

# F Aguilera-Granja

## List of Publications by Year in descending order

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117  
papers

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257450

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119  
docs citations

119  
times ranked

1485  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hollow structures of TiO systems with $m \hat{\%}^2 n$ : A density functional theoretical study. Journal of Physics and Chemistry of Solids, 2022, 164, 110646.	4.0	1
2	Relation between structural patterns and magnetism in small iron oxide clusters: reentrance of the magnetic moment at high oxidation ratios. Physical Chemistry Chemical Physics, 2021, 23, 246-272.	2.8	10
3	TiO <sub>2</sub> nano-clusters adsorbed on surfaces: A density-functional-theoretic study. Journal of Physics and Chemistry of Solids, 2021, 150, 109716.	4.0	5
4	Bimetallic (AuPt) <sub>4</sub> nano-clusters adsorbed on TiO <sub>2</sub> nano-wires: A density-functional-theoretic study. Journal of Physics and Chemistry of Solids, 2021, 159, 110275.	4.0	3
5	Magnetism and Distortions in Two-Dimensional Transition-Metal Dioxides: On the Quest for Intrinsic Magnetic Semiconductor Layers. Journal of Physical Chemistry C, 2020, 124, 2634-2643.	3.1	11
6	Tuning the Magnetic Moment of Small Late 3d-Transition-Metal Oxide Clusters by Selectively Mixing the Transition-Metal Constituents. Nanomaterials, 2020, 10, 1814.	4.1	2
7	Structural, electronic and catalytic properties of bimetallic Pt Ag ( $n=1\hat{\%}7$ ) clusters. Journal of Alloys and Compounds, 2020, 845, 155897.	5.5	15
8	Structural and electronic properties of (TiO <sub>2</sub> ) <sub>10</sub> clusters with impurities: A density functional theory investigation. Journal of Physics and Chemistry of Solids, 2019, 135, 109107.	4.0	6
9	A first principles systematic study of the structural, electronic, and magnetic properties of Heusler $X_{2\sub}MnZ$ with $X = Fe, Co, Ni, Cu, Ru, Rh, Pd, Ag, Pt, Au$ and $Z = Al, Si, Ga, Ge, In$ and $Sn$ . Materials Research Express, 2019, 6, 106118.	1.6	17
10	Structure, fragmentation patterns, and electronic properties of small indium oxide clusters. Theoretical Chemistry Accounts, 2018, 137, 1.	1.4	2
11	Structural and electronic properties of (TiO <sub>2</sub> ) <sub>N</sub> nanowires: A density functional theory investigation. Journal of Physics and Chemistry of Solids, 2018, 119, 175-182.	4.0	4
12	Structure, fragmentation patterns, and magnetic properties of small nickel oxide clusters. Physical Chemistry Chemical Physics, 2017, 19, 3366-3383.	2.8	12
13	New structural and electronic properties of (TiO <sub>2</sub> ) <sub>10</sub> . Journal of Chemical Physics, 2016, 144, 234312.	3.0	13
14	Structural, electronic, and magnetic properties of $Fe_xCo_yPd_z(x\hat{\%}y\hat{\%}z\hat{\%}7)$ clusters: a density functional theory study. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	12
15	Structural, Vibrational, and Magnetic Properties of $FeCoO_{\sub}n</sub>_{\sup}0/+</sup>$ ( $n=1\hat{\%}6$ ) Bimetallic Oxide Clusters. Journal of Physical Chemistry C, 2015, 119, 11200-11209.	3.1	5
16	Structural, electronic, and magnetic properties of $FeCoNi$ ( $n=1\hat{\%}7$ ) clusters: A density-functional-theory study. Journal of Magnetism and Magnetic Materials, 2015, 394, 325-334.	2.3	30
17	Breakdown of magnetism in sub-nanometric Ni clusters embedded in Ag. Nanotechnology, 2015, 26, 455703.	2.6	11
18	Titanium embedded cage structure formation in Al <sub>n</sub> Ti <sub>+</sub> clusters and their interaction with Ar. Journal of Chemical Physics, 2014, 140, 174304.	3.0	1

