## Hamid Kachkachi

List of Publications by Year in descending order

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63 papers

1,994 citations

304743 22 h-index 243625 44 g-index

64 all docs 64
docs citations

64 times ranked 2006 citing authors

#	Article	IF	Citations
1	Surface-induced reduction of the switching field in nanomagnets. Journal of Magnetism and Magnetic Materials, 2022, 553, 168966.	2.3	O
2	Time profile of temperature rise in assemblies of nanomagnets. Journal of Magnetism and Magnetic Materials, 2022, , 169354.	2.3	1
3	Single Nanomagnet Behaviour: Surface and Finite-Size Effects. Springer Series in Materials Science, 2021, , 3-38.	0.6	3
4	Single-particle versus collective effects in assemblies of nanomagnets: Screening. Journal of Magnetism and Magnetic Materials, 2020, 500, 166286.	2.3	4
5	Specific absorption rate of magnetic nanoparticles: Nonlinear AC susceptibility. Journal of Applied Physics, 2020, 128, 143901.	2.5	7
6	Magnetization nutation induced by surface effects in nanomagnets. Physical Review B, 2018, 98, .	3.2	17
7	Ferromagnetic resonance of a two-dimensional array of nanomagnets: Effects of surface anisotropy and dipolar interactions. Physical Review B, 2018, 97, .	3.2	6
8	Surface effects on ferromagnetic resonance in magnetic nanocubes. Journal of Physics Condensed Matter, 2017, 29, 025801.	1.8	4
9	Effect of dipolar interactions and DC magnetic field on the specific absorption rate of an array of magnetic nanoparticles. Journal of Applied Physics, 2017, 121, .	2.5	13
10	Plasmon-enhanced diffraction in nanoparticle gratings fabricated by in situ photo-reduction of gold chloride doped polymer thin films by laser interference patterning. Journal of Materials Chemistry C, 2017, 5, 3553-3560.	5.5	16
11	Ferromagnetic resonance of magnetostatically coupled shifted chains of nanoparticles in an oblique magnetic field. Journal of Applied Physics, 2016, 119, .	2.5	3
12	Collective Effects in Assemblies of Magnetic Nanaparticles. Solid State Physics, 2016, , 1-101.	0.5	7
13	Single-Particle Phenomena in Magnetic Nanostructures. Solid State Physics, 2015, 66, 301-423.	0.5	9
14	Ferromagnetic resonance of a magnetic dimer with dipolar coupling. Journal of Applied Physics, 2014, 116, 243905.	2.5	8
15	Equilibrium and dynamic behaviour of (weakly) interacting assemblies of magnetic nanoparticles. Journal of Physics: Conference Series, 2014, 521, 012010.	0.4	0
16	ac susceptibility of an assembly of nanomagnets: Combined effects of surface anisotropy and dipolar interactions. Physical Review B, 2014, 90, .	3.2	19
17	Microwave-assisted switching: optimal microwave field for a nanomagnet with surface anisotropy. Journal of Physics: Conference Series, 2014, 521, 012005.	0.4	O
18	Microwave-assisted switching of a nanomagnet: Analytical determination of the optimal microwave field. Physical Review B, 2013, 88, .	3.2	22

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19	Magnetic anisotropies in ultrathin bismuth iron garnet films. Journal of Magnetism and Magnetic Materials, 2013, 335, 139-143.	2.3	28
20	Interplay between surface anisotropy and dipolar interactions in an assembly of nanomagnets. Physical Review B, 2013, 88, .	3.2	28
21	Spin configuration of magnetic multi-layers: effect of exchange, dipolar and Dzyalozhinski–Moriya interactions. Journal of Physics Condensed Matter, 2013, 25, 316003.	1.8	1
22	Dynamical Susceptibility of Weakly Interacting Ferromagnetic Nanoclusters. Journal of Nanoscience and Nanotechnology, 2012, 12, 4843-4850.	0.9	11
23	Unified decoupling scheme for exchange and anisotropy contributions and temperature-dependent spectral properties of anisotropic spin systems. Physical Review B, 2012, 86, .	3.2	21
24	Surface effects on the magnetic behavior of nanoparticle assemblies. Physical Review B, 2012, 85, .	3.2	17
25	Dynamics of a magnetic dimer with exchange, dipolar, and Dzyalozhinski-Moriya interaction. Physical Review B, 2011, 84, .	3.2	6
26	Optimal switching of a nanomagnet assisted by microwaves. Physical Review B, 2011, 83, .	3.2	30
27	Spin configurations in hard/soft coupled bilayer systems: Transitions from rigid magnet to exchange-spring. Physical Review B, 2010, 82, .	3.2	20
28	Multiscale modeling of magnetic materials: Temperature dependence of the exchange stiffness. Physical Review B, 2010, 82, .	3.2	95
29	Magnetization reversal via internal spin waves in magnetic nanoparticles. Physical Review B, 2009, 80, .	3.2	27
30	Thermal and surface anisotropy effects on the magnetization reversal of a nanocluster. Journal Physics D: Applied Physics, 2008, 41, 134004.	2.8	19
31	Magnetization reversal and nonexponential relaxation via instabilities of internal spin waves in nanomagnets. Europhysics Letters, 2008, 82, 17007.	2.0	9
32	Effective anisotropies and energy barriers of magnetic nanoparticles with NÃ@el surface anisotropy. Physical Review B, 2007, 76, .	3.2	122
33	Effects of spin non-collinearities in magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2007, 316, 248-254.	2.3	30
34	Effects of dipolar interactions on the zero-field-cooled magnetization of a nanoparticle assembly. Physical Review B, 2007, 75, .	3.2	30
35	Ferromagnetic resonance in systems with competing uniaxial and cubic anisotropies. European Physical Journal B, 2007, 56, 27-33.	1.5	16
36	Surface-induced cubic anisotropy in nanomagnets. Physical Review B, 2006, 73, .	3.2	66

