

Raphael Jf Berger

List of Publications by Year in descending order

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100
papers

2,389
citations

218677
26
h-index

254184
43
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114
all docs

114
docs citations

114
times ranked

2249
citing authors

#	ARTICLE	IF	CITATIONS
1	Integration of global ring currents using the Ampèreâ€“Maxwell law. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 624-628.	2.8	15
2	Relativistic Spinâ€“Orbit Electronegativity and the Chemical Bond Between a Heavy Atom and a Light Atom. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	3
3	Relativistic Spinâ€“Orbit Electronegativity and the Chemical Bond Between a Heavy Atom and a Light Atom. <i>Chemistry - A European Journal</i> , 2022, 28, e202200966.	3.3	2
4	Arylamidoethyl-Functionalized Imidazolium Salts: Precursors for Dianionic [C,N,C]2â€“ Carbene Ligands at a Platinum Center. <i>Organometallics</i> , 2021, 40, 890-898.	2.3	5
5	Spatial Contributions to ¹ H NMR Chemical Shifts of Free-Base Porphyrinoids. <i>Chemistry</i> , 2021, 3, 1005-1021.	2.2	6
6	Chemical constitution of polyfurfuryl alcohol investigated by FTIR and Resonant Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 262, 120090.	3.9	18
7	Time-resolved diffraction: general discussion. <i>Faraday Discussions</i> , 2021, 228, 161-190.	3.2	2
8	Current density and molecular magnetic properties. <i>Chemical Communications</i> , 2021, 57, 12362-12378.	4.1	39
9	Arylâ€“Aryl Interactions in (Arylâ€“Perhalogenated) 1,2â€“Diaryldisilanes. <i>Chemistry - A European Journal</i> , 2020, 26, 2169-2173.	3.3	17
10	On the topology of total and diamagnetic induced electronic currents in molecules. <i>Journal of Chemical Physics</i> , 2020, 152, 194101.	3.0	8
11	London dispersion-driven hetero-arylâ€“aryl interactions in 1,2-diaryldisilanes. <i>Chemical Communications</i> , 2020, 56, 2252-2255.	4.1	10
12	A consistent model for the key complex in chronic beryllium disease. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2020, 75, 413-419.	0.7	4
13	The symmetry principle of antiaromaticity. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2020, 75, 327-339.	0.7	14
14	A comparison of computational methodologies for the structural modelling of biologically relevant zinc complexes. <i>Journal of Molecular Modeling</i> , 2019, 25, 258.	1.8	1
15	Erweiterung ungesättigter Siliciumcluster mit atomarer Genauigkeit. <i>Angewandte Chemie</i> , 2019, 131, 5178-5182.	2.0	10
16	Ligand Coordination in Bis(12-diketonato) d Metals: The Mn(II) Case of D_{2h}^2 versus D_{4h}^2 Symmetry. <i>Inorganic Chemistry</i> , 2019, 58, 4344-4349.	4.0	5
17	Understanding the Polymerization of Polyfurfuryl Alcohol: Ring Opening and Diels-Alder Reactions. <i>Polymers</i> , 2019, 11, 2126.	4.5	39
18	Atomically Precise Expansion of Unsaturated Silicon Clusters. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5124-5128.	13.8	30