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19	Spin-orbit effects on the structural, homotop, and magnetic configurations of small pure and Fe-doped Pt clusters. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	8
20	Structural, electronic and magnetic properties of , for M=13, 19, and 55, from first principles. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 355, 215-224.	2.3	23
21	Structural and Electronic Properties of $TM_n[(BN)_3H_6]_m$ Complexes with TM = Co ( $n = 1, 3$ ) and with TM = Fe, Ni, Ru, Rh, Pd ( $n = 1, 3$ ). <i>Journal of Physical Chemistry A</i> , 2014, 118, 2976-2983.	2.5	7
22	Structure, fragmentation patterns, and magnetic properties of small cobalt oxide clusters. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 21732-21741.	2.8	25
23	Antiferromagnetic-like coupling in the cationic iron cluster of thirteen atoms. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14458.	2.8	15
24	A new family of star-like icosahedral structures for small cobalt clusters. <i>Chemical Physics</i> , 2013, 415, 106-111.	1.9	12
25	Structural and electronic properties of $Ni_{26}X_n$ clusters ( $X = Pd, Pt$ ): A density-functional-theoretic study. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	16
26	Hydrogen Interaction in Pd-Pt Alloy Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 126-133.	3.1	28
27	Hybrid density functional study of small $Pt_mNi_n$ clusters. <i>Physical Chemistry B</i> , 2012, 116, 126-133.	3.2	36
28	Structural, Electronic, and Magnetic Properties Of $Co_nCu_m$ Nanoalloys ( $n + m = 12$ ) from First Principles Calculations. <i>Journal of Physical Chemistry A</i> , 2012, 116, 9353-9360.	2.5	14
29	Magnetic Cooperative Effects in Small $Ni_nRu_m$ Clusters. <i>Journal of Physical Chemistry A</i> , 2011, 115, 13950-13955.	2.5	10
30	Stability, structural, and magnetic phase diagrams of ternary ferromagnetic 3d-transition-metal clusters with five and six atoms. <i>Journal of Chemical Physics</i> , 2011, 134, 054101.	3.0	29
31	Hydrogen insertion in Pd core/Pt shell cubo-octahedral nanoparticles. <i>Physical Review B</i> , 2011, 83, .	3.2	12
32	Ab Initio Study of the Adsorption of NO on the $Rh_6$ +Cluster. <i>Journal of Physical Chemistry A</i> , 2011, 115, 8350-8360.	2.5	25
33	Structural and magnetic properties of $FemYn$ ( $m+n=7$ , Y = Ru, Rh, Pd, and Pt) nanoalloys. <i>European Physical Journal D</i> , 2011, 64, 53-62.	1.3	16
34	DFT and GEGA genetic algorithm optimized structures of $Cu_n$ ( $n = 1, 0, 2$ ; $n=3-13$ ) clusters. <i>European Physical Journal D</i> , 2010, 57, 49-60.	1.3	50
35	Theoretical study of bimetallic magnetic nanostructures: $ConPdN-n$ , $n=0, 1, \dots, N$ , $N=3, 5, 7, 13$ . <i>European Physical Journal D</i> , 2010, 57, 61-69.	1.3	19
36	DFT study of the fragmentation channels and electronic properties of $Cu_n$ ( $n = 1, 0, 2$ ; $n=3-13$ ) clusters. <i>European Physical Journal D</i> , 2010, 57, 335-342.	1.3	19

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37	Structural and magnetic properties of X12Y (X, Y=Fe, Co, Ni, Ru, Rh, Pd, and Pt) nanoalloys. Journal of Chemical Physics, 2010, 132, .	3.0	61
38	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Mo} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Structural transition and electronic structure of interest in spintronics. Physical Review B, 2009, 79, .}$	3.2	14
39	Study of the Structural and Electronic Properties of Rh <sub>N</sub> and Ru <sub>N</sub> Clusters (N < 20) within the Density Functional Theory. Journal of Physical Chemistry A, 2009, 113, 13483-13491.	2.5	53
40	A two dimensional Heusler alloy model. Solid State Communications, 2009, 149, 73-77.	1.9	2
41	Stability, magnetic behavior, and chemical order of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Physical Review B, 2009, 79, .}$	3.2	40
42	Bimetallic Fe <sup>N</sup> Ni Cluster Alloys: Stability of Core(Fe) <sup>N</sup> Shell(Ni) Arrays and Their Role Played in the Structure and Magnetic Behavior. Journal of Physical Chemistry C, 2008, 112, 6729-6739.	3.1	20
43	A density-functional study of the structures, binding energies and magnetic moments of the clusters Mo <sub>N</sub> (N = 2-13), Mo <sub>12</sub> Fe, Mo <sub>12</sub> Co and Mo <sub>12</sub> Ni. Nanotechnology, 2008, 19, 145704.	2.6	24
44	Comparative <i>ab initio</i> study of the structural, electronic, and magnetic trends of isoelectronic late $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mi} \rangle d \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{and} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mi} \rangle d \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{transition metal clusters. Physical Review B, 2008, 78, .}$	3.2	59
45	Metallic behavior of Pd atomic clusters. Nanotechnology, 2007, 18, 365706.	2.6	18
46	Magnetic properties of Pd atomic clusters from different theoretical approaches. European Physical Journal D, 2007, 44, 125-131.	1.3	26
47	Magnetic properties of small 3d and 4d transition metal clusters: The role of a noncompact growth. Physical Review B, 2006, 73, .	3.2	27
48	Collinear versus noncollinear magnetic order in Pd atomic clusters: <i>Ab initio</i> calculations. Physical Review B, 2006, 74, .	3.2	15
49	Theoretical investigation of free-standing CoPd nanoclusters as a function of cluster size and stoichiometry in the Pd-rich phase: Geometry, chemical order, magnetism, and metallic behavior. Physical Review B, 2006, 74, .	3.2	52
50	Tight-binding and evolutionary search approach for nanoscale CoRh alloys. Physica B: Condensed Matter, 2005, 370, 200-214.	2.7	13
51	Twining effects in the magnetism of small Pd clusters. Solid State Communications, 2005, 133, 573-578.	1.9	13
52	Structural and magnetic properties of CoRh nanoparticles. Physical Review B, 2004, 70, .	3.2	24
53	Axial anisotropic effects in hysteresis of $\text{Å} \pm \text{Å}$ Ising lattices. Physical Review B, 2004, 70, .	3.2	2
54	Magnetic behavior of Pd nanoclusters. Physica B: Condensed Matter, 2004, 354, 271-277.	2.7	6

