

Peter Hrobarik

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Benzothiazoles with Tunable Electron-Withdrawing Strength and Reverse Polarity: A Route to Triphenylamine-Based Chromophores with Enhanced Two-Photon Absorption. <i>Journal of Organic Chemistry</i> , 2011, 76, 8726-8736.	3.2	138
2	Benzothiazole-Based Fluorophores of Donor-Acceptor-Donor Type Displaying High Two-Photon Absorption. <i>Journal of Organic Chemistry</i> , 2010, 75, 3053-3068.	3.2	135
3	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, 5654-5659.	2.5	120
4	Molecular Engineering of Benzothiazolium Salts with Large Quadratic Hyperpolarizabilities: Can Auxiliary Electron-Withdrawing Groups Enhance Nonlinear Optical Responses?. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22289-22302.	3.1	111
5	Use of ⁷⁷ Se and ¹²⁵ Te NMR Spectroscopy to Probe Covalency of the Actinide-Chalcogen Bonding in [Th(E _n) ₂]{N(SiMe ₃) ₂ } ₃ (E = Se, Te). <i>Inorganic Chemistry</i> , 2011, 50, 138, 814-825.	1.0	14
6	Density functional calculations of NMR shielding tensors for paramagnetic systems with arbitrary spin multiplicity: Validation on 3d metallocenes. <i>Journal of Chemical Physics</i> , 2007, 126, 024107.	3.0	98
7	Insight into the Mechanism of Carbonyl Hydrosilylation Catalyzed by Brookhart's Cationic Iridium(III) Pincer Complex. <i>Journal of the American Chemical Society</i> , 2014, 136, 6912-6915.	13.7	93
8	Giant Spin-Orbit Effects on NMR Shifts in Diamagnetic Actinide Complexes: Guiding the Search of Uranium(VI) Hydride Complexes in the Correct Spectral Range. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10884-10888.	13.8	81
9	Mechanism of the cooperative Si-H bond activation at Ru-S bonds. <i>Chemical Science</i> , 2015, 6, 4324-4334.	7.4	76
10	Donor-acceptor benzothiazole-derived dyes with an extended heteroaryl-containing conjugated system: synthesis, DFT study and antimicrobial activity. <i>Tetrahedron</i> , 2008, 64, 10605-10618.	1.9	71
11	The Family of Ferrocene-Stabilized Silylium Ions: Synthesis, NMR Characterization, Lewis Acidity, Substituent Scrambling, and Quantum Chemical Analyses. <i>Chemistry - A European Journal</i> , 2013, 19, 16579-16594.	3.3	69
12	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, 3259-3263.	13.8	67
13	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, 7199-7208.	4.0	60
14	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, 4172-4173.	13.7	54
15	Synthesis, Thermochemistry, Bonding, and ¹³ C NMR Chemical Shift Analysis of a Phosphorano-Stabilized Carbene of Thorium. <i>Organometallics</i> , 2017, 36, 4519-4524.	2.3	54
16	Unlocking Structural Diversity in Gold(III) Hydrides: Unexpected Interplay of cis/trans-Influence on Stability, Insertion Chemistry, and NMR Chemical Shifts. <i>Journal of the American Chemical Society</i> , 2018, 140, 8287-8302.	13.7	53
17	Quadrupolar Benzobisthiazole-Cored Arylamines as Highly Efficient Two-Photon Absorbing Fluorophores. <i>Organic Letters</i> , 2014, 16, 6358-6361.	4.6	52
18	Computational design of benzothiazole-derived push-pull dyes with high molecular quadratic hyperpolarizabilities. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 495-502.	2.8	51

