Sheng-Hsien Chiu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2413597/publications.pdf

Version: 2024-02-01

88	4,171	81743 39	118652 62
papers	citations	h-index	g-index

101	101	101	3200
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular Borromean Rings. Science, 2004, 304, 1308-1312.	6.0	757
2	Aptamer-Functionalized Gold Nanoparticles for Turn-On Light Switch Detection of Platelet-Derived Growth Factor. Analytical Chemistry, 2007, 79, 4798-4804.	3.2	159
3	An Acidâ^'Base Switchable [2]Rotaxane. Journal of Organic Chemistry, 2002, 67, 9175-9181.	1.7	143
4	Using Acetate Anions To Induce Translational Isomerization in a Neutral Ureaâ€Based Molecular Switch. Angewandte Chemie - International Edition, 2007, 46, 6629-6633.	7.2	119
5	Acid/Baseâ€•and Anionâ€Controllable Organogels Formed From a Ureaâ€Based Molecular Switch. Angewandte Chemie - International Edition, 2010, 49, 9170-9173.	7.2	104
6	A Molecular Cage-Based [2]Rotaxane That Behaves as a Molecular Muscle. Organic Letters, 2009, 11, 385-388.	2.4	98
7	Mechanically interlocked daisy-chain-like structures as multidimensional molecular muscles. Nature Chemistry, 2017, 9, 128-134.	6.6	82
8	Use of Anions To Allow Translational Isomerism of a [2]Rotaxane. Chemistry - A European Journal, 2007, 13, 4350-4355.	1.7	76
9	Direct Observation of Mixedâ€Valence and Radical Cation Dimer States of Tetrathiafulvalene in Solution at Room Temperature: Association and Dissociation of Molecular Clip Dimers Under Oxidative Control. Chemistry - A European Journal, 2008, 14, 6546-6552.	1.7	76
10	Solventâ€Free Synthesis of the Smallest Rotaxane Prepared to Date. Angewandte Chemie - International Edition, 2008, 47, 7475-7478.	7.2	75
11	A Ring-in-Ring Complex We thank Dr. Peter T. Glink, Dr. M. Jane Strouse, and Dr. Ping Yang for useful discussions and both the National Science Foundation and the Petroleum Research Fund, administered by the American Chemical Society, for generous financial support.. Angewandte Chemie - International Edition, 2002, 41, 270.	7.2	74
12	â€œThreading-Followed-by-Swellingâ€•Â A New Protocol for Rotaxane Synthesis. Journal of the American Chemical Society, 2007, 129, 3500-3501.	6.6	68
13	Dendrimer with Rotaxane-Like Mechanical Branching. Organic Letters, 2002, 4, 679-682.	2.4	65
14	A Guanidinium Ion-Based Anion- and Solvent Polarity-Controllable Molecular Switch. Organic Letters, 2009, 11, 613-616.	2.4	65
15	Reading the operation of an acid/base-controllable molecular switch by naked eye. Chemical Communications, 2006, , 2854.	2.2	63
16	Protecting a Squaraine near-IR Dye through Its Incorporation in a Slippage-Derived [2]Rotaxane. Organic Letters, 2007, 9, 4523-4526.	2.4	63
17	Efficient Solventâ€Free Syntheses of [2]â€•and [4]Rotaxanes. Angewandte Chemie - International Edition, 2008, 47, 4436-4439.	7.2	63
18	Post-Assembly Processing of [2]Rotaxanes. Chemistry - A European Journal, 2002, 8, 5170-5183.	1.7	60

