

Martin Kaupp

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385
papers

15,051
citations

64
h-index

97
g-index

416
ext. papers

16,569
ext. citations

7.1
avg, IF

6.8
L-index

#	Paper	IF	Citations
385	Pseudopotential approaches to Ca, Sr, and Ba hydrides. Why are some alkaline earth MX ₂ compounds bent?. <i>Journal of Chemical Physics</i> , 1991 , 94, 1360-1366	3.9	502
384	How Do Spin-Orbit-Induced Heavy-Atom Effects on NMR Chemical Shifts Function? Validation of a Simple Analogy to Spin-Spin Coupling by Density Functional Theory (DFT) Calculations on Some Iodo Compounds. <i>Chemistry - A European Journal</i> , 1998 , 4, 118-126	4.8	305
383	Exciton trapping in pi-conjugated materials: a quantum-chemistry-based protocol applied to perylene bisimide dye aggregates. <i>Journal of the American Chemical Society</i> , 2008 , 130, 12858-9	16.4	258
382	TURBOMOLE: Modular program suite for ab initio quantum-chemical and condensed-matter simulations. <i>Journal of Chemical Physics</i> , 2020 , 152, 184107	3.9	255
381	A Critical Validation of Density Functional and Coupled-Cluster Approaches for the Calculation of EPR Hyperfine Coupling Constants in Transition Metal Complexes. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 9966-9983	2.8	251
380	The DFT route to NMR chemical shifts. <i>Journal of Computational Chemistry</i> , 1999 , 20, 91-105	3.5	245
379	Density Functional Calculations of Electronic g-Tensors Using Spin-Orbit Pseudopotentials and Mean-Field All-Electron Spin-Orbit Operators. <i>Journal of the American Chemical Society</i> , 2000 , 122, 9206-9218	16.4	211
378	From bis(silylene) and bis(germylene) pincer-type nickel(II) complexes to isolable intermediates of the nickel-catalyzed Sonogashira cross-coupling reaction. <i>Journal of the American Chemical Society</i> , 2013 , 135, 15617-26	16.4	189
377	A fully relativistic method for calculation of nuclear magnetic shielding tensors with a restricted magnetically balanced basis in the framework of the matrix Dirac-Kohn-Sham equation. <i>Journal of Chemical Physics</i> , 2008 , 128, 104101	3.9	169
376	Calculation of electronic g-tensors for transition metal complexes using hybrid density functionals and atomic meanfield spin-orbit operators. <i>Journal of Computational Chemistry</i> , 2002 , 23, 794-803	3.5	166
375	The question of bending of the alkaline earth dihalides MX ₂ (M = beryllium, magnesium, calcium, strontium, barium; X = fluorine, chlorine, bromine, iodine). An ab initio pseudopotential study. <i>Journal of the American Chemical Society</i> , 1991 , 113, 6012-6020	16.4	159
374	A reliable quantum-chemical protocol for the characterization of organic mixed-valence compounds. <i>Journal of the American Chemical Society</i> , 2009 , 131, 16292-302	16.4	154
373	Where is the spin? Understanding electronic structure and g-tensors for ruthenium complexes with redox-active quinonoid ligands. <i>Journal of the American Chemical Society</i> , 2005 , 127, 11399-413	16.4	148
372	The highest oxidation states of the transition metal elements. <i>Coordination Chemistry Reviews</i> , 2009 , 253, 606-624	23.2	145
371	Quantum-chemical insights into mixed-valence systems: within and beyond the Robin-Day scheme. <i>Chemical Society Reviews</i> , 2014 , 43, 5067-88	58.5	132
370	Mechanisms of EPR Hyperfine Coupling in Transition Metal Complexes. <i>Journal of the American Chemical Society</i> , 2000 , 122, 11900-11913	16.4	132
369	"Non-VSEPR" Structures and Bonding in d(0) Systems. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 3534-3565	16.4	131

