

# Javier Fernández Sanz

## List of Publications by Year in descending order

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206  
papers

8,915  
citations

43973

48  
h-index

49773

87  
g-index

216  
all docs

216  
docs citations

216  
times ranked

9761  
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic activity of PtCu intermetallic compound for CO oxidation: A theoretical insight. <i>Catalysis Today</i> , 2022, 383, 339-344.	2.2	2
2	Optoelectronic properties of Ag <sub>2</sub> S/graphene and FeS <sub>2</sub> /graphene nanostructures and interfaces: A density functional study including dispersion forces. <i>Journal of Materials Research</i> , 2022, 37, 1047-1058.	1.2	2
3	Charting the Lattice Thermal Conductivities of III-VI Chalcopyrite Semiconductors. <i>Chemistry of Materials</i> , 2022, 34, 2833-2841.	3.2	22
4	Connecting experimental synthetic variables with the microstructure and electronic properties of doped ferroelectric perovskites for solar cell applications using high-throughput frameworks. <i>Acta Materialia</i> , 2021, 204, 116466.	3.8	4
5	High-Throughput Screening of the Thermoelastic Properties of Ultrahigh-Temperature Ceramics. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 29843-29857.	4.0	8
6	Adsorption and activation of CO <sub>2</sub> on Pt/CeO <sub>x</sub> /TiO <sub>2</sub> (110): Role of the Pt-CeO <sub>x</sub> interface. <i>Surface Science</i> , 2021, 710, 121852.	0.8	5
7	Nanoimaging of Organic Charge Retention Effects: Implications for Nonvolatile Memory, Neuromorphic Computing, and High Dielectric Breakdown Devices. <i>ACS Applied Nano Materials</i> , 2019, 2, 4711-4716.	2.4	4
8	Water-Gas Shift Reaction on K/Cu(111) and Cu/K/TiO <sub>2</sub> (110) Surfaces: Alkali Promotion of Water Dissociation and Production of H <sub>2</sub> . <i>ACS Catalysis</i> , 2019, 9, 10751-10760.	5.5	38
9	Electronic structure and adsorption geometry of Pt and Pd metal complexes with 1,3-dithiole-2-thione-4,5-dithiolate ligand on TiO <sub>2</sub> (101) surface from first-principles calculations. <i>Theoretical Chemistry Accounts</i> , 2019, 138, 1.	0.5	2
10	Comprehensive Experimental and Theoretical Study of the CO + NO Reaction Catalyzed by Au/Ni Nanoparticles. <i>ACS Catalysis</i> , 2019, 9, 4919-4929.	5.5	22
11	Understanding the Photocatalytic Properties of Pt/CeO <sub>x</sub> /TiO <sub>2</sub> : Structural Effects on Electronic and Optical Properties. <i>ChemPhysChem</i> , 2019, 20, 1624-1629.	1.0	8
12	Photo-sensitizing thin-film ferroelectric oxides using materials databases and high-throughput calculations. <i>Journal of Materials Chemistry A</i> , 2019, 7, 27323-27333.	5.2	12
13	TiO <sub>2</sub> nanotubes sensitized with CdSe quantum dots. <i>Theoretical Chemistry Accounts</i> , 2018, 137, 1.	0.5	2
14	Adsorption of Prototypical Asphaltenes on Silica: First-Principles DFT Simulations Including Dispersion Corrections. <i>Journal of Physical Chemistry B</i> , 2018, 122, 618-624.	1.2	21
15	Analysis of the variables that modify the robustness of Ti-SiO <sub>2</sub> catalysts for alkene epoxidation: Role of silylation, deactivation and potential solutions. <i>Molecular Catalysis</i> , 2018, 459, 55-60.	1.0	9
16	Graphene Translucency and Interfacial Interactions in the Gold/Graphene/SiC System. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3850-3855.	2.1	19
17	Improving the activity of gold nanoparticles for the water-gas shift reaction using TiO <sub>2</sub> -Y <sub>2</sub> O <sub>3</sub> : an example of catalyst design. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 22076-22083.	1.3	8
18	Structural and electronic properties of lead sulfide quantum dots from screened hybrid density functional calculations including spin-orbit coupling effects. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	3

