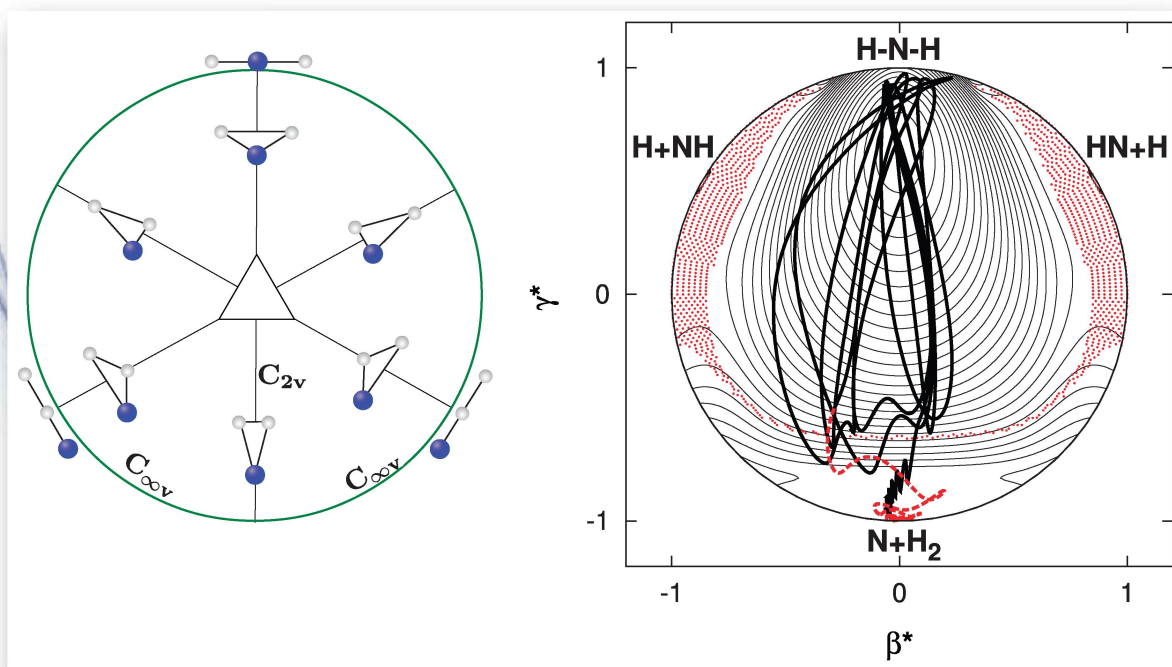


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COMMUNICATIONS

Communication: Water on hexagonal boron nitride from diffusion Monte Carlo

Yasmine S. Al-Hamdani, Ming Ma, Dario Alfè, O. Anatole von Lilienfeld and Angelos Michaelides
J. Chem. Phys. **142**, 181101 (2015); <http://dx.doi.org/10.1063/1.4921106>

ARTICLES

Theoretical Methods and Algorithms

On a theory of stability for nonlinear stochastic chemical reaction networks

Patrick Smadbeck and Yiannis N. Kaznessis
J. Chem. Phys. **142**, 184101 (2015); <http://dx.doi.org/10.1063/1.4919834>

Dynamically consistent method for mixed quantum-classical simulations: A semiclassical approach

Sergey V. Antipov, Ziyu Ye and Nandini Ananth
J. Chem. Phys. **142**, 184102 (2015); <http://dx.doi.org/10.1063/1.4919667>

Stochastic lumping analysis for linear kinetics and its application to the fluctuation relations between hierarchical kinetic networks

De-Ming Deng and Cheng-Hung Chang
J. Chem. Phys. **142**, 184103 (2015); <http://dx.doi.org/10.1063/1.4919952>

Ensemble density functional theory method correctly describes bond dissociation, excited state electron transfer, and double excitations

Michael Filatov, Miquel Huix-Rotllant and Irene Burghardt
J. Chem. Phys. **142**, 184104 (2015); <http://dx.doi.org/10.1063/1.4919773>

A very general rate expression for charge hopping in semiconducting polymers

Rocco P. Fornari, Juan Aragón and Alessandro Troisi
J. Chem. Phys. **142**, 184105 (2015); <http://dx.doi.org/10.1063/1.4920945>

Density-functional errors in ionization potential with increasing system size

Sarah R. Whittleton, Xochitl A. Sosa Vazquez, Christine M. Isborn and Erin R. Johnson
J. Chem. Phys. **142**, 184106 (2015); <http://dx.doi.org/10.1063/1.4920947>

Semi-stochastic full configuration interaction quantum Monte Carlo: Developments and application

N. S. Blunt, Simon D. Smart, J. A. F. Kersten, J. S. Spencer, George H. Booth and Ali Alavi
J. Chem. Phys. **142**, 184107 (2015); <http://dx.doi.org/10.1063/1.4920975>

