



Nombres:

**PATRICIO ARMANDO**

Apellidos:

**FUENTEALBA ROSAS**

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

**LICENCIADO EN FÍSICA, 1978, UNIVERSIDAD DE CHILE**

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

**PHD. EN FÍSICA, UNIVERSIDAD DE STUTTGART, ALEMANIA, 1984**

Actividad Actual e Institución en la cual trabaja:

**PROFESOR TITULAR DE LA UNIVERSIDAD DE CHILE, DEPARTAMENTO DE FÍSICA, FACULTAD DE CIENCIAS.**

Reseña de su actividad laboral actual:

Área de Investigación: Física Atómica y Molecular.

Línea de Investigación: Su preocupación es el estudio de la estructura electrónica de la materia, átomos, moléculas, clusters y sólidos. Básicamente se desenvuelve en dos líneas de investigación: Aplicaciones de la Teoría del Funcional de la Densidad a Reactividad en Química y el estudio de la estructura electrónica de clusters atómicos. A través de cálculos teóricos, el Profesor Fuentealba trata de predecir algunas de las propiedades de los cluster: saber si son estables o no, si es que es posible encontrarlas, aislarlas, entre otros.

#### **PUBICACIONES INDEXADAS:**

Title: Ab Initio Molecular Dynamics Simulations of Ti<sub>2</sub> on C<sub>20</sub> Collisions and C<sub>20</sub>Ti<sub>2</sub> Configurations Author(s): Muñoz, Francisco; Cardenas, Carlos; Rogan, José; et al. Source: **The Journal of Physical Chemistry C** Volume: 117 Issue: 8 Pages: 4287-

1.

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

4291 Published:2013/02/28 DOI: 10.1021/jp3120786 / Author-provided URL : added 30-Apr-13

2.

Title: A new isomer of C-20 and a way to a new C-240

Author(s): Cardenas, Carlos; Munoz, Francisco; Munoz, Macarena; et al.

Source: **Physical Chemistry Chemical Physics** Volume: 14 Issue: 43 Pages: 14810-14814 Published:2012 Times Cited: 1 DOI: 10.1039/c2cp41691c added30-Apr-13

3.

Title: A Computationally Efficient and Reliable Bond Order Measure Author(s): Mera-Adasme, R; Mendizabal, F; Olea-Azar, C; et al.

Source: **Journal of Physical Chemistry a** Volume: 115 Issue: 17 Pages: 4397-4405 Published: MAY 5 2011 Times Cited: 2 DOI: 10.1021/jp107498h added12-Jul-11

4.

Title: Assembling Small Silicon Clusters Using Criteria of Maximum Matching of the Fukui Functions Author(s): Osorio, Edison; Ferraro, Marta B.; Ona, Ofelia B.; et al.

Source: **Journal of Chemical Theory and Computation** Volume: 7 Issue: 12 Pages: 3995-4001 Published:2011 Times Cited: 1 DOI: 10.1021/ct200643z added02-Apr-12

5.

Title: Big Bang Methodology Applied to Atomic Clusters Author(s): Centeno, J;

Fuentealba, P. Source: **International Journal of Quantum**

**Chemistry** Volume: 111 Issue: 7-8 Pages: 1419-1435 Published: JUN-JUL 2011

Times Cited: 2 DOI: 10.1002/qua.22860 added12-Jul-11

6.

Title: Electron Localization Function as a Measure of Electron Delocalization and Aromaticity

Author(s): Fuentealba, Patricio; Santos, Juan C.

Source: **Current Organic Chemistry** Volume: 15 Issue: 20 Pages: 3619-3626 Published: 2011 Times Cited: 2 added02-Apr-12

7.

Title: Exploration of the (Ethanol)(4)-Water Heteropentamers Potential Energy Surface by Simulated Annealing and Ab Initio Molecular Dynamics

Author(s): Mejia, Sol M.; Orrego, Juan F.; Espinal, Juan F.; et al.

Source: **International Journal of Quantum**

**Chemistry** Volume: 111 Issue: 12 Pages: 3080-3096 Published: 2011

Times Cited: 1 DOI: 10.1002/qua.22664 added02-Apr-12

8.

Title: Octahedral complexes of the series of actinides hexafluorides AnF(6)

Author(s): Perez-Villa, A; David, J; Fuentealba, P; et al.

Source: **Chemical Physics Letters** Volume: 507 Issue: 1-3 Pages: 57-62 Published: 2011

Times Cited: 5 DOI: 10.1016/j.cplett.2011.03.064 added08-Jul-11

9.

Title: The Fukui Potential and the Capacity of Charge and the Global Hardness of Atoms

Author(s): Cardenas, Carlos; Tiznado, William; Ayers, Paul W.; et al.

Source: **Journal of Physical Chemistry A** Volume: 115 Issue: 11 Pages: 2325-2331 Published: 2011

Times Cited: 8 DOI: 10.1021/jp109955q added02-Apr-12

10.

Title: Density functional based reactivity parameters: Thermodynamic or kinetic concepts?

