Hiroko Satoh

List of Publications by Year
in descending order

42 papers	964 citations	471509 17 h-index	454955 30 g-index
53 all docs	53 docs citations	53 times ranked	1063 citing authors

#	Article	IF	Citations
1	Theoretical Investigation of Solvent Effects on Glycosylation Reactions: Stereoselectivity Controlled by Preferential Conformations of the Intermediate Oxacarbenium-Counterion Complex. Journal of Chemical Theory and Computation, 2010, 6, 1783-1797.	5.3	137
2	SOPHIA, a Knowledge Base-Guided Reaction Prediction System - Utilization of a Knowledge Base Derived from a Reaction Database. Journal of Chemical Information and Computer Sciences, 1995, 35, 34-44.	2.8	81
3	The Rise of Catalyst Informatics: Towards Catalyst Genomics. ChemCatChem, 2019, 11, 1146-1152.	3.7	72
4	Design of chemical glycosyl donors: does changing ring conformation influence selectivity/reactivity?. Chemical Society Reviews, 2013, 42, 4297.	38.1	71
5	Endocyclic Cleavage in Glycosides with 2,3-transCyclic Protecting Groups. Journal of the American Chemical Society, 2011, 133, 5610-5619.	13.7	62
6	Classification of Organic Reactions:â€‰ Similarity of Reactions Based on Changes in the Electronic Features of Oxygen Atoms at the Reaction Sites1. Journal of Chemical Information and Computer Sciences, 1998, 38, 210-219.	2.8	52
7	Further Development of a Reaction Generator in the SOPHIA System for Organic Reaction Prediction. Knowledge-Guided Addition of Suitable Atoms and/or Atomic Groups to Product Skeleton. Journal of Chemical Information and Computer Sciences, 1996, 36, 173-184.	2.8	32
8	Structural Revision of Terpenoids with a (3Z)-2-Methyl-3-penten-2-ol Moiety by the Synthesis of (23E)- and (23Z)-Cycloart-23-ene-3Î²,25-diols. Journal of Organic Chemistry, 2007, 72, 4578-4581.	3.2	31
9	Chemical Structure Elucidation from ¹³C NMR Chemical Shifts: Efficient Data Processing Using Bipartite Matching and Maximal Clique Algorithms. Journal of Chemical Information and Modeling, 2014, 54, 1027-1035.	5.4	28
10	CAST/CNMR: highly accurate 13C NMR chemical shift prediction system considering stereochemistry. Tetrahedron, 2003, 59, 4539-4547.	1.9	27
11	Novel Canonical Coding Method for Representation of Three-Dimensional Structures. Journal of Chemical Information and Computer Sciences, 2000, 40, 622-630.	2.8	26
12	Structural revision of peribysins C and D. Tetrahedron Letters, 2006, 47, 4623-4626.	1.4	26
13	Lowâ€Barrier Pathway for endoâ€Cleavage Induced Anomerization of Pyranosides with Nâ€Benzylâ€2,3â€transâ€oxazolidinone Groups. European Journal of Organic Chemistry, 2009, 2009, 1127-1131.	2.4	23
14	Significant Substituent Effect on the Anomerization of Pyranosides: Mechanism of Anomerization and Synthesis of a 1,2â€cis Glucosamine Oligomer from the 1,2â€trans Anomer. Chemistry - A European Journal, 2014, 20, 124-132.	3.3	21
15	Representation of Molecular Configurations by CAST Coding Method. Journal of Chemical Information and Computer Sciences, 2001, 41, 1106-1112.	2.8	20
16	Potential Energy Surface-Based Automatic Deduction of Conformational Transition Networks and Its Application on Quantum Mechanical Landscapes of<scp>d</scp>-Glucose Conformers. Journal of Chemical Theory and Computation, 2016, 12, 5293-5308.	5.3	20
17	Substituent effects in endocyclic cleavageâ€“recyclization anomerization reaction of pyranosides. Tetrahedron, 2011, 67, 9966-9974.	1.9	18
18	Computational Chemistry on Chemical Glycosylations. Trends in Glycoscience and Glycotechnology, 2014, 26, 11-27.	0.1	18

