Juarez L F Da Silva

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

166
papers

6,465
citations

40
p-index

76
g-index

180
ext. papers

7,218
ext. citations

4
citations

| # | Paper | IF | Citations |
|-----|--|-----|-----------|
| 166 | Role of quantum-size effects in the dehydrogenation of CH4 on 3d TMn clusters: DFT calculations combined with data mining. <i>Catalysis Science and Technology</i> , 2022 , 12, 916-926 | 5.5 | |
| 165 | Exploring the adsorption site coordination as a strategy to tune copper catalysts for CO2 electro-reduction. <i>Catalysis Science and Technology</i> , 2022 , 12, 869-879 | 5.5 | 2 |
| 164 | On a high photocatalytic activity of high-noble alloys Au-Ag/TiO catalysts during oxygen evolution reaction of water oxidation <i>Scientific Reports</i> , 2022 , 12, 2604 | 4.9 | 3 |
| 163 | Ab initio investigation of the role of the d-states on the adsorption and activation properties of CO on 3d, 4d, and 5d transition-metal clusters <i>Journal of Chemical Physics</i> , 2022 , 156, 124106 | 3.9 | |
| 162 | Tailoring Excitonic and Optoelectronic Properties of Transition Metal Dichalcogenide Bilayers. Journal of Physical Chemistry C, 2022 , 126, 9173-9184 | 3.8 | 1 |
| 161 | Ab initio investigation of topological phase transitions induced by pressure in trilayer van der Waals structures: the example of h-BN/SnTe/h-BN. <i>Journal of Physics Condensed Matter</i> , 2021 , 33, 025003 | 1.8 | 0 |
| 160 | Stacking Order Effects on the Electronic and Optical Properties of Graphene/Transition Metal Dichalcogenide Van der Waals Heterostructures. <i>ACS Applied Electronic Materials</i> , 2021 , 3, 1671-1680 | 4 | 2 |
| 159 | Excitonic Effects on Two-Dimensional Transition-Metal Dichalcogenide Monolayers: Impact on Solar Cell Efficiency. <i>ACS Applied Energy Materials</i> , 2021 , 4, 3265-3278 | 6.1 | 2 |
| 158 | Theoretical Investigation of the Na+ Transport Mechanism and the Performance of Ionic Liquid-Based Electrolytes in Sodium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 4444-4458 | 6.1 | 8 |
| 157 | Energy Decomposition to Access the Stability Changes Induced by CO Adsorption on Transition-Metal 13-Atom Clusters. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 2294-2301 | 6.1 | 2 |
| 156 | Investigation of the Stability Mechanisms of Eight-Atom Binary Metal Clusters Using DFT Calculations and -means Clustering Algorithm. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 3411-3420 | 6.1 | 3 |
| 155 | Steric and Electrostatic Effects on the Diffusion of CH/CHOH in Copper-Exchanged Zeolites: Insights from Enhanced Sampling Molecular Dynamics and Free Energy Calculations. <i>Langmuir</i> , 2021 , 37, 8014-8023 | 4 | 0 |
| 154 | The role of the A-cations in the polymorphic stability and optoelectronic properties of lead-free ASnI perovskites. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 2286-2297 | 3.6 | 4 |
| 153 | Correlation-Based Framework for Extraction of Insights from Quantum Chemistry Databases: Applications for Nanoclusters. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 1125-1135 | 6.1 | 1 |
| 152 | Acid-base properties of hydroxyapatite(0001) by the adsorption of probe molecules: An ab initio investigation. <i>Physical Review Materials</i> , 2021 , 5, | 3.2 | 1 |
| 151 | Systematic Investigation of Error Distribution in Machine Learning Algorithms Applied to the Quantum-Chemistry QM9 Data Set Using the Bias and Variance Decomposition. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 4210-4223 | 6.1 | 3 |
| 150 | Role of Structural Phases and Octahedra Distortions in the Optoelectronic and Excitonic Properties of CsGeX3 (X = Cl, Br, I) Perovskites. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 19142-19155 | 3.8 | 6 |