368	From silicon(II)-based dioxygen activation to adducts of elusive dioxasiliranes and sila-ureas stable at room temperature. <i>Nature Chemistry</i> , 2010 , 2, 577-80	17.6	128
367	Carboalumination of a chromium–chromium quintuple bond. <i>Nature Chemistry</i> , 2009 , 1, 322-5	17.6	119
366	¹³ C NMR study of halogen bonding of haloarenes: measurements of solvent effects and theoretical analysis. <i>Journal of the American Chemical Society</i> , 2004 , 126, 4412-9	16.4	115
365	Ab initio study of structures and stabilities of substituted lead compounds. Why is inorganic lead chemistry dominated by PbII but organolead chemistry by PbIV?. <i>Journal of the American Chemical Society</i> , 1993 , 115, 1061-1073	16.4	111
364	Relativistic four-component DFT calculations of ¹ H NMR chemical shifts in transition-metal hydride complexes: unusual high-field shifts beyond the Buckingham-Stephens model. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 5654-9	2.8	106
363	Theoretical and experimental study of diamagnetic and paramagnetic products from thermal and light-induced alkyl transfer between zinc or magnesium dialkyls and 1,4-diaza-1,3-butadiene substrates. <i>Journal of the American Chemical Society</i> , 1991 , 113, 5606-5618	16.4	106
362	Mercury is a transition metal: the first experimental evidence for HgF(4). <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8371-5	16.4	103
361	Computational and spectroscopic studies of organic mixed-valence compounds: where is the charge?. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 16973-86	3.6	102
360	Activation of ammonia by a Si=O double bond and formation of a unique pair of sila-hemiaminal and silanoic amide tautomers. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6912-3	16.4	102
359	Spin-orbit corrections to NMR shielding constants from density functional theory. How important are the two-electron terms?. <i>Chemical Physics Letters</i> , 1998 , 296, 93-104	2.5	102
358	A thermochemically competitive local hybrid functional without gradient corrections. <i>Journal of Chemical Physics</i> , 2007 , 126, 011103	3.9	101
357	Metal–Metal Distances at the Limit: Cr–Cr 1.73 Å – The Importance of the Ligand and its Fine Tuning. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2009 , 635, 1149-1152	1.3	98
356	The structural variations of monomeric alkaline earth MX ₂ compounds (M = calcium, strontium, barium; X = Li, BeH, BH ₂ , CH ₃ , NH ₂ , OH, F). An ab initio pseudopotential study. <i>Journal of the American Chemical Society</i> , 1992 , 114, 491-497	16.4	97
355	Understanding ground- and excited-state properties of perylene tetracarboxylic acid bisimide crystals by means of quantum chemical computations. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15660-8	16.4	94
354	Combining NMR spectroscopy and quantum chemistry as tools to quantify spin density distributions in molecular magnetic compounds. <i>Coordination Chemistry Reviews</i> , 2009 , 253, 2376-2386	23.2	93
353	Validation of local hybrid functionals for TDDFT calculations of electronic excitation energies. <i>Journal of Chemical Physics</i> , 2016 , 144, 074106	3.9	93
352	Breakdown of Bond Length-Bond Strength Correlation: A Case Study. <i>Angewandte Chemie - International Edition</i> , 2000 , 39, 4607-4609	16.4	92
351	The equilibrium structures of monomeric Group 2 and lanthanide(II) metallocenes MCp ₂ (M = calcium, strontium, barium, samarium, europium, ytterbium) studied by ab initio calculations. <i>Journal of the American Chemical Society</i> , 1992 , 114, 8202-8208	16.4	91

