List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6937259/publications.pdf Version: 2024-02-01

| | | 17405 | 17546 |
|----------|----------------|--------------|----------------|
| 267 | 16,672 | 63 | 121 |
| papers | citations | h-index | g-index |
| | | | |
| | | | |
| | | | |
| 272 | 272 | 272 | 13928 |
| all docs | docs citations | times ranked | citing authors |
| | | | |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Catalysis Research of Relevance to Carbon Management:  Progress, Challenges, and Opportunities. Chemical Reviews, 2001, 101, 953-996. | 23.0 | 1,311 |
| 2 | lonization Potential, Electron Affinity, Electronegativity, Hardness, and Electron Excitation Energy: Molecular Properties from Density Functional Theory Orbital Energies. Journal of Physical Chemistry A, 2003, 107, 4184-4195. | 1.1 | 1,134 |
| 3 | A local density functional study of the structure and vibrational frequencies of molecular transition-metal compounds. The Journal of Physical Chemistry, 1992, 96, 6630-6636. | 2.9 | 711 |
| 4 | Hydrogen Bond Energy of the Water Dimer. The Journal of Physical Chemistry, 1996, 100, 2993-2997. | 2.9 | 469 |
| 5 | On the Enthalpy of Formation of Hydroxyl Radical and Gas-Phase Bond Dissociation Energies of Water and Hydroxyl. Journal of Physical Chemistry A, 2002, 106, 2727-2747. | 1.1 | 466 |
| 6 | Chemical accuracy in ab initio thermochemistry and spectroscopy: current strategies and future challenges. Theoretical Chemistry Accounts, 2012, 131, 1. | 0.5 | 381 |
| 7 | On a quantitative scale for Lewis acidity and recent progress in polynitrogen chemistry. Journal of Fluorine Chemistry, 2000, 101, 151-153. | 0.9 | 372 |
| 8 | A survey of factors contributing to accurate theoretical predictions of atomization energies and molecular structures. Journal of Chemical Physics, 2008, 129, 204105. | 1.2 | 345 |
| 9 | Photoelectron Spectroscopy of a Carbene/Silylene/Germylene Series. Journal of the American Chemical Society, 1994, 116, 6641-6649. | 6.6 | 330 |
| 10 | Absolute Hydration Free Energy of the Proton from First-Principles Electronic Structure Calculations. Journal of Physical Chemistry A, 2001, 105, 11534-11540. | 1.1 | 277 |
| 11 | Extended benchmark studies of coupled cluster theory through triple excitations. Journal of Chemical Physics, 2001, 115, 3484-3496. | 1.2 | 266 |
| 12 | A Hybrid Organic/Inorganic Benzene. Angewandte Chemie - International Edition, 2009, 48, 973-977. | 7.2 | 258 |
| 13 | Atomically dispersed supported metal catalysts: perspectives and suggestions for future research. Catalysis Science and Technology, 2017, 7, 4259-4275. | 2.1 | 221 |
| 14 | Electronic structure of a stable nucleophilic carbene. The Journal of Physical Chemistry, 1991, 95, 4180-4182. | 2.9 | 217 |
| 15 | Electron Distribution in a Stable Carbene. Journal of the American Chemical Society, 1994, 116, 6812-6822. | 6.6 | 204 |
| 16 | Performance of coupled cluster theory in thermochemical calculations of small halogenated compounds. Journal of Chemical Physics, 2003, 118, 3510-3522. | 1.2 | 195 |
| 17 | Further benchmarks of a composite, convergent, statistically calibrated coupled-cluster-based approach for thermochemical and spectroscopic studies. Molecular Physics, 2012, 110, 2381-2399. | 0.8 | 170 |
| 18 | Predicting the Energy of the Water Exchange Reaction and Free Energy of Solvation for the Uranyl Ion in Aqueous Solution. Journal of Physical Chemistry A, 2006, 110, 8840-8856. | 1.1 | 167 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Hydration of the Fluoride Anion:Â Structures and Absolute Hydration Free Energy from First-Principles Electronic Structure Calculations. Journal of Physical Chemistry A, 2004, 108, 2020-2029. | 1.1 | 166 |
| 20 | Molecular Mechanism for H2Release from BH3NH3, Including the Catalytic Role of the Lewis Acid BH3. Journal of Physical Chemistry A, 2007, 111, 679-690. | 1.1 | 161 |
| 21 | Molecular Structures and Energetics of the (TiO ₂) _{<i>n</i>} (<i>n</i> = 1â~4) Clusters and Their Anions. Journal of Physical Chemistry A, 2008, 112, 6646-6666. | 1.1 | 161 |
| 22 | Accurate Thermochemistry for Transition Metal Oxide Clusters. Journal of Physical Chemistry A, 2009, 113, 7861-7877. | 1.1 | 156 |
| 23 | Hydrogen Storage by Boronâ~'Nitrogen Heterocycles: A Simple Route for Spent Fuel Regeneration. Journal of the American Chemical Society, 2010, 132, 3289-3291. | 6.6 | 152 |
| 24 | Predicting the Heats of Formation of Model Hydrocarbons up to Benzene. Journal of Physical Chemistry A, 2000, 104, 3048-3056. | 1.1 | 146 |
| 25 | Chemical Shielding Tensor of a Carbene. Journal of the American Chemical Society, 1994, 116, 6361-6367. | 6.6 | 134 |
| 26 | Heats of Formation of Simple Perfluorinated Carbon Compounds. Journal of Physical Chemistry A, 1999, 103, 4744-4751. | 1.1 | 130 |
| 27 | Thorium(IV) Molecular Clusters with a Hexanuclear Th Core. Inorganic Chemistry, 2011, 50, 9696-9704. | 1.9 | 127 |
| 28 | Reliable Predictions of the Thermochemistry of Boronâ^'Nitrogen Hydrogen Storage Compounds: BxNxHy, x = 2, 3. Journal of Physical Chemistry A, 2007, 111, 4411-4421. | 1.1 | 124 |
| 29 | Computational Study of the Release of H2from Ammonia Borane Dimer (BH3NH3)2and Its Ion Pair Isomers. Journal of Physical Chemistry A, 2007, 111, 8844-8856. | 1.1 | 124 |
| 30 | Theoretical Study of the Heats of Formation of Small Silicon-Containing Compounds. Journal of Physical Chemistry A, 1999, 103, 6413-6419. | 1.1 | 122 |
| 31 | Molecular and Electronic Structures, Brönsted Basicities, and Lewis Acidities of Group VIB Transition Metal Oxide Clusters. Journal of Physical Chemistry A, 2006, 110, 6231-6244. | 1.1 | 121 |
| 32 | Predicting the Proton Affinities of H2O and NH3. Journal of Physical Chemistry A, 1998, 102, 2449-2454. | 1.1 | 116 |
| 33 | Prediction of Structures and Atomization Energies of Small Silver Clusters, (Ag) _{<i>n</i>} , <i>n</i> < 100. Journal of Physical Chemistry A, 2013, 117, 8298-8313. | 1.1 | 112 |
| 34 | Unusual structure, bonding and properties in a californium borate. Nature Chemistry, 2014, 6, 387-392. | 6.6 | 110 |
