

Andrea Floris

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3908986/publications.pdf>

Version: 2024-02-01

48
papers

7,058
citations

218381

26
h-index

223531

46
g-index

49
all docs

49
docs citations

49
times ranked

8893
citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced capabilities for materials modelling with Quantum ESPRESSO. Journal of Physics Condensed Matter, 2017, 29, 465901.	0.7	4,303
2	Hubbard-corrected DFT energy functionals: The LDA+U description of correlated systems. International Journal of Quantum Chemistry, 2014, 114, 14-49.	1.0	533
3	Ab initio theory of superconductivity. I. Density functional formalism and approximate functionals. Physical Review B, 2005, 72, .	1.1	314
4	Ab initio theory of superconductivity. II. Application to elemental metals. Physical Review B, 2005, 72, .	1.1	261
5	Ab Initio Description of High-Temperature Superconductivity in Dense Molecular Hydrogen. Physical Review Letters, 2008, 100, 257001.	2.9	199
6	Superconductivity in Lithium, Potassium, and Aluminum under Extreme Pressure: A First-Principles Study. Physical Review Letters, 2006, 96, 047003.	2.9	159
7	Superconducting Properties of MgB ₂ from First Principles. Physical Review Letters, 2005, 94, 037004.	2.9	137
8	Anisotropic gap of superconducting CaC ₆ : A first-principles density functional calculation. Physical Review B, 2007, 75, .	1.1	101
9	Stereoselectivity and electrostatics in charge-transfer Mn- and Cs-TCNQ4 networks on Ag(100). Nature Communications, 2012, 3, 940.	5.8	90
10	Vibrational properties of MnO and NiO from DFT $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle U \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ -based density functional perturbation theory. Physical Review B, 2011, 84, .	1.1	82
11	Two-band superconductivity in Pb from ab initio calculations. Physical Review B, 2007, 75, .	1.1	73
12	Exact Conditions in Finite-Temperature Density-Functional Theory. Physical Review Letters, 2011, 107, 163001.	2.9	73
13	Electron-phonon interaction and superconductivity in metallic molecular hydrogen. II. Superconductivity under pressure. Physical Review B, 2010, 81, .	1.1	60
14	Thermoelasticity of Fe ²⁺ -bearing bridgmanite. Geophysical Research Letters, 2015, 42, 1741-1749.	1.5	57
15	Thermostatic properties of nitrate molten salts and their solar and eutectic mixtures. Scientific Reports, 2018, 8, 10485.	1.6	48
16	Electron-phonon interaction and superconductivity in metallic molecular hydrogen. I. Electronic and dynamical properties under pressure. Physical Review B, 2010, 81, .	1.1	47
17	Superconducting properties of MgB ₂ from first principles. Physica C: Superconductivity and Its Applications, 2007, 456, 45-53.	0.6	46
18	Hubbard-corrected density functional perturbation theory with ultrasoft pseudopotentials. Physical Review B, 2020, 101, .	1.1	43

