

Claudio M Zicovich-Wilson

List of Publications by Year in descending order

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103
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142
all docs

142
docs citations

142
times ranked

8509
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum-mechanical condensed matter simulations with CRYSTAL. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2018, 8, e1360.	14.6	1,277
2	CRYSTAL14: A program for the <i>ab initio</i> investigation of crystalline solids. International Journal of Quantum Chemistry, 2014, 114, 1287-1317.	2.0	1,151
3	CRYSTAL: a computational tool for the <i>ab initio</i> study of the electronic properties of crystals. Zeitschrift Fur Kristallographie - Crystalline Materials, 2005, 220, .	0.8	824
4	The calculation of the vibrational frequencies of crystalline compounds and its implementation in the CRYSTAL code. Journal of Computational Chemistry, 2004, 25, 888-897.	3.3	796
5	B3LYP augmented with an empirical dispersion term (B3LYP-D*) as applied to molecular crystals. CrystEngComm, 2008, 10, 405-410.	2.6	775
6	Calculation of the vibration frequencies of α -quartz: The effect of Hamiltonian and basis set. Journal of Computational Chemistry, 2004, 25, 1873-1881.	3.3	451
7	Preferential Location of Ge in the Double Four-Membered Ring Units of ITQ-7 Zeolite. Journal of Physical Chemistry B, 2002, 106, 2634-2642.	2.6	228
8	Polarization properties of ZnO and BeO: <i>ab initio</i> study through the Berry phase and Wannier functions approaches. Physical Review B, 2001, 65, .	3.2	213
9	Exceptionally Low Shear Modulus in a Prototypical Imidazole-Based Metal-Organic Framework. Physical Review Letters, 2012, 108, 095502.	7.8	210
10	A general method to obtain well localized Wannier functions for composite energy bands in linear combination of atomic orbital periodic calculations. Journal of Chemical Physics, 2001, 115, 9708-9719.	3.0	191
11	The vibrational spectrum of calcite (CaCO ₃): an <i>ab initio</i> quantum-mechanical calculation. Physics and Chemistry of Minerals, 2004, 31, 559-564.	0.8	182
12	Local-MP2 electron correlation method for nonconducting crystals. Journal of Chemical Physics, 2005, 122, 094113.	3.0	182
13	<i>Ab Initio</i> Study of the Vibrational Spectrum and Related Properties of Crystalline Compounds; the Case of CaCO ₃ Calcite. Zeitschrift Fur Physikalische Chemie, 2006, 220, 893-912.	2.8	168
14	Flexibility in a Metal-Organic Framework Material Controlled by Weak Dispersion Forces: The Bistability of MIL-53(Al). Angewandte Chemie - International Edition, 2010, 49, 7501-7503.	13.8	158
15	Vibrational spectrum of brucite, Mg(OH) ₂ : a periodic <i>ab initio</i> quantum mechanical calculation including OH anharmonicity. Chemical Physics Letters, 2004, 396, 308-315.	2.6	142
16	Vibration Frequencies of Mg ₃ Al ₂ Si ₃ O ₁₂ Pyrope. An <i>ab Initio</i> Study with the CRYSTAL Code. Journal of Physical Chemistry B, 2005, 109, 6146-6152.	2.6	142
17	Electronic Confinement of Molecules in Microscopic Pores. A New Concept Which Contributes to the Explanation of the Catalytic Activity of Zeolites. The Journal of Physical Chemistry, 1994, 98, 10863-10870.	2.9	138
18	Comparative Study on the Performance of Hybrid DFT Functionals in Highly Correlated Oxides: The Case of CeO ₂ and Ce ₂ O ₃ . Journal of Chemical Theory and Computation, 2011, 7, 56-65.	5.3	125