(2020-2021)

| 149 | Beyond the Anderson rule: importance of interfacial dipole and hybridization in van der Waals heterostructures. <i>2D Materials</i> , 2021 , 8, 041002 | 5.9 | 5 | |
|-----|---|------------------|----|--|
| 148 | Ab Initio Study of CO Activation on Pristine and Fe-Decorated WS Nanoflakes. <i>Journal of Physical Chemistry A</i> , 2021 , 125, 7769-7777 | 2.8 | 2 | |
| 147 | screening of Pt-based transition-metal nanoalloys using descriptors derived from the adsorption and activation of CO. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 6029-6041 | 3.6 | 3 | |
| 146 | Ab initio investigation of the role of the d-states occupation on the adsorption properties of H, CO, CH and CHOH on the Fe, Co, Ni and Cu clusters. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 8739-875 | 1 ^{3.6} | 3 | |
| 145 | Role of the OH-group in the adsorption properties of methanol, ethanol, and ethylene glycol on 15-atom 3d, 4d, and 5d transition-metal clusters. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 17553-1 | 7366 | 1 | |
| 144 | The role of site coordination on the CO2 electroreduction pathway on stepped and defective copper surfaces. <i>Catalysis Science and Technology</i> , 2021 , 11, 2770-2781 | 5.5 | 3 | |
| 143 | Methane dehydrogenation on 3d 13-atom transition-metal clusters: A density functional theory investigation combined with Spearman rank correlation analysis. <i>Fuel</i> , 2020 , 275, 117790 | 7.1 | 6 | |
| 142 | Contrasting Structure and Bonding of a Copper-Rich and a Zinc-Rich Intermetalloid Cu/Zn Cluster. <i>Inorganic Chemistry</i> , 2020 , 59, 9077-9085 | 5.1 | 4 | |
| 141 | Ab initio investigation of the formation mechanism of nano-interfaces between 3d-late transition-metals and ZrO nanoclusters. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 8067-8076 | 3.6 | 1 | |
| 140 | Ab initio investigation of quantum size effects on the adsorption of CO, CO, HO, and H on transition-metal particles. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 8998-9008 | 3.6 | 13 | |
| 139 | Ab initio investigation of the role of charge transfer in the adsorption properties of H2, N2, O2,CO,NO,CO2, NO2, and CH4 on the van der Waals layered Sn3O4 semiconductor. <i>Physical Review Materials</i> , 2020 , 4, | 3.2 | 1 | |
| 138 | A hybrid-DFT investigation of the Ce oxidation state upon adsorption of F, Na, Ni, Pd and Pt on the (CeO) cluster. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 14099-14108 | 3.6 | 5 | |
| 137 | Investigation of CO Adsorption on 13-Atom 4d Clusters. <i>Journal of Chemical Information and Modeling</i> , 2020 , 60, 537-545 | 6.1 | 11 | |
| 136 | A Hybrid Density Functional Theory Investigation of the (({text {CeO}}_2)_{6}) Clusters in the Cationic, Neutral, and Anionic States. <i>Journal of Cluster Science</i> , 2020 , 31, 1213-1220 | 3 | 1 | |
| 135 | Ab Initio Insights into the Formation Mechanisms of 55-Atom Pt-Based CoreBhell Nanoalloys. Journal of Physical Chemistry C, 2020 , 124, 1158-1164 | 3.8 | 11 | |
| 134 | Interfacial Structures in Ionic Liquid-Based Ternary Electrolytes for Lithium-Metal Batteries: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 9648-9657 | 3.4 | 7 | |
| 133 | An ab initio investigation of the adsorption properties of water on binary AlSi clusters. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 24669-24676 | 3.6 | 1 | |
| 132 | Mixed Halide Lead-free Double Perovskite Alloys for Band Gap Engineering. <i>ACS Applied Energy Materials</i> , 2020 , 3, 7364-7371 | 6.1 | 3 | |