- 350 Local hybrid exchange-correlation functionals based on the dimensionless density gradient. *Chemical Physics Letters*, **2007**, 440, 160-168 2.5 90
- 349 Study of relativistic effects on nuclear shieldings using density-functional theory and spin-orbit pseudopotentials. *Journal of Chemical Physics*, **2001**, 114, 61 3.9 90
- 348 Density functional calculations of electronic g-tensors for semiquinone radical anions. The role of hydrogen bonding and substituent effects. *Journal of the American Chemical Society*, **2002**, 124, 2709-22 16.4 89
- 347 Impact of molecular flexibility on binding strength and self-sorting of chiral surfaces. *Journal of the American Chemical Society*, **2011**, 133, 9580-91 16.4 87
- 346 A neutral, monomeric germanium(I) radical. *Journal of the American Chemical Society*, **2011**, 133, 10074-7 16.4 86
- 345 Density functional calculations of NMR shielding tensors for paramagnetic systems with arbitrary spin multiplicity: validation on 3d metallocenes. *Journal of Chemical Physics*, **2007**, 126, 024107 3.9 85
- 344 The role of radial nodes of atomic orbitals for chemical bonding and the periodic table. *Journal of Computational Chemistry*, **2007**, 28, 320-5 3.5 84
- 343 Interpretation of ¹³C NMR chemical shifts in halomethyl cations. On the importance of spin-orbit coupling and electron correlation. *Chemical Physics Letters*, **1997**, 265, 55-59 2.5 83
- 342 Relativistic spin-orbit effects on hyperfine coupling tensors by density-functional theory. *Journal of Chemical Physics*, **2004**, 120, 2127-39 3.9 83
- 341 Dominance of Linear 2-Coordination in Mercury Chemistry: Quasirelativistic and Nonrelativistic ab Initio Pseudopotential Study of (HgX)₂ (X = F, Cl, Br, I, H). *Inorganic Chemistry*, **1994**, 33, 2555-2564 5.1 82
- 340 Origin of the Unique Stability of Condensed-Phase Hg₂₂⁺. An ab Initio Investigation of MI and MII Species (M = Zn, Cd, Hg). *Inorganic Chemistry*, **1994**, 33, 4179-4185 5.1 82
- 339 Insight into the mechanism of carbonyl hydrosilylation catalyzed by Brookhart's cationic iridium(III) pincer complex. *Journal of the American Chemical Society*, **2014**, 136, 6912-5 16.4 81
- 338 Relationships in the rotational barriers of all Group 14 ethane congeners H₃X-YH₃ (X, Y = C, Si, Ge, Sn, Pb). Comparisons of ab initio pseudopotential and all-electron results. *Journal of the American Chemical Society*, **1992**, 114, 6791-6797 16.4 80
- 337 Calculation of ligand NMR chemical shifts in transition-metal complexes using ab initio effective-core potentials and density functional theory. *Chemical Physics Letters*, **1995**, 235, 382-388 2.5 79
- 336 Local hybrid functionals: an assessment for thermochemical kinetics. *Journal of Chemical Physics*, **2007**, 127, 194102 3.9 75
- 335 Giant spin-orbit effects on NMR shifts in diamagnetic actinide complexes: guiding the search of uranium(VI) hydride complexes in the correct spectral range. *Angewandte Chemie - International Edition*, **2012**, 51, 10884-8 16.4 73
- 334 Scalar Relativistic Effects on ¹⁷O NMR Chemical Shifts in Transition-Metal Oxo Complexes. An ab Initio ECP/DFT Study. *Journal of the American Chemical Society*, **1995**, 117, 1851-1852 16.4 72
- 333 The Structure of Hexamethyltungsten, W(CH₃)₆: Distorted Trigonal Prismatic with C₃ Symmetry. *Journal of the American Chemical Society*, **1996**, 118, 3018-3024 16.4 72