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19	Ab initio vibrational spectra and dielectric properties of carbonates: magnesite, calcite and dolomite. <i>Theoretical Chemistry Accounts</i> , 2007, 117, 991-1000.	1.4	108
20	Ab initio molecular orbital calculations of the protonation of propylene and isobutene by acidic hydroxyl groups of isomorphously substituted zeolites. <i>The Journal of Physical Chemistry</i> , 1993, 97, 13713-13719.	2.9	105
21	Ab Initio Modeling of Protein/Biomaterial Interactions: Glycine Adsorption at Hydroxyapatite Surfaces. <i>Journal of the American Chemical Society</i> , 2008, 130, 16181-16183.	13.7	97
22	Can Cu ⁺ -Exchanged Zeolites Store Molecular Hydrogen? An Ab-Initio Periodic Study Compared with Low-Temperature FTIR. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8278-8286.	2.6	91
23	Formation of Surface Methoxy Groups on H-Zeolites from Methanol. A Quantum Chemical Study. <i>The Journal of Physical Chemistry</i> , 1995, 99, 13224-13231.	2.9	88
24	²⁷ Al and ²⁹ Si MAS NMR Study of Zeolite MCM-22. <i>The Journal of Physical Chemistry</i> , 1995, 99, 7002-7008.	2.9	87
25	Characterization of the electronic structure of crystalline compounds through their localized Wannier functions. <i>Journal of Chemical Physics</i> , 2002, 116, 1120-1127.	3.0	87
26	Ab Initio Investigation of Structure and Cohesive Energy of Crystalline Urea. <i>Journal of Physical Chemistry B</i> , 2007, 111, 26-33.	2.6	87
27	Ab initio simulation of the IR spectra of pyrope, grossular, and andradite. <i>Journal of Computational Chemistry</i> , 2008, 29, 2268-2278.	3.3	84
28	Structural, Electronic, and Vibrational Properties of the TiO ₂ /Ti Quantum Wires in the Titanosilicate ETS-10. <i>Journal of Physical Chemistry B</i> , 2004, 108, 1328-1336.	2.6	79
29	Role of dispersive interactions in layered materials: a periodic B3LYP and B3LYP-D* study of Mg(OH) ₂ , Ca(OH) ₂ and kaolinite. <i>Journal of Materials Chemistry</i> , 2009, 19, 2564.	6.7	75
30	A periodic ab initio study of the structure and relative stability of silica polymorphs. <i>Chemical Physics Letters</i> , 1998, 292, 394-402.	2.6	74
31	Influence of the exchange-correlation functional in all-electron calculations of the vibrational frequencies of corundum (Al ₂ O ₃). <i>International Journal of Quantum Chemistry</i> , 2006, 106, 1703-1714.	2.0	71
32	Influence of the Local Geometry of Zeolite Active Sites and Olefin Size on the Stability of Alkoxide Intermediates. <i>Journal of Physical Chemistry B</i> , 2001, 105, 11169-11177.	2.6	66
33	Spatially confined simple quantum mechanical systems. <i>International Journal of Quantum Chemistry</i> , 1994, 50, 429-444.	2.0	65
34	Structure and Raman spectrum of crystalline poly(3-hexylthiophene) from DFT van der Waals calculations. <i>Physica Status Solidi (B): Basic Research</i> , 2011, 248, 1360-1368.	1.5	65
35	Titanium-Containing Zeolites. A Periodic ab Initio Hartree-Fock Characterization. <i>Journal of Physical Chemistry B</i> , 1998, 102, 1411-1417.	2.6	64
36	Naphthalene Included within All-Silica Zeolites: Influence of the Host on the Naphthalene Photophysics. <i>Journal of Physical Chemistry B</i> , 2001, 105, 9973-9979.	2.6	63