Author(s): Fuentealba, P; David, J; Guerra, D

Source: **Journal of Molecular Structure-Theochem** Volume: 943 Issue: 1-

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- 3 Pages: 127-137 Published:2010  
Times Cited: 4 DOI: [10.1016/j.theochem.2009.11.014](https://doi.org/10.1016/j.theochem.2009.11.014) added08-Jul-11 11.
- Title: Theoretical characterization of SOME amides and esters DERIVATIVES of valproic acid  
Author(s): Comelli, NC; Fuentealba, P; Castro, EA; et al.  
Source: **Journal of Molecular Modeling** Volume: 16 Issue: 2 Pages: 343-359 Published: 2010  
Times Cited: 0 DOI: [10.1007/s00894-009-0554-6](https://doi.org/10.1007/s00894-009-0554-6) added08-Jul-11 12.
- Title: Topological Analysis of the Fukui Function  
Author(s): Fuentealba, P; Florez, E; Tiznado, W  
Source: **Journal of Chemical Theory and Computation** Volume: 6 Issue: 5 Pages: 1470-1478 Published:MAY 2010  
Times Cited: 13 DOI: [10.1021/ct100022w](https://doi.org/10.1021/ct100022w) added12-Jul-11 13.
- Title: A Theoretical Study of Alkali Metal Atomic Clusters: From Li-n to Cs-n (n=2-8)  
Author(s): Florez, E; Fuentealba, P  
Source: **International Journal of Quantum Chemistry** Volume: 109 Issue: 5 Pages: 1080-1093 Published:APR 2009  
Times Cited: 7 DOI: [10.1002/qua.21906](https://doi.org/10.1002/qua.21906) added12-Jul-11 14.
- Title: Chemical Reactivity Descriptors for Ambiphilic Reagents: Dual Descriptor, Local Hypersoftness, and Electrostatic Potential  
Author(s): Cardenas, C; Rabi, N; Ayers, PW; et al.  
Source: **Journal of Physical Chemistry a** Volume: 113 Issue: 30 Pages: 8660-8667 Published: JUL 30 2009  
Times Cited: 25 DOI: [10.1021/jp902792n](https://doi.org/10.1021/jp902792n) added12-Jul-11 15.
- Title: Density-functional theory with additional basic variables: Extended Legendre transform  
Author(s): Ayers, PW; Fuentealba, P  
Source: **Physical Review a** Volume: 80 Issue: 3 Published: SEP 2009  
Times Cited: 17 DOI: [10.1103/PhysRevA.80.032510](https://doi.org/10.1103/PhysRevA.80.032510) added12-Jul-11 16.
- Title: Endohedral Cluster of Li<sub>10</sub>O with T-d Symmetry  
Author(s): Centeno, J; Contreras, R; Fuentealba, P  
Source: **Journal of Physical Chemistry a** Volume: 113 Issue: 48 Pages: 13451-13456 Published: 2009  
Times Cited: 2 DOI: [10.1021/jp902665p](https://doi.org/10.1021/jp902665p) added08-Jul-11 17.
- Title: Modeling Pressure Effects on the Electronic Properties of Ca, Sr, and Ba by the Confined Atoms Model  
Author(s): Guerra, D; Vargas, R; Fuentealba, P; et al.  
Source: **Advances in Quantum Chemistry, Vol 58** Volume: 58 Pages: 1-12 Published: 2009  
Times Cited: 2 DOI: [10.1016/S0065-3276\(09\)00705-9](https://doi.org/10.1016/S0065-3276(09)00705-9) added08-Jul-11 18.
- Title: On the Gas-Phase Electronic Chemical Potential of Anions  
Author(s): Perez-Mendez, C; Fuentealba, P; Contreras, R  
Source: **Journal of Chemical Theory and Computation** Volume: 5 Issue: 11 Pages: 2944-2949 Published:2009  
Times Cited: 2 DOI: [10.1021/ct900164a](https://doi.org/10.1021/ct900164a) added08-Jul-11 19.

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- Title: On the Nucleophilicity of Boryllithium Compounds. A Theoretical Study  
Author(s): Jaramillo, P; Perez, P; Fuentealba, P  
Source: **Journal of Physical Chemistry a** Volume: **113** Issue: **24** Pages: **6812-6817** Published: **2009**  
Times Cited: **8** DOI: **10.1021/jp900945k** added08-Jul-11 **20.**
- Title: On the Principle of Spin Potential Equalization  
Author(s): Guerra, D; Contreras, R; Cedillo, A; et al.  
Source: **Journal of Physical Chemistry a** Volume: **113** Issue: **7** Pages: **1390-1396** Published: **2009**  
Times Cited: **2** DOI: **10.1021/jp8066348** added08-Jul-11 **21.**
- Title: Solvent Effects on Global Reactivity Properties for Neutral and Charged Systems Using the Sequential Monte Carlo Quantum Mechanics Model  
Author(s): Jaramillo, P; Perez, P; Fuentealba, P; et al.  
Source: **Journal of Physical Chemistry B** Volume: **113** Issue: **13** Pages: **4314-4322** Published: **2009**  
Times Cited: **11** DOI: **10.1021/jp808210y** added08-Jul-11 **22.**
- Title: Theoretical Study of the Structure and Electronic Properties of Si<sub>3</sub>O<sup>n-</sup> and Si<sub>6</sub>O<sup>n-</sup> (n=1-6) Clusters. Fragmentation and Formation Patterns  
Author(s): Tiznado, W; Ona, OB; Caputo, MC; et al.  
Source: **Journal of Chemical Theory and Computation** Volume: **5** Issue: **9** Pages: **2265-2273** Published: **SEP 2009**  
Times Cited: **5** DOI: **10.1021/ct900320r** added12-Jul-11 **23.**
- Title: Chemical reactivity of oxygen vacancies on the MgO surface: Reactions with CO<sub>2</sub>, NO<sub>2</sub> and metals  
Author(s): Florez, E; Fuentealba, P; Mondragon, F  
Source: **Catalysis Today** Volume: **133** Pages: **216-222** Published: **APR-JUN 2008**  
Times Cited: **14** DOI: **10.1016/j.cattod.2007.12.087** added 12-Jul-11 **24.**
- Title: Effect of surface site on the spin state of first-row transition metals adsorbed on MgO: Embedded cluster model and hybrid density functional theory calculations  
Author(s): Florez, E; Mondragon, F; Fuentealba, P; et al.  
Source: **Physical Review B** Volume: **78** Issue: **7** Published: **AUG 2008**  
Times Cited: **6** DOI: **10.1103/PhysRevB.78.075426** added12-Jul-11 **25.**
- Title: Relationship between the electrophilicity and sigma(p) Hammett constant in Baeyer-Villiger reactions  
Author(s): Meneses, L; Araya, A; Pilaquinga, F; et al.  
Source: **Chemical Physics Letters** Volume: **460** Issue: **1-3** Pages: **27-30** Published: **2008**  
Times Cited: **14** DOI: **10.1016/j.cplett.2008.05.044** added08-Jul-11 **26.**
- Title: Relativistic effects on the hexafluorides of group 10 metals  
Author(s): David, J; Fuentealba, P; Restrepo, A  
Source: **Chemical Physics Letters** Volume: **457** Issue: **1-3** Pages: **42-44** Published: **2008**  
Times Cited: **10** DOI: **10.1016/j.cplett.2008.04.003** added08-Jul-11 **27.**
- Title: Stochastic search of the quantum conformational space of small lithium and bimetallic lithium-sodium clusters  
Author(s): Perez, JF; Florez, E; Hadad, CZ; et al.