| 131 | Novel zero-dimensional lead-free bismuth based perovskites: from synthesis to structural and optoelectronic characterization. <i>Materials Advances</i> , 2020 , 1, 3439-3448 | 3.3 | 7 |
|-----|--|-----------------------------------|----|
| 130 | Machine Learning Prediction of Nine Molecular Properties Based on the SMILES Representation of the QM9 Quantum-Chemistry Dataset. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 9854-9866 | 2.8 | 15 |
| 129 | Unveiling the adsorption properties of 3d, 4d, and 5d metal adatoms on the MoS2 monolayer: A DFT-D3 investigation. <i>Surface Science</i> , 2020 , 701, 121700 | 1.8 | 7 |
| 128 | Optical and dielectric properties of lead perovskite and iodoplumbate complexes: an ab initio study. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 18423-18434 | 3.6 | 5 |
| 127 | Ab initio investigation of the role of transition-metal dopants in the adsorption properties of ethylene glycol on doped Pt(100) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 17646-17658 | 3.6 | 3 |
| 126 | insights into the stabilization and binding mechanisms of MoS nanoflakes supported on graphene. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 26865-26875 | 3.6 | О |
| 125 | Defect-induced magnetism in II-VI quantum dots. <i>Physical Review B</i> , 2019 , 99, | 3.3 | 2 |
| 124 | (Meta-)stability and Core-Shell Dynamics of Gold Nanoclusters at Finite Temperature. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 685-692 | 6.4 | 4 |
| 123 | Adsorption of CO, NO, and H2 on the PdnAu55\(\text{B}\) Nanoclusters: A Density Functional Theory Investigation within the van der Waals D3 Corrections. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 7431- | 7 ² 4 ⁸ 9 | 11 |
| 122 | The influence of hydroxy groups on the adsorption of three-carbon alcohols on Ni(111), Pd(111) and Pt(111) surfaces: a density functional theory study within the D3 dispersion correction. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 8434-8444 | 3.6 | 12 |
| 121 | Ab initio investigation of structural stability and exfoliation energies in transition metal dichalcogenides based on Ti-, V-, and Mo-group elements. <i>Physical Review Materials</i> , 2019 , 3, | 3.2 | 24 |
| 120 | Edge, size, and shape effects on WS, WSe, and WTe nanoflake stability: design principles from an ab initio investigation. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 23076-23084 | 3.6 | 11 |
| 119 | Ab initio insights into the structural, energetic, electronic, and stability properties of mixed CeZrO nanoclusters. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 26637-26646 | 3.6 | 1 |
| 118 | First-Principles Exploration of Two-Dimensional Transition Metal Dichalcogenides Based on Fe, Co, Ni, and Cu Groups and Their van der Waals Heterostructures. <i>ACS Applied Energy Materials</i> , 2019 , 2, 849 | 1 ⁶ 8 ¹ 501 | 12 |
| 117 | Thermodynamic properties of 55-atom Pt-based nanoalloys: Phase changes and structural effects on the electronic properties. <i>Journal of Chemical Physics</i> , 2019 , 151, 204301 | 3.9 | 8 |
| 116 | Ab initio investigation of the atomistic descriptors in the activation of small molecules on 3d transition-metal 13-atom clusters: The example of H, CO, HO, and CO. <i>Journal of Chemical Physics</i> , 2019 , 151, 214301 | 3.9 | 19 |
| 115 | Tuning the Magnetic Properties of FeCo Thin Films through the Magnetoelastic Effect Induced by the Au Underlayer Thickness. <i>ACS Applied Materials & Distributed Materials & D</i> | 9.5 | 10 |
| 114 | Tuning the optical bandgap in multi-cation compound transparent conducting-oxides: The examples of In2ZnO4 and In4Sn3O12. <i>Journal of Applied Physics</i> , 2018 , 123, 055704 | 2.5 | 1 |

