M Pilar LÃ³pez-Sancho

List of Publications by Year
in descending order

79 papers	4,114 citations	430874 18 h-index	110387 64 g-index
80 all docs	80 docs citations	80 times ranked	3976 citing authors

#	Article	IF	Citations
1	Highly convergent schemes for the calculation of bulk and surface Green functions. Journal of Physics F: Metal Physics, 1985, 15, 851-858.	1.6	1,584
2	Quick iterative scheme for the calculation of transfer matrices: application to Mo (100). Journal of Physics F: Metal Physics, 1984, 14, 1205-1215.	1.6	990
3	Local defects and ferromagnetism in graphene layers. Physical Review B, 2005, 72, .	3.2	299
4	Electronic properties of singleâ€layer and multilayer transition metal dichalcogenides MX₂ (M = Mo, W and X = S, Se). Annalen Der Physik, 2014, 526, 347-357.	2.4	186
5	Carbon-Nanotube-Based Quantum Dot. Physical Review Letters, 1998, 81, 1278-1281.	7.8	164
6	Magnetic moments in the presence of topological defects in graphene. Physical Review B, 2009, 79, .	3.2	107
7	Momentum dependence of spinâ€“orbit interaction effects in single-layer and multi-layer transition metal dichalcogenides. 2D Materials, 2014, 1, 034003.	4.4	85
8	Spin Splitting Induced by Spin-Orbit Interaction in Chiral Nanotubes. Physical Review Letters, 2004, 93, 176402.	7.8	68
9	Curvature-induced anisotropic spin-orbit splitting in carbon nanotubes. Physical Review B, 2009, 79, .	3.2	60
10	New Type of Vacancy-Induced Localized States in Multilayer Graphene. Physical Review Letters, 2010, 104, 036802.	7.8	46
11	Effect of electron-electron interaction on the Fermi surface topology of doped graphene. Physical Review B, 2008, 77, .	3.2	44
12	Temperature dependence of the dielectric constant and resistivity of diluted magnetic semiconductors. Physical Review B, 2003, 68, .	3.2	29
13	Anderson localization and topological transition in Chern insulators. Physical Review B, 2015, 92, .	3.2	29
14	Intrinsic spin-orbit interactions in flat and curved graphene nanoribbons. Physical Review B, 2011, 83, .	3.2	26
15	A nonorthogonal-basis calculation of the spectral density of surface states for the (100) and (110) faces of tungsten. Journal of Physics C: Solid State Physics, 1985, 18, 1803-1815.	1.5	21
16	Configuration-interaction approach to hole pairing in the two-dimensional Hubbard model. Physical Review B, 1999, 59, 14005-14016.	3.2	19
17	Confinement of Electrons in Layered Metals. Physical Review Letters, 2002, 89, 166401.	7.8	18
18	Pinning and switching of magnetic moments in bilayer graphene. New Journal of Physics, 2009, 11, 095017.	2.9	18

