

Christian Merten

List of Publications by Year in descending order

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107
papers

3,238
citations

159585

30
h-index

189892

50
g-index

119
all docs

119
docs citations

119
times ranked

2588
citing authors

#	ARTICLE	IF	CITATIONS
1	General Enantioselective C-H Activation with Efficiently Tunable Cyclopentadienyl Ligands. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2429-2434.	13.8	287
2	Coaxing Solid-State Phosphorescence from Tellurophenes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4587-4591.	13.8	150
3	General Enantioselective C-H Activation with Efficiently Tunable Cyclopentadienyl Ligands. <i>Angewandte Chemie</i> , 2017, 129, 2469-2474.	2.0	117
4	Enantioselective Formal C(sp ³)-H Bond Activation in the Synthesis of Bioactive Spiropyrrolone Derivatives. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 307-311.	13.8	108
5	Absolute Configurations of Synthetic Molecular Scaffolds from Vibrational CD Spectroscopy. <i>Journal of Organic Chemistry</i> , 2019, 84, 8797-8814.	3.2	107
6	C-H Bond Activation for the Synthesis of Heterocyclic Atropisomers Yields Hedgehog Pathway Inhibitors. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14250-14254.	13.8	93
7	Synthesis and Luminescent Properties of Lewis Base-Appended Borafluorenes. <i>Inorganic Chemistry</i> , 2014, 53, 1475-1486.	4.0	72
8	Vibrational optical activity as probe for intermolecular interactions. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 18803-18812.	2.8	68
9	Solvent-induced conformational changes in cyclic peptides: a vibrational circular dichroism study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 5627-5633.	2.8	62
10	Stereochemical Communication within a Chiral Ion Pair Catalyst. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8841-8845.	13.8	58
11	Contrasting Reactivities of Silicon and Germanium Complexes Supported by an <i>N</i> -Heterocyclic Guanidine Ligand. <i>Inorganic Chemistry</i> , 2015, 54, 2040-2049.	4.0	57
12	Vibrational Circular Dichroism Spectroscopy of Solid Polymer Films: Effects of Sample Orientation. <i>Applied Spectroscopy</i> , 2008, 62, 901-905.	2.2	56
13	Strong Solvent-Dependent Preference of λ^+ and λ^- Stereoisomers of a Tris(diamine)nickel(II) Complex Revealed by Vibrational Circular Dichroism Spectroscopy. <i>Inorganic Chemistry</i> , 2014, 53, 3177-3182.	4.0	56
14	Fast functionalization of multi-walled carbon nanotubes by an atmospheric pressure plasma jet. <i>Journal of Colloid and Interface Science</i> , 2011, 359, 311-317.	9.4	50
15	Chirality Transfer in a Methyl Lactate-Ammonia Complex Observed by Matrix Isolation Vibrational Circular Dichroism Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 2073-2076.	13.8	49
16	Solvation of a chiral carboxylic acid: effects of hydrogen bonding on the IR and VCD spectra of \pm -methoxyphenylacetic acid. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 18948-18956.	2.8	48
17	Anharmonicity Effects in the Vibrational CD Spectra of Propylene Oxide. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3424-3428.	4.6	46
18	C-H Bond Activation for the Synthesis of Heterocyclic Atropisomers Yields Hedgehog Pathway Inhibitors. <i>Angewandte Chemie</i> , 2018, 130, 14446-14450.	2.0	43