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

- Source: **Journal of Physical Chemistry a** Volume: 112 Issue: 25 Pages: 5749-5755 Published: 2008  
Times Cited: 16 DOI: 10.1021/jp802176w added08-Jul-11 28.
- Title: Theoretical ro-vibrational spectrum of CF<sup>+</sup>  
Author(s): Inostroza, N; Letelier, JR; Senent, ML; et al.  
Source: **Spectrochimica Acta Part a-Molecular and Biomolecular Spectroscopy** Volume: 71 Issue: 3 Pages: 798-802 Published: 2008  
Times Cited: 2 DOI: 10.1016/j.saa.2008.02.027 added08-Jul-11 29.
- Title: Theoretical study of the surface reactivity of alkaline earth oxides: Local density of states evaluation of the local softness  
Author(s): Cardenas, C; De Proft, F; Chamorro, E; et al.  
Source: **Journal of Chemical Physics** Volume: 128 Issue: 3 Published: 2008  
Times Cited: 9 DOI: 10.1063/1.2819239 added08-Jul-11 30.
- Title: Aromaticity and electronic structure of silabenzenes. Possible existence of a new cluster Si<sub>6</sub>Li<sub>6</sub>  
Author(s): Santos, JC; Fuentealba, P  
Source: **Chemical Physics Letters** Volume: 443 Issue: 4-6 Pages: 439-442 Published: AUG 6 2007  
Times Cited: 24 DOI: 10.1016/j.cplett.2007.06.105 added12-Jul-11 31.
- Title: beta-Scission of thioimidoyl radicals (R-1-N-C-center dot=S-R-2): A theoretical scale of radical leaving group ability  
Author(s): Guerra, D; Fuentealba, P; Aizman, A; et al.  
Source: **Chemical Physics Letters** Volume: 443 Issue: 4-6 Pages: 383-388 Published: AUG 6 2007  
Times Cited: 5 DOI: 10.1016/j.cplett.2007.06.053 added08-Jul-11 32.
- Title: Density functional theory characterization of the formation of copper clusters on F-s and F-s(+) centers on a MgO surface  
Author(s): Florez, E; Mondragon, F; Truong, TN; et al.  
Source: **Surface Science** Volume: 601 Issue: 3 Pages: 656-664 Published: FEB 1 2007  
Times Cited: 5 DOI: 10.1016/j.susc.2006.10.040 added12-Jul-11 33.
- Title: Further exploration of the Fukui function, hardness, and other reactivity indices and its relationships within the Kohn-Sham scheme  
Author(s): Fuentealba, P; Chamorro, E; Cardenas, C  
Source: **International Journal of Quantum Chemistry** Volume: 107 Issue: 1 Pages: 37-45 Published: 2007  
Times Cited: 15 DOI: 10.1002/qua.21021 added08-Jul-11 34.
- Title: Local hardness: An application to electrophilic additions  
Author(s): Meneses, L; Araya, A; Pilaquinga, F; et al.  
Source: **Chemical Physics Letters** Volume: 446 Pages: 170-175 Published: 2007  
Times Cited: 5 DOI: 10.1016/j.cplett.2007.07.092 added08-Jul-11 35.
- Title: Nuclear fukui functions from nonintegral electron number calculations  
Author(s): Cardenas, C; Chamorro, E; Galvan, M; et al.  
Source: **International Journal of Quantum Chemistry** Volume: 107 Issue: 4 Pages: 807-815 Published: 2007  
Times Cited: 4 DOI: 10.1002/qua.21202 added08-Jul-11 36.

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- Title: Relationship between basicity and nucleophilicity  
Author(s): Jaramillo, P; Perez, P; Fuentealba, P  
Source: **Journal of Physical Organic Chemistry** Volume: **20** Issue: **12** Pages: **1050-1057** Published: **2007**  
Times Cited: **18** DOI: **10.1002/poc.1251** added08-Jul-11 **37.**
- Title: Definition of a nucleophilicity scale  
Author(s): Jaramillo, P; Perez, P; Contreras, R; et al.  
Source: **Journal of Physical Chemistry a** Volume: **110** Issue: **26** Pages: **8181-8187** Published: **JUL 6 2006**  
Times Cited: **52** DOI: **10.1021/jp057351q** added08-Jul-11 **38.**
- Title: Effect of Ni and Pd on the geometry, electronic properties, and active sites of copper clusters  
Author(s): Florez, E; Mondragon, F; Fuentealba, P  
Source: **Journal of Physical Chemistry B** Volume: **110** Issue: **28** Pages: **13793-13798** Published: **JUL 20 2006**  
Times Cited: **8** DOI: **10.1021/jp060521u** added12-Jul-11 **39.**
- Title: Experimental and theoretical study on the substitution reactions of aryl 2,4-dinitrophenyl carbonates with quinuclidines  
Author(s): Castro, EA; Campodonico, PR; Contreras, R; et al.  
Source: **Tetrahedron** Volume: **62** Issue: **11** Pages: **2555-2562** Published: **MAR 13 2006**  
Times Cited: **30** DOI: **10.1016/j.tet.2005.12.044** added08-Jul-11 **40.**
- Title: Hardness and softness kernels, and related indices in the spin polarized version of density functional theory  
Author(s): Guerra, D; Contreras, R; Perez, P; et al.  
Source: **Chemical Physics Letters** Volume: **419** Issue: **1-3** Pages: **37-43** Published: **2006**  
Times Cited: **10** DOI: **10.1016/j.cplett.2005.11.039** added08-Jul-11 **41.**
- Title: Homofugality: A new reactivity index describing the leaving group ability in homolytic substitution reactions  
Author(s): Guerra, D; Castillo, R; Andres, J; et al.  
Source: **Chemical Physics Letters** Volume: **424** Issue: **4-6** Pages: **437-442** Published: **JUN 24 2006**  
Times Cited: **9** DOI: **10.1016/j.cplett.2006.04.092** added08-Jul-11 **42.**
- Title: Modified genetic algorithms to model cluster structures in medium-sized silicon clusters: Si-18-Si-60  
Author(s): Ona, O; Bazterra, VE; Caputo, MC; et al.  
Source: **Physical Review a** Volume: **73** Issue: **5** Published: **MAY 2006**  
Times Cited: **25** DOI: **10.1103/PhysRevA.73.053203** added12-Jul-11 **43.**
- Title: Nuclear reactivity indices in the context of spin polarized density functional theory  
Author(s): Cardenas, C; Lamsabhi, AM; Fuentealba, P  
Source: **Chemical Physics** Volume: **322** Issue: **3** Pages: **303-310** Published: **MAR 20 2006**  
Times Cited: **10** DOI: **10.1016/j.chemphys.2005.09.001** added08-Jul-11 **44.**
- Title: Nucleophilicity scale for n- and pi-nucleophiles  
Author(s): Jaramillo, P; Fuentealba, P; Perez, P  
Source: **Chemical Physics Letters** Volume: **427** Issue: **4-6** Pages: **421-**

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

425 Published: **AUG 31 2006**

Times Cited: 23 DOI: **10.1016/j.cplett.2006.06.066** added08-Jul-11

45.

Title: On the variations of electronic chemical potential and chemical hardness induced by solvent effects

Author(s): Meneses, L; Fuentealba, P; Contreras, R

Source: **Chemical Physics Letters** Volume: 433 Issue: 1-3 Pages: 54-57 Published: **DEC 29 2006**

Times Cited: 10 DOI: **10.1016/j.cplett.2006.10.124** added08-Jul-11

46.

Title: Relationship between singlet-triplet excitation energies and the Kohn-Sham orbitals obtained with potentials that exhibit a wrong asymptotic behavior

Author(s): Vazquez-Mayagoitia, A; Vargas, R; Nichols, JA; et al.

Source: **Chemical Physics Letters** Volume: 419 Issue: 1-3 Pages: 207-212 Published: **FEB 15 2006**

Times Cited: 5 DOI: **10.1016/j.cplett.2005.11.075** added08-Jul-11

47.

Title: Structural, electronic and magnetic properties of vacancies in single-walled carbon nanotubes

Author(s): Orellana, W; Fuentealba, P

Source: **Surface Science** Volume: 600 Issue: 18 Pages: 4305-4309 Published: **2006**

Times Cited: 21 DOI: **10.1016/j.susc.2006.01.158** added08-Jul-11

Title: Transition-metal atom adsorption on an F-s defect site of MgO (100) and the interaction with a hydrogen atom

Author(s): Florez, E; Mondragon, F; Truong, TN; et al.