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19	Effects of the capping ligands, linkers and oxide surface on the electron injection mechanism of copper sulfide quantum dot-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14580-14587.	1.3	12
20	Molecular dynamics simulations of the role of salinity and temperature on the hydrocarbon/water interfacial tension. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	16
21	First-principles study of nickel complex with 1,3-dithiole-2-thione-4,5-dithiolate ligands as model photosensitizers. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	7
22	Critical Role of Oxygen in Silver-Catalyzed Glaser's Hay Coupling on Ag(100) under Vacuum and in Solution on Ag Particles. <i>ACS Catalysis</i> , 2017, 7, 3113-3120.	5.5	8
23	Ag <sub>2</sub> S Quantum Dot-Sensitized Solar Cells by First Principles: The Effect of Capping Ligands and Linkers. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7290-7296.	1.1	17
24	Potassium and Water Coadsorption on TiO <sub>2</sub> (110): OH-Induced Anchoring of Potassium and the Generation of Single-Site Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3866-3872.	2.1	14
25	Inverse Oxide/Metal Catalysts in Fundamental Studies and Practical Applications: A Perspective of Recent Developments. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2627-2639.	2.1	120
26	Cu Deposited on CeOx-Modified TiO <sub>2</sub> (110): Synergistic Effects at the Metal-Oxide Interface and the Mechanism of the WGS Reaction. <i>ACS Catalysis</i> , 2016, 6, 4608-4615.	5.5	43
27	Visible Light-Driven H <sub>2</sub> Production over Highly Dispersed Ruthenia on Rutile TiO <sub>2</sub> Nanorods. <i>ACS Catalysis</i> , 2016, 6, 407-417.	5.5	71
28	Structural, electronic and optical properties of copper, silver and gold sulfide: a DFT study. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	0.5	35
29	Adsorption of prototypical amino acids on silica: Influence of the pre-adsorbed water multilayer. <i>Surface Science</i> , 2016, 646, 239-246.	0.8	10
30	Graphenes as Efficient Metal-Free Fenton Catalysts. <i>Chemistry - A European Journal</i> , 2015, 21, 11966-11971.	1.7	87
31	Sonogashira Cross-Coupling and Homocoupling on a Silver Surface: Chlorobenzene and Phenylacetylene on Ag(100). <i>Journal of the American Chemical Society</i> , 2015, 137, 940-947.	6.6	50
32	Effect of Capping Ligands and TiO <sub>2</sub> Supporting on the Optical Properties of a (CdSe) <sub>13</sub> Cluster. <i>Journal of Physical Chemistry A</i> , 2015, 119, 1218-1227.	1.1	16
33	When ruthenia met titania: achieving extraordinary catalytic activity at low temperature by nanostructuring of oxides. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 26813-26818.	1.3	0
34	Designing a new generation of catalysts: Water gas shift reaction example. <i>Catalysis Today</i> , 2015, 240, 214-219.	2.2	29
35	Unraveling the Nature of the Oxide-Metal Interaction in Ceria-Based Noble Metal Inverse Catalysts. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26931-26938.	1.5	33
36	Surface oxygen vacancies in gold based catalysts for CO oxidation. <i>RSC Advances</i> , 2014, 4, 13145-13152.	1.7	24

