List of Papers (international journals with peer review)

2025

Ernesto García-Alfonso,Thantip Roongcharoen, Piotr Zuchowski and Alessandro Fortunelli. "*In Search of Structure' Links Across Length Scales: Crossover Among Structural Motifs, Energetics, and Magic Systems in Subnanometer Transition Metals Clusters*" **Small Cluster (2025) DOI:** 10.1002/sstr.202500345

2024

Ernesto García-Alfonso, Francesco Ancilotto, Manuel Barranco,Fausto Cargnoni, Nadine Halberstadt and Martí Pi. "*Revisiting Thomson's model with multiply charged superfluid helium nanodroplets*" **J. Chem. Phys. 161, 224303 (2024)**

Marisol Trejo, Andrew Clifford, Ernesto Garcia Alfonso, Nadine Halberstadt,Lan Xue,and Wei Kong. "*Electron diffraction of foam-like clusters between xenon and helium in superfluid helium droplets*". **J. Chem. Phys. 161, 000000 (2024)**

Loidel Puentes-Milián, Ernesto Garcia-Alfonso, Maykel MARQUEZ-MIJARES, and Jesús Rubayo-Soneira.*" Vibrational predissociation study of NeIBr(A) using Quasiclassical Trajectories and Trajectory Surface Hopping methods"*. **Chemical Physics Letters. 849, 141427 (2024)**

Ernesto García-Alfonso, Manuel Barranco,Nadine Halberstadt and Martí Pi .*"Time-resolved solvation of alkali ions in superfluid helium nanodroplets"*. **J. Chem. Phys. 160, 164308 (2024)**

2023

Loidel Puentes-Milián, Ernesto Garcia-Alfonso, Maykel MARQUEZ-MIJARES, and Jesús Rubayo-Soneira.*" NeI2 Photofragmentation Dynamics Through Quasiclassical and Semiclassical Studies"*. **ChemPhysChem e202300406,2023**

Ernesto García-Alfonso, Francesco Ancilotto, Manuel Barranco, Martí Pi, Nadine Halberstadt .*"Quantized vortex nucleation in collisions of superfluid nanoscopic helium droplets at zero temperature"*. **J. Chem. Phys. 159, 074305 (2023)**

2022

Ernesto García-Alfonso, Maykel Márquez-Mijares, Jesús Rubayo- Soneira, Nadine Halberstadt, Kenneth C. Janda and Craig C. Martens. *"Photogfragmentation dynamics study of ArBr2 (v = 16,.., 25) using two theoretical methods: trajectory surface hopping and quasiclassical trajectories".* **Eur. Phys. J. D. 76, 79. 2022.**

Ernesto García-Alfonso, Manuel Barranco, David A. Bonhommeau, Nadine Halberstadt, Martí Pi and Florent Calvo. *“Clustering, collision , and relaxation dynamics in pure and doped helium nanoclusters: Density - vs particle -based approaches”*. **The Journal of Chemical Physics. 157, 014106. 2022**

2020

Ernesto García-Alfonso, Francois Coppens, Manuel Barranco, Martí Pi, Frank Stienkemeier and Nadine Halberstadt.*“Alkali atoms attached to vortex-hosting helium nanodroplets”*. **The Journal of Chemical Physics. 152, 194109. 2020.**

Ernesto García-Alfonso, Maykel Márquez-Mijares, Jesús Rubayo-Soneira, Nadine Halberstadt, Kenneth C. Janda and Craig C. Martens. *“Study of the Vibrational Predissociation of the NeBr2 Complex by Computational Simulation using the Trajectory Surface Hopping Method”*. **Sigma Mathematics. 8, 2029. 2020.**

2019

C. Calvo-Mola, S. López Pérez, E. García Alfonso, and J. Cerutti Torres. *“Determination of the Planck Constans through the use of LEDS"*. **Revista Cubana de Física, 36, 125.2019.**