332	Oxidation State +IV in Group 12 Chemistry. Ab Initio Study of Zinc(IV), Cadmium(IV), and Mercury(IV) Fluorides. <i>Inorganic Chemistry</i> , 1994 , 33, 2122-2131	5.1	72
331	Reversible [4Fe-3S] cluster morphing in an O(2)-tolerant [NiFe] hydrogenase. <i>Nature Chemical Biology</i> , 2014 , 10, 378-85	11.7	70
330	Reliable Quantum Chemical Prediction of the Localized/Delocalized Character of Organic Mixed-Valence Radical Anions. From Continuum Solvent Models to Direct-COSMO-RS. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 4189-203	6.4	70
329	Mechanism of the cooperative Si-H bond activation at Ru-S bonds. <i>Chemical Science</i> , 2015 , 6, 4324-4334	9.4	69
328	Structure of the oxygen-rich cluster cation Al ₂ O ₇ ⁺ and its reactivity toward methane and water. <i>Journal of the American Chemical Society</i> , 2011 , 133, 16930-7	16.4	69
327	Density functional calculations of (55)Mn, (14)N and (13)C electron paramagnetic resonance parameters support an energetically feasible model system for the S(2) state of the oxygen-evolving complex of photosystem II. <i>Chemistry - A European Journal</i> , 2010 , 16, 10424-38	4.8	68
326	The calculation of 17O chemical shielding in transition metal oxo complexes. I. Comparison of DFT and ab initio approaches, and mechanisms of relativity-induced shielding. <i>Journal of Chemical Physics</i> , 1997 , 106, 9201-9212	3.9	68
325	Density functional analysis of 13C and 1H chemical shifts and bonding in mercurimethanes and organomercury hydrides: The role of scalar relativistic, spin-orbit, and substituent effects. <i>Journal of Chemical Physics</i> , 1998 , 108, 3648-3659	3.9	68
324	The Family of ferrocene-stabilized silylium ions: synthesis, 29Si NMR characterization, Lewis acidity, substituent scrambling, and quantum-chemical analyses. <i>Chemistry - A European Journal</i> , 2013 , 19, 16579-94	4.8	67
323	Relativistic two-component calculations of electronic g-tensors that include spin polarization. <i>Journal of Chemical Physics</i> , 2005 , 123, 244103	3.9	65
322	A Density Functional Study of EPR Parameters for Vanadyl Complexes Containing Schiff Base Ligands. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 12644-12652	3.4	64
321	From local hybrid functionals to "localized local hybrid" potentials: formalism and thermochemical tests. <i>Journal of Chemical Physics</i> , 2006 , 124, 204102	3.9	63
320	Validation study of meta-GGA functionals and of a model exchange-correlation potential in density functional calculations of EPR parameters. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 5467-5474	3.6	63
319	Synthesis and bonding in carbene complexes of an unsymmetrical dilithio methandiide: a combined experimental and theoretical study. <i>Chemistry - A European Journal</i> , 2013 , 19, 16729-39	4.8	62
318	Importance of the correlation contribution for local hybrid functionals: range separation and self-interaction corrections. <i>Journal of Chemical Physics</i> , 2012 , 136, 014111	3.9	62
317	The Structure of XeF ₆ and of Compounds Isoelectronic with It. A Challenge to Computational Chemistry and to the Qualitative Theory of the Chemical Bond. <i>Journal of the American Chemical Society</i> , 1996 , 118, 11939-11950	16.4	62
316	Local hybrid functionals: Theory, implementation, and performance of an emerging new tool in quantum chemistry and beyond. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2019 , 9, e1378	7.9	60
315	Squaraine dyes as efficient coupling bridges between triarylamine redox centres. <i>Chemistry - A European Journal</i> , 2011 , 17, 14147-63	4.8	60