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19	Simultaneous Resonance Raman Optical Activity Involving Two Electronic States. <i>Journal of Physical Chemistry A</i> , 2012, 116, 7329-7336.	2.5	41
20	Bifurcatriol, a New Antiprotozoal Acyclic Diterpene from the Brown Alga <i>Bifurcaria bifurcata</i> . <i>Marine Drugs</i> , 2017, 15, 245.	4.6	41
21	Effects of electron configuration and coordination number on the vibrational circular dichroism spectra of metal complexes of trans-1,2-diaminocyclohexane. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 12884.	2.8	40
22	Recent Advances in the Application of Vibrational Circular Dichroism Spectroscopy for the Characterization of Asymmetric Catalysts. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 5892-5900.	2.4	40
23	Asymmetric Synthesis of Carbocyclic Propellanes. <i>Organic Letters</i> , 2017, 19, 2310-2313.	4.6	39
24	Determining the structure of $\hat{I}\pm$ -phenylethyl isocyanide in chloroform by VCD spectroscopy and DFT calculations—simple case or challenge?. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11635.	2.8	38
25	Highly Enantioselective Asymmetric Transfer Hydrogenation: A Practical and Scalable Method To Efficiently Access Planar Chiral [2.2]Paracyclophanes. <i>Journal of Organic Chemistry</i> , 2019, 84, 5369-5382.	3.2	38
26	Structural Examination of Dissolved and Solid Helical Chiral Poly(trityl methacrylate) by VCD Spectroscopy. <i>Macromolecules</i> , 2010, 43, 8373-8378.	4.8	37
27	Enantioselective reduction of sulfur-containing cyclic imines through biocatalysis. <i>Nature Communications</i> , 2018, 9, 1949.	12.8	37
28	How to treat C—F stretching vibrations? A vibrational CD study on chiral fluorinated molecules. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3506-3511.	2.8	36
29	Lewis Acid Catalyzed Enantioselective Photochemical Rearrangements on the Singlet Potential Energy Surface. <i>Journal of the American Chemical Society</i> , 2019, 141, 20053-20057.	13.7	34
30	Observation of resonance electronic and non-resonance-enhanced vibrational natural Raman optical activity. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 1563-1565.	2.5	30
31	Evidence of Dihydrogen Bonding of a Chiral Amine-Borane Complex in Solution by VCD Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9940-9943.	13.8	30
32	Assignment of absolute configurations of highly flexible linear diterpenes from the brown alga <i>Bifurcaria bifurcata</i> by VCD spectroscopy. <i>Chemical Communications</i> , 2015, 51, 16217-16220.	4.1	30
33	Solvation and self-aggregation of chiral alcohols: how hydrogen bonding affects their VCD spectral signatures. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13494-13503.	2.8	30
34	Enantioselective Formal C(sp ³)—H Bond Activation in the Synthesis of Bioactive Spiropyrazolone Derivatives. <i>Angewandte Chemie</i> , 2019, 131, 313-317.	2.0	30
35	Explicit Solvation of Carboxylic Acids for Vibrational Circular Dichroism Studies: Limiting the Computational Efforts without Losing Accuracy. <i>Journal of Physical Chemistry B</i> , 2018, 122, 8056-8064.	2.6	29
36	Identification of the specific, shutter-like conformational reorientation in a chiroptical switching polycarbodiimide by VCD spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11456.	2.8	28