| 35 | Third Row Transition Metal Hexafluorides, Extraordinary Oxidizers, and Lewis Acids: Electron Affinities, Fluoride Affinities, and Heats of Formation of WF ₆ , ReF ₆ , OsF ₆ , IrF ₆ , PtF ₆ , and AuF ₆ . Inorganic Chemistry, 2010, 49, 1056-1070. | 1.9 | 109 |
| 36 | Mechanism of the Hydration of Carbon Dioxide: Direct Participation of H ₂ 0 versus Microsolvation. Journal of Physical Chemistry A, 2008, 112, 10386-10398. | 1.1 | 108 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 37 | The Nature and Absolute Hydration Free Energy of the Solvated Electron in Water. Journal of Physical Chemistry B, 2003, 107, 4403-4417. | 1.2 | 107 |
| 38 | A New, Self-Contained Asymptotic Correction Scheme To Exchange-Correlation Potentials for Time-Dependent Density Functional Theory. Journal of Physical Chemistry A, 2003, 107, 10154-10158. | 1.1 | 106 |
| 39 | First-Principles Determination of the Absolute Hydration Free Energy of the Hydroxide Ionâ€. Journal of Physical Chemistry A, 2002, 106, 9737-9744. | 1.1 | 105 |
| 40 | Ab Initio Prediction of the Gas- and Solution-Phase Acidities of Strong BrÃ,nsted Acids:  The Calculation of pKa Values Less Than â^'10. Journal of Physical Chemistry A, 2006, 110, 12044-12054. | 1.1 | 101 |
| 41 | Complexation of the Carbonate, Nitrate, and Acetate Anions with the Uranyl Dication:Â Density Functional Studies with Relativistic Effective Core Potentialsâ€. Journal of Physical Chemistry A, 2005, 109, 11568-11577. | 1.1 | 100 |
| 42 | The Least Stable Isomer of BN Naphthalene: Toward Predictive Trends for the Optoelectronic Properties of BN Acenes. Journal of the American Chemical Society, 2017, 139, 6082-6085. | 6.6 | 100 |
| 43 | A new inversion process at Group VA (Group 15) elements. Edge inversion through a planar T-shaped structure. Journal of the American Chemical Society, 1986, 108, 2461-2462. | 6.6 | 99 |
| 44 | Dehydration, dehydrogenation, and condensation of alcohols on supported oxide catalysts based on cyclic (WO ₃) ₃ and (MoO ₃) ₃ clusters. Chemical Society Reviews, 2014, 43, 7664-7680. | 18.7 | 99 |
| 45 | Mechanism by which Tungsten Oxide Promotes the Activity of Supported V ₂ O ₅ /TiO ₂ Catalysts for NO _{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹ V MAS NMR Spectroscopy. Angewandte Chemie - International Edition. 2019. 58. 12609-12616. | 7.2 | 96 |
| 46 | Coupled Cluster Theory Determination of the Heats of Formation of Combustion-Related Compounds:Â CO, HCO, CO2, HCO2, HOCO, HC(O)OH, and HC(O)OOH. Journal of Physical Chemistry A, 2003, 107, 1604-1617. | 1.1 | 94 |
| 47 | Bulky Alkylphosphines with Neopentyl Substituents as Ligands in the Amination of Aryl Bromides and Chlorides. Journal of Organic Chemistry, 2006, 71, 5117-5125. | 1.7 | 94 |
| 48 | Quantum-Chemical Calculations of Carbon-Isotope Fractionation in CO ₂ (g), Aqueous Carbonate Species, and Carbonate Minerals. Journal of Physical Chemistry A, 2008, 112, 542-555. | 1.1 | 94 |
| 49 | A Practical Guide to Reliable First Principles Computational Thermochemistry Predictions Across the Periodic Table. Annual Reports in Computational Chemistry, 2012, , 1-28. | 0.9 | 94 |
| 50 | Prediction of Bond Dissociation Energies/Heats of Formation for Diatomic Transition Metal Compounds: CCSD(T) Works. Journal of Chemical Theory and Computation, 2017, 13, 1057-1066. | 2.3 | 92 |
| 51 | Resonance Stabilization Energy of 1,2-Azaborines: A Quantitative Experimental Study by Reaction Calorimetry. Journal of the American Chemical Society, 2010, 132, 18048-18050. | 6.6 | 85 |
| 52 | Late-Stage Functionalization of 1,2-Dihydro-1,2-azaborines via Regioselective Iridium-Catalyzed C–H Borylation: The Development of a New N,N-Bidentate Ligand Scaffold. Journal of the American Chemical Society, 2015, 137, 5536-5541. | 6.6 | 80 |
| 53 | Sterically Demanding, Sulfonated, Triarylphosphines: Application to Palladium-Catalyzed Cross-Coupling, Steric and Electronic Properties, and Coordination Chemistry. Organometallics, 2008, 27, 576-593. | 1.1 | 79 |
| 54 | Molecular Structures and Energetics of the (ZrO ₂) _{<i>n</i>} and (HfO ₂) _{<i>n</i>} (<i>n</i> = 1â^'4) Clusters and Their Anions. Journal of Physical Chemistry A, 2010, 114, 2665-2683. | 1.1 | 77 |

| # | Article | IF | CITATIONS |
|----|---|------------|---------------|
| 55 | Structures and Stabilities of (MgO) _{<i>n</i>} Nanoclusters. Journal of Physical Chemistry A, 2014, 118, 3136-3146. | 1.1 | 76 |
| 56 | Interactions of 1-Methylimidazole with UO2(CH3CO2)2and UO2(NO3)2:Â Structural, Spectroscopic, and Theoretical Evidence for Imidazole Binding to the Uranyl Ion. Journal of the American Chemical Society, 2007, 129, 526-536. | 6.6 | 75 |
| 57 | A quantitative scale for the oxidizing strength of oxidative fluorinators. Journal of the American Chemical Society, 1992, 114, 2978-2985. | 6.6 | 71 |
| 58 | Nucleophilic Aromatic Substitution Reactions of 1,2â€Dihydroâ€1,2â€Azaborine. Angewandte Chemie - International Edition, 2011, 50, 8157-8160. | 7.2 | 71 |
| 59 | Tree Growth—Hybrid Genetic Algorithm for Predicting the Structure of Small (TiO ₂) _{<i>n</i>} , <i>n</i> = 2–13, Nanoclusters. Journal of Chemical Theory and Computation, 2013, 9, 3189-3200. | 2.3 | 71 |
| 60 | Benchmark Calculations on the Electron Detachment Energies of MO ₃ ⁻ and M ₂ O ₆ ⁻ (M = Cr, Mo, W). Journal of Physical Chemistry A, 2007, 111, 11908-11921. | 1.1 | 67 |
| 61 | Prediction of the p <i>K</i> _a 's of Aqueous Metal Ion +2 Complexes. Journal of Physical Chemistry A, 2015, 119, 2926-2939. | 1.1 | 67 |
| 62 | Bond Dissociation Energies in Second-Row Compounds. Journal of Physical Chemistry A, 2008, 112, 3145-3156. | 1.1 | 66 |
| 63 | BN-substituted diphenylacetylene: a basic model for conjugated π-systems containing the BN bond pair. Chemical Science, 2012, 3, 825-829. | 3.7 | 66 |
| 64 | Gold Nanorod-Enhanced Light Absorption and Photoelectrochemical Performance of α-Fe ₂ O ₃ Thin-Film Electrode for Solar Water Splitting. Journal of Physical Chemistry C, 2013, 117, 22060-22068. | 1.5 | 65 |