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37	Role of dispersive interactions in the CO adsorption on MgO(001): periodic B3LYP calculations augmented with an empirical dispersion term. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 6382.	2.8	60
38	Zeolite Synthesis in Fluoride Media: Structure Direction toward ITW by Small Methylimidazolium Cations. <i>Journal of the American Chemical Society</i> , 2012, 134, 2255-2263.	13.7	56
39	Acid softness and hardness in large-pore zeolites as a determinant parameter to control selectivity in orbital-controlled reactions. <i>Journal of the American Chemical Society</i> , 1994, 116, 134-142.	13.7	55
40	Structure, Vibrational Analysis, and Insights into Host-Guest Interactions in As-Synthesized Pure Silica ITQ-12 Zeolite by Periodic B3LYP Calculations. <i>Journal of the American Chemical Society</i> , 2007, 129, 11512-11523.	13.7	55
41	Periodic DFT modeling of bulk and surface properties of MgCl ₂ . <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 6525.	2.8	54
42	On the use of symmetry-adapted crystalline orbitals in SCF-LCAO periodic calculations. I. The construction of the symmetrized orbitals. , 1998, 67, 299-309.		53
43	<i>In Situ</i> Transformation of TON Silica Zeolite into the Less Dense ITW: Structure-Direction Overcoming Framework Instability in the Synthesis of SiO ₂ Zeolites. <i>Journal of the American Chemical Society</i> , 2010, 132, 3461-3471.	13.7	53
44	H-Chabazite with variable Si/Al ratio: stability and OH vibrational frequency computed in a periodic LCAO B3-LYP approach. <i>Chemical Physics Letters</i> , 2000, 318, 247-255.	2.6	52
45	Well localized crystalline orbitals obtained from Bloch functions: The case of KNbO ₃ . <i>Physical Review B</i> , 2001, 64, .	3.2	50
46	Physico-Chemical Features of Aluminum Hydroxides As Modeled with the Hybrid B3LYP Functional and Localized Basis Functions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13107-13134.	3.1	50
47	Symmetry-adapted Localized Wannier Functions Suitable for Periodic Local Correlation Methods. <i>Theoretical Chemistry Accounts</i> , 2006, 116, 726-733.	1.4	49
48	On the use of symmetry in the <i>ab initio</i> quantum mechanical simulation of nanotubes and related materials. <i>Journal of Computational Chemistry</i> , 2010, 31, 855-862.	3.3	48
49	High-pressure decomposition of MCr ₂ O ₄ spinels (M=Mg, Mn, Zn) by <i>ab initio</i> methods. <i>Physics and Chemistry of Minerals</i> , 1999, 26, 389-395.	0.8	45
50	In Situ Disorder-Order Transformation in Synthetic Gallosilicate Zeolites with the NAT Topology. <i>Journal of the American Chemical Society</i> , 2004, 126, 13742-13751.	13.7	45
51	A quantum-mechanical study of the vinyl fluoride adsorbed on the rutile TiO ₂ (110) surface. <i>Surface Science</i> , 2006, 600, 305-317.	1.9	43
52	Properties of Carbon Nanotubes: An <i>ab Initio</i> Study Using Large Gaussian Basis Sets and Various DFT Functionals. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8876-8885.	3.1	42
53	Anatase(001) 3 ML Nanotubes, The First TiO ₂ Nanotube With Negative Strain Energies: A DFT Prediction. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2854-2857.	4.6	41
54	<i>Ab initio</i> modeling of protein/biomaterial interactions: competitive adsorption between glycine and water onto hydroxyapatite surfaces. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9005.	2.8	40

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55	Interaction of Ti-Zeolites with Water. A Periodic ab Initio Study. Journal of Physical Chemistry B, 1999, 103, 988-994.	2.6	37
56	Catalytic Reaction Mechanism of Mn-Doped Nanoporous Aluminophosphates for the Aerobic Oxidation of Hydrocarbons. Chemistry - A European Journal, 2010, 16, 13638-13645.	3.3	37
57	Cluster and periodic ab initio study of the ethane-ethene hydride transfer reaction catalyzed by acid chabazite. Is the cluster model able to describe accurately the host-guest interactions?. Physical Chemistry Chemical Physics, 1999, 1, 537-543.	2.8	35
58	Modeling Soot and Its Functionalization under Atmospheric or Combustion Conditions by Density Functional Theory within Molecular (Polycyclic-Aromatic-Hydrocarbon-like) and Periodic Methodologies. Journal of Physical Chemistry B, 2004, 108, 3215-3223.	2.6	35
59	Flexibility in a Metal-Organic Framework Material Controlled by Weak Dispersion Forces: The Bistability of MIL-53(Al). Angewandte Chemie, 2010, 122, 7663-7665.	2.0	35
60	Uniplanar Orientations as a Tool To Assign Vibrational Modes of Polymer Chain. Macromolecules, 2007, 40, 3895-3897.	4.8	33
61	Carbon monoxide adsorption on alkali and proton-exchanged chabazite: an ab-initio periodic study using the CRYSTAL code. Molecular Physics, 2005, 103, 2559-2571.	1.7	32
62	Molecular orbital calculation of the soft-hard acidity of zeolites and its catalytic implications. Journal of Catalysis, 1992, 136, 521-530.	6.2	31
63	Periodic B3-LYP calculations on H-Edingtonites, both alone and interacting with acetylene. Physical Chemistry Chemical Physics, 1999, 1, 545-553.	2.8	31
64	Infrared and Raman spectroscopic features of the self-interstitial defect in diamond from exact-exchange hybrid DFT calculations. Physical Chemistry Chemical Physics, 2016, 18, 21288-21295.	2.8	31
65	Host-Guest Stabilization of a Zeolite Strained Framework: In Situ Transformation of Zeolite MTW into the Less Dense and More Strained ITW. Chemistry of Materials, 2013, 25, 729-738.	6.7	30
66	Structural, electronic and energetic properties of giant icosahedral fullerenes up to C6000: insights from an ab initio hybrid DFT study. Physical Chemistry Chemical Physics, 2014, 16, 13390-13401.	2.8	30
67	Initial structure of cetyltrimethylammonium bromide micelles in aqueous solution from molecular dynamics simulations. Soft Matter, 2011, 7, 8508.	2.7	29
68	Modifying the Catalytic Activity of Ti-Zeolites by Isomorphic Substitution of Si by Ge Atoms. A Periodic Quantum-Chemical Study. Journal of Physical Chemistry B, 2000, 104, 4134-4140.	2.6	28
69	Cluster and Periodic Calculations of the Ethene Protonation Reaction Catalyzed by theta-1 Zeolite: Influence of Method, Model Size, and Structural Constraints. Chemistry - A European Journal, 2001, 7, 1295-1303.	3.3	28
70	The IR vibrational properties of six members of the garnet family: A quantum mechanical ab initio study. American Mineralogist, 2011, 96, 1787-1798.	1.9	28
71	On the use of symmetry-adapted crystalline orbitals in SCF-LCAO periodic calculations. II. Implementation of the self-consistent-field scheme and examples. , 1998, 67, 311-320.		27
72	The role of long-range van der Waals forces in the relative stability of SiO ₂ -zeolites. Chemical Physics Letters, 2015, 619, 109-114.	2.6	27