Advanced Experimental Techniques

A unified heteronuclear decoupling strategy for magic-angle-spinning solid-state NMR spectroscopy

Asif Equbal, Morten Bjerring, P. K. Madhu and Niels Chr. Nielsen
J. Chem. Phys. **142**, 184201 (2015); <http://dx.doi.org/10.1063/1.4919634>

Atoms, Molecules, and Clusters

Structure and spectroscopic properties of neutral and cationic tetratomic [C,H,N,Zn] isomers: A theoretical study

Pilar Redondo, Antonio Largo, Álvaro Vega-Vega and Carmen Barrientos
J. Chem. Phys. **142**, 184301 (2015); <http://dx.doi.org/10.1063/1.4919879>

The effect of intersystem crossings in $N(^2D) + H_2$ collisions

B. R. L. Galvão and L. A. Poveda

J. Chem. Phys. **142**, 184302 (2015); <http://dx.doi.org/10.1063/1.4919743>

Electronic spectra and excited state dynamics of pentafluorophenol: Effects of low-lying $\pi\sigma^*$ states

Shreetama Karmakar, Deb Pratim Mukhopadhyay and Tapas Chakraborty

J. Chem. Phys. **142**, 184303 (2015); <http://dx.doi.org/10.1063/1.4919950>

Catching the role of anisotropic electronic distribution and charge transfer in halogen bonded complexes of noble gases

Alessio Bartocci, Leonardo Belpassi, David Cappelletti, Stefano Falcinelli, Felice Grandinetti, Francesco Tarantelli and Fernando Pirani

J. Chem. Phys. **142**, 184304 (2015); <http://dx.doi.org/10.1063/1.4919692>

Jet cooled cavity ringdown spectroscopy of the $A^2E'' \leftarrow X^2A'$ transition of the NO_3 radical

Terrance Codd, Ming-Wei Chen, Mourad Roudjane, John F. Stanton and Terry A. Miller

J. Chem. Phys. **142**, 184305 (2015); <http://dx.doi.org/10.1063/1.4919690>

Threshold photoelectron spectroscopy of unstable N-containing compounds: Resolution of ΔK subbands in HNC^+ and vibrational resolution in NCO^+

Fabian Holzmeier, Melanie Lang, Ingo Fischer, Xiaofeng Tang, Barbara Cunha de Miranda, Claire Romanzin, Christian Alcaraz and Patrick Hemberger

J. Chem. Phys. **142**, 184306 (2015); <http://dx.doi.org/10.1063/1.4920951>

Two-dimensional spectra of electron collisions with acrylonitrile and methacrylonitrile reveal nuclear dynamics

K. Regeta and M. Allan

J. Chem. Phys. **142**, 184307 (2015); <http://dx.doi.org/10.1063/1.4921204>

First-principles investigation of the dissociation and coupling of methane on small copper clusters: Interplay of collision dynamics and geometric and electronic effects

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J. Chem. Phys. **142**, 184308 (2015); <http://dx.doi.org/10.1063/1.4919948>

Crossed-beam DC slice imaging of fluorine atom reactions with linear alkanes

Yuanyuan Shi, Alexander Kamasah, Baptiste Joalland and Arthur G. Suits

J. Chem. Phys. **142**, 184309 (2015); <http://dx.doi.org/10.1063/1.4919099>

Liquids, Glasses, and Crystals

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R. Golovchak, Ya. Shpotyuk, V. Nazabal, C. Boussard-Pledel, B. Bureau, J. Cebulski and H. Jain

J. Chem. Phys. **142**, 184501 (2015); <http://dx.doi.org/10.1063/1.4919947>

Static dielectric properties of dense ionic fluids

Grigory Zarubin and Markus Bier

J. Chem. Phys. **142**, 184502 (2015); <http://dx.doi.org/10.1063/1.4920976>

Structural and topological aspects of borophosphate glasses and their relation to physical properties

Christian Hermansen, Randall E. Youngman, John Wang and Yuanzheng Yue

J. Chem. Phys. **142**, 184503 (2015); <http://dx.doi.org/10.1063/1.4919798>

Glass transition dynamics and conductivity scaling in ionic deep eutectic solvents: The case of (acetamide + lithium nitrate/sodium thiocyanate) melts

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J. Chem. Phys. **142**, 184504 (2015); <http://dx.doi.org/10.1063/1.4919946>

Observation and theory of reorientation-induced spectral diffusion in polarization-selective 2D IR spectroscopy

Patrick L. Kramer, Jun Nishida, Chiara H. Giammanco, Amr Tamimi and Michael D. Fayer

J. Chem. Phys. **142**, 184505 (2015); <http://dx.doi.org/10.1063/1.4920949>

Surfaces, Interfaces, and Materials

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M. Stefanski, L. Marciniak, D. Hreniak and W. Strek