314	[Pb ₅ {Mo(CO) ₃ } ₂] ₄ : a complex containing a planar Pb ₅ unit. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 2092-6	16.4	60
313	Mixed-valence ruthenium complexes rotating through a conformational Robin-Day continuum. <i>Chemistry - A European Journal</i> , 2014 , 20, 6895-908	4.8	59
312	A rare uranyl(VI)-alkyl ate complex [Li(DME) _{1.5}] ₂ [UO ₂ (CH ₂ SiMe ₃) ₄] and its comparison with a homoleptic uranium(VI)-hexaalkyl. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 3259-63	16.4	59
311	Density functional study of EPR parameters and spin-density distribution of azurin and other blue copper proteins. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 8290-304	3.4	59
310	Calculation of zero-field splitting parameters: comparison of a two-component noncolinear spin-density-functional method and a one-component perturbational approach. <i>Journal of Chemical Physics</i> , 2006 , 125, 054110	3.9	59
309	Spin-Orbit Effects on Hyperfine Coupling Tensors in Transition Metal Complexes Using Hybrid Density Functionals and Accurate Spin-Orbit Operators. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 5026-5033	2.8	59
308	Gaseous Mercury(IV) Fluoride, HgF ₄ : An Ab Initio Study. <i>Angewandte Chemie International Edition in English</i> , 1993 , 32, 861-863		59
307	Chemistry is about energy and its changes: A critique of bond-length/bond-strength correlations. <i>Coordination Chemistry Reviews</i> , 2017 , 344, 355-362	23.2	58
306	Combined Spectroscopic and Quantum Chemical Study of [trans-Ru(C ₇ CC ₆ H ₄ R ₁ -4) ₂ (dppe) ₂] ⁿ⁺ and [trans-Ru(C ₇ CC ₆ H ₄ R ₁ -4)(C ₇ CC ₆ H ₄ R ₂ -4)(dppe) ₂] ⁿ⁺ (n = 0, 1) Complexes: Interpretations beyond the Lowest Energy Conformer Paradigm. <i>Organometallics</i> , 2014 , 33, 4947-4963	3.8	58
305	Formation and characterization of the iridium tetroxide molecule with iridium in the oxidation state +VIII. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 7879-83	16.4	56
304	Do low-coordinated Group 1-3 cations M ⁿ +L _m (M ⁿ + = potassium, rubidium cesium, calcium, strontium, barium, scandium, yttrium, lanthanum; L = ammonia, water, hydrogen fluoride; m = 1-3) with a formal noble-gas electron configuration favor regular or abnormal shapes?. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 7316-7323		56
303	Understanding Substituent Effects on ²⁹ Si Chemical Shifts and Bonding in Disilenes. A Quantum Chemical Analysis. <i>Organometallics</i> , 2003 , 22, 2442-2449	3.8	55
302	Multifrequency EPR study and density functional g-tensor calculations of persistent organorhenium radical complexes. <i>Journal of the American Chemical Society</i> , 2002 , 124, 10563-71	16.4	55
301	A Relativistic Quantum-Chemical Analysis of the trans Influence on (1)H NMR Hydride Shifts in Square-Planar Platinum(II) Complexes. <i>Inorganic Chemistry</i> , 2015 , 54, 7199-208	5.1	54
300	Systematic Experimental and Quantum Chemical Investigation into the Structures, the Stability, and the Spectroscopic Properties of Alkylindium(I) Compounds: Tetrameric In ₄ [C(SiMeRR) ₂] ₄ versus Monomeric InC(SiMeRR) ₂ Derivatives. <i>Organometallics</i> , 1998 , 17, 5009-5017	3.8	54
299	Ro-Vibrational Corrections to NMR Parameters 2004 , 153-173		53
298	Validation of density functional methods for computing structures and energies of mercury(IV) complexes. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 1122	3.6	53
297	Ab initio molecular dynamics simulations and g-tensor calculations of aqueous benzosemiquinone radical anion: effects of regular and "T-stacked" hydrogen bonds. <i>Journal of the American Chemical Society</i> , 2004 , 126, 9854-61	16.4	53

