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31. E. Coccia, F. Troiani, S. Corni: J. Chem. Phys., **148** (2018), 204112, *Probing quantum coherence in ultrafast molecular processes: an ab initio approach to open quantum systems*
30. B. Mussard, E. Coccia, R. Assaraf, M. Otten, C. J. Umrigar, J. Toulouse: Adv. Quantum Chem., **76** (2018), 255, *Time-dependent Linear-Response Variational Monte Carlo*
29. E. Coccia, D. Varsano, L. Guidoni: J. Chem. Theory Comput., **13** (2017), 4357, *Theoretical  $S_1 \leftarrow S_0$  absorption energies of the anionic forms of oxyluciferin by Variational Monte Carlo and Many Body Green's Function Theory*
28. D. Narzi, E. Coccia, M. Manzoli, L. Guidoni: Biophys. Chem., **229** (2017), 93 *Impact of molecular flexibility on the site energy shift of chlorophylls in Photosystem II*
27. E. Coccia, R. Assaraf, E. Luppi, J. Toulouse: J. Chem. Phys., **147** (2017), 014106, *Ab initio lifetime correction to scattering states for time-dependent electronic-structure calculations with incomplete basis sets*
26. E. Coccia: J. Low. Temp. Phys., **188** (2017), 22, *Excited rotational states in doped  $^4\text{He}$  clusters: a diffusion Monte Carlo analysis*
25. D. Varsano, S. Caprasecca, E. Coccia: J. Phys.: Condens. Matter, **29** (2017), 013002, *Theoretical description of protein field effects on electronic excitations of biological chromophores (Review)*
24. S. Chu, E. Coccia, M. Barborini, L. Guidoni: J. Chem. Theory Comput., **12** (2016), 5803, *Role of Electron Correlation along the Water Splitting Reaction*
23. E. Coccia, B. Mussard, M. Lebeye, J. Caillat, R. Taieb, J. Toulouse, E. Luppi: Int. J. Quant. Chem., **116** (2016), 1120, *Gaussian continuum basis functions for calculating high-harmonic generation spectra*
22. E. Coccia and E. Luppi: Theor. Chem. Acc., **135** (2016), 43, *Optimal-continuum and multicentered Gaussian basis sets for high-harmonic generation spectroscopy*
21. M. Barborini and E. Coccia: J. Chem. Theory Comput., **11** (2015), 5696, *Investigating disjoint non-Kekulé diradicals with quantum Monte Carlo: the tetramethylethane molecule through the Jastrow Antisymmetrized Geminal Power wave function*
20. A. Zen, E. Coccia, S. Gozem, M. Olivucci, L. Guidoni: J. Chem. Theory Comput., **11** (2015), 992, *Quantum Monte Carlo Treatment of the Charge Transfer and Diradical Electronic Character in a Retinal Chromophore Minimal Model (ACS Editors' Choice)*
19. D. Varsano, E. Coccia, A. Mosca Conte, O. Pulci, L. Guidoni: Comp. Theor. Chem., **1040-1041** (2014), 338 *Ground state structures and electronic excitations of biological chromophores at Quantum Monte Carlo / Many Body Green's Function Theory level*
18. A. Zen, E. Coccia, Y. Luo, S. Sorella, L. Guidoni: J. Chem. Theory Comput., **10** (2014), 1048, *Static and dynamical correlation in diradical molecules by Quantum Monte Carlo using the Jastrow Antisymmetrized Geminal Power ansatz*
17. E. Coccia, D. Varsano, L. Guidoni: J. Chem. Theory Comput., **10** (2014), 501, *Ab initio geometry and bright excitation of carotenoids: Quantum Monte Carlo and Many Body Green's Function Theory calculations on peridinin*