| 65 | Boronâ€Substituted 1,3â€Dihydroâ€1,3â€azaborines: Synthesis, Structure, and Evaluation of Aromaticity. Angewandte Chemie - International Edition, 2013, 52, 7527-7531. | 7.2 | 65 |
| 66 | Beating Heterogeneity of Single-Site Catalysts: MgO-Supported Iridium Complexes. ACS Catalysis, 2018, 8, 3489-3498. | 5.5 | 64 |
| 67 | Lewis Acidities and Hydride, Fluoride, and Xâ^ Affinities of the BH3â^ NXn Compounds for (X = F, Cl, Br, I,) Tj ETQ | 2q1_1_0.78 | 84314 rgBT /O |
| 68 | Thorium(IV)–Selenate Clusters Containing an Octanuclear Th(IV) Hydroxide/Oxide Core. Inorganic Chemistry, 2012, 51, 4239-4249. | 1.9 | 63 |
| 69 | Molecular Heterogeneous Catalysis: A Single‣ite Zeolite‣upported Rhodium Complex for Acetylene Cyclotrimerization. Chemistry - A European Journal, 2007, 13, 7294-7304. | 1.7 | 62 |
| 70 | Ethanol Conversion on Cyclic (MO3)3 (M = Mo, W) Clusters. Journal of Physical Chemistry C, 2014, 118, 4869-4877. | 1.5 | 62 |
| 71 | Bis-BN Cyclohexane: A Remarkably Kinetically Stable Chemical Hydrogen Storage Material. Journal of the American Chemical Society, 2015, 137, 134-137. | 6.6 | 62 |
| 72 | Computational Study of the Hydrolysis Reactions of the Ground and First Excited Triplet States of Small TiO ₂ Nanoclusters. Journal of Physical Chemistry C, 2011, 115, 9344-9360. | 1.5 | 61 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Neopentylphosphines as effective ligands in palladium-catalyzed cross-couplings of aryl bromides and chlorides. Tetrahedron, 2008, 64, 6920-6934. | 1.0 | 58 |
| 74 | Substituent Effects on the Properties of Borafluorenes. Organometallics, 2016, 35, 3182-3191. | 1.1 | 58 |
| 75 | Energetics of the protonation of CO: Implications for the observation of HOC+ in dense interstellar clouds. Journal of Chemical Physics, 1984, 81, 3603-3611. | 1.2 | 57 |
| 76 | Thermochemistry for the Dehydrogenation of Methyl-Substituted Ammonia Borane Compounds. Journal of Physical Chemistry A, 2009, 113, 6121-6132. | 1.1 | 56 |
| 77 | Zeolite-Supported Organorhodium Fragments: Essentially Molecular Surface Chemistry Elucidated with Spectroscopy and Theory. Journal of the American Chemical Society, 2009, 131, 8460-8473. | 6.6 | 56 |
| 78 | Gas-phase acidities of aspartic acid, glutamic acid, and their amino acid amides. International Journal of Mass Spectrometry, 2007, 265, 213-223. | 0.7 | 55 |
| 79 | Reliable Potential Energy Surfaces for the Reactions of H ₂ 0 with ThO ₂ , PaO ₂ ⁺ , UO ₂ ²⁺ , and UO ₂ ⁺ . Journal of Physical Chemistry A, 2015, 119, 11422-11431. | 1.1 | 55 |
| 80 | Molecular Structures, Acidâ^'Base Properties, and Formation of Group 6 Transition Metal Hydroxides. Journal of Physical Chemistry C, 2011, 115, 8072-8103. | 1.5 | 54 |
| 81 | Trivalent Ion Hydrolysis Reactions:Â A Linear Free-Energy Relationship Based on Density Functional Electronic Structure Calculations. Journal of the American Chemical Society, 1999, 121, 3234-3235. | 6.6 | 53 |
| 82 | Structure and Heats of Formation of Iodine Fluorides and the Respective Closed-Shell Ions from CCSD(T) Electronic Structure Calculations and Reliable Prediction of the Steric Activity of the Free-Valence Electron Pair in ClF ₆ ^{â^`} , BrF ₆ ^{â^`} , and IF ₆ ^{â^`} . Inorganic Chemistry, 2008, 47, 5485-5494. | 1.9 | 53 |
| 83 | Prototype Supported Metal Cluster Catalysts: Ir ₄ and Ir ₆ . ChemCatChem, 2011, 3, 95-107. | 1.8 | 53 |
| 84 | Selective molecular recognition by nanoscale environments in a supported iridium cluster catalyst. Nature Nanotechnology, 2014, 9, 459-465. | 15.6 | 53 |
| 85 | Structural and Electronic Property Study of (ZnO) _{<i>n</i>} , <i>n</i> ≤68: Transition from Zinc Oxide Molecular Clusters to Ultrasmall Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 20400-20418. | 1.5 | 53 |
| 86 | Accurate heats of formation and acidities for H3PO4, H2SO4, and H2CO3 from ab initio electronic structure calculations. International Journal of Quantum Chemistry, 2005, 102, 775-784. | 1.0 | 52 |
| 87 | Fundamental Thermochemical Properties of Amino Acids: Gas-Phase and Aqueous Acidities and Gas-Phase Heats of Formation. Journal of Physical Chemistry B, 2012, 116, 2905-2916. | 1.2 | 52 |
| 88 | Investigation of the Structure and Active Sites of TiO ₂ Nanorod Supported VO _{<i>x</i>} Catalysts by High-Field and Fast-Spinning ⁵¹ V MAS NMR. ACS Catalysis, 2015, 5, 3945-3952. | 5.5 | 51 |
| 89 | A Modular Synthetic Approach to Monocyclic 1,4â€Azaborines. Angewandte Chemie - International Edition, 2016, 55, 8333-8337. | 7.2 | 50 |
| 90 | Diels–Alder Reactions of 1,2â€Azaborines. Angewandte Chemie - International Edition, 2015, 54, 7823-7827. | 7.2 | 49 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-------------|
| 91 | Accurate Heats of Formation of the "Arduengo-Type―Carbene and Various Adducts Including H2 from ab Initio Molecular Orbital Theory. Journal of Physical Chemistry A, 2006, 110, 1968-1974. | 1.1 | 48 |
| 92 | Low-Lying Electronic States of M ₃ O ₉ ⁻ and M ₃ O ₉ ²⁻ (M = Mo, W). Journal of Physical Chemistry A, 2007, 111, 11093-11099. | 1.1 | 47 |
| 93 | Matrix Infrared Spectra and Theoretical Studies of Thorium Oxide Species: ThOxand Th2Oy. Journal of Physical Chemistry A, 2011, 115, 14407-14416. | 1.1 | 47 |
| 94 | Rhodium-Catalyzed B–H Activation of 1,2-Azaborines: Synthesis and Characterization of BN Isosteres of Stilbenes. Organic Letters, 2014, 16, 3340-3343. | 2.4 | 46 |
| 95 | Prediction of Vibrational Frequencies of UO22+ at the CCSD(T) Level. Journal of Physical Chemistry A, 2008, 112, 4095-4099. | 1.1 | 45 |
| 96 | Computational Study of H2 and O2 Production from Water Splitting by Small (MO2)n Clusters (M = Ti,) Tj ETQq | 0 | Overlock 10 |
| 97 | Mechanism by which Tungsten Oxide Promotes the Activity of Supported V ₂ O ₅ /TiO ₂ Catalysts for NO _{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹ V MAS NMR Spectroscopy. Angewandte Chemie, 2019, 131, 12739-12746. | 1.6 | 45 |
| 98 | Degradation of Î ³ -irradiated linear perfluoroalkanes at high dosage. Journal of Fluorine Chemistry, 2007, 128, 575-586. | 0.9 | 44 |
| 99 | Structures and Heats of Formation of Simple Alkaline Earth Metal Compounds: Fluorides, Chlorides, Oxides, and Hydroxides for Be, Mg, and Ca. Journal of Physical Chemistry A, 2010, 114, 9349-9358. | 1.1 | 43 |