296	Scalar relativistic calculations of hyperfine coupling tensors using the Douglas-Kroll-Hess method. <i>Chemical Physics Letters</i> , 2004 , 396, 268-276	2.5	52
295	Refining the interpretation of near-infrared band shapes in a polyynediyl molecular wire. <i>Chemistry - A European Journal</i> , 2013 , 19, 9780-4	4.8	51
294	A trimetallic gold boride complex with a fluxional gold-boron bond. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 9735-8	16.4	51
293	Synthesis, reactivity, and electronic structure of [n]vanadoarenophanes: an experimental and theoretical study. <i>Journal of the American Chemical Society</i> , 2008 , 130, 11376-93	16.4	51
292	Has Au ₇ been made?. <i>Inorganic Chemistry</i> , 2006 , 45, 1228-34	5.1	51
291	The self-consistent implementation of exchange-correlation functionals depending on the local kinetic energy density. <i>Chemical Physics Letters</i> , 2003 , 381, 495-504	2.5	51
290	The function of photosystem I. Quantum chemical insight into the role of tryptophan-quinone interactions. <i>Biochemistry</i> , 2002 , 41, 2895-900	3.2	51
289	Jacobsen's catalyst for hydrolytic kinetic resolution: structure elucidation of paramagnetic Co(III) salen complexes in solution via combined NMR and quantum chemical studies. <i>Journal of the American Chemical Society</i> , 2009 , 131, 4172-3	16.4	50
288	Structure of the nucleotide radical formed during reaction of CDP/TTP with the E441Q-alpha2beta2 of E. coli ribonucleotide reductase. <i>Journal of the American Chemical Society</i> , 2009 , 131, 200-11	16.4	50
287	Towards improved local hybrid functionals by calibration of exchange-energy densities. <i>Journal of Chemical Physics</i> , 2014 , 141, 204101	3.9	49
286	Scalar relativistic calculations of hyperfine coupling tensors using the Douglas-Kroll-Hess method with a finite-size nucleus model. <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 4079-85	3.6	48
285	Relativistic Heavy-Neighbor-Atom Effects on NMR Shifts: Concepts and Trends Across the Periodic Table. <i>Chemical Reviews</i> , 2020 , 120, 7065-7103	68.1	47
284	Perturbational and ECP Calculation of Relativistic Effects in NMR Shielding and Spin-Spin Coupling 2004 , 209-226		47
283	Relativistic Effects on NMR Chemical Shifts. <i>Theoretical and Computational Chemistry</i> , 2004 , 14, 552-597		47
282	Ab Initio ECP/DFT Calculation and Interpretation of Carbon and Oxygen NMR Chemical Shift Tensors in Transition-Metal Carbonyl Complexes. <i>Chemistry - A European Journal</i> , 1996 , 2, 24-30	4.8	47
281	The Cluster Anion Si. <i>Angewandte Chemie - International Edition</i> , 1998 , 37, 2359-2361	16.4	46
280	Understanding structure and bonding in early actinide 6d(0)5f0 MX ₆ q (M = Th-Np; X = H, F) complexes in comparison with their transition metal 5d0 analogues. <i>Journal of the American Chemical Society</i> , 2005 , 127, 2591-9	16.4	46
279	Pseudo-Contact NMR Shifts over the Paramagnetic Metalloprotein CoMMP-12 from First Principles. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 14713-14717	16.4	45

278	Predicting the localized/delocalized character of mixed-valence diquinone radical anions. Toward the right answer for the right reason. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 10629-37	2.8	45
277	The Nonoctahedral Structures of d0, d1, and d2 Hexamethyl Complexes. <i>Chemistry - A European Journal</i> , 1998 , 4, 1678-1686	4.8	45
276	Structure of the nitrogen-centered radical formed during inactivation of E. coli ribonucleotide reductase by 2'-azido-2'-deoxyuridine-5'-diphosphate: trapping of the 3'-ketonucleotide. <i>Journal of the American Chemical Society</i> , 2005 , 127, 7729-38	16.4	45
275	Efficient Self-Consistent Implementation of Local Hybrid Functionals. <i>Journal of Chemical Theory and Computation</i> , 2015 , 11, 1540-8	6.4	44
274	Solid-State Nuclear Magnetic Resonance Spectroscopic and Quantum Chemical Investigation of ¹³ C and ¹⁷ O Chemical Shift Tensors, ¹⁷ O Nuclear Quadrupole Coupling Tensors, and Bonding in Transition-Metal Carbonyl Complexes and Clusters. <i>Journal of the American Chemical Society</i> , 1998 , 120, 4771-4783	16.4	44
273	Development of a TDDFT-Based Protocol with Local Hybrid Functionals for the Screening of Potential Singlet Fission Chromophores. <i>Journal of Chemical Theory and Computation</i> , 2017 , 13, 4984-4996	6.4	43
272	What can we learn from the adiabatic connection formalism about local hybrid functionals?. <i>Journal of Chemical Physics</i> , 2008 , 128, 214107	3.9	43
271	Mercury Is a Transition Metal: The First Experimental Evidence for HgF ₄ . <i>Angewandte Chemie</i> , 2007 , 119, 8523-8527	3.6	43
270	Formal Oxidation State versus Partial Charge: A Comment. <i>Angewandte Chemie International Edition in English</i> , 1995 , 34, 986-986		43
269	Solvent effects on g-tensors of semiquinone radical anions: polarizable continuum versus cluster models. <i>Theoretical Chemistry Accounts</i> , 2004 , 111, 132-140	1.9	42
268	New Zwitterionic Spirocyclic β -Si-Silicates with an SiX ₄ C Skeleton (X = S, O) Containing Two Ligands of the Dithiolato(2 ⁻) or Diolato(2 ⁻) Type: Synthesis, Structure, and Bonding Situation. <i>Organometallics</i> , 2003 , 22, 4104-4110	3.8	42
267	ReSpect: Relativistic spectroscopy DFT program package. <i>Journal of Chemical Physics</i> , 2020 , 152, 184101	3.9	41
266	From Silylone to an Isolable Monomeric Silicon Disulfide Complex. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 10254-7	16.4	41
265	Local hybrid functionals with an explicit dependence on spin polarization. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 11898-906	2.8	41
264	Construction of local hybrid exchange-correlation potentials and their evaluation for nuclear shielding constants. <i>Chemical Physics Letters</i> , 2004 , 386, 8-16	2.5	41
263	Advances in local hybrid exchange-correlation functionals: from thermochemistry to magnetic-resonance parameters and hyperpolarizabilities. <i>International Journal of Quantum Chemistry</i> , 2011 , 111, 2625-2638	2.1	40
262	First-Principles Calculations of Paramagnetic NMR Shifts 2004 , 325-338		40
261	Reaction of Pentadienyl Complexes with Metal Carbonyls: Synthetic, Structural, and Theoretical Studies of Metallabenzene π -Complexes. <i>Organometallics</i> , 2003 , 22, 264-274	3.8	40