J. Chem. Phys. **142**, 184701 (2015); <http://dx.doi.org/10.1063/1.4919880>

An electron energy-loss study of picene and chrysene based charge transfer salts

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Dielectric constant of water as a function of separation in a slab geometry: A molecular dynamics study

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Molecular simulations of heterogeneous ice nucleation. I. Controlling ice nucleation through surface hydrophilicity

Stephen J. Cox, Shawn M. Kathmann, Ben Slater and Angelos Michaelides

J. Chem. Phys. **142**, 184704 (2015); <http://dx.doi.org/10.1063/1.4919714>

Molecular simulations of heterogeneous ice nucleation. II. Peeling back the layers

Stephen J. Cox, Shawn M. Kathmann, Ben Slater and Angelos Michaelides

J. Chem. Phys. **142**, 184705 (2015); <http://dx.doi.org/10.1063/1.4919715>

Superpermittivity of nanoconfined water

Richard Renou, Anthony Szymczyk, Guillaume Maurin, Patrice Malfreyt and Aziz Ghoufi

J. Chem. Phys. **142**, 184706 (2015); <http://dx.doi.org/10.1063/1.4921043>

Optical microcavities enhance the exciton coherence length and eliminate vibronic coupling in J-aggregates

F. C. Spano

J. Chem. Phys. **142**, 184707 (2015); <http://dx.doi.org/10.1063/1.4919348>

Electronic, structural, and substrate effect properties of single-layer covalent organic frameworks

Liangbo Liang, Pan Zhu and Vincent Meunier

J. Chem. Phys. **142**, 184708 (2015); <http://dx.doi.org/10.1063/1.4919682>

Kinetically induced irreversibility in electro-oxidation and reduction of Pt surface

Ryosuke Jinnouchi, Kensaku Kodama, Takahisa Suzuki and Yu Morimoto

J. Chem. Phys. **142**, 184709 (2015); <http://dx.doi.org/10.1063/1.4920974>

Polymers and Soft Matter

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Phillip Woolston and Jeroen S. van Duijneveldt

J. Chem. Phys. **142**, 184901 (2015); <http://dx.doi.org/10.1063/1.4919887>

Optimizing the fabrication process and interplay of device components of polymer solar cells using a field-based multiscale solar-cell algorithm

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J. Chem. Phys. **142**, 184902 (2015); <http://dx.doi.org/10.1063/1.4919649>

The dispersion state of magnetic nanorods in homopolymers and block copolymers

Chieh-Tsung Lo, Ming-Hsuan Li and Wei-Ting Lin

J. Chem. Phys. **142**, 184903 (2015); <http://dx.doi.org/10.1063/1.4921042>

New strategy to create ultra-thin surface layer of grafted amphiphilic macromolecules

A. A. Lazutin, E. N. Govorun, V. V. Vasilevskaya and A. R. Khokhlov

J. Chem. Phys. **142**, 184904 (2015); <http://dx.doi.org/10.1063/1.4920973>

Ion mixing, hydration, and transport in aqueous ionic systems

Ying-Lung Steve Tse, Gregory A. Voth and Thomas A. Witten

J. Chem. Phys. **142**, 184905 (2015); <http://dx.doi.org/10.1063/1.4921044>

Biological Molecules and Networks

Dynamic memory of a single voltage-gated potassium ion channel: A stochastic nonequilibrium thermodynamic analysis

Kinshuk Banerjee

J. Chem. Phys. **142**, 185101 (2015); <http://dx.doi.org/10.1063/1.4920937>

Designing pH induced fold switch in proteins

Anupaul Baruah and Parbati Biswas

J. Chem. Phys. **142**, 185102 (2015); <http://dx.doi.org/10.1063/1.4920938>

LETTERS TO THE EDITOR

Errata

Erratum: “Self-consistent embedding of density-matrix renormalization group wavefunctions in a density functional environment” [*J. Chem. Phys.* **142**, 044111 (2015)]

Thomas Dresselhaus, Johannes Neugebauer, Stefan Knecht, Sebastian Keller, Yingjin Ma and Markus Reiher
J. Chem. Phys. **142**, 189901 (2015); <http://dx.doi.org/10.1063/1.4921162>

Publisher’s Note: “Reactive scattering calculations for $^{87}\text{Rb} + ^{87}\text{RbHe} \rightarrow \text{Rb}_2(3\Sigma^+u,v) + \text{He}$ from ultralow to intermediate energies” [*J. Chem. Phys.* **142**, 164304 (2015)]

Rocío Rodríguez-Cantano, Tomás González-Lezana, Rita Prosmiti, Gerardo Delgado-Barrio, Pablo Villarreal and Julius Jellinek

J. Chem. Phys. **142**, 189902 (2015); <http://dx.doi.org/10.1063/1.4921246>