

Carlos Fiolhais

List of Publications by Year in descending order

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54
papers

23,899
citations

361413

20
h-index

182427

51
g-index

59
all docs

59
docs citations

59
times ranked

16904
citing authors

#	ARTICLE	IF	CITATIONS
1	Atoms, molecules, solids, and surfaces: Applications of the generalized gradient approximation for exchange and correlation. <i>Physical Review B</i> , 1992, 46, 6671-6687.	3.2	19,217
2	Dominant density parameters and local pseudopotentials for simple metals. <i>Physical Review B</i> , 1995, 51, 14001-14011.	3.2	175
3	Science learning in virtual environments: a descriptive study. <i>British Journal of Educational Technology</i> , 2002, 33, 471-488.	6.3	134
4	Energy and pressure versus volume: Equations of state motivated by the stabilized jellium model. <i>Physical Review B</i> , 2001, 63, .	3.2	132
5	Relativistic particle in a box. <i>European Journal of Physics</i> , 1996, 17, 19-24.	0.6	78
6	Energies of curved metallic surfaces from the stabilized-jellium model. <i>Physical Review B</i> , 1992, 45, 6207-6215.	3.2	71
7	Ionization energy and electron affinity of a metal cluster in the stabilized jellium model: Size effect and charging limit. <i>Journal of Chemical Physics</i> , 1998, 108, 8182-8189.	3.0	60
8	Density-functional versus wave-function methods: Toward a benchmark for the jellium surface energy. <i>Physical Review B</i> , 2000, 61, 2595-2598.	3.2	40
9	Toys in physics lectures and demonstrations – a brief review. <i>Physics Education</i> , 2009, 44, 53-64.	0.5	36
10	Self-compression of metallic clusters under surface tension. <i>Solid State Communications</i> , 1993, 88, 795-801.	1.9	33
11	Física no computador: o computador como uma ferramenta no ensino e na aprendizagem das ciências físicas. <i>Revista Brasileira De Ensino De Fisica</i> , 2003, 25, 259-272.	0.2	33
12	Surface and curvature energies from jellium spheres: Density functional hierarchy and quantum Monte Carlo. <i>Physical Review B</i> , 2002, 66, .	3.2	32
13	Spherical voids in the stabilized jellium model: Rigorous theorems and Padé representation of the void-formation energy. <i>Physical Review B</i> , 1994, 49, 7916-7928.	3.2	30
14	Oxoperoxo Vanadium(V) Complexes of L-Lactic Acid: Density Functional Theory Study of Structure and NMR Chemical Shifts. <i>Inorganic Chemistry</i> , 2008, 47, 7317-7326.	4.0	28
15	Density functional theory study of the oxoperoxo vanadium(V) complexes of glycolic acid. Structural correlations with NMR chemical shifts. <i>Dalton Transactions</i> , 2009, , 9735.	3.3	28
16	Formation energies of metallic voids, edges, and steps: Generalized liquid-drop model. <i>Physical Review B</i> , 1993, 47, 16460-16463.	3.2	26
17	Nonempirical density functionals investigated for jellium: Spin-polarized surfaces, spherical clusters, and bulk linear response. <i>Physical Review B</i> , 2008, 77, .	3.2	26
18	Trends in the properties and structures of the simple metals from a universal local pseudopotential. <i>Physical Review B</i> , 1999, 59, 2570-2578.	3.2	23