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55	Magnetic trends in Mnn nanoclusters effects of uniform relaxations on the magnetic properties. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 325, 144-148.	2.1	1
56	Magnetic behaviour of selected geometries of Pd clusters: icosahedral versus fcc structures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 330, 126-130.	2.1	11
57	Magnetism in small Pd clusters. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 332, 107-114.	2.1	17
58	Magnetism in segregated bimetallic CoRh nanoclusters. Physica B: Condensed Matter, 2004, 354, 278-281.	2.7	4
59	Hysteresis for anisotropic $\hat{A}\pm J$ Ising square lattices. Journal of Alloys and Compounds, 2004, 369, 55-57.	5.5	5
60	Magnetic properties of small vanadium clusters. Journal of Alloys and Compounds, 2004, 369, 52-54.	5.5	3
61	Magnetic structure of cobalt clusters. Journal of Alloys and Compounds, 2004, 369, 93-96.	5.5	11
62	Magnetism in Rh clusters under hydrostatic deformations. European Physical Journal D, 2003, 23, 343-349.	1.3	5
63	Effects of the structural deformations on the magnetism of Rh6 and Rh13 clusters. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 318, 473-479.	2.1	4
64	Order parameters in anisotropic two-dimensional $\hat{A}\pm J$ Ising lattices. Physica A: Statistical Mechanics and Its Applications, 2003, 327, 477-490.	2.6	2
65	Magnetism of small Mn clusters. Physica Status Solidi (B): Basic Research, 2003, 239, 457-462.	1.5	6
66	Structure and magnetism of cobalt clusters. Physical Review B, 2003, 67, .	3.2	128
67	Structure and magnetism of small rhodium clusters. Physical Review B, 2002, 66, .	3.2	96
68	Electronic structure and stability of polycrystalline cobalt clusters. Physical Review B, 2002, 65, .	3.2	17
69	Deformation Effects in the Magnetic Moments of Ni Clusters. , 2001, , 77-85.		1
70	Magnetic moments in Ni clusters with deformations. Solid State Communications, 2001, 117, 477-482.	1.9	4
71	Electronic Properties of Small Free Co Clusters. Physica Status Solidi (B): Basic Research, 2000, 220, 455-460.	1.5	4
72	Magnetic interactions between small Ni clusters. Solid State Communications, 2000, 116, 309-314.	1.9	0

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73	Nonmetal-metal transition in RhN and RuN clusters. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 265, 116-121.	2.1	4
74	Average magnetization and local magnetic moments of FeN clusters ( $N < 230$ ). Physical Review B, 1999, 60, 434-439.	3.2	43
75	Structural evolution of free Co cluster magnetism. Solid State Communications, 1999, 111, 335-340.	1.9	24
76	Cluster variation method and Monte Carlo simulations in Ising square antiferromagnets. Solid State Communications, 1999, 112, 437-441.	1.9	20
77	On the metallic behavior of Co clusters. Solid State Communications, 1999, 113, 147-151.	1.9	4
78	Magnetic moments of. European Physical Journal D, 1999, 6, 235.	1.3	15
79	Electronic and geometrical effects on the magnetism of small RuN clusters. Journal of Magnetism and Magnetic Materials, 1998, 186, 214-222.	2.3	20
80	Geometrical structure and magnetism of nickel clusters. Solid State Communications, 1998, 107, 25-30.	1.9	13
81	Finite-size effects on the phase diagrams of binary alloy films. Solid State Communications, 1998, 107, 285-289.	1.9	4
82	Magnetic moments of iron clusters: a simple theoretical model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 242, 255-260.	2.1	18
83	Magnetic moments of Ni clusters. Physical Review B, 1998, 57, 12469-12475.	3.2	73
84	Theoretical Study of the Metal-Nonmetal Transition in Transition Metal Clusters. , 1998, , 109-117.		1
85	Magnetic Surface Enhancement and the Curie Temperature in Ising Thin Films. , 1998, , 219-226.		0
86	Phase Transitions in Ising Square Antiferromagnets: A Controversial System. , 1998, , 203-207.		0
87	DIRECT ENUMERATION OF THE GEOMETRICAL CHARACTERISTICS OF CLUSTERS. Scripta Materialia, 1997, 8, 269-287.	0.5	128
88	Nonmetal-metal transition in Ni clusters. Solid State Communications, 1997, 104, 635-639.	1.9	18
89	Cluster Variation Method Applications to Large Ising Aggregates. , 1996, , 219-235.		0
90	Phase transitions in bcc(110) binary-alloy thin films. Physical Review B, 1995, 52, 5392-5399.	3.2	16