Source: **Physical Review B** Volume: 73 Issue: 11 Published: **MAR 2006**

Times Cited: 10 DOI: **10.1103/PhysRevB.73.115423** added12-Jul-11

49.

Title: A theoretical study on the reaction mechanism for the Bergman cyclization from the perspective of the electron localization function and catastrophe theory

Author(s): Santos, JC; Andres, J; Aizman, A; et al.

Source: **Journal of Physical Chemistry a** Volume: 109 Issue: 16 Pages: 3687-3693 Published: **APR 28 2005**

Times Cited: 28 DOI: **10.1021/jp0441947** added12-Jul-11

50.

Title: A theoretical study on the reaction mechanism for the Bergman cyclization from the perspective of the electron localization function and catastrophe theory

Author(s): Santos, JC; Andres, J; Aizman, A; et al.

Source: **Journal of Physical Chemistry a** Volume: 109 Issue: 16 Pages: 3687-3693 Published: **APR 28 2005**

Times Cited: 28 DOI: **10.1021/jp0441947**

51.

Title: An aromaticity scale based on the topological analysis of the electron localization function including sigma and pi contributions

Author(s): Santos, JC; Andres, J; Aizman, A; et al.

Source: **Journal of Chemical Theory and Computation** Volume: 1 Issue: 1 Pages: 83-86 Published: **JAN-FEB 2005**

Times Cited: 83 DOI: **10.1021/ct0499276** added12-Jul-11

52.

Title: Comparison among four different ways to condense the Fukui function

Author(s): Tiznado, W; Chamorro, E; Contreras, R; et al.

Source: **Journal of Physical Chemistry a** Volume: 109 Issue: 14 Pages: 3220-3224 Published: **APR 14 2005**

Times Cited: 33 DOI: **10.1021/jp0450787** added08-Jul-11

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

53.  
Title: Condensation of the highest occupied molecular orbital within the electron localization function domains  
Author(s): Chamorro, E; Duque, M; Cardenas, C; et al.  
Source: **Journal of Chemical Sciences** Volume: **117** Issue: **5** Pages: **419-424** Published: **SEP 2005** Times Cited: **6** added08-Jul-11
54.  
Title: Electronic properties of small bimetallic  $\text{Li}_n\text{Cu}_m$  ( $n, m \leq 4$ ) clusters. A comparison with  $\text{Li}_n$  and  $\text{Cu}_m$  clusters  
Author(s): Fuentealba, P; Padilla-Campos, L  
Source: **International Journal of Quantum Chemistry** Volume: **102** Issue: **5** Pages: **498-505** Published: **APR 20 2005** Times Cited: **9** DOI: **10.1002/qua.20459** added08-Jul-11
55.  
Title: Pseudopotential and electron propagator methods for the calculation of the photoelectron spectra of anionic silicon clusters: Predictions on  $\text{Si}_{10}^-$   
Author(s): Tiznado, WA; Fuentealba, P; Ortiz, JV  
Source: **Journal of Chemical Physics** Volume: **123** Issue: **14** Published: **OCT 8 2005** Times Cited: **3** DOI: **10.1063/1.2048506** added08-Jul-11
56.  
Title: Relationship between the electrophilicity of substituting agents and substrate selectivity in Friedel-Crafts reactions  
Author(s): Meneses, L; Fuentealba, P; Contreras, R  
Source: **Tetrahedron** Volume: **61** Issue: **4** Pages: **831-836** Published: **JAN 24 2005** Times Cited: **15** DOI: **10.1016/j.tet.2004.11.038** added08-Jul-11
57.  
Title: Relationships between the electrophilicity index and experimental rate coefficients for the aminolysis of thiolecarbonates and dithiocarbonates  
Author(s): Campodonico, RR; Fuentealba, P; Castro, EA; et al.  
Source: **Journal of Organic Chemistry** Volume: **70** Issue: **5** Pages: **1754-1760** Published: **MAR 4 2005** Times Cited: **29** DOI: **10.1021/jo048127k** added08-Jul-11
58.  
Title: Theoretical study of the adsorption of H on  $\text{Si}_n$  clusters, ( $n=3-10$ )  
Author(s): Tiznado, W; Ona, OB; Bazterra, VE; et al.  
Source: **Journal of Chemical Physics** Volume: **123** Issue: **21** Published: **DEC 1 2005** Times Cited: **11** DOI: **10.1063/1.2128675** added08-Jul-11
59.  
Title: Theoretical study of the interaction of molecular oxygen with copper clusters  
Author(s): Florez, E; Tiznado, W; Mondragon, F; et al.  
Source: **Journal of Physical Chemistry a** Volume: **109** Issue: **34** Pages: **7815-7821** Published: **SEP 1 2005** Times Cited: **29** DOI: **10.1021/jp052245+** added08-Jul-1160.
- Title: A proposal for a new local hardness as selectivity index  
Author(s): Meneses, L; Tiznado, W; Contreras, R; et al.  
Source: **Chemical Physics Letters** Volume: **383** Issue: **1-2** Pages: **181-187** Published: **JAN 1 2004** Times Cited: **34** DOI: **10.1016/j.cplett.2003.11.019** added08-Jul-11
61.  
Title: Calculated geometry and paramagnetic hyperfine structure of the  $\text{Cu}_7$  cluster  
Author(s): Arratia-Perez, R; Alvarez-Thon, L; Fuentealba, P  
Source: **Chemical Physics Letters** Volume: **397** Issue: **4-6** Pages: **408-**



**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

411 Published: **OCT 21 2004**

Times Cited: 6 DOI: **10.1016/j.cplett.2004.08.139** added08-Jul-11

62.

Title: Condensation of frontier molecular orbital Fukui functions

Author(s): Bulat, FA; Chamorro, E; Fuentealba, P; et al.

Source: **Journal of Physical Chemistry a** Volume: **108** Issue: **2** Pages: **342-**

**349** Published: **JAN 15 2004**

Times Cited: 47 DOI: **10.1021/jp036416r** added08-Jul-11

63.

Title: Local reactivity index as descriptor of benzene adsorption in cluster models of exchanged zeolite-Y

Author(s): Santos, JC; Chamorro, E; Contreras, R; et al.

Source: **Chemical Physics Letters** Volume: **383** Issue: **5-6** Pages: **612-**

**616** Published: **JAN 15 2004**

Times Cited: 3 DOI: **10.1016/j.cplett.2003.11.083** added 08-Jul-1164.

Title: Modified genetic algorithms to model atomic cluster structures: CuSi clusters

Author(s): Ona, O; Bazterra, VE; Caputo, MC; et al.

Source: **Journal of Molecular Structure-Theochem** Volume: **681** Issue: **1-**

**3** Pages: **149-155** Published: **2004**

Times Cited: 10 DOI: **10.1016/j.theochem.2004.04.060** added 08-Jul-1165.