16. E. Coccia, D. Varsano, L. Guidoni: J. Chem. Theory Comput., **9** (2013), 8, *Protein field effect on the dark state of 11-cis Retinal in Rhodopsin by Quantum Monte Carlo / Molecular Mechanics*
15. E. Coccia, L. Guidoni: J. Comput. Chem., **33** (2012), 2332, *Quantum Monte Carlo study of the Retinal Minimal Model  $\text{C}_5\text{H}_6\text{NH}_2^+$*

14. E. Coccia, O. Chernomor, M. Barborini, S. Sorella, L. Guidoni: *J. Chem. Theory Comput.*, **8** (2012), 1952, *Molecular Electrical Properties from Quantum Monte Carlo Calculations: Application to Ethyne*
13. E. Coccia, F. A. Gianturco: *J. Phys. Chem A* **114** (2010), 3221, *Attachment energetics of quantum dopants in a weakly interacting quantum solvent:  $^1\text{H}$ ,  $^2\text{H}$  and  $^3\text{H}$  in small  $^4\text{He}$  clusters*
12. S. Orlandini, E. Coccia, I. Baccarelli, F. A. Gianturco, E. Garrido, T. Gonzalez-Lezana, G. Delgado-Barrio, P. Villarreal: *Mol. Phys.* **108** (2010), 57, *Binding He atoms to hydrogen moieties: quantum features from ultraweak interactions*
11. R. Prosimi, G. Delgado-Barrio, P. Villarreal, E. Yurtsever, E. Coccia, F. A. Gianturco: *J. Phys. Chem A* **113** (2009), 14718, *Structuring a quantum solvent around a weakly bound dopant: the He-Cs<sub>2</sub> ( $^3\Sigma_u$ ) complex*
10. S. Bovino, E. Coccia, E. Bodo, D. Lopez Duran, F. A. Gianturco: *J. Chem. Phys.* **130** (2009), 224903, *Spin-driven structural effects in alkali doped  $^4\text{He}$  clusters from quantum calculations*
9. E. Coccia, E. Bodo, F. A. Gianturco: *J. Chem. Phys.* **130** (2009), 094906, *Size-dependent solvation of p-H<sub>2</sub> in  $^4\text{He}$  clusters: A quantum Monte Carlo analysis*
8. E. Coccia, F. Marinetti, E. Bodo, F. A. Gianturco: *ChemPhysChem* **9** (2008), 1323, *Chemical Solutions in a Quantum Solvent: Anionic Electrolytes in  $^4\text{He}$  Nanodroplets (Cover Picture)*
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6. E. Coccia, E. Bodo, F. Marinetti, F. A. Gianturco, E. Yurtsever, M. Yurtsever, in *Latest Advances in Atomic Cluster Collisions*, Imperial College Press (2008)
5. E. Coccia, E. Bodo, F. A. Gianturco: *EuroPhys. Lett.* **82** (2008), 23001, *Nanoscopic phase changes in doped  $^4\text{He}$  droplets*
4. E. Bodo, E. Coccia, D. Lopez Duran, F. A. Gianturco: *Phys. Scripta* **76** (2007), C104, *Ionic dopants in He droplets: cluster energies from a variational and Diffusion Monte Carlo approach*
3. F. Marinetti, Ll. Uranga Piña, E. Coccia, D. Lopez Duran, E. Bodo, F. A. Gianturco: *J. Phys. Chem. A* **111** (2007), 12289, *Microsolvation of Cationic Dimers in  $^4\text{He}$  Droplets: Geometries of A<sub>2</sub><sup>+</sup>(He)<sub>N</sub> (A = Li, Na, K) from Optimized Energies*
2. E. Coccia, E. Bodo, F. Marinetti, F. A. Gianturco, E. Yurtsever, M. Yurtsever, E. Yildirim: *J. Chem. Phys.* **126** (2007), 124319, *Bosonic helium droplets with cationic impurities: Onset of electrostriction and snowball effects from quantum calculations*
1. F. Marinetti, E. Coccia, E. Bodo, F. A. Gianturco, E. Yurtsever, M. Yurtsever, E. Yildirim: *Theo. Chem. Acc.* **118** (2007), 53, *Bosonic helium clusters doped by alkali metal cations: interaction forces and analysis of their most stable structures*

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