#	Article	IF	Citations
19	Electronic-structure calculations of the Cr/GaAs(001) interface. Physical Review B, 1990, 41, 8412-8419.	3.2	16
20	Effect of pressure on the magnetism of bilayer graphene. Physical Review B, 2011, 84, .	3.2	14
21	Resonant contributions to the cross section for electron stimulated desorption of neutral particles from adsorbates. Journal of Vacuum Science and Technology, 1982, 20, 217-218.	1.9	13
22	Doping dependence of the density of states forCuO2clusters in the Hubbard model. Physical Review B, 1992, 46, 11110-11116.	3.2	13
23	Density of states of the clean Mo (110) surface. Solid State Communications, 1984, 50, 629-632.	1.9	12
24	Correlation effects in photoemission from adsorbates: Hydrogen on narrow-band metals. Physical Review B, 1988, 38, 3142-3147.	3.2	11
25	Interplay between symmetry and spin-orbit coupling on graphene nanoribbons. Physical Review B, 2013, 87, .	3.2	11
26	Enhanced spin-flip scattering by surface roughness in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn nanoribbons. Physical Review B, 2017, 95, .	3.2	11
27	Metallic character of the K/Si(100)-(2Ã—1) interface at saturation coverage: A Mott-Hubbard model calculation of its near-Fermi-level band structure. Physical Review B, 1996, 53, 4791-4795.	3.2	10
28	Interlayer hopping properties of electrons in layered metals. Physical Review B, 2003, 68, .	3.2	10
29	Self-energy corrections to anisotropic Fermi surfaces. Physical Review B, 2006, 74, .	3.2	9
30	Absence of localization in a class of topological systems. Physical Review B, 2016, 93, .	3.2	9
31	Local alkali-metal-promoted oxidation of Si(100)-(2Ã—1) surfaces: A generalized-Hubbard-model calculation. Physical Review B, 1994, 49, 2629-2636.	3.2	8
32	Interactions, disorder and local defects in graphite. Journal of Physics and Chemistry of Solids, 2006, 67, 562-566.	4.0	8
33	Vacancy induced zero energy modes in graphene stacks: The case of ABC trilayer. Solid State Communications, 2012, 152, 1483-1488.	1.9	8
34	Magnetic phases in periodically rippled graphene. Physical Review B, 2016, 94, .	3.2	8
35	The dynamic form factor of a one-level adsorbate: Cluster-Bethe lattice approach in configuration space. Surface Science, 1988, 199, 297-308.	1.9	7
36	Hole pairs in the two-dimensional Hubbard model. Europhysics Letters, 1998, 44, 229-234.	2.0	7

#	Article	IF	Citations
37	Quantum confinement in carbon-nanotube systems. International Journal of Nanotechnology, 2005, 2, 103.	0.2	7
38	Intrinsic spinâ€“orbit interaction in carbon nanotubes and curved nanoribbons. Solid State Communications, 2012, 152, 1477-1482.	1.9	7
39	Effects of vertical electric field and charged impurities on the spin-polarized transport of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math>-antimonene armchair nanoribbons. Physical Review B, 2021, 103, .	3.2	7
40	Electron confinement and localization in (111) Ni/Co superlattices. Physical Review B, 1999, 59, 1232-1241.	3.2	6
41	Dynamics of holes and universality class of the antiferromagnetic transition in the two-dimensional Hubbard model. Solid State Communications, 2000, 113, 593-597.	1.9	6
42	Dielectric function of diluted magnetic semiconductors in the infrared regime. Physical Review B, 2004, 70, .	3.2	6
43	Finite-size versus periodic effects in Ni/Co multilayers. Physical Review B, 2002, 65, .	3.2	5
44	Electromodulation of the magnetoresistance in diluted magnetic semiconductors based heterostructures. Solid State Communications, 2003, 125, 31-35.	1.9	5
45	Transverse transport in graphite. European Physical Journal: Special Topics, 2007, 148, 73-81.	2.6	5
46	Topologically protected edge and confined states in finite armchair graphene nanoribbons and their junctions. Physical Review B, 2021, 104, .	3.2	5
47	Interpretation of the electron-energy-loss spectrum for hydrogen-covered transition-metal surfaces in terms of a configuration-interaction approach. Physical Review B, 1985, 31, 4143-4145.	3.2	4
48	Configuration-lattice approach to electron spectroscopies: Application to inverse photoemission. Physical Review B, 1990, 41, 7856-7859.	3.2	4
49	Spin correlations in semiconductor dangling bonds: Implications for the alkali-metal-covered surfaces. Physical Review B, 1994, 49, 4623-4634.	3.2	4
50	Partially filled stripes in the two-dimensional Hubbard model:â€‚â€‚Statics and dynamics. Physical Review B, 2001, 64, .	3.2	4
51	Interaction of methane with polycrystalline tungsten. Surface Science, 1978, 77, L167-L172.	1.9	3
52	Many-body effects in electron spectroscopies from absorbates. Surface Science, 1989, 211-212, 896-903.	1.9	3
53	New insights on metallization of semiconductor-alkali interfaces. Physica Scripta, 1991, 43, 216-220.	2.5	3
54	Nonplanar orbital effects on charge and spin fluctuations in doped cuprate superconductors. Physical Review B, 1994, 49, 9125-9137.	3.2	3