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37	Determination of the Helical Screw Sense and Side-Group Chirality of a Synthetic Chiral Polymer from Raman Optical Activity. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9973-9976.	13.8	27
38	Intra- versus Intermolecular Hydrogen Bonding: Solvent-Dependent Conformational Preferences of a Common Supramolecular Binding Motif from ¹ H- and ¹³ C-NMR and Vibrational Circular Dichroism Spectra. <i>Chemistry - A European Journal</i> , 2017, 23, 17915-17922.	3.3	27
39	How Do Substrates Bind to a Bifunctional Thiourea Catalyst? A Vibrational CD Study on Carboxylic Acid Binding. <i>Chemistry - A European Journal</i> , 2018, 24, 17948-17954.	3.3	27
40	The Interplay between a Multifunctional Dehydratase Domain and a C-Methyltransferase Effects Olefin Shift in Ambruticin Biosynthesis. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13589-13592.	13.8	26
41	More complex, less complicated? Explicit solvation of hydroxyl groups for the analysis of VCD spectra. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12515-12523.	2.8	26
42	Matrix Isolation-Vibrational Circular Dichroism Spectroscopy of 3-Butyn-2-ol and its Binary Aggregates. <i>ChemPhysChem</i> , 2013, 14, 213-219.	2.1	25
43	Towards an Observation of Active Conformations in Asymmetric Catalysis: Interaction-Induced Conformational Preferences of a Chiral Thiourea Model Compound. <i>Chemistry - A European Journal</i> , 2016, 22, 12455-12463.	3.3	25
44	Photoisomerization of a Chiral Imine Molecular Switch Followed by Matrix-Isolation VCD Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 1925-1928.	13.8	25
45	Solvation of N,C-Protected Valine: Interactions with DMSO and a Chiral Solvating Agent. <i>Journal of Physical Chemistry B</i> , 2016, 120, 9434-9442.	2.6	24
46	Conformational distortion of \pm -phenylethyl amine in cryogenic matrices – a matrix isolation VCD study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13496-13502.	2.8	24
47	How many solvent molecules are required to solvate chiral 1,2-diols with hydrogen bonding solvents? A VCD spectroscopic study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1525-1533.	2.8	23
48	Solvation and the secondary structure of a proline-containing dipeptide: insights from VCD spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 15640-15648.	2.8	23
49	Modulating Sonogashira Cross-Coupling Reactivity in Four-Coordinate Nickel Complexes by Using Geometric Control. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 2139-2144.	2.0	22
50	Enantioconvergent Biocatalytic Redox Isomerization. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12151-12156.	13.8	22
51	IR, Raman, and Vibrational Optical Activity Spectra of Methyl Glycidate in Chloroform and Water: The <i>i</i> -Clusters- <i>n</i> - <i>l</i> Solvation Model. <i>ChemPhysChem</i> , 2018, 19, 2234-2242.	2.1	21
52	Catalytic Atroposelective C7 Functionalisation of Indolines and Indoles. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	21
53	Chirality Induction from a Chiral Guest to the Hydrogen-Bonding Network of Its Hexameric Resorcinarene Host Capsule. <i>ChemPhysChem</i> , 2017, 18, 1987-1991.	2.1	20
54	Comparative Study of Measured and Computed Raman Optical Activity of a Chiral Transition Metal Complex. <i>ChemPhysChem</i> , 2011, 12, 1419-1421.	2.1	19

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55	Controlled Flexible Coordination in Tripodal Iron(II) Phosphane Complexes: Effects on Reactivity. <i>Inorganic Chemistry</i> , 2016, 55, 1183-1191.	4.0	19
56	Enantio- and Diastereoswitchable C ^α -H Arylation of Methylene Groups in Cycloalkanes. <i>Chemistry - A European Journal</i> , 2019, 25, 8503-8507.	3.3	19
57	Silver-Catalyzed Enantioselective Sulfimidation Mediated by Hydrogen Bonding Interactions. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7920-7926.	13.8	19
58	Vibrational circular dichroism spectroscopy of two chiral binaphthyl diphosphine ligands and their palladium complexes in solution. <i>Dalton Transactions</i> , 2012, 41, 10817.	3.3	18
59	Rhodium(II)-Catalyzed Enantioselective Synthesis of Troponoids. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7653-7656.	13.8	18
60	The vibrational CD spectra of propylene oxide in liquid xenon: a proof-of-principle CryoVCD study that challenges theory. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6582-6587.	2.8	18
61	Stereochemistry of the Reaction Intermediates of Prolinol Ether Catalyzed Reactions Characterized by Vibrational Circular Dichroism Spectroscopy. <i>Chemistry - A European Journal</i> , 2020, 26, 2349-2353.	3.3	18
62	VCD spectroscopy reveals that a water molecule determines the conformation of azithromycin in solution. <i>Chemical Communications</i> , 2021, 57, 4031-4034.	4.1	18
63	Catalytic Aerobic Oxidation and Tandem Enantioselective Cycloaddition in Cascade Multicomponent Synthesis. <i>Chemistry - A European Journal</i> , 2015, 21, 4913-4917.	3.3	17
64	Sensitivity of VCD spectroscopy for small structural and stereochemical changes of macrolide antibiotics. <i>Chemical Communications</i> , 2020, 56, 10926-10929.	4.1	17
65	Chiral Molecular Propellers of Triarylborane Ammonia Adducts. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2958-2962.	13.8	17
66	Rh ^{III} -Catalyzed C ^α -H Activation of Aryl Hydroxamates for the Synthesis of Isoindolinones. <i>Chemistry - A European Journal</i> , 2020, 26, 10729-10734.	3.3	16
67	A comparative vibrational CD study of homo- and heteroleptic complexes of the type [Cu(trans-1,2-diaminocyclohexane) ₂](ClO ₄) ₂ . <i>Dalton Transactions</i> , 2013, 42, 10572-10578.	3.3	15
68	Intermolecular Interactions of a Chiral Amine Borane Adduct Revealed by VCD Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4108-4115.	2.5	14
69	Antiprotozoal Linear Furanosesterterpenoids from the Marine Sponge <i>Ircinia oros</i> . <i>Journal of Natural Products</i> , 2017, 80, 2566-2571.	3.0	14
70	VCD study of α -methylbenzyl amine derivatives: Detection of the unchanged chiral motif. <i>Chirality</i> , 2010, 22, 754-761.	2.6	13
71	Solution and solid state conformational preferences of a family of cyclic disulphide bridged tetrapeptides. <i>Biopolymers</i> , 2017, 107, 28-34.	2.4	13
72	Treating anisotropic artefacts in circular dichroism spectroscopy enables investigation of lyotropic liquid crystalline polyaspartate solutions. <i>Soft Matter</i> , 2021, 17, 2849-2856.	2.7	13

