

Wataru Setaka

List of Publications by Year in descending order

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52
papers

1,047
citations

394421

19
h-index

434195

31
g-index

54
all docs

54
docs citations

54
times ranked

766
citing authors

#	ARTICLE	IF	CITATIONS
1	Order-Disorder Transition of Dipolar Rotor in a Crystalline Molecular Gyrotop and Its Optical Change. <i>Journal of the American Chemical Society</i> , 2013, 135, 14560-14563.	13.7	100
2	Thermal modulation of birefringence observed in a crystalline molecular gyrotop. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9271-9275.	7.1	73
3	Introduction of Clutch Function into a Molecular Gear System by Silane-Silicate Interconversion. <i>Journal of the American Chemical Society</i> , 2008, 130, 15762-15763.	13.7	66
4	A Molecular Balloon: Expansion of a Molecular Gyrotop Cage Due to Rotation of the Phenylene Rotor. <i>Journal of the American Chemical Society</i> , 2012, 134, 12458-12461.	13.7	65
5	Synthesis and Structure of Stable Tri-tert-butylgermyl-Substituted Stannylene and Germylene. <i>Organometallics</i> , 2001, 20, 4460-4462.	2.3	54
6	Synthesis of Crystalline Molecular Gyrotops and Phenylene Rotation inside the Cage. <i>Journal of Organic Chemistry</i> , 2014, 79, 8288-8295.	3.2	40
7	Stannaacetylene (RSn ⁺ CR ⁻) Showing Carbene-like Reaction Mode. <i>Journal of the American Chemical Society</i> , 2004, 126, 2696-2697.	13.7	38
8	A Molecular Gyroscope Having Phenylene Rotator Encased in Three-spoke Silicon-based Stator. <i>Chemistry Letters</i> , 2007, 36, 1076-1077.	1.3	38
9	Planar Hexasilylbenzene Dianion with Thermally Accessible Triplet State. <i>Journal of the American Chemical Society</i> , 1998, 120, 1335-1336.	13.7	37
10	Iron Complexes of (E)- and (Z)-1,2-Dichlorodisilenes. <i>Journal of the American Chemical Society</i> , 2004, 126, 13628-13629.	13.7	33
11	1,4-Naphthalenediyl-Bridged Molecular Gyrotops: Rotation of the Rotor and Fluorescence in Solution. <i>Journal of Organic Chemistry</i> , 2015, 80, 9959-9966.	3.2	28
12	Molecular Gyrotops with a Five-Membered Heteroaromatic Ring: Synthesis, Temperature-Dependent Orientation of Dipolar Rotors inside the Crystal, and its Birefringence Change. <i>Crystal Growth and Design</i> , 2016, 16, 4392-4401.	3.0	27
13	Molecular Gyroscope Having a Halogen-substituted <i>p</i> -Phenylene Rotator and Silaalkane Chain Stators. <i>Chemistry Letters</i> , 2010, 39, 468-469.	1.3	26
14	Ring-closing metathesis for the synthesis of a molecular gyrotop. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 3354-3357.	2.8	25
15	Theoretical Investigation of the Structures and Dynamics of Crystalline Molecular Gyroscopes. <i>Journal of Physical Chemistry C</i> , 2012, 116, 24845-24854.	3.1	24
16	Cage Size Effects on the Rotation of Molecular Gyrotops with 1,4-Naphthalenediyl Rotor in Solution. <i>Organic Letters</i> , 2013, 15, 5092-5095.	4.6	24
17	Dielectric Relaxation of Powdered Molecular Gyrotops Having a Thiophene Dioxide-diyl as a Dipolar Rotor. <i>Organic Letters</i> , 2018, 20, 6934-6937.	4.6	23
18	A pyrene-bridged macrocage showing no excimer fluorescence. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 10511-10516.	2.8	22

