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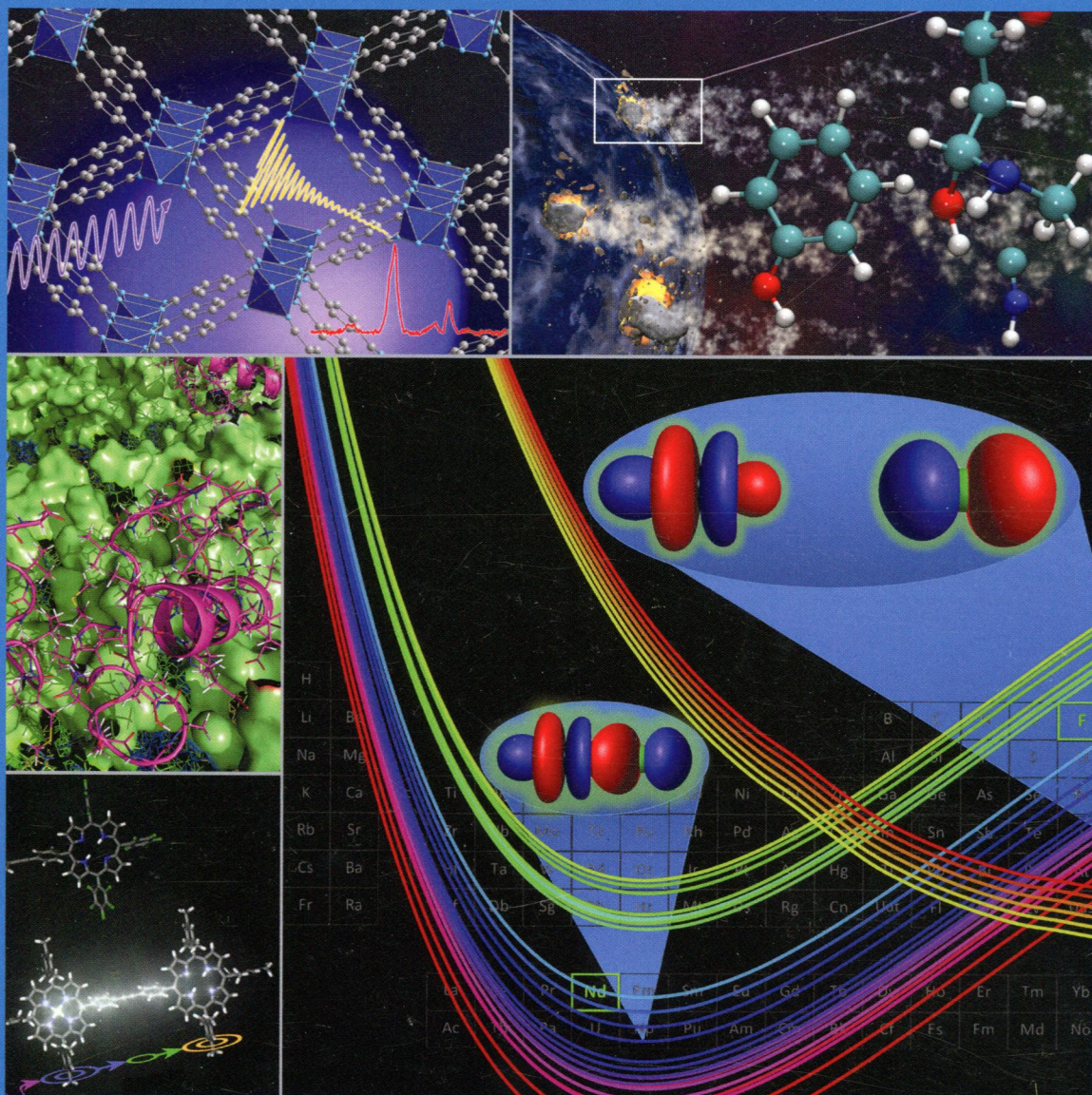
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A



ISOLATED MOLECULES, CLUSTERS, RADICALS, AND IONS; ENVIRONMENTAL CHEMISTRY,
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ON THE COVER: Collage of cover art from recent issues of *J. Phys. Chem.* Top Left: ^{17}O Solid-State NMR Spectra Provide Signatures of Various Oxygen Species in Metal-Organic Frameworks (*J. Phys. Chem. C* **2013**, *117* (33), 16953–16960). Center Left: Behavior of Amyloid β -Peptides on a Ganglioside-Containing Membrane Surface (*J. Phys. Chem. B* **2013**, *117* (27), 8085–8094). Bottom Left: Bridge-Mediated EET in Porphyrin Dimers: Electronic Coupling Reduced by Fluorination (*J. Phys. Chem. C* **2013**, *117* (24), 12423–12431). Top Right: Synthesis of Prebiotic Hydrocarbons in Impacts of Simple Icy Mixtures on Early Earth (*J. Phys. Chem. A* **2013**, *117* (24), 5124–5131). Bottom Right: Computed Potential Energy Curves for Quartet, Doublet, and Sextet States of NdF^{2+} (*J. Phys. Chem. A* **2013**, *117* (42), 10881–10888).


Articles

- 10159  DOI: 10.1021/jp509602s
The Barriers to Internal Rotation of Benzaldehyde and Benzoyl Fluoride: “Reconciliation” Between Theory and Experiment
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- 10179  DOI: 10.1021/jp507369q
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- 10188  DOI: 10.1021/jp507811d
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- 10201 DOI: 10.1021/jp5085795
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DOI: 10.1021/jp5090235

Photoelectron–Photofragment Coincidence Studies of the *tert*-Butoxide Anion $(\text{CH}_3)_3\text{CO}^-$, the Carbanion Isomer $(\text{CH}_3)_2\text{CH}_2\text{COH}^-$, and Corresponding Radicals

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Structural Diversity of Copper– CO_2 Complexes: Infrared Spectra and Structures of $[\text{Cu}(\text{CO}_2)_n]^-$ Clusters

Benjamin J. Knurr and J. Mathias Weber*

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Ionization Energies of Three Resonance-Stabilized Radicals: Cyclohexadienyl (d_n , $n = 0, 1, 6, 7$), 1-Phenylpropargyl, and Methylcyclohexadienyl

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Self-Analysis of Coherent Oscillations in Time-Resolved Optical Signals

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DOI: 10.1021/jp509470q

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Most Probable Distance between the Nucleus and HOMO Electron: The Latent Meaning of Atomic Radius from the Product of Chemical Hardness and Polarizability

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Small and Efficient Basis Sets for the Evaluation of Accurate Interaction Energies: Aromatic Molecule–Argon Ground-State Intermolecular Potentials and Rovibrational States

Hubert Cybulski, Angelika Baranowska-Łączkowska, Christian Henriksen, and Berta Fernández*