



Nombres:

FRANCISCO JAVIER

Apellidos:

MUÑOZ SÁEZ

Título Profesional o Grado Académico (incluya el año de obtención):

LICENCIADO EN FÍSICA, PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE, 2006

Estudios de Postgrado o Especialización (institución donde lo obtuvo y año de obtención):

DOCTOR EN FÍSICA, PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE, 2010

Actividad Actual e Institución en la cual trabaja:

PROFESOR INSTRUCTOR DE LA FACULTAD DE FÍSICA

Reseña de su actividad laboral actual:

Especialidad: Materia Condensada Teórica

Temas de investigación

- DFT
- Clusters, nanocilindros, superficies
- Magnetismo, MD

Descripción de la investigación

Estudio de propiedades de clusters atómicos y nanocilindros, especialmente metálicos y magnéticos, y la interacción de ellos con otras nanoestructuras como nanotubos, grafeno, superficies, etc.



PUBLICACIONES INDEXADAS:

Muñoz, F., Altbir, D., Kiwi, M., Morán-López, J.L.
Properties of Fe₈-NCoN nanoribbons and nanowires: A DFT approach
(2013) Journal of Magnetism and Magnetic Materials, 339, pp. 75-80.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84876814477&partnerID=40&md5=65ca9a2d2b647a5ba138d84b6efcce00>
DOCUMENT TYPE: Article
SOURCE: Scopus

Muñoz, F., Cardenas, C., Rogan, J., Valdivia, J.A., Fuentealba, P., Kiwi, M.
Ab initio molecular dynamics simulations of Ti₂ on C₂₀ collisions and C₂₀Ti₂ configurations
(2013) Journal of Physical Chemistry C, 117 (8), pp. 4287-4291.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84874603694&partnerID=40&md5=a0df8391452ab6b70606fc4ed15876bc>
DOCUMENT TYPE: Article
SOURCE: Scopus

Cárdenas, C., Muñoz, F., Muñoz, M., Bernardin, A., Fuentealba, P.
A new isomer of C₂₀ and a way to a new C₂₄₀
(2012) Physical Chemistry Chemical Physics, 14 (43), pp. 14810-14814. Cited 1 time.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84867700071&partnerID=40&md5=4856ffb0fba35afac4e0c327961476f4>
DOCUMENT TYPE: Article
SOURCE: Scopus

1. Title: [Surface anisotropy, hysteretic, and magnetic properties of magnetite nanoparticles: A simulation study](#)
Author(s): Mazo-Zuluaga, J; Restrepo, J; Munoz, F; et al.
Source: **Journal of Applied Physics** Volume: **105** Issue: **12** Published: **2009**
Times Cited: **13**
DOI: [10.1063/1.3148865](https://doi.org/10.1063/1.3148865)  added
14-Apr-11
2. Title: [Collisions between a single gold atom and 13 atom gold clusters: an ab initio approach](#)
Author(s): Munoz, F; Rogan, J; Garcia, G; et al.
Source: **European Physical Journal D** Volume: **61** Issue: **1** Pages: **87-93** Published: **2011**
Times Cited: **4**
DOI: [10.1140/epjd/e2010-10195-x](https://doi.org/10.1140/epjd/e2010-10195-x)  added
14-Apr-11
3. Title: [Uniaxial Magnetic Anisotropy Energy of Fe Wires Embedded in Carbon Nanotubes](#)
Author(s): Munoz, F; Mejia-Lopez, J; Perez-Acle, T; et al.
Source: **Acs Nano** Volume: **4** Issue: **5** Pages: **2883-2891** Published: **2010**
Times Cited: **3**
DOI: [10.1021/nn901834z](https://doi.org/10.1021/nn901834z)  added
14-Apr-11
4. Title: [Monoatomic and dimer Mn adsorption on the Au\(111\) surface from first principles](#)
Author(s): Munoz, Francisco; Romero, Aldo H.; Mejia-Lopez, Jose; et al.

- Source: **Physical Review B** Volume: **83** Issue: **20** Published: **MAY 23 2011**
Times Cited: 2
DOI: [10.1103/PhysRevB.83.205423](https://doi.org/10.1103/PhysRevB.83.205423)  added
20-Sep-11
5. Title: [The role of d-orbital polarization on rhodium cluster collisions](#)
Author(s): Munoz, F.; Rogan, J.; Garcia, G.; et al.
Source: **European Physical Journal D** Volume: **64** Issue: **1** Pages: **45-51** Published: **SEP 2011**
Times Cited: 1
DOI: [10.1140/epjd/e2011-20052-1](https://doi.org/10.1140/epjd/e2011-20052-1)  added
25-May-12
6. Title: [Physical and chemical properties of Con-mCum nanoclusters with n=2-6 atoms via ab-initio calculations](#)
Author(s): Perez, Marcos; Munoz, Francisco; Mejia-Lopez, Jose; et al.
Source: **Journal of Nanoparticle Research** Volume: **14** Issue: **6** Published: **JUN 2012**
Times Cited: 1
DOI: [10.1007/s11051-012-0933-2](https://doi.org/10.1007/s11051-012-0933-2)  added
18-Oct-12
7. Title: [Nanocluster Collisions as a Way to Understand the Role of d-Shell Polarization](#)
Author(s): Kiwi, M.; Munoz, F.; Garcia, G.; et al.
Source: **Journal of Superconductivity and Novel Magnetism** Volume: **25** Issue: **7** Pages: **2205-2212** Published: **2012**
Times Cited: 1
DOI: [10.1007/s10948-012-1663-5](https://doi.org/10.1007/s10948-012-1663-5)  added
12-Dec-12
8. Title: [First-principles theoretical investigation of monoatomic and dimer Mn adsorption on noble metal \(111\) surfaces](#)
Author(s): Munoz, Francisco; Romero, Aldo H.; Mejia-Lopez, Jose; et al.
Source: **Physical Review B** Volume: **85** Issue: **11** Published: **MAR 12 2012**
Times Cited: 0
DOI: [10.1103/PhysRevB.85.115417](https://doi.org/10.1103/PhysRevB.85.115417)  added
25-May-12
9. Title: [Properties of Fe8-NCoN nanoribbons and nanowires: A DFT approach](#)
Author(s): Munoz, Francisco; Altbir, D.; Kiwi, Miguel; et al.
Source: **Journal of Magnetism and Magnetic Materials** Volume: **339** Pages: **75-80** Published: **AUG 2013**
Times Cited: 0
DOI: [10.1016/j.jmmm.2013.02.027](https://doi.org/10.1016/j.jmmm.2013.02.027)  added
28-Jun-13
10. Title: A new isomer of C-20 and a way to a new C-240
Author(s): Cardenas, C.; Munoz, F.; Munoz, M.; et al.
Source: **Physical Chemistry Chemical Physics** Volume: **14** Issue: **43** Pages: **14810-14814** Published: **2012**

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