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73	Solvation of the Boc-Val-Phe-Pr peptide characterized by VCD spectroscopy and DFT calculations. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3611-3617.	2.8	13
74	FTIR Imaging of Poly(3-hydroxybutyrate) and Isotactic Poly(propylene oxide) Spherulites. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1627-1631.	2.2	12
75	Mutual Influence Between Adhesion and Molecular Conformation: Molecular Geometry is a Key Issue in Interphase Formation. <i>Journal of Adhesion</i> , 2013, 89, 77-95.	3.0	12
76	Induced VCD and conformational chirality in host-guest complexes of a chiral ammonium salt with crown ethers. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18300-18307.	2.8	12
77	Basis set dependence of Si-O stretching frequencies and its consequences for IR and VCD spectra predictions. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 27979-27986.	2.8	12
78	Antileishmanial compounds from <i>Connarus suberosus</i> : Metabolomics, isolation and mechanism of action. <i>PLoS ONE</i> , 2020, 15, e0241855.	2.5	12
79	Oxygenated Acyclic Diterpenes with Anticancer Activity from the Irish Brown Seaweed <i>Bifurcaria bifurcata</i> . <i>Marine Drugs</i> , 2020, 18, 581.	4.6	11
80	Enantioselective Synthesis of Diaryl Sulfoxides Enabled by Molecular Recognition. <i>Organic Letters</i> , 2021, 23, 1829-1834.	4.6	11
81	The Pseudo-Natural Product Rhonin Targets RHOGLI. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	11
82	Absolute Configuration and Predominant Conformations of a Chiral Crown Ether-Based Colorimetric Sensor: A Vibrational Circular Dichroism Spectroscopy and DFT Study of Chiral Recognition. <i>Chirality</i> , 2013, 25, 294-300.	2.6	10
83	Vibrational CD study on the solution phase structures of the MacMillan catalyst and its corresponding iminium ion. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 25162-25169.	2.8	10
84	Vibrational circular dichroism of ϵ -(trifluoroacetyl)- α -camphor and its interaction with chiral amines. <i>Chirality</i> , 2010, 22, 772-777.	2.6	9
85	Conformational analysis and vibrational circular dichroism study of a chiral metallocene catalyst. <i>Journal of Molecular Structure</i> , 2010, 970, 101-105.	3.6	9
86	Track by Track: The Structure of Single Tracks of Atmospheric Pressure Plasma Polymerized Hexamethyl Disiloxane (HMDSO) Analyzed by Infrared Microscopy. <i>Plasma Processes and Polymers</i> , 2013, 10, 60-68.	3.0	9
87	Stereochemical assignment of fusicocadiene from NMR shielding constants and vibrational circular dichroism spectroscopy. <i>Chirality</i> , 2017, 29, 409-414.	2.6	9
88	Chiral hydrogen-bonded supramolecular capsules: synthesis, characterization and complexation of C_{70} . <i>Chemical Communications</i> , 2019, 55, 3298-3301.	4.1	9
89	Revisiting empirical rules for the determination of the absolute configuration of cascarosides and other (ox)anthrones. <i>Chirality</i> , 2018, 30, 432-438.	2.6	8
90	Dynamic chiral self-recognition in aromatic dimers of styrene oxide revealed by rotational spectroscopy. <i>Communications Chemistry</i> , 2021, 4, .	4.5	8