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19	Understanding Structure and Bonding in Early Actinide $6d05f0MX6q$ ($M = Th^{+}Np$; $X = H, F$) Complexes in Comparison with Their Transition Metal $5d0$ Analogues. <i>Journal of the American Chemical Society</i> , 2005, 127, 2591-2599.	13.7	49
20	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, 12892-12905.	2.5	49
21	Giant spin-orbit effects on ^{1}H and ^{13}C NMR shifts for uranium(ν) complexes revisited: role of the exchange-correlation response kernel, bonding analyses, and new predictions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30462-30474.	2.8	42
22	Insights into <i>trans</i> -Ligand and Spin-Orbit Effects on Electronic Structure and Ligand NMR Shifts in Transition-Metal Complexes. <i>Chemistry - A European Journal</i> , 2017, 23, 9790-9803.	3.3	42
23	Excited State and Injection Dynamics of Triphenylamine Sensitizers Containing a Benzothiazole Electron-Accepting Group on TiO_2 and Al_2O_3 Thin Films. <i>Journal of Physical Chemistry C</i> , 2014, 118, 28509-28519.	3.1	41
24	Assessment of higher-order spin-orbit effects on electronic g -tensors of $d 1$ transition-metal complexes by relativistic two- and four-component methods. <i>Theoretical Chemistry Accounts</i> , 2011, 129, 715-725.	1.4	39
25	Cooperative $Al-H$ Bond Activation in DIBAL-H: Catalytic Generation of an Aluminum-Ion-Like Lewis Acid for Hydrodefluorinative Friedel-Crafts Alkylation. <i>Journal of the American Chemical Society</i> , 2017, 139, 16334-16342.	13.7	39
26	Completing the Heterocubane Family $[Cp^*AlE]_4$ ($E = O, S, Se, \text{ and } Te$) by Selective Oxygenation and Sulfuration of $[Cp^*Al]_4$: Density Functional Theory Calculations of $[Cp^*AlE]_4$ and Reactivity of $[Cp^*AlO]_4$ toward Hydrolysis. <i>Inorganic Chemistry</i> , 2016, 55, 4915-4923.	4.0	38
27	Computational Studies of Electron Paramagnetic Resonance Parameters for Paramagnetic Molybdenum Complexes. I. Method Validation on Small and Medium-Sized Systems. <i>Journal of Physical Chemistry B</i> , 2007, 111, 4616-4629.	2.6	34
28	^{13}C NMR Shifts as an Indicator of $U-C$ Bond Covalency in Uranium(VI) Acetylide Complexes: An Experimental and Computational Study. <i>Inorganic Chemistry</i> , 2019, 58, 4152-4163.	4.0	34
29	Synthesis, structure and bonding of hexaphenyl thorium(IV): observation of a non-octahedral structure. <i>Chemical Communications</i> , 2016, 52, 689-692.	4.1	30
30	Computational Studies of EPR Parameters for Paramagnetic Molybdenum Complexes. II. Larger MoV Systems Relevant to Molybdenum Enzymes. <i>Inorganic Chemistry</i> , 2007, 46, 8146-8161.	4.0	27
31	A time resolved fluorescence and quantum chemical study of the solar cell sensitizer D149. <i>Dyes and Pigments</i> , 2013, 96, 304-312.	3.7	27
32	Preparation of Novel Push-Pull Benzothiazole Derivatives with Reverse Polarity: Compounds with Potential Non-Linear Optic Application. <i>Synthesis</i> , 2005, 2005, 600-604.	2.3	26
33	Diselenadiphosphatendiselenide und Triselenadiphosphatendiselenide - Synthese und Charakterisierung mittels ^{31}P - und ^{77}Se -Festkörperlaser-NMR-Spektroskopie. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2001, 627, 1269-1278.	1.2	25
34	A Ketimide-Stabilized Palladium Nanocluster with a Hexagonal Aromatic Pd_7 Core. <i>Inorganic Chemistry</i> , 2020, 59, 1471-1480.	4.0	24
35	Relativistic two-component calculations of electronic g -tensor for oxo-molybdenum(V) and oxo-tungsten(V) complexes: The important role of higher-order spin-orbit contributions. <i>Chemical Physics</i> , 2009, 356, 229-235.	1.9	23
36	Paramagnetic NMR of Phenolic Oxime Copper Complexes: A Joint Experimental and Density Functional Study. <i>Chemistry - A European Journal</i> , 2016, 22, 15328-15339.	3.3	22