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37	The Flexible Surface Revisited: Adsorbate-Induced Reconstruction, Homocoupling, and Sonogashira Cross-Coupling on the Au(100) Surface. <i>Journal of Physical Chemistry C</i> , 2014, 118, 11677-11684.	1.5	31
38	Highly active copper-ceria and copper-ceria-titania catalysts for methanol synthesis from CO <sub>2</sub> . <i>Science</i> , 2014, 345, 546-550.	6.0	1,114
39	Understanding the Interplay of Dopants, Interfaces, and Anionic Conductivity in Doped Ceria/Zirconia Heteroepitaxial Structures. <i>Chemistry of Materials</i> , 2014, 26, 3385-3390.	3.2	16
40	Analysis of the origin of lateral interactions in the adsorption of small organic molecules on oxide surfaces. <i>Highlights in Theoretical Chemistry</i> , 2014, , 177-183.	0.0	0
41	Simulating the optical properties of CdSe clusters using the RT-TDDFT approach. <i>Theoretical Chemistry Accounts</i> , 2013, 132, 1.	0.5	27
42	Analysis of the origin of lateral interactions in the adsorption of small organic molecules on oxide surfaces. <i>Theoretical Chemistry Accounts</i> , 2013, 132, 1.	0.5	5
43	Nature of the Mixed-Oxide Interface in Ceria-Titania Catalysts: Clusters, Chains, and Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14463-14471.	1.5	73
44	Electron Mobility via Polaron Hopping in Bulk Ceria: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14502-14509.	1.5	75
45	Importance of the Metal-Oxide Interface in Catalysis: In Situ Studies of the Water-Gas Shift Reaction by Ambient-Pressure X-ray Photoelectron Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 5101-5105.	7.2	280
46	Nanosized CoO Films on the $\gamma$ -Al <sub>2</sub> O <sub>3</sub> (0001) Surface: A Density Functional Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22714-22722.	1.5	6
47	Role of the Si-Si bond stability in the first stages of Ti diffusion on a Si(111) 2 $\times$ 1 surface. A periodic DFT study. <i>Applied Surface Science</i> , 2013, 273, 496-501.	3.1	2
48	Transport Properties in the CeO <sub>2</sub> (111) Surface: From Charge Distribution to Ion-Electron Collaborative Migration. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25497-25503.	1.5	41
49	Effect of dispersion correction on the Au(111)-H <sub>2</sub> O interface: A first-principles study. <i>Journal of Chemical Physics</i> , 2012, 137, 114709.	1.2	49
50	Making Photo-selective TiO <sub>2</sub> Materials by Cation-Anion Codoping: From Structure and Electronic Properties to Photoactivity. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18759-18767.	1.5	29
51	Ceria(100) Nanotubes with Negative Strain Energy: A First-Principles Prediction. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2092-2096.	2.1	5
52	Study of the TiSi interface formed by Ti deposition on a clean Si (100) surface. <i>Surface Science</i> , 2012, 606, 754-761.	0.8	3
53	Coumarin derivatives for dye sensitized solar cells: a TD-DFT study. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 225-233.	1.3	193
54	Molecular modification of coumarin dyes for more efficient dye sensitized solar cells. <i>Journal of Chemical Physics</i> , 2012, 136, 194702.	1.2	36