#	Article	IF	Citations
19	A Macrocycle/Molecular-Clip Complex that Functions as a Quadruply Controllable Molecular Switch. Chemistry - A European Journal, 2006, 12, 865-876.	1.7	60
20	Using Alkali Metal Ions To Template the Synthesis of Interlocked Molecules. Accounts of Chemical Research, 2018, 51, 1324-1337.	7.6	59
21	A Rotaxane-Like Complex with Controlled-Release Characteristics. Organic Letters, 2000, 2, 3631-3634.	2.4	56
22	Serotonin accumulation in transgenic rice by over-expressing tryptophan decarboxlyase results in a dark brown phenotype and stunted growth. Plant Molecular Biology, 2012, 78, 525-543.	2.0	56
23	Self-Assembly of Dendrimers by Slippage. Organic Letters, 2002, 4, 3565-3568.	2.4	55
24	Novel Ether-Linked Secondary Face-to-Face 2â˜'2â€˜ and 3â˜'3â€˜ Î²-Cyclodextrin Dimers. Journal of Organic Chemistry, 2000, 65, 2792-2796.	1.7	52
25	Synthesis of a [2]Catenane from the Sodium Ion Templated Orthogonal Arrangement of Two Diethylene Glycol Chains. Angewandte Chemie - International Edition, 2013, 52, 13269-13272.	7.2	49
26	An hermaphroditic [c2]daisy chain. Chemical Communications, 2002, , 2948-2949.	2.2	48
27	Highly Selective Na+-Templated Formation of [2]Pseudorotaxanes Exhibiting Significant Optical Outputs. Angewandte Chemie - International Edition, 2007, 46, 2013-2017.	7.2	48
28	Hemicarceplex Formation With a Cyclotriveratrylene-Based Molecular Cage Allows Isolation of High-Purity (â‰¥99.0%) C₇₀ Directly from Fullerene Extracts. Organic Letters, 2012, 14, 6146-6149.	2.4	46
29	Self-Sorting under Solvent-Free Conditions: One-Pot Synthesis of a Hetero[3]rotaxane. Organic Letters, 2011, 13, 4660-4663.	2.4	45
30	Translational Isomerism in a [3]Catenane and a [3]Rotaxane. Organic Letters, 2002, 4, 3561-3564.	2.4	44
31	Making molecular-necklaces from rotaxanes. Tetrahedron, 2002, 58, 807-814.	1.0	44
32	A [2]rotaxane-based 1H NMR spectroscopic probe for the simultaneous identification of physiologically important metal ions in solution. Chemical Communications, 2007, , 4122.	2.2	44
33	Mild and High-Yielding Syntheses of Diethyl Phosphoramidate-Stoppered [2]Rotaxanesâ€. Organic Letters, 2004, 6, 4183-4186.	2.4	42
34	Squaraineâ€Based [2]Rotaxanes that Function as Visibly Active Molecular Switches. Chemistry - A European Journal, 2010, 16, 2997-3000.	1.7	41
35	A switchable macrocycleâ€“clip complex that functions as a NOR logic gate. Chemical Communications, 2005, , 1285-1287.	2.2	40
36	Is [N+â˜'HÂ·Â·Â·O] Hydrogen Bonding the Most Important Noncovalent Interaction in Macrocycleâ˜'Dibenzylammonium Ion Complexes?. Journal of Organic Chemistry, 2006, 71, 2373-2383.	1.7	40

#	Article	IF	Citations
37	An Extremely Stable Hostâ€“Guest Complex That Functions as a Fluorescence Probe for Calcium Ions. Chemistry - A European Journal, 2006, 12, 4594-4599.	1.7	40
38	Parking and Restarting a Molecular Shuttle In Situ. Chemistry - A European Journal, 2008, 14, 2904-2908.	1.7	40
39	Using Oppositely Charged Ions To Operate a Three-Station [2]Rotaxane in Two Different Switching Modes. Organic Letters, 2012, 14, 1046-1049.	2.4	40
40	[3]Pseudorotaxane-Like Complexes Formed between Bipyridinium Dications and Bis-p-xylyl[26]crown-6. Organic Letters, 2006, 8, 435-438.	2.4	37
41	Na⁺ Ions Induce the Pirouetting Motion and Catalytic Activity of [2]Rotaxanes. Chemistry - A European Journal, 2017, 23, 9756-9760.	1.7	36
42	Capturing a [c2]daisy chain using the threading-followed-by-swelling approach. Chemical Communications, 2008, , 817-819.	2.2	34
43	A Metalâ€Free â€œThreadingâ€Followedâ€byâ€Shrinkingâ€•Protocol for Rotaxane Synthesis. Angewandte Chemie - International Edition, 2011, 50, 6643-6646.	7.2	34
44	Sodium Ions Template the Formation of Rotaxanes from BPX26C6 and Nonconjugated Amide and Urea Functionalities. Angewandte Chemie - International Edition, 2013, 52, 10231-10236.	7.2	34
45	Reversing a Rotaxane Recognition Motif:Â Threading Oligoethylene Glycol Derivatives through a Dicationic Cyclophane. Journal of the American Chemical Society, 2002, 124, 4174-4175.	6.6	33
46	Precise Facial Control in Threading Guests into a Molecular Cage and the Formation of a Turtlelike Supramolecular Complex. Angewandte Chemie - International Edition, 2006, 45, 3176-3181.	7.2	32
47	Using Dielsâ€“Alder reactions to synthesize [2]rotaxanes under solvent-free conditions. Tetrahedron, 2009, 65, 2824-2829.	1.0	30
48	Weakly Associated TFPB Anions Are Superior to PF₆ Anions When Preparing (Pseudo)Rotaxanes from Crown Ethers and Secondary Dialkylammonium Ions. Chemistry - A European Journal, 2012, 18, 1896-1900.	1.7	27
49	Polyvalent Interactions in Unnatural Recognition Processes. Journal of Organic Chemistry, 2004, 69, 4390-4402.	1.7	26
50	Cyclic [2]Catenane Dimers, Trimers, and Tetramers. Angewandte Chemie - International Edition, 2015, 54, 11745-11749.	7.2	25
51	Using Hostâ€“Guest Complexation to Fold a Flexible Linear Organic String: Kinetically Controlled Syntheses of [3]Catenanes and a Fiveâ€Membered Molecular Necklace. Angewandte Chemie - International Edition, 2012, 51, 10094-10098.	7.2	24
52	Na⁺ Ion Templated Threading of Oligo(ethylene glycol) Chains through BPX26C6 Allows Synthesis of [2]Rotaxanes under Solvent-Free Conditions. Organic Letters, 2014, 16, 1068-1071.	2.4	24
53	Substituent effects in the binding of bis(4-fluorobenzyl)ammonium ions by dianilino[24]crown-8. Tetrahedron Letters, 2004, 45, 213-216.	0.7	22
54	Molecular Switch Based on Very Weak Association between BPX26C6 and Two Recognition Units. Organic Letters, 2013, 15, 5742-5745.	2.4	21