| 100 | Spectroscopic and Energetic Properties of Thorium(IV) Molecular Clusters with a Hexanuclear Core. Journal of Physical Chemistry A, 2012, 116, 6917-6926. | 1.1 | 43 |
| 101 | Gas Phase Properties of MX ₂ and MX ₄ (X = F, Cl) for M = Group 4, Group 14, Cerium, and Thorium. Journal of Physical Chemistry A, 2015, 119, 5790-5803. | 1.1 | 43 |
| 102 | Use of Improved Orbitals for CCSD(T) Calculations for Predicting Heats of Formation of Group IV and Group VI Metal Oxide Monomers and Dimers and UCl ₆ . Journal of Chemical Theory and Computation, 2016, 12, 3583-3592. | 2.3 | 43 |
| 103 | Boranes with Ultra-High Stokes Shift Fluorescence. Organometallics, 2018, 37, 3732-3741. | 1.1 | 40 |
| 104 | Molecular and Dissociative Adsorption of Water on (TiO ₂) _{<i>n</i>} Clusters, <i>n</i> = 1–4. Journal of Physical Chemistry A, 2015, 119, 11406-11421. | 1.1 | 39 |
| 105 | Investigation of Silica-Supported Vanadium Oxide Catalysts by High-Field ⁵¹ V Magic-Angle Spinning NMR. Journal of Physical Chemistry C, 2017, 121, 6246-6254. | 1.5 | 39 |
| 106 | The gas and solution phase acidities of HNO, HOONO, HONO, and HONO2. International Journal of Mass Spectrometry, 2003, 227, 421-438. | 0.7 | 38 |
| 107 | Heats of Formation of Triplet Ethylene, Ethylidene, and Acetylene. Journal of Physical Chemistry A, 2008, 112, 2082-2087. | 1.1 | 38 |
| 108 | Thermodynamic Properties of the XO ₂ , X ₂ O, XYO, X ₂ O ₂ , and XYO ₂ (X, Y = Cl, Br, and I) Isomers. Journal of Physical Chemistry A, 2010, 114, 4254-4265. | 1.1 | 38 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Ab Initio Coupled Cluster Determination of the Heats of Formation of C ₂ H ₂ F ₂ , C ₂ F ₂ , and C ₂ F ₄ . Journal of Physical Chemistry A, 2011, 115, 1440-1451. | 1.1 | 38 |
| 110 | Tipping Point for Expansion of Layered Aluminosilicates in Weakly Polar Solvents: Supercritical CO ₂ . ACS Applied Materials & Interfaces, 2017, 9, 36783-36791. | 4.0 | 38 |
| 111 | Structures and Heats of Formation of Simple Alkali Metal Compounds: Hydrides, Chlorides, Fluorides, Hydroxides, and Oxides for Li, Na, and K. Journal of Physical Chemistry A, 2010, 114, 4272-4281. | 1.1 | 37 |
| 112 | Oxidation, Reduction, and Condensation of Alcohols over (MO3)3 (M = Mo, W) Nanoclusters. Journal of Physical Chemistry C, 2014, 118, 22620-22634. | 1.5 | 37 |
| 113 | Computational Study of the Hydrolysis Reactions of Small MO ₂ (M = Zr and Hf) Nanoclusters with Water. Journal of Physical Chemistry C, 2012, 116, 8475-8492. | 1.5 | 35 |
| 114 | Highâ€Energyâ€Resolution Xâ€ray Absorption Spectroscopy for Identification of Reactive Surface Species on Supported Singleâ€Site Iridium Catalysts. Chemistry - A European Journal, 2017, 23, 14760-14768. | 1.7 | 35 |
| 115 | Electronic structure of phosphine. Effect of basic set and correlation on the inversion barrier. The Journal of Physical Chemistry, 1982, 86, 914-917. | 2.9 | 34 |
| 116 | Dehydrogenation Reactions of Cyclic C2B2N2H12 and C4BNH12 Isomers. Journal of Physical Chemistry A, 2010, 114, 2644-2654. | 1.1 | 34 |
| 117 | Benchmark Calculations of Energetic Properties of Groups 4 and 6 Transition Metal Oxide Nanoclusters Including Comparison to Density Functional Theory. Journal of Chemical Theory and Computation, 2016, 12, 3689-3710. | 2.3 | 32 |
| 118 | Matrix Infrared Spectroscopic and Computational Investigations of the Lanthanideâ^'Methylene Complexes CH ₂ LnF ₂ with Single Lnâ^'C Bonds. Journal of Physical Chemistry A, 2011, 115, 1913-1921. | 1.1 | 31 |
| 119 | Reversible Metal Aggregation and Redispersion Driven by the Catalytic Water Gas Shift Half-Reactions: Interconversion of Single-Site Rhodium Complexes and Tetrarhodium Clusters in Zeolite HY. ACS Catalysis, 2019, 9, 3311-3321. | 5.5 | 31 |
| 120 | Heptacoordination: pentagonal bipyramidal heptafluoroxenon(1+) XeF7+ and heptafluorotellurate(1-) TeF7- ions. Journal of the American Chemical Society, 1993, 115, 9461-9467. | 6.6 | 30 |
| 121 | Structural and Electronic Near Degeneracy of M3O9– (M = Cr, Mo, W). Journal of Physical Chemistry C, 2011, 115, 19190-19196. | 1.5 | 29 |
| 122 | Intrinsic acidity of aluminum, chromium (III) and iron (III) μ3-hydroxo functional groups from ab initio electronic structure calculations. Geochimica Et Cosmochimica Acta, 2000, 64, 1675-1680. | 1.6 | 28 |
| 123 | Thermochemical Properties of HxNO Molecules and Ions from ab Initio Electronic Structure Theory. Journal of Physical Chemistry A, 2006, 110, 185-191. | 1.1 | 28 |
| 124 | Mechanism of selective and complete oxidation in La ₂ O ₃ -catalyzed oxidative coupling of methane. Catalysis Science and Technology, 2020, 10, 2602-2614. | 2.1 | 28 |
| 125 | 3-Methyl-1,2-BN-cyclopentane: a promising H ₂ storage material?. Dalton Transactions, 2013, 42, 611-614. | 1.6 | 26 |
| 126 | Reactions of laser-ablated U atoms with (CN)2: infrared spectra and electronic structure calculations of UNC, U(NC)2, and U(NC)4 in solid argon. Chemical Communications, 2015, 51, 3899-3902. | 2.2 | 26 |

| # | Article | IF | CITATIONS |
|-----|--|----------------|-------------|
| 127 | Matrix Infrared Spectroscopic and Electronic Structure Investigations of the Lanthanide Metal Atom-Methyl Fluoride Reaction Products CH ₃ -LnF and CH ₂ -LnHF: The Formation of Single Carbon-Lanthanide Metal Bonds. Journal of Physical Chemistry A, 2011, 115, 5609-5624. | 1.1 | 25 |
| 128 | Infrared Spectra of H2ThS and H2US in Noble Gas Matrixes: Enhanced H-An-S Covalent Bonding. Inorganic Chemistry, 2013, 52, 10275-10285. | 1.9 | 25 |
| 129 | Reactions of Lanthanide Atoms with Oxygen Difluoride and the Role of the Ln Oxidation State. Inorganic Chemistry, 2014, 53, 446-456. | 1.9 | 25 |
| 130 | Single‣ite Zeoliteâ€Anchored Organoiridium Carbonyl Complexes: Characterization of Structure and Reactivity by Spectroscopy and Computational Chemistry. Chemistry - A European Journal, 2015, 21, 11825-11835. | 1.7 | 25 |
| 131 | MgO-Supported Iridium Metal Pair-Site Catalysts Are More Active and Resistant to CO Poisoning than Analogous Single-Site Catalysts for Ethylene Hydrogenation and Hydrogen–Deuterium Exchange. ACS Catalysis, 2019, 9, 9545-9553. | 5.5 | 25 |
