machines. <i>Nature Materials</i> , 2005, 4, 704-710.	13.3	685
82	Helical Sense Bias Induced by Point Chirality in Cage Compounds. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 1205-1208.	7.2	22
83	Diels- α -Alder cycloaddition of 5-aryl-2-pyrones. <i>Tetrahedron Letters</i> , 2000, 41, 4955-4958.	0.7	29
84	Design and synthesis of a new macrobicyclic tris(phosphazide). <i>Tetrahedron Letters</i> , 1998, 39, 7807-7810.	0.7	18
85	Tripod-Tripod Coupling of Triazides with Triphosphanes. The Synthesis, Characterization, and Stability in Solution of New Cage Compounds: Chiral Macrobicyclic Triphosphazides. <i>Chemistry - A European Journal</i> , 1998, 4, 2558-2570.	1.7	26
86	Further Insights on the Assembly of Acylaminopyridine-based [2]Rotaxanes. , 0, , .		1
87	Chemical Interconversion of Azo and Hydrazodicarboxamide-based [2]Rotaxanes, , 0, , .		0