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55	Communication: Improving the density functional theory description of CeO <sub>2</sub> by including the contribution of the O 2 <i>p</i> electrons. Journal of Chemical Physics, 2012, 136, 041101.	1.2	62
56	First-principles molecular dynamics simulations of the H <sub>2</sub> O / Cu(111) interface. Journal of Molecular Modeling, 2012, 18, 2433-2442.	0.8	17
57	Nitrogen/gold codoping of the TiO <sub>2</sub> (101) anatase surface. A theoretical study based on DFT calculations. Physical Chemistry Chemical Physics, 2011, 13, 11340.	1.3	38
58	CO Oxidation on Inverse CeO <sub>x</sub> /Cu(111) Catalysts: High Catalytic Activity and Ceria-Promoted Dissociation of O <sub>2</sub> . Journal of the American Chemical Society, 2011, 133, 3444-3451.	6.6	241
59	Understanding Acetaldehyde Thermal Chemistry on the TiO <sub>2</sub> (110) Rutile Surface: From Adsorption to Reactivity. Journal of Physical Chemistry C, 2011, 115, 2819-2825.	1.5	22
60	Comparative Study on the Performance of Hybrid DFT Functionals in Highly Correlated Oxides: The Case of CeO <sub>2</sub> and Ce <sub>2</sub> O <sub>3</sub> . Journal of Chemical Theory and Computation, 2011, 7, 56-65.	2.3	125
61	Structural Defects in W-Doped TiO <sub>2</sub> (101) Anatase Surface: Density Functional Study. Journal of Physical Chemistry C, 2011, 115, 16970-16976.	1.5	34
62	Direct vs Indirect Mechanisms for Electron Injection in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 11293-11301.	1.5	129
63	Electronic structure and optical spectra of catechol on TiO <sub>2</sub> nanoparticles from real time TD-DFT simulations. Physical Chemistry Chemical Physics, 2011, 13, 1506-1514.	1.3	103
64	Direct vs. indirect mechanisms for electron injection in DSSC: Catechol and alizarin. Computational and Theoretical Chemistry, 2011, 975, 99-105.	1.1	49
65	Coverage and charge dependent adsorption of butanethiol on the Au(111) surface: A density functional theory study. Computational and Theoretical Chemistry, 2011, 975, 116-121.	1.1	10
66	Gold Nanoparticles on Yttrium Modified Titania: Support Properties and Catalytic Activity. Topics in Catalysis, 2011, 54, 219-228.	1.3	25
67	Determining the Behavior of RuO <sub>x</sub> Nanoparticles in Mixed-Metal Oxides: Structural and Catalytic Properties of RuO <sub>2</sub> /TiO <sub>2</sub> (110) Surfaces. Angewandte Chemie - International Edition, 2011, 50, 10198-10202.	7.2	48
68	Thiodiacetate-Manganese Chemistry with N ligands: Unique Control of the Supramolecular Arrangement over the Metal Coordination Mode. Chemistry - A European Journal, 2011, 17, 10600-10617.	1.7	29
69	Real-Time TD-DFT Simulations in Dye Sensitized Solar Cells: The Electronic Absorption Spectrum of Alizarin Supported on TiO <sub>2</sub> Nanoclusters. Journal of Chemical Theory and Computation, 2010, 6, 2856-2865.	2.3	170
70	Charge state of metal atoms on oxide supports: a systematic study based on simulated infrared spectroscopy and density functional theory. Theoretical Chemistry Accounts, 2010, 126, 265-273.	0.5	17
71	Effect of interface structure on the Ru on HfO <sub>2</sub> work function. Journal of Materials Science, 2010, 45, 4924-4928.	1.7	2
72	Gold, Copper, and Platinum Nanoparticles Dispersed on CeO <sub>x</sub> /TiO <sub>2</sub> (110) Surfaces: High Water-Gas Shift Activity and the Nature of the Mixed-Metal Oxide at the Nanometer Level. Journal of the American Chemical Society, 2010, 132, 356-363.	6.6	247