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37	Four-component relativistic density functional theory with the polarisable continuum model: application to EPR parameters and paramagnetic NMR shifts. <i>Molecular Physics</i> , 2017, 115, 214-227.	1.7	21
38	A free boratriptycene-type Lewis superacid. <i>Chemical Science</i> , 2022, 13, 1608-1617.	7.4	20
39	Direct Iodination of Electron-Deficient Benzothiazoles: Rapid Access to Two-Photon Absorbing Fluorophores with Quadrupolar D- π -A- π -D Architecture and Tunable Heteroaromatic Core. <i>Organic Letters</i> , 2021, 23, 3460-3465.	4.6	19
40	Is Allred's [Hg(cyclam)] ³⁺ a True Mercury(III) Complex?. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 8631-8633.	13.8	18
41	Si-H Bond Activation with Bullock's Cationic Tungsten(II) Catalyst: CO as Cooperating Ligand. <i>Journal of the American Chemical Society</i> , 2019, 141, 18845-18850.	13.7	17
42	Oxidative C-H Homocoupling of Push-Pull Benzothiazoles: An Atom-Economical Route to Highly Emissive Quadrupolar Arylamine-Functionalized 2,2'-Bibenzothiazoles with Enhanced Two-Photon Absorption. <i>Organic Letters</i> , 2021, 23, 5512-5517.	4.6	17
43	Computational study of bonding trends in the metalloactinyl series EThM and MThM ² (E=Nâ ⁺ , O, F+; M, Tj ETQq _{1,1} 0.784314 rgB ₁₆ /	2.6	16
44	Stable Actinide π Complexes of a Neutral 1,4-Diborabenzene. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13109-13115.	13.8	15
45	[TeX ₃] ⁺ Cations Stabilized by the Weakly Coordinating [Al(OR) ₄] ⁻ Anion: FIR Spectra, Raman Spectra, and Evaluation of an Abnormal Halogen Dependence of the ¹²⁵ Te...NMR Chemical Shifts. <i>ChemPlusChem</i> , 2012, 77, 643-651.	2.8	14
46	Molecular Thorium Compounds with Dichalcogenide Ligands: Synthesis, Structure, ⁷⁷ Se NMR Study, and Thermolysis. <i>Inorganic Chemistry</i> , 2018, 57, 14821-14833.	4.0	14
47	The impact of the π -electron conjugation on ¹⁵ N, ¹³ C and ¹ H NMR chemical shifts in <i>push-pull</i> benzothiazolium salts. Experimental and theoretical study. <i>Magnetic Resonance in Chemistry</i> , 2007, 45, 942-953.	1.9	12
48	Synthesis and Characterization of a Linear, Two-Coordinate Pt(II) Ketimide Complex. <i>Inorganic Chemistry</i> , 2019, 58, 15927-15935.	4.0	11
49	Thorium Cubanes: Synthesis, Solid-State and Solution Structures, Thermolysis, and Chalcogen Exchange Reactions. <i>Inorganic Chemistry</i> , 2018, 57, 7129-7141.	4.0	10
50	Hydride Transfer to Gold: Yes or No? Exploring the Unexpected Versatility of Auâ ⁺ ...â ⁺ ...â ⁺ M Bonding in Heterobimetallic Dihydrides. <i>Chemistry - A European Journal</i> , 2020, 26, 8267-8280.	3.3	10
51	A Heterobimetallic Approach To Stabilize the Elusive Disulfur Radical Trianion (S_2^{3-}). <i>Chemistry - A European Journal</i> , 2013, 19, 1246-1253.	3.3	9
52	Solvent-Acidity-Driven Change in Photophysics and Significant Efficiency Improvement in Dye-Sensitized Solar Cells of a Benzothiazole-Derived Organic Sensitizer. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20122-20134.	3.1	9
53	Insights into <i>trans</i> -Ligand and Spin-Orbit Effects on Electronic Structure and Ligand NMR Shifts in Transition-Metal Complexes. <i>Chemistry - A European Journal</i> , 2017, 23, 9702-9702.	3.3	5
54	Four-Component Relativistic Density Functional Calculations of EPR Parameters for Model Complexes of Tungstoenzymes. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9106-9117.	2.5	5

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55	Ein neutrales 1,4-Diborabenzol als π -Ligand in Actinoidkomplexen. <i>Angewandte Chemie</i> , 2020, 132, 13209-13216.	2.0	5
56	Nicotinamide-based supregelator self-assembling via asymmetric hydrogen bonding $\text{NH}^{\delta-}\text{OC}$ and $\text{H}^{\delta-}\text{Br}^{\delta+}$ pattern for reusable, moldable and self-healable nontoxic fuel gels. <i>Journal of Colloid and Interface Science</i> , 2021, 603, 182-190.	9.4	3
57	Investigations on the Spin States of Two Mononuclear Iron(II) Complexes Based on N-Donor Tridentate Schiff Base Ligands Derived from Pyridine-2,6-Dicarboxaldehyde. <i>Inorganics</i> , 2022, 10, 98.	2.7	1
58	Innentitelbild: Gigantische Spin-Bahn-Effekte auf NMR-Verschiebungen in diamagnetischen Actinoid-Komplexen: Richtlinien für die Suche nach Uran(VI)-Hydridkomplexen (<i>Angew. Chem.</i> 43/2012). <i>Angewandte Chemie</i> , 2012, 124, 10830-10830.	2.0	0