260	The PI4+ cation has an extremely large negative 31P nuclear magnetic resonance chemical shift, due to spin-orbit coupling: A quantum-chemical prediction and its confirmation by solid-state nuclear magnetic resonance spectroscopy. <i>Journal of Chemical Physics</i> , 1999 , 110, 3897-3902	3.9	40
259	Efficient Semi-numerical Implementation of Global and Local Hybrid Functionals for Time-Dependent Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2015 , 11, 4226-37	6.4	39
258	Wavelength selective polymer network formation of end-functional star polymers. <i>Chemical Communications</i> , 2016 , 52, 1975-8	5.8	39
257	Diphosphines with strongly polarized P-P bonds: hybrids between covalent molecules and donor-acceptor adducts with flexible molecular structures. <i>Journal of the American Chemical Society</i> , 2009 , 131, 10763-74	16.4	39
256	In Situ Study on the Wet Chemical Synthesis of Nanoscopic Pt Colloids by Reductive Stabilization. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 7507-7515	3.4	39
255	On the Relation between Bonding, Electronegativity, and Bond Angles in High-Valent Transition Metal Complexes. <i>Chemistry - A European Journal</i> , 1999 , 5, 3631-3643	4.8	39
254	Four-Component Relativistic Density Functional Theory Calculations of EPR g- and Hyperfine-Coupling Tensors Using Hybrid Functionals: Validation on Transition-Metal Complexes with Large Tensor Anisotropies and Higher-Order Spin-Orbit Effects. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 12892-905	2.8	38
253	Phosphorus chemical shifts in a nucleic acid backbone from combined molecular dynamics and density functional calculations. <i>Journal of the American Chemical Society</i> , 2010 , 132, 17139-48	16.4	38
252	Unexpected 29Si NMR Chemical Shifts in Heteroatom-Substituted Silyllithium Compounds: A Quantum-Chemical Analysis. <i>Organometallics</i> , 2004 , 23, 3647-3655	3.8	38
251	g-Tensor and Spin Density of the Modified Tyrosyl Radical in Galactose Oxidase: A Density Functional Study. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 331-337	3.4	38
250	An Isolable Silicon Dicarboxylate Complex from Carbon Dioxide Activation with a Silylone. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 1894-1897	16.4	37
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