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73	A theoretical insight into the catalytic effect of a mixed-metal oxide at the nanometer level: The case of the highly active metal/CeO <sub>x</sub> /TiO <sub>2</sub> (110) catalysts. Journal of Chemical Physics, 2010, 132, 104703.	1.2	93
74	Density Functional Theory Study of the Interaction of Cu, Ag, and Au Atoms with the Regular CeO <sub>2</sub> (111) Surface. Journal of Physical Chemistry C, 2010, 114, 1934-1941.	1.5	108
75	First-principles study of ionic oxygen mobility of Sr-containing LaAlO <sub>3</sub> perovskite. Journal of Physics Condensed Matter, 2009, 21, 305502.	0.7	2
76	High catalytic activity of Au/CeO <sub>x</sub> /TiO <sub>2</sub> (110) controlled by the nature of the mixed-metal oxide at the nanometer level. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4975-4980.	3.3	257
77	Water-Gas Shift Reaction on a Highly Active Inverse CeO <sub>x</sub> /Cu(111) Catalyst: Unique Role of Ceria Nanoparticles. Angewandte Chemie - International Edition, 2009, 48, 8047-8050.	7.2	262
78	High Water-Gas Shift Activity in TiO <sub>2</sub> (110) Supported Cu and Au Nanoparticles: Role of the Oxide and Metal Particle Size. Journal of Physical Chemistry C, 2009, 113, 7364-7370.	1.5	223
79	Ca Deposition on TiO <sub>2</sub> (110) Surfaces: Insights from Quantum Calculations. Journal of Physical Chemistry C, 2009, 113, 3740-3745.	1.5	7
80	A Density Functional Study of Initial Steps in the Oxidation of Early Transition Metal Nitrides, MN (M = Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, In, Sn, Pb, Bi, Po, At, Rn). Journal of Physical Chemistry C, 2009, 113, 19973-19980.	1.5	12
81	Carbon Doping of the TiO <sub>2</sub> (110) Rutile Surface. A Theoretical Study Based on DFT. Chemistry of Materials, 2009, 21, 1431-1438.	3.2	39
82	Redox properties of gold-substituted zirconia surfaces. Journal of Materials Chemistry, 2009, 19, 710-717.	6.7	12
83	Role of Coverage and Surface Oxidation Degree in the Adsorption of Acetone on TiO <sub>2</sub> (110). A Density Functional Study. Journal of Physical Chemistry C, 2009, 113, 19973-19980.	1.5	24
84	On the difficulties of present theoretical models to predict the oxidation state of atomic Au adsorbed on regular sites of CeO <sub>2</sub> (111). Journal of Chemical Physics, 2009, 131, 094702.	1.2	64
85	Electronic charge transfer between ceria surfaces and gold adatoms: a GGA+U investigation. Physical Chemistry Chemical Physics, 2009, 11, 5246.	1.3	83
86	Changing the physical and chemical properties of titanium oxynitrides $TiN_xO_{1-x}$ by changing the composition. Physical Review B, 2009, 80, 115411.	1.1	48
87	Methanol and Water Dissociation on TiO <sub>2</sub> (110): The Role of Surface Oxygen. Journal of Physical Chemistry C, 2008, 112, 17737-17740.	1.5	92
88	N Doping of Rutile TiO <sub>2</sub> (110) Surface. A Theoretical DFT Study. Journal of Physical Chemistry C, 2008, 112, 2624-2631.	1.5	107
89	Atomic Layer Deposition of Hafnium Oxide from Hafnium Chloride and Water. Journal of the American Chemical Society, 2008, 130, 11996-12006.	6.6	45
90	Au <sup>+</sup> /N Synergy and N-Doping of Metal Oxide-Based Photocatalysts. Journal of the American Chemical Society, 2008, 130, 12056-12063.	6.6	115