| 113 | A comprehensive study of g-factors, elastic, structural and electronic properties of III-V semiconductors using hybrid-density functional theory. <i>Journal of Applied Physics</i> , 2018 , 123, 065702 | 2.5 | 13 |
|-----|--|------|----|
| 112 | Comparison of the Performance of van der Waals Dispersion Functionals in the Description of Water and Ethanol on Transition Metal Surfaces. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 1577-1588 | 3.8 | 25 |
| 111 | Ab Initio Investigation of the Role of Atomic Radius in the Structural Formation of PtnTM55 (TM = Y, Zr, Nb, Mo, and Tc) Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7444-7454 | 3.8 | 12 |
| 110 | The role of the anionic and cationic pt sites in the adsorption site preference of water and ethanol on defected Pt4/Pt(111) substrates: A density functional theory investigation within the D3 van der waals corrections. <i>Surface Science</i> , 2018 , 667, 84-91 | 1.8 | 5 |
| 109 | Azobenzene Adsorption on the MoS2(0001) Surface: A Density Functional Investigation within van der Waals Corrections. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 18895-18901 | 3.8 | 9 |
| 108 | The Mackay-Type Cluster [Cu Al](Cp*): Open-Shell 67-Electron Superatom with Emerging Metal-Like Electronic Structure. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14630-14634 | 16.4 | 25 |
| 107 | Size-Induced Phase Evolution of MoSe2 Nanoflakes Revealed by Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 20483-20488 | 3.8 | 11 |
| 106 | The adsorption of alcohols on strained PtNi(111) substrates: a density functional investigation within the D3 van der Waals correction. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 24210-24221 | 3.6 | 11 |
| 105 | Water adsorption on the stoichiometric and defected Fe(110) surfaces. Surface Science, 2018, 668, 144- | 149 | 11 |
| 104 | Physical and Chemical Properties of Unsupported (MO2)n Clusters for $M = Ti$, Zr , or Ce and $n = 1115$: A Density Functional Theory Study Combined with the Tree-Growth Scheme and Euclidean Similarity Distance Algorithm. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 27702-27712 | 3.8 | 19 |
| 103 | investigation of the formation of ZrO-like structures upon the adsorption of Zr on the CeO(111) surface. <i>Journal of Chemical Physics</i> , 2018 , 149, 244702 | 3.9 | 4 |
| 102 | Photomodulation of transport in monolayer dichalcogenides. <i>Physical Review B</i> , 2018 , 98, | 3.3 | 2 |
| 101 | Ab Initio Investigation of Atomistic Insights into the Nanoflake Formation of Transition-Metal Dichalcogenides: The Examples of MoS2, MoSe2, and MoTe2. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 27059-27069 | 3.8 | 18 |
| 100 | The role of the alkali and chalcogen atoms on the stability of the layered chalcogenide [Formula: see text] (A = alkali-metal; M = metal-cations; Q = chalcogen) compounds: a density functional theory investigation within van der Waals corrections. <i>Journal of Physics Condensed Matter</i> , 2017 , | 1.8 | 5 |
| 99 | Optical and fundamental band gaps disparity in transparent conducting oxides: new findings for the [Formula: see text] and [Formula: see text] systems. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 085501 | 1.8 | 9 |
| 98 | The Role of Low-Coordinated Sites on the Adsorption of Glycerol on Defected Ptn/Pt(111) Substrates: A Density Functional Investigation within the D3 van der Waals Correction. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 3445-3454 | 3.8 | 13 |
| 97 | Density functional investigation of the adsorption effects of PH and SH on the structure stability of the Au and Pt nanoclusters. <i>Journal of Chemical Physics</i> , 2017 , 146, 164304 | 3.9 | 7 |
| 96 | Evolution of the structural, energetic, and electronic properties of the 3d, 4d, and 5d transition-metal clusters (30 TM systems for n = 2-15): a density functional theory investigation. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 15484-15502 | 3.6 | 74 |