Title: Modified genetic algorithms to model cluster structures in medium-size silicon clusters

Author(s): Bazterra, VE; Ona, O; Caputo, MC; et al.

Source: **Physical Review a** Volume: **69** Issue: **5** Published: **MAY 2004**

Times Cited: 17 DOI: **10.1103/PhysRevA.69.053202** added08-Jul-11

66.

Title: Sigma-pi separation of the electron localization function and aromaticity

Author(s): Santos, JC; Tiznado, W; Contreras, R; et al.

Source: **Journal of Chemical Physics** Volume: **120** Issue: **4** Pages: **1670-**

**1673** Published: **JAN 22 2004**

Times Cited: 85 DOI: **10.1063/1.1635799** added08-Jul-11

67.

Title: The static dipole polarizability of aluminium atom: discrepancy between theory and experiment

Author(s): Fuentealba, P

Source: **Chemical Physics Letters** Volume: **397** Issue: **4-6** Pages: **459-**

**461** Published: **OCT 21 2004**

Times Cited: 13 DOI: **10.1016/j.cplett.2004.09.013** added08-Jul-11

68.

Title: Application of the electron localization function to radical systems

Author(s): Melin, J; Fuentealba, P

Source: **International Journal of Quantum**

**Chemistry** Volume: **92** Issue: **4** Pages: **381-390** Published: **APR 15 2003**

Times Cited: 22 DOI: **10.1002/qua.10515** added08-Jul-11

69.

Title: Chemical reactivity in the {N, N-S, nu(r)} space

Author(s): Melin, J; Aparicio, F; Galvan, M; et al.

Source: **Journal of Physical Chemistry a** Volume: **107** Issue: **19** Pages: **3831-**

**3835** Published: **MAY 15 2003**

Times Cited: 21 DOI: **10.1021/jp034195j** added08-Jul-11

70.

Title: Correcting the atomic highest occupied orbital energy within an hybrid density functional model

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- Author(s): Fuentealba, P; Reyes, O  
Source: **Journal of the Chilean Chemical Society** Volume: 48 Issue: 4 Pages: 115-118 Published: DEC 2003 Times Cited: 1 added08-Jul-11 71.
- Title: Electron probability distribution in AIM and ELF basins  
Author(s): Chamorro, E; Fuentealba, P; Savin, A  
Source: **Journal of Computational Chemistry** Volume: 24 Issue: 4 Pages: 496-504 Published: MAR 2003  
Times Cited: 28 DOI: 10.1002/jcc.10242 added08-Jul-11 72.
- Title: On the location of the electron lone pair of XeF6 and related molecules  
Author(s): Simon-Manso, Y; Fuentealba, P  
Source: **Journal of Molecular Structure-Theochem** Volume: 634 Pages: 89-94 Published: SEP 5 2003  
Times Cited: 2 DOI: 10.1016/S0166-1280(03)00325-7 added08-Jul-11 73.
- Title: The maximum hardness and minimum polarizability principles as the basis for the study of reaction profiles  
Author(s): Gomez, B; Fuentealba, P; Contreras, R  
Source: **Theoretical Chemistry Accounts** Volume: 110 Issue: 6 Pages: 421-427 Published: 2003  
Times Cited: 17 DOI: 10.1007/s00214-003-0497-4 added08-Jul-11 74.
- Title: Theoretical characterization of linear [n]-ladderanes and some isomers  
Author(s): Santos, JC; Fuentealba, P  
Source: **Chemical Physics Letters** Volume: 377 Issue: 3-4 Pages: 449-454 Published: AUG 15 2003  
Times Cited: 8 DOI: 10.1016/S0009-2614(03)01198-9 added08-Jul-11 75.
- Title: Theoretical study of the adsorption of oxygen on a Cu(100) surface and the coadsorption with alkali atoms  
Author(s): Padilla-Campos, L; Fuentealba, P  
Source: **Theoretical Chemistry Accounts** Volume: 110 Issue: 6 Pages: 414-420 Published: 2003  
Times Cited: 13 DOI: 10.1007/s00214-003-0496-5 added08-Jul-11 76.
- Title: Variation of the electrophilicity index along the reaction path  
Author(s): Chamorro, E; Chattaraj, PK; Fuentealba, P  
Source: **Journal of Physical Chemistry a** Volume: 107 Issue: 36 Pages: 7068-7072 Published: SEP 11 2003  
Times Cited: 105 DOI: 10.1021/jp035435y added08-Jul-1177.
- Title: A density functional study of the Claisen rearrangement of allyl aryl ether, allyl arylamine, allyl aryl thio ether, and a series of meta-substituted molecules through reactivity and selectivity profiles  
Author(s): Gomez, B; Chattaraj, PK; Chamorro, E; et al.  
Source: **Journal of Physical Chemistry a** Volume: 106 Issue: 46 Pages: 11227-11233 Published: NOV 21 2002  
Times Cited: 19 DOI: 10.1021/jp020437o added08-Jul-11 78.
- Title: Atomic spin-density polarization index and atomic spin-density information entropy distance  
Author(s): Fuentealba, P; Melin, J  
Source: **International Journal of Quantum**

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

**Chemistry** Volume: 90 Issue: 1 Pages: 334-341 Published:2002

Times Cited: 2 DOI: 10.1002/qua.994 added08-Jul-11

79.

Title: Local reactivity index defined through the density of states describes the basicity of alkaline-exchanged zeolites

Author(s): Santos, JC; Contreras, R; Chamorro, E; et al.

Source: **Journal of Chemical Physics** Volume: 116 Issue: 10 Pages: 4311-4316 Published: **MAR 8 2002**

Times Cited: 18 DOI: 10.1063/1.1449944 added08-Jul-11

80.

Title: On the theoretical determination of the static dipole polarizability of intermediate size silicon clusters

Author(s): Bazterra, VE; Caputo, MC; Ferraro, MB; et al.

Source: **Journal of Chemical Physics** Volume: 117 Issue: 24 Pages: 11158-11165 Published: **DEC 22 2002**

Times Cited: 33 DOI: 10.1063/1.1521761 added08-Jul-11

81.

Title: The bonding nature of some simple sigmatropic transition states from the topological analysis of the electron localization function

Author(s): Chamorro, E; Santos, JC; Gomez, B; et al.

Source: **Journal of Physical Chemistry a** Volume: 106 Issue: 47 Pages: 11533-11539 Published: **NOV 28 2002**

Times Cited: 14 DOI: 10.1021/jp025958q added08-Jul-11

82.

Title: Theoretical study of intramolecular proton transfer reactions in some thiooxalic acid derivatives

Author(s): Chamorro, E; Toro-Labbe, A; Fuentealba, P

Source: **Journal of Physical Chemistry a** Volume: 106 Issue: 15 Pages: 3891-3898 Published: **APR 18 2002**

Times Cited: 17 DOI: 10.1021/jp0143185 added08-Jul-11

83.