| 132 | Predictive Acid Gas Adsorption in Rare Earth DOBDC Metal–Organic Frameworks via Complementary Cluster and Periodic Structure Models. Journal of Physical Chemistry C, 2020, 124, 26801-26813. | 1.5 | 25 |
| 133 | Infrared spectroscopic and theoretical studies of the OTiF2, OZrF2 and OHfF2 molecules with terminal oxo ligands. Dalton Transactions, 2012, 41, 11706. | 1.6 | 24 |
| 134 | Acid Gas Adsorption on Metal–Organic Framework Nanosheets as a Model of an "All-Surface― Material. Journal of Chemical Theory and Computation, 2017, 13, 1341-1350. | 2.3 | 23 |
| 135 | Infrared Spectra and Quantum Chemical Calculations of the Bridge-Bonded HC(F)LnF ₂ (Ln) Tj ETQq1 | 10.7843 1.1 | 814.rgBT /0 |
| 136 | Density Functional Theory Study of the Complexation of the Uranyl Dication with Anionic Phosphate Ligands with and without Water Molecules. Journal of Physical Chemistry A, 2013, 117, 8939-8957. | 1.1 | 22 |
| 137 | The Synthesis, Characterization and Dehydrogenation of Sigmaâ€Complexes of BNâ€Cyclohexanes. Chemistry - A European Journal, 2016, 22, 310-322. | 1.7 | 22 |
| 138 | Initial Steps in the Selective Catalytic Reduction of NO with NH ₃ by TiO ₂ -Supported Vanadium Oxides. ACS Catalysis, 2020, 10, 13918-13931. | 5.5 | 22 |
| 139 | Prediction of Reliable Metalâ^'PH ₃ Bond Energies for Ni, Pd, and Pt in the 0 and +2 Oxidation States. Inorganic Chemistry, 2010, 49, 5546-5553. | 1.9 | 21 |
| 140 | Modeling the formation of TiO ₂ ultra-small nanoparticles. Nanoscale, 2017, 9, 7143-7162. | 2.8 | 21 |
| 141 | Uranium(IV) Chloride Complexes: UCl ₆ ^{2–} and an Unprecedented U(H ₂ O) ₄ Cl ₄ Structural Unit. Inorganic Chemistry, 2017, 56, 9772-9780. | 1.9 | 21 |
| 142 | Surface-Catalyzed Oxygen Exchange during Mineral Carbonation in Nanoscale Water Films. Journal of Physical Chemistry C, 2019, 123, 12871-12885. | 1.5 | 21 |
| 143 | Formation of Surface Impurities on Lithium–Nickel–Manganese–Cobalt Oxides in the Presence of CO ₂ and H ₂ O. Journal of the American Chemical Society, 2021, 143, 10261-10274. | 6.6 | 21 |
| 144 | Thorium Fluorides ThF, ThF ₂ , ThF ₃ , ThF ₄ , ThF ₃ (F ₂), and ThF ₅ [–] Characterized by Infrared Spectra in Solid Argon and Electronic Structure and Vibrational Frequency Calculations. Inorganic Chemistry, 2013, 52, 8228-8233. | 1.9 | 20 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Formation and Characterization of Homoleptic Thorium Isocyanide Complexes. Inorganic Chemistry, 2017, 56, 5060-5068. | 1.9 | 20 |
| 146 | F ⁺ and F ^{â^'} Affinities of Simple N _{<i>x</i>} F _{<i>y</i>} and O _{<i>x</i>} F _{<i>y</i>} Compounds. Inorganic Chemistry, 2011, 50, 1914-1925. | 1.9 | 19 |
| 147 | Remarkably High Stability of Late Actinide Dioxide Cations: Extending Chemistry to Pentavalent Berkelium and Californium. Chemistry - A European Journal, 2017, 23, 17369-17378. | 1.7 | 19 |
| 148 | Bond energies in organofluorine systems: applications to Teflon® and fullerenes. Journal of Fluorine Chemistry, 1995, 72, 209-214. | 0.9 | 18 |
| 149 | Bond Energies in Models of the Schrock Metathesis Catalyst. Journal of Physical Chemistry C, 2011, 115, 12106-12120. | 1.5 | 18 |
| 150 | Structures and Energetics of (MgCO ₃) _{<i>n</i>} Clusters (<i>n</i> ≤6). Journal of Physical Chemistry A, 2015, 119, 3419-3428. | 1.1 | 18 |
| 151 | Single‧ite Osmium Catalysts on MgO: Reactivity and Catalysis of CO Oxidation. Chemistry - A European Journal, 2017, 23, 2532-2536. | 1.7 | 18 |
| 152 | Structures and Heats of Formation of Simple Alkaline Earth Metal Compounds II: Fluorides, Chlorides, Oxides, and Hydroxides for Ba, Sr, and Ra. Journal of Physical Chemistry A, 2018, 122, 316-327. | 1.1 | 18 |
| 153 | Acidity, basicity, and gas-phase ion chemistry of hydrogen selenide by ion cyclotron resonance spectroscopy. Inorganic Chemistry, 1972, 11, 960-963. | 1.9 | 17 |
| 154 | Properties of ThF _{<i>x</i>} from Infrared Spectra in Solid Argon and Neon with Supporting Electronic Structure and Thermochemical Calculations. Journal of Physical Chemistry A, 2014, 118, 2107-2119. | 1.1 | 17 |
| 155 | Diels–Alder Reactions of 1,2â€Azaborines. Angewandte Chemie, 2015, 127, 7934-7938. | 1.6 | 17 |
| 156 | Structure and Stability of Hydrolysis Reaction Products of MgO Nanoparticles Leading to the Formation of Brucite. Journal of Physical Chemistry C, 2017, 121, 21750-21762. | 1.5 | 17 |
| 157 | A Computational Assessment of Actinide Dioxide Cations AnO ₂ ²⁺ for An = U to Lr: The Limited Stability Range of the Hexavalent Actinyl Moiety, [Oâ•Anâ•O] ²⁺ . Inorganic Chemistry, 2020, 59, 4554-4566. | 1.9 | 17 |
| 158 | Solvent stabilization of the edge inversion transition state in tetrahedral molecules. International Journal of Quantum Chemistry, 1988, 34, 85-98. | 1.0 | 16 |
| 159 | Gas-Phase Deprotonation of the Peptide Backbone for Tripeptides and Their Methyl Esters with Hydrogen and Methyl Side Chains. Journal of Physical Chemistry B, 2012, 116, 14844-14858. | 1.2 | 16 |
| 160 | Reaction of Laser-Ablated Uranium and Thorium Atoms with H ₂ Se: A Rare Example of Selenium Multiple Bonding. Inorganic Chemistry, 2015, 54, 9761-9769. | 1.9 | 16 |
| 161 | Water Structure Controls Carbonic Acid Formation in Adsorbed Water Films. Journal of Physical Chemistry Letters, 2018, 9, 4988-4994. | 2.1 | 16 |
| 162 | Understanding the Binding of Aromatic Hydrocarbons on Rutile TiO ₂ (110). Journal of Physical Chemistry C, 2019, 123, 16766-16777. | 1.5 | 16 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Gas Phase Hydrolysis and Oxoâ€Exchange of Actinide Dioxide Cations: Elucidating Intrinsic Chemistry from Protactinium to Einsteinium. Chemistry - A European Journal, 2019, 25, 4245-4254. | 1.7 | 16 |
| 164 | Accelerating the insertion reactions of (NHC)Cu–H <i>via</i> remote ligand functionalization. Chemical Science, 2021, 12, 11495-11505. | 3.7 | 16 |
| 165 | Thermodynamic Properties of Arsenic Compounds and the Heat of Formation of the As Atom from High Level Electronic Structure Calculations. Journal of Physical Chemistry A, 2011, 115, 14667-14676. | 1.1 | 15 |