| 95 | Glycerol adsorption on a defected Pt6/Pt(100) substrate: a density functional theory investigation within the D3 van der Waals correction. <i>RSC Advances</i> , 2017 , 7, 17122-17127 | 3.7 | 4 |
|----|---|----------------------------|---------|
| 94 | Parallel tempering Monte Carlo combined with clustering Euclidean metric analysis to study the thermodynamic stability of Lennard-Jones nanoclusters. <i>Journal of Chemical Physics</i> , 2017 , 146, 064114 | 3.9 | 7 |
| 93 | Polyhydroxamicalkanoate as a bioinspired acetylcholinesterase-based catalyst for acetylthiocholine hydrolysis and organophosphorus dephosphorylation: experimental studies and theoretical insights. <i>Catalysis Science and Technology</i> , 2017 , 7, 3388-3398 | 5.5 | 3 |
| 92 | Ab Initio Investigation of the Role of CO Adsorption on the Physical Properties of 55-Atom PtCo Nanoalloys. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 27721-27732 | 3.8 | 9 |
| 91 | Interplay between structure asymmetry, defect-induced localization, and spin-orbit interaction in Mn-doped quantum dots. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 5 |
| 90 | Graphene-supported small transition-metal clusters: A density functional theory investigation within van der Waals corrections. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 36 |
| 89 | Stability and accuracy control of k 🏻 p parameters. Semiconductor Science and Technology, 2016 , 31, 1050 | 028 | 8 |
| 88 | How do random superficial defects influence the electro-oxidation of glycerol on Pt(111) surfaces?. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 25582-25591 | 3.6 | 30 |
| 87 | Electronic structure of layered quaternary chalcogenide materials for band-gap engineering: The example of Cs2MIIM3IVQ8. <i>Physical Review B</i> , 2016 , 93, | 3.3 | 9 |
| 86 | Ethanol and Water Adsorption on Transition-Metal 13-Atom Clusters: A Density Functional Theory Investigation within van der Waals Corrections. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 4231-40 | 2.8 | 31 |
| 85 | Nitroxyl as a ligand in ruthenium tetraammine systems: a density functional theory study. <i>Dalton Transactions</i> , 2016 , 45, 4907-15 | 4.3 | 6 |
| 84 | Theoretical Study of the Structural, Energetic, and Electronic Properties of 55-Atom Metal Nanoclusters: A DFT Investigation within van der Waals Corrections, Spint Coupling, and PBE+U of 42 Metal Systems. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 28844-28856 | 3.8 | 59 |
| 83 | A theoretical investigation of the structural and electronic properties of 55-atom nanoclusters: The examples of Y-Tc and Pt. <i>Journal of Chemical Physics</i> , 2016 , 144, 054310 | 3.9 | 9 |
| 82 | The role of the cationic Pt sites in the adsorption properties of water and ethanol on the Pt/Pt(111) and Pt/CeO(111) substrates: A density functional theory investigation. <i>Journal of Chemical Physics</i> , 2016 , 145, 124709 | 3.9 | 9 |
| 81 | A basin-hopping Monte Carlo investigation of the structural and energetic properties of 55- and 561-atom bimetallic nanoclusters: the examples of the ZrCu, ZrAl, and CuAl systems. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 175302 | 1.8 | 10 |
| 80 | Adsorption of water and ethanol on noble and transition-metal substrates: a density functional investigation within van der Waals corrections. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 29526-295 | 36 | 25 |
| 79 | Structure, Electronic, and Magnetic Properties of Binary PtnTM55B (TM = Fe, Co, Ni, Cu, Zn) Nanoclusters: A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 156 | <i>6</i> 9 ⁸ 15 | 679 |
| 78 | The role of charge transfer in the oxidation state change of Ce atoms in the TM13-CeO2(111) systems (TM = Pd, Ag, Pt, Au): a DFT + U investigation. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 135 | 5 20 -30 | 35 |

(2012-2015)