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91	Magnetic properties of large Ising clusters. Surface Science, 1995, 326, 150-160.	1.9	7
92	Phase transitions in Ising square antiferromagnets with first- and second-neighbour interactions. Journal of Physics Condensed Matter, 1994, 6, 9759-9772.	1.8	34
93	The Pair Approximation of the Cluster Variation Method as Applied to bcc Alloys. Progress of Theoretical Physics Supplement, 1994, 115, 165-169.	0.1	1
94	Finite size scaling in Ising thin films. Solid State Communications, 1994, 91, 435-438.	1.9	10
95	Modeling the magnetic properties of Heusler alloys. Journal of Magnetism and Magnetic Materials, 1994, 131, 417-426.	2.3	30
96	Adsorption of random copolymer on surfaces. Journal De Physique II, 1994, 4, 1651-1675.	0.9	5
97	Mean Field Study of Size Scaling in Ising Thin Films. , 1994, , 167-174.		0
98	Magnetic Properties of Cubo-Octahedral Ising Clusters. , 1994, , 47-55.		0
99	Magnetic properties of cubo-octahedral Ising clusters. Solid State Communications, 1993, 88, 101-104.	1.9	9
100	The s and p character of the electronic structure of C20, C60 and C70. Solid State Communications, 1993, 85, 767-771.	1.9	9
101	Polymer statistics. Physica A: Statistical Mechanics and Its Applications, 1993, 195, 53-73.	2.6	6
102	Electronic structure of some semiconductor fullerenes. Scripta Materialia, 1993, 3, 469-477.	0.5	5
103	Specific heat and the phase diagram of the Ising square lattice with nearest- and next-nearest interactions. Journal of Physics Condensed Matter, 1993, 5, A195-A196.	1.8	11
104	Recursion method study of the electronic structure of some fullerenes. Journal of Physics Condensed Matter, 1993, 5, A389-A392.	1.8	0
105	First-order phase transitions in the Ising square lattice with first- and second-neighbor interactions. Physical Review B, 1993, 48, 3519-3522.	3.2	62
106	End effects in adsorption of homopolymers and triblock copolymers. Journal De Physique II, 1993, 3, 1141-1159.	0.9	1
107	Phase transitions in layered magnetic structures. Solid State Communications, 1992, 82, 71-74.	1.9	5
108	Polymer statistics. Physica A: Statistical Mechanics and Its Applications, 1992, 189, 81-107.	2.6	11

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109	Polymer statistics. Physica A: Statistical Mechanics and Its Applications, 1992, 189, 108-126.	2.6	11
110	Polymer statistics. Physica A: Statistical Mechanics and Its Applications, 1992, 182, 331-345.	2.6	12
111	Phase Transitions in Ultrathin Films. Springer Proceedings in Physics, 1992, , 453-462.	0.2	0
112	Polymer statistics. Physica A: Statistical Mechanics and Its Applications, 1991, 176, 514-533.	2.6	11
113	Ising model of phase transitions in ultrathin films. Solid State Communications, 1990, 74, 155-158.	1.9	96
114	Theory of phase equilibria in Co-Fe alloys. Physical Review B, 1985, 31, 1686-1688.	3.2	20
115	Mean-field theory of magnetic transitions in semi-infinite Ising models. Physical Review B, 1985, 31, 7146-7150.	3.2	41
116	Spatial and magnetic ordering of systems chemisorbed at the surface of ferromagnets. Physical Review B, 1984, 30, 2666-2670.	3.2	1
117	Magnetic long- and short-range order at the surface of ferromagnets. Physical Review B, 1983, 28, 3909-3913.	3.2	11