#	Article	IF	Citations
55	Tubular Fermi surfaces in transition metal superlattices. Europhysics Letters, 1997, 40, 679-684.	2.0	3
56	Temperature dependence of the conductance in diluted magnetic semiconductors. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1585-E1586.	2.3	3
57	Progress in Modeling Graphene: The Novel Features of this Material. Advanced Materials, 2011, 23, 5324-5326.	21.0	3
58	ESD study of the interaction of oxygen with tungsten containing carbon. Applications of Surface Science, 1980, 6, 82-86.	1.0	2
59	Coverage Dependence of the Neutralization Rate of an Ionized Adsorbate. Physica Scripta, 1987, 35, 696-698.	2.5	2
60	Many-body study of ionic states in adsorption systems: Clî—¸Si(100)-(2 Ã— 1). Surface Science, 1997, 372, L279-L284.	1.9	2
61	Deformation of anisotropic Fermi surfaces due to electron-electron interactions. Europhysics Letters, 2006, 76, 1165-1171.	2.0	2
62	Shuffle dislocation induced magnetic moment in graphene. Journal of Magnetism and Magnetic Materials, 2010, 322, 1167-1169.	2.3	2
63	Interactions between co-adsorbed CH4 and CO on tungsten: ESD and flash desorption study. Vacuum, 1982, 32, 277-281.	3.5	1
64	A simple model for the lowest excited states of : application to electron stimulated desorption. Vacuum, 1982, 32, 719-722.	3.5	1
65	Electron correlation effects on adsorption geometries. Surface Science, 1991, 251-252, 947-950.	1.9	1
66	Extended Hubbard model analysis of semiconductor-alkali interfaces: implications for the metallization problem. Surface Science, 1993, 285, L491-L497.	1.9	1
67	Charge and spin fluctuations in planar and non-planar orbitals of cuprate superconductors. Journal of Physics Condensed Matter, 1994, 6, L29-L34.	1.8	1
68	CORRELATION EFFECTS IN PHOTOEMISSION SPECTROSCOPY: Cl/Si(100)-(2 Ã— 1). Surface Review and Letters, 1997, 04, 923-927.	1.1	1
69	Long-lived core-hole excited states and high-energy thresholds in stimulated desorption processes: Cl/Si(100)-(2 Ã— 1). Applied Surface Science, 1998, 123-124, 61-65.	6.1	1
70	Dynamical correlation-hole approach to the Hubbard model. Physical Review B, 1999, 59, 5384-5397.	3.2	1
71	Renormalization group approach to anisotropic superconductivity. Physical Review B, 2009, 79, .	3.2	1
72	La ComisiÃ³n de Mujeres y Ciencia del CSIC: diez aÃ±os promoviendo la igualdad de oportunidades y la excelencia en el organismo. Arbor, 2013, 189, a012.	0.3	1

#	Article	IF	Citations
73	Electron-Hole Shake-Up in Adsorption Systems: Halogens on Semiconductor Surfaces. Journal of the Physical Society of Japan, 1997, 66, 1109-1114.	1.6	1
74	Coulomb bound states and ion neutralization in ESD. Surface Science Letters, 1986, 173, L590-L596.	0.1	0
75	Many-body effects in the interpretation of the electron energy loss spectrum for an adsorbate. Physica Scripta, 1988, 38, 878-884.	2.5	0
76	Title is missing!. Journal of Physics Condensed Matter, 1995, 7, L695-L700.	1.8	0
77	Unexpected magnetism in low dimensional systems: the role of symmetry. Journal of Physics: Conference Series, 2006, 30, 215-223.	0.4	0
78	Many body effects on c-axis properties: Out of plane coherence and bilayer splitting. Journal of Physics and Chemistry of Solids, 2006, 67, 27-31.	4.0	0
79	Robust band of critical states in time-reversal symmetry-broken fermionic systems with lattice selective disorder. Physical Review Research, 2019, 1, .	3.6	0