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91	VCD spectroscopy reveals conformational changes of chiral crown ethers upon complexation of potassium and ammonium cations. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 11721-11728.	2.8	8
92	Photoisomerisierung eines Schalters auf Basis eines chiralen Imins: Verfolgung durch Matrixisolationenâ€VCDâ€Spektroskopie. <i>Angewandte Chemie</i> , 2017, 129, 1952-1955.	2.0	7
93	Enantiokonvergente biokatalytische Redoxisomerisierung. <i>Angewandte Chemie</i> , 2018, 130, 12328-12333.	2.0	7
94	Dynamic Stereochemistry of a Biphenylâ€Bisprolineamide Model Catalyst and its Imidazolidinone Intermediates. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	7
95	Rhodium(III)-Catalyzed Enantioselective Benzamidation of Cyclopropenes. <i>Synthesis</i> , 2021, 53, 2192-2200.	2.3	6
96	Structure Elucidation of <i>in Situ</i> Generated Chiral Hypervalent Iodine Complexes via Vibrational Circular Dichroism (VCD). <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	6
97	Das Zusammenspiel zwischen einer multifunktionalen Dehydrataseâ€DomÃne und einer Câ€Methyltransferase bewirkt die Doppelbindungsverschiebung in der Ambruticinâ€Biosynthese. <i>Angewandte Chemie</i> , 2016, 128, 13787-13790.	2.0	5
98	Biology-Oriented Synthesis of Decahydro-4,8-epoxyazulene Scaffolds. <i>Synlett</i> , 2017, 28, 2918-2922.	1.8	5
99	Silverâ€Catalyzed Enantioselective Sulfimidation Mediated by Hydrogen Bonding Interactions. <i>Angewandte Chemie</i> , 2021, 133, 7999-8005.	2.0	5
100	Anion-binding of a chiral tris(2-aminoethyl)amine-based tripodal thiourea: a spectroscopic and computational study. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 4042-4050.	2.8	4
101	Asymmetric chainâ€growth synthesis of polyisocyanide with chiral nickel precatalysts. <i>Journal of Polymer Science</i> , 2020, 58, 2221-2233.	3.8	2
102	Chirale molekulare Propeller basierend auf Triarylboranâ€Ammoniakâ€Addukten. <i>Angewandte Chemie</i> , 2021, 133, 2994-2999.	2.0	2
103	The Pseudoâ€Natural Product Rhonin Targets RHOGDI. <i>Angewandte Chemie</i> , 0, , .	2.0	2
104	Intra- versus Intermolecular Hydrogen Bonding: Solvent-Dependent Conformational Preferences of a Common Supramolecular Binding Motif from 1 Hâ€NMR and Vibrational Circular Dichroism Spectra. <i>Chemistry - A European Journal</i> , 2017, 23, 17840-17840.	3.3	1
105	VCD spectroscopy distinguishes the enamine and iminium ion of a 1,1â€2-binaphthyl azepine. <i>Chemical Communications</i> , 2022, 58, 8412-8415.	4.1	1
106	How Do Substrates Bind to a Bifunctional Thiourea Catalyst? A Vibrational CD Study on Carboxylic Acid Binding. <i>Chemistry - A European Journal</i> , 2018, 24, 17855-17855.	3.3	0
107	StrukturaufklÃrung eines chiralen <i>in situ</i> erzeugten hypervalenten Iodâ€Komplexes mittels VCDâ€Spektroskopie. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0