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73	Phonon vibrational frequencies and elastic properties of solid SrFCl. An ab initio study. European Physical Journal B, 2005, 43, 453-461.	1.5	26
74	Raman Spectrum of Pyrope Garnet. A Quantum Mechanical Simulation of Frequencies, Intensities, and Isotope Shifts. Journal of Physical Chemistry A, 2013, 117, 11464-11471.	2.5	25
75	Serpentine polymorphism: a quantitative insight from first-principles calculations. CrystEngComm, 2016, 18, 4412-4419.	2.6	24
76	Infrared Investigation of Fluoride Occluded in Double Four-Member Rings in Zeolites. Journal of Physical Chemistry B, 2002, 106, 2796-2800.	2.6	23
77	Periodic density functional theory calculations for 3-dimensional polyacetylene with empirical dispersion terms. Physical Chemistry Chemical Physics, 2010, 12, 3289.	2.8	23
78	On the full exploitation of symmetry in periodic (as well as molecular) self-consistent-field <i>ab initio</i> calculations. Journal of Chemical Physics, 2014, 141, 104108.	3.0	21
79	Periodic <i>ab initio</i> study of the oxidizing sites in Ti-containing zeolites. Journal of Molecular Catalysis A, 1997, 119, 449-458.	4.8	20
80	Trapped-hole centres containing lithium and sodium in MgO, CaO and SrO. An <i>ab initio</i> supercell study. Journal of Physics and Chemistry of Solids, 1998, 59, 1119-1124.	4.0	20
81	Electronic structure, dielectric properties and infrared vibrational spectrum of fayalite: An <i>ab initio</i> simulation with an all-electron Gaussian basis set and the B3LYP functional. International Journal of Quantum Chemistry, 2012, 112, 2098-2108.	2.0	20
82	Full Mechanism of Zeolite Dealumination in Aqueous Strong Acid Medium: <i>Ab Initio</i> Periodic Study on H-Clinoptilolite. Journal of Physical Chemistry C, 2017, 121, 2652-2660.	3.1	20
83	Atoms and molecules in cavities: A method for study of spatial confinement effects. International Journal of Quantum Chemistry, 1995, 54, 61-72.	2.0	19
84	<i>Ab initio</i> quantum-mechanical simulation of the Raman spectrum of grossular. Journal of Raman Spectroscopy, 2009, 40, 416-418.	2.5	19
85	Search and Characterization of Transition State Structures in Crystalline Systems Using Valence Coordinates. Journal of Chemical Theory and Computation, 2010, 6, 1341-1350.	5.3	19
86	Boronate Ligands in Materials: Determining Their Local Environment by Using a Combination of IR/Solid-State NMR Spectroscopies and DFT Calculations. Chemistry - A European Journal, 2013, 19, 880-891.	3.3	19
87	A periodic Hartree-Fock study of Na adsorption on the TiO ₂ (110) rutile surface. Chemical Physics Letters, 1999, 303, 111-116.	2.6	18
88	Periodic <i>ab initio</i> study of silico-faujasite. Chemical Physics Letters, 1997, 277, 227-233.	2.6	16
89	Periodic density functional theory studies of Li-doped polythiophene: Dependence of electronic and structural properties on dopant concentration. Journal of Chemical Physics, 2009, 130, 164904.	3.0	16
90	Mechanism of F ⁺ Elimination from Zeolitic D4R Units: A Periodic B3LYP Study on the Octadecasil Zeolite. Journal of Physical Chemistry C, 2010, 114, 2989-2995.	3.1	16