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19	From sol-gel prepared porous silica to monolithic porous Mg ₂ Si/MgO composite materials. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 89, 295-302.	2.4	3
20	Highly efficient cold-white light emission in a [Au ₂ CuCl ₂ (P ₂ O ₇) ₂]PF ₆ -type salt. <i>Dalton Transactions</i> , 2017, 46, 3438-3442.	3.3	22
21	Monolithic porous magnesium silicide. <i>Dalton Transactions</i> , 2017, 46, 8855-8860.	3.3	5
22	A Relativity Enhanced, Medium-Strong Au(I)-N Hydrogen Bond in a Protonated Phenylpyridine-Gold(I) Thiolate. <i>Inorganic Chemistry</i> , 2017, 56, 956-961.	4.0	27
23	The Structure of Mn(acac) ₃ - Experimental Evidence of a Static Jahn-Teller Effect in the Gas Phase. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15751-15754.	13.8	10
24	Die Struktur von Mn(acac) ₃ - experimenteller Beleg fÃ¼r einen statischen Jahn-Teller-Effekt in der Gasphase. <i>Angewandte Chemie</i> , 2017, 129, 15958-15961.	2.0	2
25	Intramolecular London Dispersion Interaction Effects on Gas-Phase and Solid-State Structures of Diamondoid Dimers. <i>Journal of the American Chemical Society</i> , 2017, 139, 16696-16707.	13.7	62
26	Spin-orbit coupling effects on the molecular structure of Thallium(I)formiate. <i>Journal of Molecular Structure</i> , 2017, 1132, 70-72.	3.6	1
27	MOLECULAR STRUCTURE OF MANGANESE TRIS-ACETYLACETONATE IN DIFFERENT SPIN STATES. <i>ChemChemTech</i> , 2017, 60, 47.	0.3	4
28	Calculations of magnetically induced current densities: theory and applications. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2016, 6, 639-678.	14.6	244
29	Glutamyl-glutamate - a tailor-made chelating ligand for the [Be ₄ O] ⁶⁺ core in basic beryllium complexes and implications on investigations on the origins of chronic beryllium disease. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2016, 71, 71-75.	0.7	13
30	Straightforward Solvothermal Synthesis toward Phase Pure Li ₂ CoPO ₄ F. <i>Crystal Growth and Design</i> , 2016, 16, 4999-5005.	3.0	5
31	Cover Image, Volume 6, Issue 6. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2016, 6, i.	14.6	0
32	Analysis of the magnetically induced current density of molecules consisting of annelated aromatic and antiaromatic hydrocarbon rings. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15934-15942.	2.8	61
33	Self-supporting hierarchically organized silicon networks via magnesiothermic reduction. <i>Monatshefte FÃ¼r Chemie</i> , 2016, 147, 269-278.	1.8	8
34	Raman spectroscopic investigation of tannin-furanic rigid foams. <i>Vibrational Spectroscopy</i> , 2016, 84, 58-66.	2.2	25
35	Innentitelbild: Trimethylaluminium: BindungsverhÃltnisse nach Ladungs- und Stromtopologie (Angew.) Tj ETQq1 1 0.784314 0gBT /Over		
36	Trimethylaluminum: Bonding by Charge and Current Topology. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13816-13820.	13.8	23

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37	A diethylhydroxylamine based mixed lithium/beryllium aggregate. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2015, 70, 279-282.	0.7	4
38	Conformational composition, molecular structure and decomposition of difluorophosphoryl azide in the gas phase. Physical Chemistry Chemical Physics, 2015, 17, 8784-8791.	2.8	15
39	Defect and Surface Area Control in Hydrothermally Synthesized LiMn _{0.8} Fe _{0.2} PO ₄ Using a Phosphate Based Structure Directing Agent. Crystal Growth and Design, 2015, 15, 4213-4218.	3.0	7
40	How does relativity affect magnetically induced currents?. Chemical Communications, 2015, 51, 13961-13963.	4.1	20
41	A Two-Step Synthesis for Li ₂ CoPO ₄ F as High-Voltage Cathode Material. Journal of the Electrochemical Society, 2015, 162, A2679-A2683.	2.9	8
42	A Novel Two-Step Synthesis for Li ₂ CoPO ₄ F as High-Voltage Cathode Material. ECS Transactions, 2015, 66, 95-109.	0.5	2
43	Influence of Antipodally Coupled Iodine and Carbon Atoms on the Cage Structure of 9,12- <i>I</i> ₂ - <i>C</i> ₂ - <i>i</i> -1,2-C ₂ B ₁₀ H ₁₀ : An Electron Diffraction and Computational Study. Inorganic Chemistry, 2015, 54, 11868-11874.	4.0	13
44	Gilded Chalices: Tetra-aurated Calix[4]arenes. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2014, 69, 1061-1072.	0.7	2
45	Dismutational and Global Minimum Isomers of Heavier 1,4-Dimetallatetrasilabenzenes of Group...14. Angewandte Chemie - International Edition, 2014, 53, 3514-3518.	13.8	49
46	Gold(I) mediated rearrangement of [7]-helicene to give a benzo[cd]pyrenium cation embedded in a chiral framework. Chemical Communications, 2014, 50, 5251-5253.	4.1	10
47	B=N Bonds and BCN Rings – Reactivity and Charge Density Studies. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2086-2095.	1.2	14
48	Unprecedented Large Temperature Dependence of Silver(I)-Silver(I) Distances in Some N-Heterocyclic Carbene Silver(I) Complex Salts. Organometallics, 2013, 32, 2876-2884.	2.3	40
49	Structures of Energetic Acetylene Derivatives HC≡CCH ₂ ONO ₂ , (NO ₂) ₃ CCH ₂ C≡CCH ₂ C(NO ₂) ₃ and Trinitroethane, (NO ₂) ₃ CCH ₃ . Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2013, 68, 719-731.	0.7	9
50	Functionalized Bis(pentafluoroethyl)phosphanes: Improved Syntheses and Molecular Structures in the Gas Phase. European Journal of Inorganic Chemistry, 2013, 2013, 3392-3404.	2.0	24
51	Bis(1/4-diisopropylhydroxylaminato)-2O:N;2O:O-bis[(diisopropylhydroxylaminato-O)beryllium]. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m1463-m1463.	0.2	2
52	Chlorodifluoroacetyl Isocyanate, ClF ₂ CC(O)NCO: Preparation and Structural and Spectroscopic Studies. Journal of Physical Chemistry A, 2012, 116, 11586-11595.	2.5	13
53	Silanetriols in the gas phase: single molecules vs. hydrogen-bonded dimers. Dalton Transactions, 2012, 41, 3630-3632.	3.3	10
54	Relativistic effects in triphenylbismuth and their influence on molecular structure and spectroscopic properties. Physical Chemistry Chemical Physics, 2012, 14, 15520.	2.8	35