#	Article	IF	Citations
55	Dual-Action Acid/Base- and Base/Acid-Controllable Molecular Switch. Organic Letters, 2006, 8, 3223-3226.	2.4	20
56	Hemicarceplex formation allows ready identification of the isomers of the metallofullerene Sc₃N@C₈₀using¹H and¹³C NMR spectroscopy. Chemical Communications, 2014, 50, 11709-11712.	2.2	20
57	Nâ€Heterocyclic Carbene Copper(I) Rotaxanes Mediate Sequential Click Ligations with All Reagents Premixed. Angewandte Chemie - International Edition, 2020, 59, 11278-11282.	7.2	20
58	A new macrocycle that forms pseudorotaxane-like complexes with dibenzylammonium ions. Tetrahedron Letters, 2005, 46, 4239-4242.	0.7	19
59	Using â€œThreading Followed by Shrinkingâ€• to Synthesize Highly Stable Dialkylammoniumâ€ionâ€Based Rotaxanes. Chemistry - A European Journal, 2013, 19, 8850-8860.	1.7	18
60	Bis-p-xylyl[26]crown-6/pyridinium ion recognition: one-pot synthesis of molecular shuttles. Tetrahedron Letters, 2008, 49, 1665-1669.	0.7	17
61	Using a Threadingâ€Followedâ€byâ€Swelling Approach to Synthesize [2]Rotaxanes. Chemistry - A European Journal, 2010, 16, 6950-6960.	1.7	17
62	Synthesizing [2]Rotaxanes and [2]Catenanes through Na⁺-Templated Clipping of Macrocycles around Oligo(ethylene glycol) Units. Organic Letters, 2015, 17, 2158-2161.	2.4	17
63	Size effects in the alkali metal ion-templated formation of oligo(ethylene glycol)-containing [2]catenanes. Organic and Biomolecular Chemistry, 2016, 14, 1153-1160.	1.5	17
64	Two [2]pseudorotaxane-like complexes and their corresponding [2]rotaxanes stabilized via interactions on opposite ends of the same macrocycle. Tetrahedron Letters, 2009, 50, 267-270.	0.7	16
65	Rotaxanes Synthesized Through Sodiumâ€ionâ€Templated Clipping of Macrocycles Around Nonconjugated Amide and Urea Functionalities. Chemistry - A European Journal, 2014, 20, 4563-4567.	1.7	16
66	A Molecular Cage That Selectively Complexes Three Different Guests in Solution. Organic Letters, 2009, 11, 4604-4607.	2.4	14
67	Efficient Monomodification of the Secondary Hydroxy Groups of Î²-Cyclodextrin. Journal of Organic Chemistry, 1999, 64, 332-333.	1.7	13
68	Two guest complexation modes in a cyclotriveratrylene-based molecular container. Chemical Communications, 2009, , 5814.	2.2	13
69	Interlocked Photoâ€degradable Macrocycles Allow Oneâ€Off Photoâ€triggerable Gelation of Organoâ€and Hydrogelators. Chemistry - A European Journal, 2018, 24, 1522-1527.	1.7	13
70	Absolute Configurations of Topologically Chiral [2]Catenanes and the Acid/Base-Flippable Directions of Their Optical Rotations. Organic Letters, 2019, 21, 5708-5712.	2.4	13
71	Nâ€Heterocyclic Carbene Copper(I) Rotaxanes Mediate Sequential Click Ligations with All Reagents Premixed. Angewandte Chemie, 2020, 132, 11374-11378.	1.6	13
72	Hemicarceplexes Modify the Solubility and Reduction Potentials of C₆₀. Journal of Organic Chemistry, 2014, 79, 3581-3586.	1.7	12