| 77 | Comparative study of van der Waals corrections to the bulk properties of graphite. <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 415502 | 1.8 | 32 | |
|----|---|------|----|--|
| 76 | Atomic structure of the La/Pt(111) and Ce/Pt(111) surfaces revealed by DFT+U calculations. <i>RSC Advances</i> , 2015 , 5, 521-528 | 3.7 | 7 | |
| 75 | Theoretical Investigation of the Adsorption Properties of CO, NO, and OH on Monometallic and Bimetallic 13-Atom Clusters: The Example of Cu13, Pt7Cu6, and Pt13. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 11565-73 | 2.8 | 24 | |
| 74 | Structural formation of binary PtCu clusters: A density functional theory investigation. <i>Computational Materials Science</i> , 2015 , 98, 278-286 | 3.2 | 34 | |
| 73 | Origin of and tuning the optical and fundamental band gaps in transparent conducting oxides: The case of M2O3(M=Al,Ga,In). <i>Physical Review B</i> , 2015 , 92, | 3.3 | 13 | |
| 72 | Establishing a Link between Well-Ordered Pt(100) Surfaces and Real Systems: How Do Random Superficial Defects Influence the Electro-oxidation of Glycerol?. <i>ACS Catalysis</i> , 2015 , 5, 4227-4236 | 13.1 | 44 | |
| 71 | The role of charge states in the atomic structure of $Cu(n)$ and $Pt(n)$ ($n = 2-14$ atoms) clusters: a DFT investigation. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 10813-21 | 2.8 | 77 | |
| 70 | The role of the CO adsorption on Pt monolayers supported on flat and stepped Au surfaces: a density functional investigation. <i>RSC Advances</i> , 2014 , 4, 9247-9254 | 3.7 | 18 | |
| 69 | Glycerol Adsorption on Platinum Surfaces: A Density Functional Theory Investigation with van der Waals Corrections. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 15251-15259 | 3.8 | 31 | |
| 68 | Theoretical Investigation of Small Transition-Metal Clusters Supported on the CeO2(111) Surface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 21438-21446 | 3.8 | 29 | |
| 67 | Adsorption of Rh, Pd, Ir, and Pt on the Au(111) and Cu(111) Surfaces: A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19051-19061 | 3.8 | 34 | |
| 66 | Correlation between the electronic structures and diffusion paths of interstitial defects in semiconductors: The case of CdTe. <i>Physical Review B</i> , 2014 , 90, | 3.3 | 18 | |
| 65 | Role of atomic radius and d-states hybridization in the stability of the crystal structure of M2O3 (M=Al, Ga, In) oxides. <i>Physical Review B</i> , 2014 , 90, | 3.3 | 18 | |
| 64 | Role of van der Waals corrections for the PtX2 (X=O, S, Se) compounds. <i>Physical Review B</i> , 2013 , 88, | 3.3 | 23 | |
| 63 | Density Functional Investigation of the Adsorption of Ethanol Water Mixture on the Pt(111) Surface. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 16942-16952 | 3.8 | 25 | |
| 62 | Revised basin-hopping Monte Carlo algorithm for structure optimization of clusters and nanoparticles. <i>Journal of Chemical Information and Modeling</i> , 2013 , 53, 2282-98 | 6.1 | 79 | |
| 61 | Structural and electronic properties of TM23 - pAgp (TM = Ni, Pd, and Pt) clusters in the dilute limit (p = 0 $\frac{1}{2}$): A density functional theory investigation. <i>European Physical Journal D</i> , 2013 , 67, 1 | 1.3 | 13 | |
| 60 | Hybrid density functional study of small Rhn (n=2🗓5) clusters. <i>Physical Review B</i> , 2012 , 86, | 3.3 | 32 | |