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55	Inherent Stability Limits of Intramolecular Boron Nitrogen Lewis Acid–Base Pairs. <i>Chemistry - A European Journal</i> , 2012, 18, 9312-9320.	3.3	12
56	Silver and Gold Complexes with a New 1,10-Phenanthroline Analogue N-Heterocyclic Carbene: A Combined Structural, Theoretical, and Photophysical Study. <i>Chemistry - A European Journal</i> , 2012, 18, 5506-5509.	3.3	52
57	Molecular structure and conformational preferences of gaseous 1-iodo-1-silacyclohexane. <i>Journal of Molecular Structure</i> , 2012, 1012, 126-130.	3.6	27
58	Prediction of a Cyclic Helical Oligoacetylene Showing Anapolar Ring Currents in the Magnetic Field. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2012, 67, 1127-1131.	0.7	18
59	Syntheses, crystal structures, reactivity, and photochemistry of gold(iii) bromides bearing N-heterocyclic carbenes. <i>Dalton Transactions</i> , 2011, 40, 9899.	3.3	60
60	The perfluorinated alcohols (F5C6)(F3C)2COH and (F5C6)(F10C5)COH: synthesis, theoretical and acidity studies, spectroscopy and structures in the solid state and the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6184.	2.8	6
61	Organozinc hydroxylamides: on the bulk-dependent interplay of nuclearity, structure and dynamics. <i>Dalton Transactions</i> , 2011, 40, 1144-1157.	3.3	4
62	Chlorodifluoroacetyl Cyanide, ClF2CC(O)CN: Synthesis, Structure, and Spectroscopic Characterization. <i>Inorganic Chemistry</i> , 2011, 50, 9650-9659.	4.0	6
63	Basic Beryllium ortho-Fluorobenzoate and its Mono-hydroxo Derivative. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2011, 66, 1131-1135.	0.7	7
64	Structure and Conformational Properties of Azido(difluoro)phosphane, F ₂ PN ₃ . <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 895-905.	2.0	7
65	The Pentamethylcyclopentadienylsilicon(II) Cation as a Catalyst for the Specific Degradation of Oligo(ethyleneglycol) Diethers. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6843-6846.	13.8	52
66	A Stable Derivative of the Global Minimum on the Si ₆ H ₆ Potential Energy Surface. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7936-7939.	13.8	136
67	Chlorobis(pentafluoroethyl)phosphane: Improved Synthesis and Molecular Structure in the Gas Phase. <i>Chemistry - A European Journal</i> , 2011, 17, 3968-3976.	3.3	9
68	First Solid-State Structures of Real Diorganyl Phosphinous Acids R ₂ POH (R=CF ₃ , C ₂ F ₅). <i>Chemistry - A European Journal</i> , 2011, 17, 13420-13423.	3.3	15
69	Basic Beryllium ortho-Fluorobenzoate and its Mono-hydroxo Derivative. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2011, 66, 1131.	0.7	6
70	A Theoretical Study of the Half-Sandwich Silicon(II) Cation [(Me ₅ C ₅)Si] ⁺ and of the Cationic Complex [(Me ₅ C ₅)Si (DME)] ⁺ . <i>Silicon</i> , 2010, 2, 229-234.	3.3	7
71	fac-Ir(ppy) ₃ : Structures in the Gas-Phase and of a New Solid Modification. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 1613-1617.	2.0	32
72	Ring Currents in the Dismutational Aromatic Si ₆ R ₆ . <i>Angewandte Chemie - International Edition</i> , 2010, 49, 10006-10009.	13.8	46