#	Article	IF	Citations
73	A Twoâ€Stage Molecular Retractable Cable Featuring Pushâ€Button and Rotary Twoâ€Way Switching Modes. Chemistry - A European Journal, 2012, 18, 16698-16707.	1.7	10
74	Sodium Ions Template the Formation of Rotaxanes from BPX26C6 and Nonconjugated Amide and Urea Functionalities. Angewandte Chemie, 2013, 125, 10421-10426.	1.6	10
75	Controlling the rotation of a complexed guest within a molecular cage. Dalton Transactions, 2011, 40, 2163-2166.	1.6	8
76	Synthesis of Oxygen-Free [2]Rotaxanes: Recognition of Diarylguanidinium Ions by Tetraazacyclophanes. Organic Letters, 2018, 20, 2416-2419.	2.4	8
77	[2]Catenanes Displaying Switchable Gin-Trap-Like Motion. Journal of Organic Chemistry, 2018, 83, 5619-5628.	1.7	7
78	Observation of face-to-face hostâ€“guest associated states prior to threading of dialkylammonium ions into the DB24C8-like openings of a molecular cage. Chemical Communications, 2013, 49, 4199-4201.	2.2	6
79	Five additional macrocycles that allow Na⁺ ion-templated threading of guest units featuring a single urea or amide functionality. Organic and Biomolecular Chemistry, 2014, 12, 2907-2917.	1.5	6
80	Solventâ€free synthesis of rotaxanes. Journal of the Chinese Chemical Society, 2019, 66, 134-145.	0.8	6
81	Interlocking increases the persistence of N-heterocyclic carbenes in solution. Chemical Communications, 2020, 56, 4773-4776.	2.2	6
82	Incarceration of Higherâ€Order Fullerenes within Cyclotriveratryleneâ€Based Hemicarcerands Allows Selective Isolation of C₇₆, C₇₈, and C₈₄ from a Commercial Fullerene Mixture. Chemistry - A European Journal, 2016, 22, 17468-17476.	1.7	5
83	Using Slippage to Construct a Prototypical Molecular â€œLock & Lockâ€•Box. Organic Letters, 2021, 23, 5787-5792.	2.4	4
84	A Redox-Controllable Molecular Switch Based on Weak Recognition of BPX26C6 at a Diphenylurea Station. Molecules, 2015, 20, 1775-1787.	1.7	2
85	Complementarity of 2,6-Dimethanolpyridine and Di(ethylene glycol) in the Complexation of Na+ Ions: Attaching Multiple Copies of [2]Catenane Branches to Isophthalaldehyde-Containing Cores. Journal of Organic Chemistry, 2021, 86, 13491-13502.	1.7	1
86	Metal-Ion-Induced Mechanical Chirality: Achiral Rotaxane as the Only Ligand in Chiral Palladium(II)â€“N-Heterocyclic Carbene Complexes. Organic Letters, 2022, 24, 1996-2001.	2.4	1
87	Post-Assembly Processing of [2]Rotaxanes.. ChemInform, 2003, 34, no.	0.1	0
88	RÃ¼cktitelbild: Cyclic [2]Catenane Dimers, Trimers, and Tetramers (Angew. Chem. 40/2015). Angewandte Chemie, 2015, 127, 12044-12044.	1.6	0