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19	Algorithm for Advanced Canonical Coding of Planar Chemical Structures That Considers Stereochemical and Symmetric Information. Journal of Chemical Information and Modeling, 2007, 47, 1734-1746.	5.4	17
20	Effective consideration of ring structures in CAST/CNMR for highly accurate 13C NMR chemical shift prediction. Tetrahedron, 2005, 61, 7431-7437.	1.9	16
21	A Novel Method for Characterization of Three-Dimensional Reaction Fields Based on Electrostatic and Steric Interactions toward the Goal of Quantitative Analysis and Understanding of Organic Reactions. Journal of Chemical Information and Computer Sciences, 1999, 39, 671-678.	2.8	15
22	Global exploration of isomers and isomerization channels on the quantum chemical potential energy surface of H₃CNO₃. Journal of Computational Chemistry, 2017, 38, 669-687.	3.3	15
23	Prism-C2n carbon dimer, trimer, and nano-sheets: A quantum chemical study. Chemical Physics Letters, 2015, 633, 120-125.	2.6	14
24	G-RMSD: Root Mean Square Deviation Based Method for Three-Dimensional Molecular Similarity Determination. Bulletin of the Chemical Society of Japan, 2021, 94, 655-665.	3.2	13
25	An Efficient Algorithm for Enumerating Chordless Cycles and Chordless Paths. Lecture Notes in Computer Science, 2014, , 313-324.	1.3	13
26	A Prism Carbon Molecule C20. Chemistry Letters, 2015, 44, 712-714.	1.3	12
27	Wavy carbon: A new series of carbon structures explored by quantum chemical calculations. Chemical Physics Letters, 2015, 639, 178-182.	2.6	12
28	Extended CAST Coding Method for Exact Search of Stereochemical Structures. Journal of Computer Aided Chemistry, 2002, 3, 48-55.	0.3	11
29	Exploration of Carbon Allotropes with Fourâ€membered Ring Structures on Quantum Chemical Potential Energy Surfaces. Journal of Computational Chemistry, 2019, 40, 14-28.	3.3	8
30	Construction of Basic Haptic Systems for Feeling the Intermolecular Force in Molecular Models. Journal of Computer Aided Chemistry, 2006, 7, 38-47.	0.3	8
31	"Maizo"-chemistry Project: toward Molecular- and Reaction Discovery from Quantum Mechanical Global Reaction Route Mappings. Journal of Computer Chemistry Japan, 2015, 14, 77-79.	0.1	6
32	Quantum chemical exploration of dimeric forms of polycyclic aromatic hydrocarbons, naphthalene, perylene, and coronene. Chemical Physics Letters, 2019, 716, 147-154.	2.6	6
33	Classification and Prediction of Reagents' Roles by FRAU System with Self-Organizing Neural Network Model. Bulletin of the Chemical Society of Japan, 2000, 73, 1955-1965.	3.2	5
34	Quantum chemical exploration of new Ï€-electron systems: Capsule-formed dimers of polycyclic aromatic hydrocarbons. Chemical Physics Letters, 2019, 725, 59-65.	2.6	5
35	High performance global exploration of isomers and isomerization channels on quantum chemical potential energy surface of <scp>H₅C₂NO₂</scp>. Journal of Computational Chemistry, 2021, 42, 192-204.	3.3	5
36	Development of a Program for Construction of a Starting Material Library for AIPHOS.. Journal of Chemical Software, 1998, 4, 101-111.	0.2	5

#	Article	IF	Citations
37	An Educational Environment for Chemical Contents with Haptic Interaction. , 2007, , .		4
38	Quantum chemical exploration of polymerized forms of polycyclic aromatic hydrocarbons: D6h tetramer and polymer of coronene. Chemical Physics Letters, 2020, 747, 137366.	2.6	3
39	Unique Reactivity of Pyranosides with 2,3-trans Carbamate Group; Renaissance of Endocyclic Cleavage Reaction. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2013, 71, 616-624.	0.1	2
40	Handling of Highly Symmetric Molecules for Chemical Structure Elucidation in a CAST/CNMR System. Journal of Computer Chemistry Japan, 2016, 14, 193-195.	0.1	2
41	Knowledge Discovery on Chemical Reactivity from Experimental Reaction Information. Lecture Notes in Computer Science, 2003, , 470-477.	1.3	1
42	[Special Issue: Fact Databases and Freewares] ChemoJun: Open Source Chemical Graphics Library. Journal of Computer Aided Chemistry, 2006, 7, 141-149.	0.3	1