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91	Katoite under pressure: an ab initio investigation of its structural, elastic and vibrational properties sheds light on the phase transition. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 2660-2669.	2.8	16
92	Hirshfeld-I charges in linear combination of atomic orbitals periodic calculations. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	16
93	The A-center defect in diamond: quantum mechanical characterization through the infrared spectrum. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14478-14485.	2.8	16
94	Nuclear-relaxed elastic and piezoelectric constants of materials: Computational aspects of two quantum-mechanical approaches. <i>Journal of Computational Chemistry</i> , 2017, 38, 257-264.	3.3	16
95	Synthesis of Aluminosilicate Natrolites and Control of Their Tetrahedral Atom Ordering. <i>Chemistry of Materials</i> , 2014, 26, 3361-3363.	6.7	15
96	Solid oxygen β phase and its transition from β phase to β' phase at extremely high pressure: A first-principles analysis. <i>Physical Review B</i> , 2015, 92, .	3.2	15
97	Understanding the β and β' High-Pressure Solid Phases of Oxygen. Systematic Periodic Density Functional Theory Studies Using Localized Atomic Basis. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 1195-1205.	5.3	15
98	Periodic Hartree-Fock and density functional theory calculations for Li-doped polyacetylene chains. <i>Journal of Chemical Physics</i> , 2006, 124, 244703.	3.0	14
99	Magnetic interactions and electronic structure of uvarovite and andradite garnets. An ab initio all-electron simulation with the CRYSTAL06 program. <i>International Journal of Quantum Chemistry</i> , 2010, 110, 338-351.	2.0	14
100	Orbital-controlled reactions catalysed by zeolites: Electrophilic alkylation of aromatics. <i>Journal of Physical Organic Chemistry</i> , 1994, 7, 364-370.	1.9	13
101	Comment on "Accurate Hartree-Fock energy of extended systems using large Gaussian basis sets". <i>Physical Review B</i> , 2010, 81, .	3.2	13
102	DFT Cluster Calculations for Alkali Cation-Exchanged Zeolites Interacting with Ethylchloride and HCl. <i>Journal of Physical Chemistry B</i> , 2004, 108, 10658-10662.	2.6	12
103	Ab-initio quantum mechanical study of akdalaitite ($5\text{Al}_2\text{O}_3 \cdot \text{Tj} \cdot \text{ETQq1} \cdot 10.784314 \text{ rgBT} / \text{Overlock} 10$) 012013.	0.4	12
104	Theoretical EHT study of oxidative coupling of methane on pure MgO and MgO doped with Li and Na. <i>Journal of Molecular Catalysis</i> , 1991, 64, 191-200.	1.2	11
105	Periodic Quantum Chemical Studies on Anhydrous and Hydrated Acid Clinoptilolite. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5779-5789.	2.5	11
106	Direct Piezoelectric Tensor of 3D Periodic Systems through a Coupled Perturbed Hartree-Fock/Kohn-Sham Method. <i>Zeitschrift Fur Physikalische Chemie</i> , 2016, 230, 719-736.	2.8	11
107	The Isobutylene-Isobutane Alkylation Process in Liquid HF Revisited. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12946-12955.	2.6	10
108	The electronic structure of MgO nanotubes. An ab initio quantum mechanical investigation. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13296.	2.8	10