| 166 | The surprising oxidation state of fumed silica and the nature of water binding to silicon oxides and hydroxides. Chemical Physics Letters, 2011, 501, 159-165. | 1.2 | 15 |
| 167 | Spatial and temporal variation of surface-enhanced Raman scattering at Ag nanowires in aqueous solution. Physical Chemistry Chemical Physics, 2013, 15, 850-859. | 1.3 | 15 |
| 168 | Structures and Properties of the Products of the Reaction of Lanthanide Atoms with H ₂ 0: Dominance of the +II Oxidation State. Journal of Physical Chemistry A, 2016, 120, 793-804. | 1.1 | 15 |
| 169 | Density Functional Theory and the Basis Set Truncation Problem with Correlation Consistent Basis Sets: Elephant in the Room or Mouse in the Closet?. Journal of Physical Chemistry A, 2018, 122, 2598-2603. | 1.1 | 15 |
| 170 | Reactions of Late Lanthanide Metal Atoms and Methanol in Solid Argon: A Matrix Isolation Infrared Spectroscopic and Theoretical Study. Journal of Physical Chemistry A, 2011, 115, 14581-14592. | 1.1 | 14 |
| 171 | Molecular models of site-isolated cobalt, rhodium, and iridium catalysts supported on zeolites: Ligand bond dissociation energies. Computational and Theoretical Chemistry, 2015, 1074, 58-72. | 1.1 | 14 |
| 172 | Structures and Stabilities of (CaO) _{<i>n</i>} Nanoclusters. Journal of Physical Chemistry C, 2017, 121, 23025-23038. | 1.5 | 14 |
| 173 | [(bipy) ₂ (UO ₂) ₂ (N ₃) ₃) ₄], [(bipy)UO ₂ (N ₃) ₃] ^{â^'} , [UO ₂ (N ₃) ₄] ^{2â''} , and [(UO ₂) ₂) ₂) ₃) ₃) ₂) _{222<td>1.7</td><td>14</td>} | 1.7 | 14 |
| 174 | Synthesis of 1 <i>H</i> -Pyrazol-5-yl-pyridin-2-yl-[1,2,4]triazinyl Soft-Lewis Basic Complexants via Metal and Oxidant Free [3 + 2] Dipolar Cycloaddition of Terminal Ethynyl Pyridines with Tosylhydrazides. Journal of Organic Chemistry, 2019, 84, 14558-14570. | 1.7 | 14 |
| 175 | An Experimental and Computational Study of the Gas-Phase Acidities of the Common Amino Acid Amides. Journal of Physical Chemistry B, 2015, 119, 9661-9669. | 1.2 | 13 |
| 176 | Reaction of CO ₂ with Groups 4 and 6 Transition Metal Oxide Clusters. Journal of Physical Chemistry A, 2017, 121, 8719-8727. | 1.1 | 13 |
| 177 | An Experimental and Computational Investigation into the Gas-Phase Acidities of Tyrosine and Phenylalanine: Three Structures for Deprotonated Tyrosine. Journal of Physical Chemistry B, 2014, 118, 12630-12643. | 1.2 | 12 |
| 178 | Extending the Row of Lanthanide Tetrafluorides: A Combined Matrixâ€Isolation and Quantumâ€Chemical Study. Chemistry - A European Journal, 2016, 22, 2406-2416. | 1.7 | 12 |
| 179 | Laser-Ablated U Atom Reactions with (CN) ₂ to Form UNC, U(NC) ₂ , and U(NC) ₄ : Matrix Infrared Spectra and Quantum Chemical Calculations. Journal of Physical Chemistry A, 2018, 122, 516-528. | 1.1 | 12 |
| 180 | Machine-Learning Approach for the Development of Structure–Energy Relationships of ZnO Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 18621-18639. | 1.5 | 12 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Monomeric and Trimeric Thorium Chlorides Isolated from Acidic Aqueous Solution. Inorganic Chemistry, 2019, 58, 10871-10882. | 1.9 | 12 |
| 182 | Solubility thermodynamics of amine boranes in polar solvents. International Journal of Hydrogen Energy, 2021, 46, 10801-10808. | 3.8 | 12 |
| 183 | Computational Studies of the Properties of Azole· <i>x</i> BH ₃ Adducts for Chemical Hydrogen Storage Systems. Journal of Physical Chemistry C, 2012, 116, 22196-22211. | 1.5 | 11 |
| 184 | Thorium and Uranium Hydride Phosphorus and Arsenic Bearing Molecules with Single and Double Actinide-Pnictogen and Bridged Agostic Hydrogen Bonds. Inorganic Chemistry, 2017, 56, 2949-2957. | 1.9 | 11 |
| 185 | Characterization of Carbenes via Hydrogenation Energies, Stability, and Reactivity: What's in a Name?. Chemistry - A European Journal, 2017, 23, 17556-17565. | 1.7 | 11 |
| 186 | Potential Energy Surface of Group 11 Trimers (Cu, Ag, Au): Bond Angle Isomerism in Au3. Journal of Physical Chemistry A, 2019, 123, 1198-1207. | 1.1 | 11 |
| 187 | Energetics of CO2– in Aqueous Solution. Journal of Physical Chemistry A, 2019, 123, 1243-1259. | 1.1 | 11 |
| 188 | Lewis Acidity and Basicity: Another Measure of Carbene Reactivity. Journal of Physical Chemistry A, 2020, 124, 6096-6103. | 1.1 | 11 |
| 189 | Elucidation of Bottom-Up Growth of CaCO ₃ Involving Prenucleation Clusters from Structure Predictions and Decomposition of Globally Optimized (CaCO ₃) _{<i>n</i>} Nanoclusters. ACS Nano, 2020, 14, 4153-4165. | 7.3 | 11 |
| 190 | Nature of Oxygen Adsorption on Defective Carbonaceous Materials. Journal of Physical Chemistry C, 2021, 125, 20686-20696. | 1.5 | 11 |
| 191 | The presence of Ti(II) centers in doped nanoscale TiO2 and TiO2â^'xNx. Chemical Physics Letters, 2012, 539-540, 58-63. | 1.2 | 10 |
| 192 | Mononuclear Iridium Dinitrogen Complexes Bonded to Zeolite HY. Chemistry - A European Journal, 2015, 21, 631-640. | 1.7 | 10 |
| 193 | Formation Mechanism of NF ₄ ⁺ Salts and Extraordinary Enhancement of the Oxidizing Power of Fluorine by Strong Lewis Acids. Angewandte Chemie - International Edition, 2017, 56, 7924-7929. | 7.2 | 10 |
| 194 | Thermodynamic Acidity Studies of 6,6′-Dihydroxy-2,2′-bipyridine: A Combined Experimental and Computational Approach. Journal of Physical Chemistry A, 2018, 122, 2221-2231. | 1.1 | 10 |
| 195 | Electronic Structure Predictions of the Energetic Properties of Tellurium Fluorides. Inorganic Chemistry, 2019, 58, 8279-8292. | 1.9 | 10 |
| 196 | The H•/H [–] Redox Couple and Absolute Hydration Energy of H [–] . Journal of Physical Chemistry A, 2020, 124, 6084-6095. | 1.1 | 10 |
| 197 | Prediction of Structures and Atomization Energies of Coinage Metals, (M) _{<i>n</i>} , <i>n</i> < 20: Extrapolation of Normalized Clustering Energies to Predict the Cohesive Energy. Journal of Physical Chemistry A, 2020, 124, 1775-1786. | 1.1 | 10 |
| 198 | Bond Dissociation Energies in Heavy Element Chalcogen and Halogen Small Molecules. Journal of Physical Chemistry A, 2021, 125, 1892-1902. | 1.1 | 10 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Thermochemical Parameters of CHFO and CF ₂ O. Journal of Physical Chemistry A, 2008, 112, 4973-4981. | 1.1 | 9 |