#	ARTICLE	IF	CITATIONS
19	Experiments with the drinking bird. American Journal of Physics, 2003, 71, 1257-1263.	0.7	23
20	Energetics of small clusters of stabilized jellium: Continuum and shell-structure effects. International Journal of Quantum Chemistry, 1993, 48, 249-261.	2.0	22
21	Transferability of a local pseudopotential based on solid-state electron density. Journal of Physics Condensed Matter, 1996, 8, 287-302.	1.8	20
22	Landau damping and one-body dissipation in nuclei. Annals of Physics, 1986, 171, 186-204.	2.8	16
23	The Cartesian diver and the fold catastrophe. American Journal of Physics, 2002, 70, 710-714.	0.7	16
24	Extraction of aluminium surface energies from slab calculations: perturbative and non-perturbative approaches. Progress in Surface Science, 2003, 74, 209-217.	8.3	15
25	Metal-cluster ionization energy: A profile-insensitive exact expression for the size effect. Physical Review B, 1997, 55, 13288-13292.	3.2	11
26	Surface energies of simple metals from slabs: Comparison of exchange-correlation density functionals. International Journal of Quantum Chemistry, 2005, 101, 645-650.	2.0	10
27	Physics of the fire piston and the fog bottle. European Journal of Physics, 2007, 28, 1199-1205.	0.6	10
28	Dependence of metal surface properties on the valence-electron density in the stabilized jellium model. Vacuum, 2001, 63, 135-138.	3.5	8
29	Properties of simple metals beyond the local density approximation of density functional theory. International Journal of Quantum Chemistry, 2003, 91, 224-229.	2.0	7
30	Decay of charged stabilized jellium clusters. International Journal of Quantum Chemistry, 1995, 56, 239-246.	2.0	6
31	Comparison of the spherically averaged pseudopotential model with the stabilized jellium model. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3583-3596.	1.5	6
32	Shell effects on fission barriers of metallic clusters: A systematic description. Physical Review B, 1998, 57, 7352-7359.	3.2	6
33	The two-centre shell model for the fission of metallic clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1996, 37, 269-276.	1.0	5
34	Fission of metallic clusters in the liquid drop model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 220, 231-236.	2.1	5
35	On the ternary fission of atomic clusters. Europhysics Letters, 1998, 42, 149-154.	2.0	5
36	Equivalence of thermodynamical fundamental equations. European Journal of Physics, 2000, 21, 395-404.	0.6	4

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37	Metallic slabs: perturbative treatments based on jellium. Progress in Surface Science, 2001, 67, 285-298.	8.3	4
38	Sadi Carnot on Carnot's theorem. American Journal of Physics, 2002, 70, 42-47.	0.7	4
39	COMPARISON OF DENSITY FUNCTIONAL APPROXIMATIONS IN THE JELLIUM MODEL FOR METAL CLUSTERS. International Journal of Modern Physics B, 2001, 15, 1724-1727.	2.0	3
40	The Meteorological Observations in Coimbra and the Portuguese Participation in Weather Forecasting in Europe. Earth Sciences History, 2011, 30, 135-162.	0.2	3
41	Self-expansion and compression of charged clusters of stabilized jellium. International Journal of Quantum Chemistry, 1996, 60, 1537-1548.	2.0	2
42	Experiments with a sunbird. American Journal of Physics, 2003, 71, 1264-1267.	0.7	2
43	A telegrafia elĂ©ctrica nas pĂĄginas de "O Instituto", revista da Academia de Coimbra. Revista Brasileira De Ensino De Fisica, 2009, 31, 2601.1-2601.13.	0.2	2
44	Amato Lusitano na cultura cientĂfica do seu tempo. Revista Brasileira De HistĂria Da CiĂncia, 2015, 8, 79-87.	0.2	2
45	La censura inquisitorial en las Centurias de Amatus Lusitanus. Asclepio, 2018, 70, 229.	0.2	2
46	Variational principles in quantum statistical mechanics. European Journal of Physics, 1987, 8, 12-17.	0.6	1
47	The early scientific work (1976-2000) of E.K.U. Gross. European Physical Journal B, 2018, 91, 1.	1.5	1
48	Biblioteca Joanina da Universidade de Coimbra. , 2013, , .		1
49	COMPARISON OF DENSITY FUNCTIONAL APPROXIMATIONS IN THE JELLIUM MODEL FOR METAL CLUSTERS. , 2000, , .		0
50	Atomic orbitals and their representation: can 3-D computer graphics help conceptual understanding?. Revista Brasileira De Ensino De Fisica, 2005, 27, 319-325.	0.2	0
51	O instituto de coimbra e a anĂlise quĂmica de Ăguas minerais em portugal na segunda metade do SĂculo XIX. Quimica Nova, 2011, 34, 1094-1105.	0.3	0
52	Livros MĂdicos do Renascimento: Tesouros do Conhecimento*. Revista De MedicĂf InternĂf, Neurologie, Psiquiatrie, Neurochirurgie, Dermato-venerologie MedicĂf InternĂf, 2019, 26, 274-282.	0.0	0
53	Uma Breve HistĂria da Tuberculose em Portugal. Revistamultidisciplinar Com, 2022, 4, 41-55.	0.1	0
54	A HistĂria da CiĂncia e as Pandemias em Portugal e no Mundo. Revistamultidisciplinar Com, 2022, 4, 3-4.	0.1	0