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109	Charge distribution in NaY zeolite from charge-transfer molecular dynamics. <i>Chemical Physics Letters</i> , 2000, 327, 224-229.	2.6	9
110	Periodic DFT Studies of AlPO-11: The Role of Hydration on Structural Properties. <i>Journal of Physical Chemistry C</i> , 2007, 111, 9664-9670.	3.1	9
111	On the use of symmetry in SCF calculations. The case of fullerenes and nanotubes. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	9
112	Chemical interaction of water molecules with framework Al in acid zeolites: a periodic ab initio study on H-clinoptilolite. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23657-23666.	2.8	9
113	The V + I defects in diamond: An ab initio investigation of the electronic structure, of the Raman and IR spectra, and of their possible recombination. <i>Journal of Chemical Physics</i> , 2016, 145, 184701.	3.0	9
114	Semiempirical Hamiltonians for spatially confined π -electron systems. , 1996, 60, 971-981.		8
115	Ab-initio thermal physics and Cr-isotopic fractionation of MgCr ₂ O ₄ . <i>American Mineralogist</i> , 2007, 92, 98-108.	1.9	8
116	Periodic Density Functional Theory Calculations for Na-doped Quasi-one-dimensional Polyacetylene Chains. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9493-9500.	3.1	8
117	Ab initio modeling of layered materials with the CRYSTAL code: an overview. <i>Zeitschrift für Kristallographie</i> , 2009, 224, 241-250.	1.1	8
118	A fundamental connection between symmetry and spatial localization properties of basis sets. <i>Theoretical Chemistry Accounts</i> , 2010, 126, 165-175.	1.4	8
119	Adjusting framework ionicity to favour crystallisation of zeolites with strained structural units. <i>Periodic quantum chemical studies. Catalysis Science and Technology</i> , 2011, 1, 868.	4.1	8
120	Antiferromagnetic vs. non-magnetic $\hat{\mu}$ phase of solid oxygen. Periodic density functional theory studies using a localized atomic basis set and the role of exact exchange. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2826-2833.	2.8	8
121	The constrained space orbital variation analysis for periodic ab initio calculations. <i>Journal of Chemical Physics</i> , 2006, 124, 194105.	3.0	7
122	On the Raman and infrared vibrational spectra of the \hat{E}_g and \hat{A}_g phases of oxygen. Systematic DFT studies with localized basis sets. <i>Chemical Physics Letters</i> , 2015, 638, 82-86.	2.6	7
123	The influence of the DFT approach on the structure and relative stability of models for cellulose I allomorphs. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	7
124	Electronic structure characterization of six semiconductors through their localized Wannier functions. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 5319.	2.8	6
125	Periodic ab Initio Study of the Electronic Structure of $\hat{\Gamma}_2$ -Al ₂ O ₃ and AlN(w) Surfaces Based on Localized Wannier Functions. <i>Journal of Physical Chemistry B</i> , 2004, 108, 7316-7322.	2.6	6
126	On the Interaction between Silica Surfaces and Surfactants. A 2D Periodic B3LYP Investigation. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13309-13316.	3.1	6

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127	On the structure and stability of Ti-zeolites. A comparison of cluster and periodic ab initio calculations. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1997, 19, 1785-1790.	0.4	5
128	Two points of view to look at symmetry. <i>Journal of Physics: Conference Series</i> , 2008, 117, 012030.	0.4	4
129	Exploitation of symmetry in periodic Self-Consistent-Field ab initio calculations: application to large three-dimensional compounds. <i>Science China Chemistry</i> , 2014, 57, 1418-1426.	8.2	4
130	Beyond Wigner's theorems: The role of symmetry equivalences in quantum systems. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 3543-3551.	2.0	3
131	Long-range exchange limit and dispersion in pure silica zeolites. <i>Theoretical Chemistry Accounts</i> , 2018, 137, 1.	1.4	3
132	Vibration Frequencies of Mg ₃ Al ₂ Si ₃ O ₁₂ Pyrope. An ab initio Study with the CRYSTAL Code.. <i>ChemInform</i> , 2005, 36, no.	0.0	2
133	A simple proof for the formula to get symmetrized powers of group representations. <i>International Journal of Quantum Chemistry</i> , 1993, 47, 319-323.	2.0	1
134	Coupled perturbed HF/KS calculation of the dielectric constant of crystalline systems. The case of six members of the garnet family. , 2012, , .		1
135	Electronic Charge Density Analysis of Li-Doped Polyacetylene: Molecular vs Periodic Descriptions and Nature of Li-to-Chain Bonding. <i>Journal of Physical Chemistry B</i> , 2013, 117, 725-730.	2.6	1
136	The molecular and electronic structure of poly-[2,7-(benzo[2,1;3,4-b ²]dithiophene)-alt-2,2 ² -(3,3 ² -didodecyl-5,5 ² -bithiophenyl)] (PBTT): A periodic DFT approach. <i>Chemical Physics Letters</i> , 2014, 607, 47-51.	0.0	1
137	Can Cu ⁺ -Exchanged Zeolites Store Molecular Hydrogen? An ab initio Periodic Study Compared with Low-Temperature FTIR.. <i>ChemInform</i> , 2004, 35, no.	0.0	0