| 200 | Structures and Stability of Irn(CO)m. Molecular Physics, 2012, 110, 1977-1992. | 0.8 | 9 |
| 201 | Activation of Water by Pentavalent Actinide Dioxide Cations: Characteristic Curium Revealed by a Reactivity Turn after Americium. Inorganic Chemistry, 2019, 58, 14005-14014. | 1.9 | 9 |
| 202 | Calculated Ionization Potentials of MO ₃ and MO ₂ for M = U, Mo, W, and Nd. Journal of Physical Chemistry A, 2020, 124, 6913-6919. | 1.1 | 9 |
| 203 | Effect of initial γ-irradiation on infrared laser ablation of poly(vinyl alcohol) studied by infrared spectroscopy. Polymer Degradation and Stability, 2020, 181, 109331. | 2.7 | 9 |
| 204 | Interaction of Th with H ^{0/–/+} : Combined Experimental and Theoretical Thermodynamic Properties. Journal of Physical Chemistry A, 2022, 126, 198-210. | 1.1 | 9 |
| 205 | 1,2-Ethanediol and 1,3-Propanediol Conversions over (MO ₃) ₃ (M = Mo, W) Nanoclusters: A Computational Study. Journal of Physical Chemistry A, 2016, 120, 1897-1907. | 1.1 | 8 |
| 206 | Infrared Spectroscopic and Theoretical Studies on the OMF ₂ and OMF (M = Cr, Mo, W) Molecules in Solid Argon. Journal of Physical Chemistry A, 2017, 121, 7603-7612. | 1.1 | 8 |
| 207 | Weakly interacting solvation spheres surrounding a calixarene-protected tetrairidium carbonyl cluster: contrasting effects on reactivity of alkane solvent and silica support. Dalton Transactions, 2018, 47, 13550-13558. | 1.6 | 8 |
| 208 | Predicting the Formation of Sulfur-Based BrÃ,nsted Acids from the Reactions of SO _{<i>x</i>} with H ₂ O and H ₂ S. Journal of Physical Chemistry A, 2019, 123, 10169-10183. | 1.1 | 8 |
| 209 | Synthesis, Structural Characterization, and Coordination Chemistry of (Trineopentylphosphine)palladium(aryl)bromide Dimer Complexes ([(Np ₃ P)Pd(Ar)Br] ₂). Inorganic Chemistry, 2019, 58, 13299-13313. | 1.9 | 8 |
| 210 | Photodissociation and Theory to Investigate Uranium Oxide Cluster Cations. Journal of Physical Chemistry A, 2020, 124, 1940-1953. | 1.1 | 8 |
| 211 | Dehydration of UO ₂ Cl ₂ ·3H ₂ O and Nd(NO ₃) ₃ ·6H ₂ O with a Soft Donor Ligand and Comparison of Their Interactions through X-ray Diffraction and Theoretical Investigation. Inorganic Chemistry, 2020, 59, 2861-2869. | 1.9 | 8 |
| 212 | Th ₂ O [–] , Th ₂ Au [–] , and Th ₂ AuO _{1,2} [–] Anions: Photoelectron Spectroscopic and Computational Characterization of Energetics and Bonding. Journal of Physical Chemistry A, 2021, 125, 258-271. | 1.1 | 8 |
| 213 | Predicting the Mechanism and Products of CO ₂ Capture by Amines in the Presence of H ₂ O. Journal of Physical Chemistry A, 2021, 125, 9802-9818. | 1.1 | 8 |
| 214 | A Zeolite‧upported Molecular Ruthenium Complex with η ⁶ ₆ H ₆ Ligands: Chemistry Elucidated by Using Spectroscopy and Density Functional Theory. Chemistry - A European Journal, 2010, 16, 7427-7436. | 1.7 | 7 |
| 215 | Thermochemical Properties of Selenium Fluorides, Oxides, and Oxofluorides. Inorganic Chemistry, 2012, 51, 2472-2485. | 1.9 | 7 |
| 216 | Acidity of M(VI)O2(OH)2 for M = Group 6, 16, and U as Central Atoms. Journal of Physical Chemistry A, 2017, 121, 1041-1050. | 1.1 | 7 |

| # | Article | IF | CITATIONS |
|-----|--|------------|---------------------------|
| 217 | Role of N-Heterocyclic Carbenes as Ligands in Iridium Carbonyl Clusters. Journal of Physical Chemistry A, 2017, 121, 5029-5044. | 1.1 | 7 |
| 218 | Hydrolysis of Small Oxo/Hydroxo Molecules Containing High Oxidation State Actinides (Th, Pa, U, Np,) Tj ETQq0 | 0 Q rgBT / | /Overlock 10 ⁻ |
| 219 | Gas-Phase Acidities of Phosphorylated Amino Acids. Journal of Physical Chemistry B, 2015, 119, 14604-14621. | 1.2 | 6 |
| 220 | Reaction of SO2 with Group IV and VI transition metal oxide clusters. Computational and Theoretical Chemistry, 2017, 1120, 46-55. | 1.1 | 6 |
| 221 | Electronic Structures of Small (RuO ₂) _{<i>n</i>} (<i>n</i> = 1–4) Nanoclusters and Their Anions and the Hydrolysis Reactions with Water. Journal of Physical Chemistry A, 2017, 121, 7726-7744. | 1.1 | 6 |
| 222 | Stability and Electronic Properties of Rocksalt (CdO) _{<i>n</i>} , (SrO) _{<i>n</i>} , and (BaO) _{<i>n</i>} Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 25021-25034. | 1.5 | 6 |
| 223 | Infrared Spectroscopic and Theoretical Studies of the 3d Transition Metal Oxyfluoride Molecules. Inorganic Chemistry, 2019, 58, 9796-9810. | 1.9 | 6 |
| 224 | Crystallographic evidence of Watson–Crick connectivity in the base pair of anionic adenine with thymine. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18224-18230. | 3.3 | 6 |
| 225 | Polarizabilities of neutral atoms and atomic ions with a noble gas electron configuration. Journal of Chemical Physics, 2020, 153, 174304. | 1.2 | 6 |
| 226 | Hydrolysis of Metal Dioxides Differentiates d-block from f-block Elements: Pa(V) as a 6d Transition Metal; Pr(V) as a 4f "Lanthanyl― Journal of Physical Chemistry A, 2020, 124, 9272-9287. | 1.1 | 6 |
| 227 | Reaction Energetics and ¹³ C Fractionation of Alanine Transamination in the Aqueous and Gas Phases. Journal of Physical Chemistry A, 2020, 124, 2077-2089. | 1.1 | 6 |
| 228 | Prediction of An(III)/Ln(III) Separation by 1,2,4-Triazinylpyridine Derivatives. Journal of Physical Chemistry A, 2021, 125, 6529-6542. | 1.1 | 6 |
| 229 | Synthesis of nanoscale silicon oxide oxidation state distributions: The transformation from hydrophilicity to hydrophobicity. Chemical Physics Letters, 2016, 653, 137-143. | 1.2 | 5 |
| 230 | Reaction of CO ₂ with UO ₃ Nanoclusters. Journal of Physical Chemistry A, 2017, 121, 8518-8524. | 1.1 | 5 |

| 231 | Computational Study of Molecular Hydrogen Adsorption over Small (MO ₂) _{<i>n</i>} Nanoclusters (M = Ti, Zr, Hf; <i>n</i> = 1 to 4). Journal of Physical Chemistry A, 2018, 122, 4338-4349. | 1.1 | 5 |
|-----|---|-----|---|
| 232 | αâ€Fluoroalcohols: Synthesis and Characterization of Perfluorinated Methanol, Ethanol and <i>n</i> â€Propanol, and their Oxonium Salts. Chemistry - A European Journal, 2018, 24, 16737-16742. | 1.7 | 5 |