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91	Effect of on-site Coulomb repulsion term $U$ on the band-gap states of the reduced rutile (110) $\text{TiO}_2$ surface.	1.1	165
92	Interaction of oxygen with $\text{TiN}(001):\text{N}_2\text{O}$ exchange and oxidation process. Journal of Chemical Physics, 2007, 126, 244713.	1.2	51
93	Influence of Temperature on the Interaction between Pd Clusters and the $\text{TiO}_2$ (110) Surface. Physical Review Letters, 2007, 99, 066102.	2.9	11
94	Adsorption of Pd Atoms and Dimers on the $\text{TiO}_2(110)$ Surface: A First Principles Study. Journal of Physical Chemistry C, 2007, 111, 3949-3955.	1.5	51
95	Theoretical Investigation of the Deposition of Cu, Ag, and Au Atoms on the $\text{ZrO}_2(111)$ Surface. Journal of Physical Chemistry C, 2007, 111, 10448-10454.	1.5	58
96	First-Principles Investigation of the Structure, Energetics, and Electronic Properties of Ru/ $\text{HfO}_2$ Interfaces. Journal of Physical Chemistry C, 2007, 111, 9203-9210.	1.5	11
97	Methanol Adsorption and Dissociation on $\text{TiO}_2(110)$ from First Principles Calculations. Journal of Physical Chemistry C, 2007, 111, 10023-10028.	1.5	106
98	Classical molecular dynamics simulations of gold clusters deposited on rutile $\text{TiO}_2(110)$ surface. Catalysis Today, 2007, 128, 230-234.	2.2	4
99	First-Principles Investigation of Hydroxylated Monoclinic $\text{HfO}_2$ Surfaces. Chemistry of Materials, 2006, 18, 3397-3403.	3.2	30
100	First-principles calculations of structural and electronic properties of monoclinic hafnia surfaces. Physical Review B, 2006, 73, .	1.1	71
101	Unravelling the Origin of the High-Catalytic Activity of Supported Au: A Density-Functional Theory-Based Interpretation. Journal of the American Chemical Society, 2006, 128, 15600-15601.	6.6	65
102	$\text{V@Au}_{12}$ : An Improved Novel Catalyst for CO Oxidation?. Journal of Physical Chemistry B, 2006, 110, 11600-11603.	1.2	61
103	Ba Adsorption on the Stoichiometric and Defective $\text{TiO}_2$ (110) Surface from First-Principles Calculations. Journal of Physical Chemistry B, 2006, 110, 19552-19556.	1.2	5
104	From periodic DFT calculations to classical molecular dynamics simulations. Computational Materials Science, 2006, 35, 183-186.	1.4	8
105	Ba adsorption on the $\text{TiO}_2$ (110) surface. A density functional study. Computational and Theoretical Chemistry, 2006, 769, 237-242.	1.5	4
106	Structure and Dynamics of Methyl-substituted Beryllocene: $[\text{Be}(\text{C}_5\text{Me}_5)_2]$ . Theoretical Chemistry Accounts, 2006, 116, 480-485.	0.5	6
107	Proposal for a modified Møller-Plesset perturbation theory. Physical Review A, 2006, 73, .	1.0	3
108	The constrained space orbital variation analysis for periodic ab initio calculations. Journal of Chemical Physics, 2006, 124, 194105.	1.2	7

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109	N doping of TiO <sub>2</sub> (110): Photoemission and density-functional studies. Journal of Chemical Physics, 2006, 125, 094706.	1.2	127
110	Cu, Ag and Au atoms deposited on the $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface: a comparative density functional study. Surface Science, 2005, 575, 189-196.	0.8	63
111	Supramolecular Interactions as Determining Factors of the Geometry of Metallic Building Blocks: Tetracarboxylate Dimanganese Species. Angewandte Chemie - International Edition, 2005, 44, 3429-3432.	7.2	27
112	Interaction potentials from periodic density-functional theory calculations: Molecular-dynamics simulations of Au clusters deposited on the TiN (001) surface. Journal of Chemical Physics, 2005, 123, 244706.	1.2	9
113	Mechanism of Cu Deposition on the $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) Surface. Physical Review Letters, 2005, 94, 016104.	2.9	37
114	N <sub>2</sub> O Decomposition on TiO <sub>2</sub> (110) from Dynamic First-Principles Calculations. Journal of Physical Chemistry B, 2005, 109, 16223-16226.	1.2	38
115	Role of vacancies in the structural stability of $\hat{\Gamma}$ -TiO: A first-principles study based on density-functional calculations. Physical Review B, 2005, 72, .	1.1	50
116	Atomistic simulations of Cu deposition on the $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface. Computational and Theoretical Chemistry, 2004, 709, 79-85.	1.5	1
117	First principles simulations of Cu and Au deposition on $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface. Applied Surface Science, 2004, 238, 228-232.	3.1	19
118	Adsorption of Pd atoms on $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> : a density functional study of metal-support interactions. Applied Surface Science, 2004, 238, 82-85.	3.1	23
119	Oxygen vacancies on TiO <sub>2</sub> (110) from first principles calculations. Journal of Chemical Physics, 2004, 121, 7427-7433.	1.2	75
120	Density Functional Theory Study of Co, Rh, and Ir Atoms Deposited on the $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) Surface. Journal of Physical Chemistry B, 2004, 108, 15671-15678.	1.2	30
121	Synthesis, Solid-State Structure, and Bonding Analysis of the Beryllocenes[Be(C <sub>5</sub> Me <sub>4</sub> H) <sub>2</sub> ],[Be(C <sub>5</sub> Me <sub>5</sub> ) <sub>2</sub> ], and[Be(C <sub>5</sub> Me <sub>5</sub> )(C <sub>5</sub> Me <sub>4</sub> H)]. Chemistry - A European Journal, 2003, 9, 4452-4461.	1.7	37
122	Relaxation of the surface in binary Sc, Ti and V nitrides: a first principles density functional study. Surface Science, 2003, 541, 217-224.	0.8	15
123	A parametrical embedding method for catalytic modeling. Journal of Molecular Catalysis A, 2003, 191, 101-112.	4.8	3
124	Surface model and exchange-correlation functional effects on the description of Pd/ $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001). Journal of Chemical Physics, 2002, 116, 1684-1691.	1.2	51
125	Interaction of Pd with $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001): a case study of modeling the metal-oxide interface on complex substrates. Physical Review B, 2002, 65, .	1.1	55
126	First Principles Study of Cu Atoms Deposited on the $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> (0001) Surface. Journal of Physical Chemistry B, 2002, 106, 11495-11500.	1.2	34



