Johan Mazo Zuluaga

List of Publications by Year
in descending order

37 papers	388 citations	840776 11 h-index	839539 18 g-index
37 all docs	37 docs citations	37 times ranked	506 citing authors

#	Article	IF	Citations
1	Structure and electronic properties of iron oxide clusters: A first-principles study. Physical Review B, 2009, 80, .	3.2	40
2	Surface anisotropy, hysteretic, and magnetic properties of magnetite nanoparticles: A simulation study. Journal of Applied Physics, 2009, 105, 123907.	2.5	38
3	Surface anisotropy of a Fe3O4 nanoparticle: A simulation approach. Physica B: Condensed Matter, 2007, 398, 187-190.	2.7	37
4	Effect of surface anisotropy on the magnetic properties of magnetite nanoparticles: A Heisenbergâ€“Monte Carlo study. Journal of Applied Physics, 2008, 103, .	2.5	29
5	Thermally Induced Magnetiteâ€“Haematite Transformation. Hyperfine Interactions, 2003, 148/149, 153-161.	0.5	25
6	Critical behavior of ferromagnetic Ising thin films. Physica B: Condensed Matter, 2006, 384, 227-229.	2.7	25
7	Influence of non-stoichiometry on the magnetic properties of magnetite nanoparticles. Journal of Physics Condensed Matter, 2008, 20, 195213.	1.8	17
8	Thermally Driven and Ball-Milled Hematite to Magnetite Transformation. Hyperfine Interactions, 2003, 148/149, 163-175.	0.5	15
9	Monte Carlo study of the bulk magnetic properties of magnetite. Physica B: Condensed Matter, 2004, 354, 20-26.	2.7	14
10	Synthesis of Magnetite in Presence of Cu2+ or Cr3+. Hyperfine Interactions, 2001, 134, 141-152.	0.5	13
11	Understanding the loss of electrochemical activity of nanosized LiMn₂O₄particles: a combined experimental and<i>ab initio</i>DFT study. Journal of Materials Chemistry A, 2018, 6, 14967-14974.	10.3	13
12	Magnetite thin films: A simulational approach. Physica B: Condensed Matter, 2006, 384, 224-226.	2.7	12
13	Pseudocritical behavior of ferromagnetic pure and random diluted nanoparticles with competing interactions: Variational and Monte Carlo approaches. Physical Review B, 2011, 83, .	3.2	11
14	Ferrimagnetic to Paramagnetic Transition in Magnetite: MÃ¶ssbauer versus Monte Carlo. Hyperfine Interactions, 2005, 161, 161-169.	0.5	9
15	Physical properties of quasi-one-dimensional MgO and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>3</mml:mn></mml:msub><mm mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>-based nanostructures. Physical Review B, 2014, 90, .	3.2	9
16	Uniaxial magnetic anisotropy energy of bimetallic Coâ€“Ni clusters from a first-principles perspective. Physical Chemistry Chemical Physics, 2018, 20, 16528-16539.	2.8	8
17	Bridging the gap between discrete and continuous magnetic models in the scaling approach. Physical Review B, 2015, 91, .	3.2	7
18	Fe/Ni core/shell nanowires and nanorods: a combined first-principles and atomistic simulation study. Physical Chemistry Chemical Physics, 2017, 19, 16267-16275.	2.8	7

#	Article	IF	Citations
19	Magnetic effects of interstitial hydrogen in nickel. Journal of Magnetism and Magnetic Materials, 2017, 421, 7-12.	2.3	7
20	Searching for the nanoscopicâ€“macroscopic boundary. Journal of Magnetism and Magnetic Materials, 2013, 348, 154-159.	2.3	6
21	Magnetic properties across intergranular regions of disordered FeMnAl alloys: Theory. Physica B: Condensed Matter, 2007, 398, 364-368.	2.7	5
22	Size dependence study of the ordering temperature in the Fast Monte Carlo method. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	5
23	Finite-length Fe nanowire arrays: the effects of magnetic anisotropy energy, dipolar interaction and system size on their magnetic properties. Journal Physics D: Applied Physics, 2017, 50, 095003.	2.8	5
24	Complex magnetic states in Ni/Fe bi-segmented nanorods. Physica Status Solidi - Rapid Research Letters, 2015, 9, 740-744.	2.4	4
25	Structural Relaxation and Crystalline Phase Effects on the Exchange Bias Phenomenon in FeF 2 /Fe Core/Shell Nanoparticles. Advanced Materials Interfaces, 2020, 7, 2000862.	3.7	4
26	Magnetic properties of magnetite above the Verwey transition: a Monte Carlo simulation. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3540-3543.	0.8	3
27	Energy contributions in magnetite nanoparticles: computation of magnetic phase diagram, theory, and simulation. Journal of Nanoparticle Research, 2011, 13, 7115-7125.	1.9	3
28	Sequential oxygen chemisorption on Fe13clusters: from first-principles to practical insights. Journal of Physics Condensed Matter, 2016, 28, 485002.	1.8	3
29	Controlling domain wall nucleation and propagation with temperature gradients. Applied Physics Letters, 2016, 109, .	3.3	3
30	Thermal gradients for the stabilization of a single domain wall in magnetic nanowires. Nanotechnology, 2018, 29, 345702.	2.6	3
31	Local structural order in nanostructured hematite. Hyperfine Interactions, 2007, 165, 253-259.	0.5	2
32	Ornstein-Zernike correlations and magnetic ordering in nanostructures. European Physical Journal B, 2014, 87, 1.	1.5	2
33	Physicalâ€“chemical properties of M@Fe₃O₄core@shell nanowires (M = Cu, Co,) Tj ETQq1 1 0.784314 rgBT /	2.8	2
34	Structural stability, shape memory and mechanical properties of Fe/Ni core/shell nanorods. Journal of Alloys and Compounds, 2021, 877, 160206.	5.5	2
35	Ferrimagnetic to Paramagnetic Transition in Magnetite: MÃ¶ssbauer versus Monte Carlo. , 2005, , 161-169.		0
36	Local structural order in nanostructured hematite. , 2006, , 253-259.		0

#	Article	IF	Citations
37	Low-energy configurations of Pt₆Cu₆ clusters and their physicalâ€“chemical characterization: a high-accuracy DFT study. Physical Chemistry Chemical Physics, 0, , .	2.8	0