| 233 | Effect of X-ray beam on the molecular–topological structure of the surface of kynar® polyvinylidene fluoride resin. Journal of Fluorine Chemistry, 2019, 226, 109338. | 0.9 | 5 |
| | Dt Assisted Carbon Domediation of Makaub 2 Jours C Materials for CO Dispressortionation ACS | | |

²³⁴Pt-Assisted Carbon Remediation of Mo₂C Materials for CO Disproportionation. ACS
Catalysis, 2020, 10, 1894-1911.5.55

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Reaction of NO ₂ with Groups IV and VI Transition Metal Oxide Clusters. Journal of Physical Chemistry A, 2020, 124, 9222-9236. | 1.1 | 5 |
| 236 | Thermodynamics of Metal Carbonates and Bicarbonates and Their Hydrates for Mg, Ca, Fe, and Cd Relevant to Mineral Energetics. Journal of Physical Chemistry A, 2020, 124, 1829-1840. | 1.1 | 5 |
| 237 | Syntheses, solution behavior, and computational bond length analyses of trifluoromethyl and perfluoroethyl cuprate salts. Journal of Fluorine Chemistry, 2020, 234, 109518. | 0.9 | 5 |
| 238 | Experimental and Computational Description of the Interaction of H and H [–] with U. Journal of Physical Chemistry A, 2022, 126, 4432-4443. | 1.1 | 5 |
| 239 | Spectroscopic Characterization of μ-η ¹ 11-Peroxo Ligands Formed by Reaction of Dioxygen with Electron-Rich Iridium Clusters. Inorganic Chemistry, 2019, 58, 14338-14348. | 1.9 | 4 |
| 240 | Mechanistic Study of Enhanced Protonation by Chromium(III) in Electrospray Ionization: A Superacid Bound to a Peptide. Journal of the American Society for Mass Spectrometry, 2020, 31, 308-318. | 1.2 | 4 |
| 241 | Impact of Noncovalent Interactions on the Structural Chemistry of Thorium(IV)-Aquo-Chloro Complexes. Inorganic Chemistry, 2021, 60, 6375-6390. | 1.9 | 4 |
| 242 | Computational Study of Triphosphine-Ligated Cu(I) Catalysts for Hydrogenation of CO ₂ to Formate. Journal of Physical Chemistry A, 2021, 125, 6600-6610. | 1.1 | 4 |
| 243 | Joint influence of γ–irradiation and high temperature shear grinding on the IR spectra and surface–energy properties of polyethylene. Polymer, 2021, 237, 124342. | 1.8 | 4 |
| 244 | Bond Dissociation Energies of Carbene–Carbene and Carbene–Main Group Adducts. Journal of Physical Chemistry A, 2022, 126, 2658-2669. | 1.1 | 4 |
| 245 | Benchmark-Quality Atomization Energies for BeH and BeH ₂ . Journal of Chemical Theory and Computation, 2017, 13, 649-653. | 2.3 | 3 |
| 246 | Formation of Cerium and Neodymium Isocyanides in the Reactions of Cyanogen with Ce and Nd Atoms in Argon Matrices. Journal of Physical Chemistry A, 2019, 123, 8208-8219. | 1.1 | 3 |
| 247 | Experimental and Computational Study of the Gas-Phase Acidities of Acidic Di- and Tripeptides. Journal of Physical Chemistry B, 2019, 123, 606-613. | 1.2 | 3 |
| 248 | Direct fluorination of tetrafluoroethylene at low temperatures. Journal of Fluorine Chemistry, 2020, 232, 109493. | 0.9 | 3 |
| 249 | Experimental and Computational Study of the Structure, Steric Properties, and Binding Equilibria of Neopentylphosphine Palladium Complexes. Inorganic Chemistry, 2020, 59, 5579-5592. | 1.9 | 3 |
| 250 | Binding and stability of MgO monomers on anatase TiO2(101). Journal of Chemical Physics, 2021, 154, 204703. | 1.2 | 3 |
| 251 | Synergistic Coupling of CO ₂ and H ₂ O during Expansion of Clays in Supercritical CO ₂ –CH ₄ Fluid Mixtures. Environmental Science & Technology, 2021, 55, 11192-11203. | 4.6 | 3 |
| 252 | Molecular Properties of Thorium Hydrides: Electron Affinities and Thermochemistry. Journal of Physical Chemistry A, 2022, 126, 2388-2396. | 1.1 | 3 |

| # | Article | IF | CITATION |
|-----|---|-----|----------|
| 253 | Structures, relative energies, and ligand dissociation energies of iridium carbonyl phosphine clusters. Computational and Theoretical Chemistry, 2015, 1069, 18-35. | 1.1 | 2 |
| 254 | Chemistry of the Highly Strained Alkene Perfluorobicyclo[2.2.0]hexâ€1(4)â€ene. European Journal of Organic Chemistry, 2018, 2018, 3167-3179. | 1.2 | 2 |
| 255 | Effect of 60Co γ-radiation on the tetrafluoroethylene/perfluoro(methyl vinyl ether) copolymer. Journal of Fluorine Chemistry, 2020, 240, 109671. | 0.9 | 2 |
| 256 | Different Carbonate Isomers Formed by the Addition of CO ₂ to M ₃ O ₆ [–] for M = Ti, Zr, and Hf. Journal of Physical Chemistry A, 2020, 124, 5402-5407. | 1.1 | 2 |
| 257 | Investigation of \hat{I}^3 -irradiated polyvinylidene fluoride and its acute toxicity. Journal of Fluorine Chemistry, 2021, 251, 109885. | 0.9 | 2 |
| 258 | Th(IV) Bromide Complexes: A Homoleptic Aqua Ion and a Novel Th(H ₂ O) ₄ Br ₄ Structural Unit. Crystal Growth and Design, 2022, 22, 4375-4381. | 1.4 | 2 |
| 259 | Energetic Properties, Spectroscopy, and Reactivity of NF3O. Journal of Physical Chemistry A, 2020, 124, 5237-5245. | 1.1 | 1 |
| 260 | A comparison of hydrogen release kinetics from 5- and 6-membered 1,2-BN-cycloalkanes. RSC Advances, 2021, 11, 34132-34136. | 1.7 | 1 |
| 261 | Electronically Excited Complex Formation in Magnesium Cluster–Halogen Atom Reactions. Journal of Physical Chemistry A, 2022, 126, 1848-1860. | 1.1 | 1 |
| 262 | Energetic Properties and Electronic Structure of [C,N,O,P] and [C,N,S,P] Isomers. Journal of Physical Chemistry A, 2017, 121, 2180-2186. | 1.1 | 0 |
| 263 | Tungsten Hydride Phosphorus- and Arsenic-Bearing Molecules with Double and Triple W–P and W–As Bonds. Inorganic Chemistry, 2018, 57, 5320-5332. | 1.9 | 0 |
| 264 | Zn <i>_x</i> Mg _{60–<i>x</i>} O ₆₀ Nanoclusters with Tunable Near-Ultraviolet Energy Gaps. Journal of Physical Chemistry C, 2019, 123, 13083-13093. | 1.5 | 0 |
| 265 | Raman Spectroscopy Investigation of Polytetrafluoroethylene in Different Zones of Impact of Continuous CO2 Laser Radiation. Journal of Russian Laser Research, 2019, 40, 571-580. | 0.3 | 0 |
| 266 | Excited Electronic State Cross Sections for Group 3 Halide and Oxide Production: Evaluating Relative Excited-State Quantum Yields. Journal of Physical Chemistry A, 2022, , . | 1.1 | 0 |
| 267 | Observation of Selectively Populated Monohalide Excited States from the Reactions of Group 3 Metal (Sc, Y, and La) Monomers and Dimers with Halogen-Containing Molecules. Journal of Physical Chemistry A, O, , . | 1.1 | 0 |