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19	Novel Synthesis and Bridgehead Functionalization of Permethylobicyclo[2.2.2]octasilane. <i>Chemistry Letters</i> , 2004, 33, 626-627.	1.3	20
20	Formation of a stannylstannylene via intramolecular carbene addition of a transient stannaacetylene (RSn ^{IV} CR ^{II}). <i>Chemical Communications</i> , 2008, , 6558.	4.1	19
21	Kinetic stabilization against the oxidation reaction induced by a silaalkane cage in a thiophene-bridged molecular gyroscope. <i>Chemical Communications</i> , 2014, 50, 1098-1100.	4.1	19
22	Ring-closing Metathesis for the Synthesis of Phenylene-bridged Silamacrocycles. <i>Chemistry Letters</i> , 2007, 36, 1180-1181.	1.3	18
23	Multiplicity of Planar Hexasilylbenzene Dianions: Effects of Substituents and Counterions. <i>Journal of the American Chemical Society</i> , 2000, 122, 7781-7786.	13.7	17
24	A crystalline molecular gyrotop with a biphenylene dirotor and its temperature-dependent birefringence. <i>CrystEngComm</i> , 2017, 19, 6049-6056.	2.6	17
25	A crystalline molecular gyrotop with germanium junctions between a phenylene rotor and alkyl spokes. <i>RSC Advances</i> , 2014, 4, 58624-58630.	3.6	15
26	Trimethylsilyl-substituted Dibenzodehydro[12]annulene Having High Thermal and Chemical Stability. <i>Chemistry Letters</i> , 2006, 35, 1364-1365.	1.3	14
27	Ferrocene-diyl Bridged Macrocages: Steric Effects of the Cage on the Redox Properties of Ferrocene Moiety. <i>Organometallics</i> , 2018, 37, 1501-1506.	2.3	14
28	Direct observation of the solvent reorientation dynamics in the "twisted" intramolecular charge-transfer process of cyanophenyldisilane-water cluster by transient infrared spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 117-126.	2.8	13
29	An ESR Study of a Tetrasilaspirobiindane Anion Radical. Stereoelectronic Electron-Accepting Effects of Trialkylsilyl Groups. <i>Chemistry Letters</i> , 1999, 28, 317-318.	1.3	11
30	Determination of the Equilibrium Structure of the Charge-transfer State of (p-Cyanophenyl)pentamethyldisilane by Means of Transient Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2005, 109, 8959-8961.	2.5	11
31	Phenylene-bridged Polysilaalkane Macrocycles as Framed Molecular Rotor. <i>Chemistry Letters</i> , 2006, 35, 596-597.	1.3	10
32	Spectroscopic Investigation on the Microscopic Solvation Effect on the Intramolecular Charge-Transfer Process of (p-Cyanophenyl)pentamethyldisilane in Supersonic Jets. <i>Journal of Physical Chemistry A</i> , 2003, 107, 10781-10786.	2.5	9
33	Intramolecular charge-transfer fluorescence of 1-phenyltridecamethylbicyclo[2.2.2]octasilane. <i>Chemical Communications</i> , 2005, , 4666.	4.1	9
34	Polarized fluorescence of a crystal having uniaxially oriented molecules by a carbazole-diyl-bridged macrocage. <i>CrystEngComm</i> , 2019, 21, 3910-3914.	2.6	9
35	Crystalline thieno[3,2- <i>b</i>]thiophene-dioxide-diyl bridged molecular gyrotops as fluorescent dielectric materials. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8220-8225.	5.5	9
36	Silicon-based Synthesis of [2]Rotaxanes without Polar Functional Groups. <i>Chemistry Letters</i> , 2008, 37, 976-977.	1.3	8

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37	Gear Slippage in Molecular Bevel Gears Bridged with a Group 14 Element. <i>Journal of Organic Chemistry</i> , 2019, 84, 14636-14643.	3.2	8
38	Structure and Dynamics of Crystalline Molecular Gyrotops with a Difluorophenylene Rotor. <i>Journal of Organic Chemistry</i> , 2021, 86, 2423-2430.	3.2	8
39	Solvent Reorientation Process in the "Twisted" Intramolecular Charge-Transfer Process of Cyanophenylsilane ⁺ (H ₂ O) ₂ Cluster Investigated by Transient Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2008, 112, 1168-1171.	2.5	7
40	Facile synthesis of 2,5-bis(silyl)selenophene-1,1-dioxide and its photophysical properties. <i>New Journal of Chemistry</i> , 2016, 40, 8593-8599.	2.8	7
41	Kinetic Stabilization of Carbazole Nitroxides by Inclusion in a Macrocage and Their Electron Spin Resonance Characterization. <i>Journal of Organic Chemistry</i> , 2019, 84, 11783-11789.	3.2	7
42	Gear Alignments Due to Hydrogen-Bonded Networks in a Crystal Structure of Resorcyldiptycene Hydrate and Its Transformation to a Nongearing Anhydrate Crystal by Heating. <i>Crystal Growth and Design</i> , 2020, 20, 1097-1102.	3.0	6
43	Triplet dimers of silylbenzene anion radicals in low-temperature glass matrices. <i>Chemical Physics Letters</i> , 2002, 363, 447-450.	2.6	4
44	Simultaneous synthesis and characterization of in/out-isomers of disilabicyclo[14.14.14]alkanes. <i>Chemical Communications</i> , 2021, 57, 7838-7841.	4.1	4
45	Novel Organosilicon Compounds Performing as Molecular Machines. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2010, 68, 930-938.	0.1	3
46	A Furan-2,5-diyl Bridged Macrocage as a Highly Distorted Molecular Gyrotop. <i>Chemistry Letters</i> , 2020, 49, 1291-1293.	1.3	2
47	Solid-State 2H NMR Study for Deuterated Phenylene Dynamics in a Crystalline Gyroscope-Like Molecule. <i>Chemistry</i> , 2021, 3, 39-44.	2.2	2
48	Chemistry of Macrocage Molecules with a Bridged π -Electron System as Crystalline Molecular Gyrotops. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2019, 77, 813-822.	0.1	2
49	Metal-Ion Induced Intramolecular Charge-Transfer Fluorescence of p-Pentamethyldisilanylacetophenone. <i>Chemistry Letters</i> , 2002, 31, 242-243.	1.3	1
50	Steric effects on the intramolecular charge transfer fluorescence of benzo[b]thiophene-1,1-dioxide bridged macrocages. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 6328-6333.	2.8	1
51	Novel Synthesis and Bridgehead Functionalization of Permethylbicyclo[2.2.2]octasilane (II).. <i>ChemInform</i> , 2004, 35, no.	0.0	0
52	Template Synthesis for Disilamacrocycles via Ring-closing Metathesis. <i>Chemistry Letters</i> , 2021, 50, 1397-1399.	1.3	0