Title: Bonding analysis of hydrogenated lithium clusters using the electron localization function

Author(s): Fuentealba, P; Savin, A

Source: **Journal of Physical Chemistry a** Volume: 105 Issue: 51 Pages: 11531-11533 Published: **DEC 27 2001**

Times Cited: 32 DOI: 10.1021/jp012004b added08-Jul-11

84.

Title: Higher order derivatives for nuclear indexes in the framework of density functional theory

Author(s): Chamorro, E; Fuentealba, P; Contreras, R

Source: **Journal of Chemical Physics** Volume: 115 Issue: 15 Pages: 6822-6826 Published: **OCT 15 2001** Times Cited: 10 added08-Jul-11

85.

Title: Scrutiny of the HSAB principle in some representative acid-base reactions

Author(s): Chattaraj, PK; Gomez, B; Chamorro, E; et al.

Source: **Journal of Physical Chemistry a** Volume: 105 Issue: 38 Pages: 8815-8820 Published: **2001**

Times Cited: 26 DOI: 10.1021/jp011767w added08-Jul-11

86.

Title: Topological analysis of the electron localization function applied to the study of the [1,3] sigmatropic shift of fluorine in 3-fluorpropene

Author(s): Chamorro, E; Santos, JC; Gomez, B; et al.

Source: **Journal of Chemical Physics** Volume: 114 Issue: 1 Pages: 23-34 Published: **JAN 1 2001** Times Cited: 15 added08-Jul-11

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

87.  
Title: Electronic structure and bonding of the ground state of alkaline-earth-metal monoxides and carbides  
Author(s): Fuentealba, P; Savin, A  
Source: **Journal of Physical Chemistry a** Volume: **104** Issue: **46** Pages: **10882-10886** Published: **NOV 23 2000**  
Times Cited: **14** DOI: **10.1021/jp001669v** added08-Jul-11
88.  
Title: Empirical energy-density relationships for the analysis of substituent effects in chemical reactivity  
Author(s): Perez, P; Simon-Manso, Y; Aizman, A; et al.  
Source: **Journal of the American Chemical Society** Volume: **122** Issue: **19** Pages: **4756-4762** Published: **MAY 17 2000** Times Cited: **63** added12-Jul-11
89.  
Title: Molecular electronic excitations and the minimum polarizability principle  
Author(s): Fuentealba, P; Simon-Manso, Y; Chattaraj, PK  
Source: **Journal of Physical Chemistry a** Volume: **104** Issue: **14** Pages: **3185-3187** Published: **APR 13 2000** Times Cited: **59** added08-Jul-1190.
- Title: On the condensed Fukui function  
Author(s): Fuentealba, P; Perez, P; Contreras, R  
Source: **Journal of Chemical Physics** Volume: **113** Issue: **7** Pages: **2544-2551** Published: **AUG 15 2000** Times Cited: **170** added08-Jul-11
91.  
Title: Shannon entropy of 1-normalized electron density  
Author(s): Fazal, SP; Sen, KD; Gutierrez, G; et al.  
Source: **Indian Journal of Chemistry Section a-Inorganic Bio-Inorganic Physical Theoretical & Analytical Chemistry** Volume: **39** Issue: **1-3** Pages: **48-49** Published: **2000** Times Cited: **7** added08-Jul-11
92.  
Title: Some relationships within the nonlocal (pair-site) chemical reactivity formalism of density functional theory  
Author(s): Chamorro, E; Contreras, R; Fuentealba, P  
Source: **Journal of Chemical Physics** Volume: **113** Issue: **24** Pages: **10861-10866** Published: **DEC 22 2000** Times Cited: **22** added08-Jul-11
93.  
Title: Woodward-Hoffmann rule in the light of the principles of maximum hardness and minimum polarizability: DFT and ab initio SCF studies  
Author(s): Chattaraj, PK; Fuentealba, P; Gomez, B; et al.  
Source: **Journal of the American Chemical Society** Volume: **122** Issue: **2** Pages: **348-351** Published: **JAN 19 2000** Times Cited: **74** added12-Jul-11
94.  
Title: A direct evaluation of regional Fukui functions in molecules  
Author(s): Contreras, RR; Fuentealba, P; Galvan, M; et al.  
Source: **Chemical Physics Letters** Volume: **304** Issue: **5-6** Pages: **405-413** Published: **MAY 7 1999** Times Cited: **201** added08-Jul-11
95.  
Title: Basis set superposition error in atomic cluster calculations  
Author(s): Fuentealba, P; Simon-Manso, Y  
Source: **Chemical Physics Letters** Volume: **314** Issue: **1-2** Pages: **108-113** Published: **NOV 26 1999** Times Cited: **13** added08-Jul-11
- 96.

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- Title: Chemical bonding and reactivity: a local thermodynamic viewpoint  
Author(s): Chattaraj, PK; Chamorro, E; Fuentealba, P  
Source: **Chemical Physics Letters** Volume: 314 Issue: 1-2 Pages: 114-121 Published: **NOV 26 1999** Times Cited: 32 added08-Jul-11 97.
- Title: Density functional study of LinHm clusters. Electric dipole polarizabilities  
Author(s): Fuentealba, P; Reyes, O  
Source: **Journal of Physical Chemistry a** Volume: 103 Issue: 10 Pages: 1376-1380 Published: 1999 Times Cited: 26 added08-Jul-11 98.
- Title: On the ground-state structure of XBO (X = Li, Na and K) molecules  
Author(s): Fuentealba, P  
Source: **Chemical Physics Letters** Volume: 301 Issue: 1-2 Pages: 59-63 Published: **FEB 19 1999** Times Cited: 2 added08-Jul-11 99.
- Title: The static dipole polarizability and the hardness of some new carbon hypermagnesium species  
Author(s): Fuentealba, P  
Source: **Journal of Molecular Structure-Theochem** Volume: 493 Pages: 139-143 Published: 1999 Times Cited: 1 added08-Jul-11 100.
- Title: The variations of the hardness and the Kohn-Sham Fukui function under an external perturbation  
Author(s): Fuentealba, P; Cedillo, A  
Source: **Journal of Chemical Physics** Volume: 110 Issue: 20 Pages: 9807-9811 Published: **MAY 22 1999** Times Cited: 23 101.
- Title: Validity of the minimum polarizability principle in molecular vibrations and internal rotations: An ab initio SCF study  
Author(s): Chattaraj, PK; Fuentealba, P; Jaque, P; et al.  
Source: **Journal of Physical Chemistry a** Volume: 103 Issue: 46 Pages: 9307-9312 Published: **NOV 18 1999** Times Cited: 87 added 08-Jul-11 102.
- Title: A modified version of the electron localization function (ELF)  
Author(s): Fuentealba, P  
Source: **International Journal of Quantum Chemistry** Volume: 69 Issue: 4 Pages: 559-565 Published: 1998 Times Cited: 11 added08-Jul-11 103.
- Title: Comment on "Contribution of the shape factor  $\sigma(r)$  to atomic and molecular electronegativities"  
Author(s): Fuentealba, P  
Source: **Journal of Physical Chemistry a** Volume: 102 Issue: 24 Pages: 4747-4748 Published: **JUN 11 1998** Times Cited: 4 added08-Jul-11 104.
- Title: On the density functional relationship between static dipole polarizability and global softness  
Author(s): Simon-Manso, Y; Fuentealba, P  
Source: **Journal of Physical Chemistry a** Volume: 102 Issue: 11 Pages: 2029-2032 Published: **MAR 12 1998** Times Cited: 56 added08-Jul-11 105.
- Title: Reactivity indices and response functions in density functional theory  
Author(s): Fuentealba, P  
Source: **Journal of Molecular Structure-Theochem** Volume: 433 Pages: 113-118 Published: **JUL 13 1998** Times Cited: 7 added08-Jul-11