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73	Reinvestigation of the gas-phase structure of tris(trifluoromethyl)arsine. <i>Journal of Molecular Structure</i> , 2010, 978, 205-208.	3.6	2
74	On the Molecular and Electronic Structures of AsP ₃ and P ₄ . <i>Journal of the American Chemical Society</i> , 2010, 132, 8459-8465.	13.7	65
75	The keto/enol tautomerism in acetoacetyl fluoride: properties, spectroscopy, and gas-phase and crystal structures of the enol form. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11445.	2.8	12
76	Sila-Substitution of Alkyl Nitrates: Synthesis, Structural Characterization, and Sensitivity Studies of Highly Explosive (Nitratomethyl)-, Bis(nitratomethyl)-, and Tris(nitratomethyl)silanes and Their Corresponding Carbon Analogues. <i>Inorganic Chemistry</i> , 2010, 49, 4865-4880.	4.0	21
77	Molecular structure of tris(pentafluoroethyl)phosphane P(C ₂ F ₅) ₃ . <i>Dalton Transactions</i> , 2010, 39, 5630.	3.3	13
78	Variations in the Mechanisms of Direct Metallation of Cyclic and Acyclic Aminals. <i>Chemistry - A European Journal</i> , 2009, 15, 11123-11127.	3.3	17
79	Two diamino-substituted lithiocarbanions in one molecule. <i>Chemical Communications</i> , 2009, , 5558.	4.1	13
80	Neutral ligand induced methane elimination from rare-earth metal tetramethylaluminates up to the six-coordinate carbide state. <i>Dalton Transactions</i> , 2009, , 5755.	3.3	61
81	An Improved Gas Electron Diffractometer – The Instrument, Data Collection, Reduction and Structure Refinement Procedures. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2009, 64, 1259-1268.	0.7	57
82	The Smallest ‘‘Auophilic Species’’. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2009, 64, 388-394.	0.7	8
83	<math>\langle i>N</i>,<math>\langle i>N</i></math>â€“Dimethylaminopropylsilane: A Case Study on the Nature of Weak Intramolecular Siâ...â...N Interactions. <i>Chemistry - A European Journal</i> , 2008, 14, 11027-11038.	3.3	44
84	Strong Intramolecular Siâ”N Interactions in the Chlorosilanes $\text{Cl}_{\substack{3}}\text{Si}^{\substack{+}}\langle n \rangle \text{H}_{\substack{2}}\langle n \rangle \text{SiOCH}_{\substack{2}}\text{CH}_{\substack{2}}\text{NMe}_{\substack{2}}\langle n \rangle \text{O}^- \text{Tj ETQ000rg}$	0.7	0
85	On the presence or absence of geminal Siâ”N interactions ($\bar{\delta}$ -effect) in pentafluorophenylsilyl compounds with SiCN, SiNN and SiON backbones. <i>Dalton Transactions</i> , 2008, , 5652.	3.3	11
86	Potassium Hydroxylamine Complexes. <i>Inorganic Chemistry</i> , 2008, 47, 4506-4512.	4.0	17
87	Oxygenation of Simple Zinc Alkyls: A Surprising Dependence of Product Distributions on the Alkyl Substituents and the Presence of Water. <i>Inorganic Chemistry</i> , 2007, 46, 4293-4297.	4.0	74
88	First mixed hydrazide/hydroxylamide metal aggregates. <i>Chemical Communications</i> , 2006, , 3993-3995.	4.1	20
89	Expectation and surprise in group 13 organometallics: molecular vs. polymeric aggregation of Me ₂ Ga and Me ₂ In norcamphor oximates. <i>Dalton Transactions</i> , 2006, , 5334.	3.3	4
90	â€œIsomerismâ€• of Coordination Modes and Numbers in Pentanuclear Organozinc Hydroxylamides: An Exercise in Subtle Substituent Size Effects. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 4219-4224.	2.0	22

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91	Isomeric Mono- and Bis[(phosphane)gold(I)] Thiocyanate Complexes. <i>Chemistry - A European Journal</i> , 2005, 11, 3574-3582.	3.3	4
92	A Non-Iterative Numerical Solver of Poisson and Helmholtz Equations Using High-Order Finite-Element Functions. <i>Advances in Quantum Chemistry</i> , 2005, 50, 235-247.	0.8	8
93	Beryllium Dichloride Coordination by Nitrogen Donor Molecules. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2003, 58, 173-182.	0.7	58
94	Structural, Spectroscopic and Theoretical Studies of (tButyl-isocyanide)gold(I) Iodide. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2002, 57, 881-889.	0.7	26
95	Lumineszenzphänomene und Festkörperstrukturen von Trimethyl- und Triethylgallium. <i>Angewandte Chemie</i> , 2002, 114, 2629-2632.	2.0	16
96	Luminescence Phenomena and Solid-State Structures of Trimethyl- and Triethylgallium. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 2519-2522.	13.8	42
97	The Quest for Beryllium Peroxides. <i>Inorganic Chemistry</i> , 2001, 40, 2270-2274.	4.0	13
98	Ligand-Protected Strain-Free Diarylgermylenes. <i>Organometallics</i> , 2001, 20, 418-423.	2.3	53
99	Tetraberyllium- ⁴ -oxo-hexa(arylcarboxylates). <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2001, 56, 979-989.	0.7	31
100	Generation of Bis[2,6-di(4-methoxy-phenyl)phenyl]plumbylene and its Insertion into n-Butyliodide to Give a Tetrahedral Triorganolead(IV) Iodide. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2000, 55, 995-999.	0.7	14