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127	Molecular Dynamics Simulations of Pd Deposition on the $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> (0001) Surface. <i>Journal of Physical Chemistry B</i> , 2001, 105, 12111-12117.	1.2	30
128	Cu, Ag, and Au atoms adsorbed on TiO <sub>2</sub> (110): cluster and periodic calculations. <i>Surface Science</i> , 2001, 471, 21-31.	0.8	131
129	Theoretical Approach to Ionic Conductivity in PhosphorusOxynitride Compounds. <i>Journal of Solid State Chemistry</i> , 2001, 161, 73-79.	1.4	12
130	DFTversus CI determination of the electron-transfer matrix element in some case examples. <i>International Journal of Quantum Chemistry</i> , 2000, 76, 458-463.	1.0	12
131	Experimental and molecular dynamics simulation analysis of LaCrO <sub>3</sub> precipitation in chromia scales. <i>Acta Materialia</i> , 2000, 48, 2951-2958.	3.8	9
132	A first principles study of Pd deposition on the TiO <sub>2</sub> (1 1 0) surface. <i>Theoretical Chemistry Accounts</i> , 2000, 104, 317-322.	0.5	11
133	Ab initigroup model potentials including electron correlation effects. <i>Journal of Chemical Physics</i> , 2000, 113, 6082-6087.	1.2	1
134	Molecular Dynamics Simulations of the Structure of Pd Clusters Deposited on the MgO(001) Surface. <i>Journal of Physical Chemistry B</i> , 2000, 104, 4342-4348.	1.2	24
135	Theoretical investigations of NMR chemical shieldings on the AlPON catalyst system. <i>Journal of Non-Crystalline Solids</i> , 2000, 263-264, 189-194.	1.5	7
136	Accurate ab initio determination of magnetic interactions and hopping integrals in La <sub>2</sub> xSrxCuO <sub>4</sub> systems. <i>Journal of Chemical Physics</i> , 2000, 112, 5158-5167.	1.2	85
137	MO Rationalization of the Synthesis and Structure of V(N-2,6-iPr <sub>2</sub> C <sub>6</sub> H <sub>3</sub> )Cl(CO) <sub>2</sub> (PMe <sub>3</sub> ) <sub>2</sub> Complex. <i>Organometallics</i> , 2000, 19, 304-308.	1.1	10
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