

Collect. Czech. Chem. Commun.
2003, 68, 423–446

Density Functional Study of the Electronic Structure and Related Properties of Pt(NO)/Pt(NO₂) Redox Couples

Pt(NO)/Pt(NO₂)

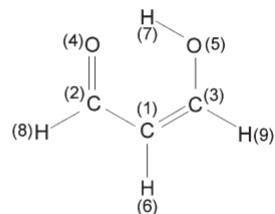
Redox Couples

Paraskevas Karipidis, Athanassios C. Tsipis and Constantinos A. Tsipis

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2003, 68, 447–462

MR-CISD and MR-AQCC Calculation of Excited States of Malonaldehyde: Geometry Optimizations Using Analytical Energy Gradient Methods and a Systematic Investigation of Reference Configuration Sets

Silmar A. do Monte, Michal Dallos,
Thomas Müller and Hans Lischka



ab initio calculations

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2003, 68, 463–488

**On the Performance of Bond Functions and Basis Set Extrapolation Techniques in High-Accuracy Calculations of Interatomic Potentials.
A Helium Dimer Study**

He₂ interatomic potentials
by CCSD and FCI

Małgorzata Jeziorska, Robert Bukowski,
Wojciech Cencek, Michał Jaszuński,
Bogumił Jeziorski and Krzysztof Szalewicz

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2003, 68, 489–508

A Comprehensive Computational Study on OCH⁺-Rg (Rg = He, Ne, Ar, Kr, Xe) Complexes

OCH⁺-Rg

(Rg = He, Ne, Ar, Kr, Xe)

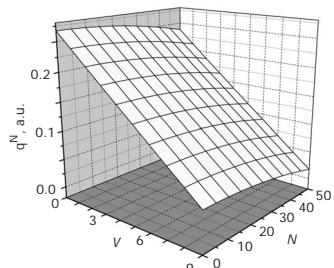
Yinghong Sheng and Jerzy Leszczynski

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2003, 68, 509–528

The Rovibrational Dependence of the ^{14}N Nuclear Quadrupole Coupling Constants in the $X^2\Sigma^+$ and $B^2\Sigma^+$ States of CN from the Multireference CI Approach

Rudolf Polák and Jiří Fišer

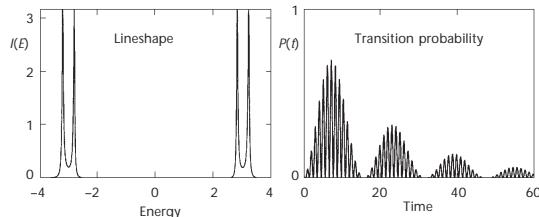
Electric field gradient: rovibrational dependence



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2003, 68, 529–553

**Quantum Resonances:
Line Profiles and Dynamics**

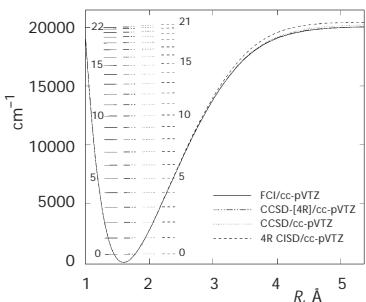
Ivana Paidarová and
Philippe Durand



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2003, 68, 554–586

Externally Corrected Coupled-Cluster Approaches: Energy versus Amplitude Corrected CCSD

Josef Paldus and Xiangzhu Li

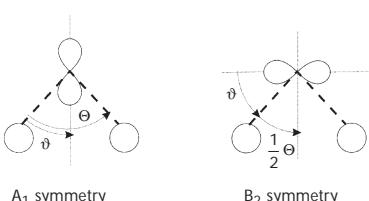


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2003, 68, 587–626

Modeling of the Three-Body Effects in the Neutral Trimers in the Quartet State by *ab initio* Calculations.

H₃, Na₃, and Na₂B

Jacek Jakowski, Grzegorz Chałasiński,
Małgorzata M. Szcześniak and
Slawomir M. Cybulski



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2003, 68, 627–643

Calculation of Thermodynamical, Transport and Structural Properties of Neon in Liquid and Supercritical Phases by Molecular Dynamics Simulations Using an Accurate *ab initio* Pair Potential

Muthusamy Venkatraj, Markus G. Müller,
Hanspeter Huber and Robert J. Gdanitz

- Global Simulation of Neon
- Bulk Properties

Collect. Czech. Chem. Commun.
2003, 68, 644–662

A Proposed Mechanism of $[closo\text{-}CB_{11}\text{H}_{12}]^-$ Formation by Dichlorocarbene Insertion Into $[nido\text{-}B_{11}\text{H}_{14}]^-$. A Computational Study by Density Functional Theory

Pawel Rempala and Josef Michl

