

List of Papers (international journals with peer review)

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. " *Photofragmentation dynamics study of ArBr₂ ($v = 16, \dots, 25$) 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 Constants through the use of LEDS*". Revista Cubana de Física, 36, 125.2019.