| 59 | Ethanol and Water Adsorption on Close-Packed 3d, 4d, and 5d Transition-Metal Surfaces: A Density Functional Theory Investigation with van der Waals Correction. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24695-24705 | 3.8 | 87 |
|----|---|-----|-----|
| 58 | Adsorption of NO on the Rh13, Pd13, Ir13, and Pt13 Clusters: A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 20540-20549 | 3.8 | 29 |
| 57 | Platinum-Based Nanoalloys PtnTM55 (TM = Co, Rh, Au): A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 18432-18439 | 3.8 | 53 |
| 56 | Encapsulation of small magnetic clusters in fullerene cages: A density functional theory investigation within van der Waals corrections. <i>Physical Review B</i> , 2012 , 85, | 3.3 | 29 |
| 55 | Quantum Monte Carlo study of small aluminum clusters Aln (n=2🗓3). <i>Physical Review B</i> , 2012 , 85, | 3.3 | 39 |
| 54 | Multi-component transparent conducting oxides: progress in materials modelling. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 334210 | 1.8 | 39 |
| 53 | Bulk structures of PtO and PtO2 from density functional calculations. <i>Physical Review B</i> , 2011 , 84, | 3.3 | 29 |
| 52 | Effective coordination concept applied for phase change (GeTe)m(Sb2Te3)n compounds. <i>Journal of Applied Physics</i> , 2011 , 109, 023502 | 2.5 | 72 |
| 51 | Transition-metal 13-atom clusters assessed with solid and surface-biased functionals. <i>Journal of Chemical Physics</i> , 2011 , 134, 134105 | 3.9 | 24 |
| 50 | The role of electron localization in the atomic structure of transition-metal 13-atom clusters: the example of Co13, Rh13, and Hf13. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 17242-8 | 3.6 | 38 |
| 49 | Theory of nitride oxide adsorption on transition metal (111) surfaces: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 2459-70 | 3.6 | 49 |
| 48 | Density functional theory and ab initio molecular dynamics study of NO adsorption on Pd(111) and Pt(111) surfaces. <i>Physical Review B</i> , 2010 , 81, | 3.3 | 15 |
| 47 | Density functional theory investigation of 3d, 4d, and 5d 13-atom metal clusters. <i>Physical Review B</i> , 2010 , 81, | 3.3 | 180 |
| 46 | Electronic structure of In2O3 and Sn-doped In2O3 by hard x-ray photoemission spectroscopy. <i>Physical Review B</i> , 2010 , 81, | 3.3 | 94 |
| 45 | Reconstruction of core and surface nanoparticles: The example of Pt55 and Au55. <i>Physical Review B</i> , 2010 , 82, | 3.3 | 50 |
| 44 | Understanding the clean interface between covalent Si and ionic Al2O3. <i>Physical Review Letters</i> , 2009 , 103, 116101 | 7.4 | 20 |
| 43 | Walsh, Da Silva, and Wei Reply:. <i>Physical Review Letters</i> , 2009 , 102, | 7.4 | 7 |
| 42 | Density-functional calculations of the structure of near-surface oxygen vacancies and electron localization on CeO2(111). <i>Physical Review Letters</i> , 2009 , 102, 026101 | 7.4 | 442 |

(2008-2009)

| 41 | Density functional theory study of the energetics, electronic structure, and core-level shifts of NO adsorption on the Pt(111) surface. <i>Physical Review B</i> , 2009 , 79, | 3.3 | 43 |
|----|---|-----|----------------|
| 40 | Atomistic origins of the phase transition mechanism in Ge2Sb2Te5. <i>Journal of Applied Physics</i> , 2009 , 106, 113509 | 2.5 | 28 |
| 39 | Ferrimagnetic Fe-doped GaN: An unusual magnetic phase in dilute magnetic semiconductors. <i>Physical Review B</i> , 2009 , 79, | 3.3 | 24 |
| 38 | Revised ab initio natural band offsets of all group IV, II-VI, and III-V semiconductors. <i>Applied Physics Letters</i> , 2009 , 94, 212109 | 3.4 | 162 |
| 37 | Evidence for a subtle structural symmetry breaking in EuB(6). <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 456007 | 1.8 | 6 |
| 36 | Interplay between Order and Disorder in the High Performance of Amorphous Transparent Conducting Oxides. <i>Chemistry of Materials</i> , 2009 , 21, 5119-5124 | 9.6 | 80 |
| 35 | Origin of electronic and optical trends in ternary In2O3(ZnO)n transparent conducting oxides (n=1,3,5): Hybrid density functional theory calculations. <i>Physical Review B</i> , 2009 , 79, | 3.3 | 73 |
| 34 | Optical properties of pseudobinary GeTe, Ge2Sb2Te5, GeSb2Te4, GeSb4Te7, and Sb2Te3 from ellipsometry and density functional theory. <i>Physical Review B</i> , 2009 , 80, | 3.3 | 110 |
| 33 | Theoretical investigation of atomic and electronic structures of Ga2O3(ZnO)6. <i>Physical Review B</i> , 2009 , 80, | 3.3 | 26 |
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