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

106.  
Title: Static dipole polarizabilities of small neutral carbon clusters C-n ( $n \leq 8$ )  
Author(s): Fuentealba, P  
Source: Physical Review a Volume: 58 Issue: 5 Pages: 4232-4234 Published: NOV 1998 Times Cited: 26 added08-Jul-11
107.  
Title: Calculation of the atomic kinetic energy from a density functional virial relationship  
Author(s): Fuentealba, P  
Source: Journal of Physics B-Atomic Molecular and Optical Physics Volume: 30 Issue: 9 Pages: 2039-2045 Published: MAY 14 1997 Times Cited: 5 added08-Jul-11
108.  
Title: Modified local exchange and kinetic energy functionals for atomic systems  
Author(s): Fuentealba, P  
Source: Theochem-Journal of Molecular Structure Volume: 390 Pages: 1-9 Published: 1997 Times Cited: 1 added08-Jul-11
109.  
Title: Static dipole polarizabilities through density functional methods  
Author(s): Fuentealba, P; SimonManso, Y  
Source: Journal of Physical Chemistry a Volume: 101 Issue: 23 Pages: 4231-4235 Published: JUN 5 1997 Times Cited: 28 added08-Jul-11
110.  
Title: A LOCAL MODEL FOR THE HARDNESS KERNEL AND RELATED REACTIVITY PARAMETERS IN DENSITY-FUNCTIONAL THEORY  
Author(s): FUENTEALBA, P  
Source: Journal of Chemical Physics Volume: 103 Issue: 15 Pages: 6571-6575 Published: OCT 15 1995 Times Cited: 47 added08-Jul-11
111.  
Title: FURTHER EVIDENCE OF THE CONJOINT CORRECTION TO THE LOCAL KINETIC AND EXCHANGE ENERGY DENSITY FUNCTIONALS  
Author(s): FUENTEALBA, P; REYES, O  
Source: Chemical Physics Letters Volume: 232 Issue: 1-2 Pages: 31-34 Published: JAN 6 1995 Times Cited: 11 added08-Jul-11
112.  
Title: A CORRELATION-ENERGY FUNCTIONAL FROM A CORRELATION-FACTOR MODEL  
Author(s): FUENTEALBA, P  
Source: International Journal of Quantum Chemistry Volume: 49 Issue: 4 Pages: 549-557 Published:FEB 5 1994 Times Cited: 5 added08-Jul-11
113.  
Title: A TEST FOR THE WILSON-LEVY CORRELATION-ENERGY FUNCTIONAL  
Author(s): FUENTEALBA, P; SAVIN, A  
Source: Chemical Physics Letters Volume: 217 Issue: 5-6 Pages: 566-570 Published: JAN 28 1994 Times Cited: 14 added08-Jul-11
114.  
Title: ATOMIC SOFTNESS AND THE ELECTRIC-DIPOLE POLARIZABILITY  
Author(s): FUENTEALBA, P; REYES, O  
Source: Theochem-Journal of Molecular Structure Volume: 101 Issue: 1-2 Pages: 65-70 Published:MAY 1993 Times Cited: 0 added08-Jul-11
115.  
Title: EXCHANGE ENERGY FUNCTIONAL FROM A PAULI CORRELATION-FACTOR MODEL  
Author(s): FUENTEALBA, P

## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

- Source: Theochem-Journal of Molecular Structure Volume: 106 Pages: 35-38 Published: NOV 14 1993 Times Cited: 0 added08-Jul-11 116.
- Title: POLARIZABILITIES AND HYPERPOLARIZABILITIES OF THE ALKALI-METAL ATOMS  
Author(s): FUENTEALBA, P; REYES, O  
Source: Journal of Physics B-Atomic Molecular and Optical Physics Volume: 26 Issue: 15 Pages: 2245-2250 Published: AUG 14 1993 Times Cited: 26 added08-Jul-11 117.
- Title: EXCHANGE-CORRELATION FUNCTIONAL FROM A CORRELATION-FACTOR MODEL  
Author(s): FUENTEALBA, P  
Source: Physical Review a Volume: 45 Issue: 9 Pages: 6891-6894 Published: MAY 1 1992 Times Cited: 1 added08-Jul-11 118.
- Title: HIGHER-ORDER DERIVATIVES IN DENSITY-FUNCTIONAL THEORY, ESPECIALLY THE HARDNESS DERIVATIVE  $\Delta\eta/\Delta N$   
Author(s): FUENTEALBA, P; PARR, RG  
Source: Journal of Chemical Physics Volume: 94 Issue: 8 Pages: 5559-5564 Published: APR 15 1991 Times Cited: 91 added12-Jul-11 119.
- Title: ELECTRON-AFFINITIES OF ALKALINE-EARTH-METAL ATOMS  
Author(s): FUENTEALBA, P; SAVIN, A; STOLL, H; et al.  
Source: Physical Review a Volume: 41 Issue: 3 Pages: 1238-1242 Published: FEB 1 1990 Times Cited: 37 added08-Jul-11 120.
- Title: ELECTRON-AFFINITIES OF ALKALINE-EARTH ATOMS BY MEANS OF DIFFERENT DENSITY FUNCTIONALS  
Author(s): FUENTEALBA, P; SAVIN, A; STOLL, H; et al.  
Source: Physical Review a Volume: 40 Issue: 4 Pages: 2163-2165 Published: 1989 Times Cited: 9 added08-Jul-11 121.
- Title: ATOMIC CORRELATION-ENERGY DIFFERENCES BY MEANS OF A POLARIZATION POTENTIAL  
Author(s): FUENTEALBA, P; STOLL, H; SAVIN, A  
Source: Physical Review a Volume: 38 Issue: 1 Pages: 483-486 Published: JUL 1 1988 Times Cited: 6 added08-Jul-11 122.
- Title: GROUND-STATE PROPERTIES OF ALKALI AND ALKALINE-EARTH HYDRIDES  
Author(s): FUENTEALBA, P; REYES, O; STOLL, H; et al.  
Source: Journal of Chemical Physics Volume: 87 Issue: 9 Pages: 5338-5345 Published: NOV 1 1987 Times Cited: 63 added08-Jul-11 123.
- Title: PSEUDOPOTENTIAL CALCULATIONS ON THE GROUND-STATE OF THE ALKALINE-EARTH MONOHYDRIDE IONS  
Author(s): FUENTEALBA, P; REYES, O  
Source: Molecular Physics Volume: 62 Issue: 6 Pages: 1291-1296 Published: DEC 20 1987 Times Cited: 18 added08-Jul-11 124.
- Title: CALCULATION OF ALKALI-ION RARE-GAS POTENTIALS - THE LIH<sup>+</sup> ION  
Author(s): FUENTEALBA, P  
Source: Journal of Physics B-Atomic Molecular and Optical

**Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile**

Physics Volume: 19 Issue: 7 Pages: L235-L239 Published: APR 14 1986 Times Cited: 1 added08-Jul-11

125.