#	ARTICLE	IF	CITATIONS
19	Ab initio prediction of pressure-induced superconductivity in potassium. <i>Physical Review B</i> , 2006, 73, .	1.1	41
20	Reduced partition function ratios of iron and oxygen in goethite. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 151, 19-33.	1.6	38
21	Electronic, vibrational, and superconducting properties of CaBeSi : First-principles calculations. <i>Physical Review B</i> , 2009, 79, .	1.1	32
22	The role of Coulomb interaction in the superconducting properties of CaC_6 and H under pressure. <i>Superconductor Science and Technology</i> , 2009, 22, 034006.	1.8	32
23	Driving Forces for Covalent Assembly of Porphyrins by Selective C-H Bond Activation and Intermolecular Coupling on a Copper Surface. <i>Journal of the American Chemical Society</i> , 2016, 138, 5837-5847.	6.6	30
24	Anomalous Coarsening Driven by Reversible Charge Transfer at Metal-Organic Interfaces. <i>ACS Nano</i> , 2014, 8, 12356-12364.	7.3	27
25	First-Principles Calculation of the Real-Space Order Parameter and Condensation Energy Density in Phonon-Mediated Superconductors. <i>Physical Review Letters</i> , 2015, 115, 097002.	2.9	26
26	A Small Molecule Walks Along a Surface Between Porphyrin Fences That Are Assembled In Situ. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7101-7105.	7.2	26
27	Infrared spectroscopic properties of goethite: anharmonic broadening, long-range electrostatic effects and Al substitution. <i>Physics and Chemistry of Minerals</i> , 2014, 41, 289-302.	0.3	24
28	Fast Molecular Compression by a Hyperthermal Collision Gives Bond-Selective Mechanochemistry. <i>Physical Review Letters</i> , 2021, 126, 056001.	2.9	22
29	Ab Initio Electron-Phonon Interactions in Correlated Electron Systems. <i>Physical Review Letters</i> , 2021, 127, 126404.	2.9	22
30	Fine-Tuning the Electrostatic Properties of an Alkali-Linked Organic Adlayer on a Metal Substrate. <i>ACS Nano</i> , 2013, 7, 8059-8065.	7.3	21
31	Probing the electron-phonon coupling in MgB_2 through magnetoresistance measurements in neutron irradiated thin films. <i>Europhysics Letters</i> , 2008, 81, 67006.	0.7	12
32	Multiband superconductivity in Pb , H under pressure and CaBeSi from ab initio calculations. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 164209.	0.7	10
33	Mechanisms of Covalent Dimerization on a Bulk Insulating Surface. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10053-10062.	1.5	9
34	A Small Molecule Walks Along a Surface Between Porphyrin Fences That Are Assembled In Situ. <i>Angewandte Chemie</i> , 2015, 127, 7207-7211.	1.6	7
35	Increasing the Templating Effect on a Bulk Insulator Surface: From a Kinetically Trapped to a Thermodynamically More Stable Structure. <i>Journal of Physical Chemistry C</i> , 2016, 120, 17546-17554.	1.5	7
36	On-surface synthesis on a bulk insulator surface. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 133001.	0.7	7

#	ARTICLE	IF	CITATIONS
37	Kinetic control of molecular assembly on surfaces. <i>Communications Chemistry</i> , 2018, 1, .	2.0	6
38	Controlling the preferential motion of chiral molecular walkers on a surface. <i>Chemical Science</i> , 2019, 10, 5864-5874.	3.7	6
39	Unified Description of the Specific Heat of Ionic Bulk Materials Containing Nanoparticles. <i>ACS Nano</i> , 2021, 15, 563-574.	7.3	6
40	Cu doping effects in MgB ₂ . <i>Physical Review B</i> , 2003, 67, .	1.1	5
41	Publisher's Note: <i>Ab initio</i> Description of High-Temperature Superconductivity in Dense Molecular Hydrogen [<i>Phys. Rev. Lett.</i> 100 (2008)]. <i>Physical Review Letters</i> , 2008, 101, .	2.9	4
42	Creating a regular array of metal-complexing molecules on an insulator surface at room temperature. <i>Nature Communications</i> , 2020, 11, 6424.	5.8	3
43	Magnetic Energy Landscape of Dimolybdenum Tetraacetate on a Bulk Insulator Surface. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3806.	1.3	3
44	Ab-initio Computation of Superconducting Properties of Elemental Superconductors and MgB ₂ . <i>Journal of Superconductivity and Novel Magnetism</i> , 2005, 18, 649-652.	0.5	2
45	Ethylene Dissociation on Ni ₃ Al(111). <i>Journal of Physical Chemistry C</i> , 2017, 121, 7967-7976.	1.5	2
46	Focus on the Essential: Extracting the Decisive Energy Barrier of a Complex Process. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900795.	1.9	2
47	Energy Barrier: Focus on the Essential: Extracting the Decisive Energy Barrier of a Complex Process (<i>Adv. Mater. Interfaces</i> 20/2019). <i>Advanced Materials Interfaces</i> , 2019, 6, 1970128.	1.9	0
48	Special issue on novel superconducting and magnetic materials. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 040401.	0.7	0