Title: GROUND-STATE PROPERTIES OF ALKALI DIMERS XY (X,Y=LITOCs)

Author(s): IGELMANN, G; WEDIG, U; FUENTEALBA, P; et al.

Source: Journal of Chemical Physics Volume: 84 Issue: 9 Pages: 5007-5012 Published: MAY 1 1986 Times Cited: 96 added08-Jul-11

126.

Title: PSEUDOPOTENTIAL CALCULATIONS FOR ALKALINE-EARTH ATOMS

Author(s): FUENTEALBA, P; VONSZENTPALLY, L; PREUSS, H; et al.

Source: Journal of Physics B-Atomic Molecular and Optical Physics Volume: 18 Issue: 7 Pages: 1287-1296 Published: 1985 Times Cited: 149 added08-Jul-11

127.

Title: CU AND AG AS ONE-VALENCE-ELECTRON ATOMS - CI RESULTS AND QUADRUPOLE CORRECTIONS FOR CU<sub>2</sub>, AG<sub>2</sub>, CUH, AND AGH

Author(s): STOLL, H; FUENTEALBA, P; SCHWERDTFEGER, P; et al.

Source: Journal of Chemical Physics Volume: 81 Issue: 6 Pages: 2732-2736 Published: 1984 Times Cited: 67 added08-Jul-11

128.

Title: CU AND AG AS ONE-VALENCE-ELECTRON ATOMS - PSEUDOPOTENTIAL CI RESULTS FOR CUO AND AGO

Author(s): IGEL, G; WEDIG, U; DOLG, M; et al.

Source: Journal of Chemical Physics Volume: 81 Issue: 6 Pages: 2737-2740 Published: 1984 Times Cited: 31 added08-Jul-11

129.

Title: PSEUDOPOTENTIAL CALCULATIONS INCLUDING CORE-VALENCE CORRELATION - ALKALI AND NOBLE-METAL COMPOUNDS

Author(s): STOLL, H; SZENTPALLY, LV; FUENTEALBA, P; et al.

Source: International Journal of Quantum Chemistry Volume: 26 Issue: 5 Pages: 725-727 Published: 1984 Times Cited: 7 added08-Jul-11

130.

Title: CU AND AG AS ONE-VALENCE-ELECTRON ATOMS - PSEUDOPOTENTIAL RESULTS FOR CU-2, AG-2, CUH, AGH, AND THE CORRESPONDING CATIONS

Author(s): STOLL, H; FUENTEALBA, P; DOLG, M; et al.

Source: Journal of Chemical Physics Volume: 79 Issue: 11 Pages: 5532-5542 Published: 1983 Times Cited: 123 added08-Jul-11

131.

Title: ON THE RELIABILITY OF SEMI-EMPIRICAL PSEUDOPOTENTIALS - SIMULATION OF HARTREE-FOCK AND DIRAC-FOCK RESULTS

Author(s): FUENTEALBA, P; STOLL, H; VONSZENTPALLY, L; et al.

Source: Journal of Physics B-Atomic Molecular and Optical Physics Volume: 16 Issue: 11 Pages: L323-L328 Published: 1983 Times Cited: 64 added08-Jul-11

132.

Title: PSEUDOPOTENTIAL CALCULATIONS INCLUDING CORE-VALENCE CORRELATION - ALKALI COMPOUNDS

Author(s): FUENTEALBA, P; VONSZENTPALLY, L; STOLL, H; et al.

Source: Theochem-Journal of Molecular Structure Volume: 10 Pages: 213-219 Published: 1983 Times Cited: 0 added08-Jul-11

133.

Title: A PROPER ACCOUNT OF CORE-POLARIZATION WITH PSEUDOPOTENTIALS - SINGLE VALENCE-ELECTRON ALKALI COMPOUNDS

Author(s): FUENTEALBA, P; PREUSS, H; STOLL, H; et al.



## Escuela de Pregrado – Facultad de Ciencias – Universidad de Chile

Source: Chemical Physics Letters Volume: 89 Issue: 5 Pages: 418-422 Published: 1982 Times Cited: 364 added08-Jul-11

134.

Title: ON THE RELIABILITY OF SEMI-EMPIRICAL PSEUDOPOTENTIALS - DIPOLE POLARIZABILITY OF THE ALKALI ATOMS

Author(s): FUENTEALBA, P

Source: Journal of Physics B-Atomic Molecular and Optical Physics Volume: 15 Issue: 16 Pages: L555-L558 Published: 1982 Times Cited: 38 added08-Jul-11

135.

Title: PSEUDOPOTENTIAL CALCULATIONS ON RB-2+, CS-2+, RBH+, CSH+ AND THE MIXED ALKALI DIMER IONS

Author(s): VONSZENTPALY, L; FUENTEALBA, P; PREUSS, H; et al.

Source: Chemical Physics Letters Volume: 93 Issue: 6 Pages: 555-559 Published: 1982

### PROYECTOS DE INVESTIGACIÓN:

INVESTIGADOR RESPONSIBLE. 1130202 EXPLORING THE DYNAMICS AND REACTIVITY OF ATOMIC AND MOLECULAR CLUSTERS. 2013

INVESTIGADOR RESPONSIBLE. 1080184 CHEMICAL REACTIVITY OF MOLECULES, CLUSTERS AND EXTENDED SYSTEMS FROM A THEORETICAL PERSPECTIVE. 2008

INVESTIGADOR RESPONSABLE. 1050294 CONCEPTOS QUIMICOS EN TEORIAS DEL FUNCIONAL DE LA DENSIDAD Y SUS APLICACIONES A MOLECULAS Y CLUSTERS. 2005

INVESTIGADOR RESPONSABLE. 1010649 APLICACIONES Y DESARROLLO DE LA TEORIA DEL FUNCIONAL DE LA DENSIDAD EN QUIMICA. 2001

INVESTIGADOR RESPONSABLE. 7010649 APLICACIONES Y DESARROLLO DE LA TEORIA DEL FUNCIONAL DE LA DENSIDAD EN QUIMICA. 2001

Actualización, mayo 2014