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37	Magnetization of nanomagnet assemblies: Effects of anisotropy and dipolar interactions. European Physical Journal B, 2005, 44, 299-308.	1.5	24
38	Magnetization dynamics of two interacting spins in an external magnetic field. Physical Review B, 2005, 72, .	3.2	15
39	Magnetic Nanoparticles as Many-Spin Systems. , 2005, , 75-104.		12
40	Surface anisotropy in nanomagnets: transverse or Néel?. Journal of Magnetism and Magnetic Materials, 2004, 278, 334-341.	2.3	31
41	Dynamics of a nanoparticle as a one-spin system and beyond. Journal of Molecular Liquids, 2004, 114, 113-130.	4.9	12
42	Dynamics of a nanoparticle as a one-spin system and beyond. Journal of Molecular Liquids, 2004, 114, 113-113.	4.9	0
43	Surface Contribution to the Anisotropy of Magnetic Nanoparticles. Physical Review Letters, 2003, 90, 065504.	7.8	200
44	Effect of exchange interaction on superparamagnetic relaxation. Europhysics Letters, 2003, 62, 650-656.	2.0	11
45	Effect of surface anisotropy on the hysteretic properties of a magnetic particle. Journal of Applied Physics, 2002, 91, 7625.	2.5	25
46	Hysteretic properties of a magnetic particle with strong surface anisotropy. Physical Review B, 2002, 66, .	3.2	96
47	Spin-wave theory for finite classical magnets and superparamagnetic relation. European Physical Journal B, 2001, 22, 291-300.	1.5	15
48	Magnetic free energy at elevated temperatures and hysteresis of magnetic particles. Physica A: Statistical Mechanics and Its Applications, 2001, 291, 485-500.	2.6	17
49	Boundary and finite-size effects in small magnetic systems. Physica A: Statistical Mechanics and Its Applications, 2001, 300, 487-504.	2.6	28
50	Surface-related properties of $\hat{I}^3$ -Fe2O3 nanoparticles. Journal of Magnetism and Magnetic Materials, 2000, 221, 63-79.	2.3	272
51	Interpolation formulae between axially symmetric and non-axially symmetric Kramers' escape rates for single-domain ferromagnetic particles in the intermediate to high-damping limit. Journal of Magnetism and Magnetic Materials, 2000, 221, 110-123.	2.3	12
52	Finite-size versus surface effects in nanoparticles. Journal of Magnetism and Magnetic Materials, 2000, 221, 158-163.	2.3	60
53	Field dependence of the temperature at the peak of the zero-field-cooled magnetization. Journal of Physics Condensed Matter, 2000, 12, 3077-3090.	1.8	36
54	Surface effects in nanoparticles: application to maghemite -Fe O. European Physical Journal B, 2000, 14, 681-689.	1.5	146

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55	Superparamagnetic susceptibility of a nanoparticle assembly: application of the Onsager model. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 37-39.	2.3	4
56	From pure superparamagnetism to glass collective state in $\hat{I}^3$ -Fe2O3 nanoparticle assemblies. Journal of Magnetism and Magnetic Materials, 1999, 203, 23-27.	2.3	105
57	Universal phase diagram for transitions to non-uniform states with one-component order parameter. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 237, 276-282.	2.1	2
58	Magnetic and thermodynamic properties of Sr2LaFe3O9. Journal of Magnetism and Magnetic Materials, 1997, 172, 173-182.	2.3	0
59	Generalized Ginzburg-Landau theory for nonuniform FFLO superconductors. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 225, 341-348.	2.1	142
60	The super-Weierstrass -function and operator product expansions in 2D-induced supergravity on the supertorus. Classical and Quantum Gravity, 1994, 11, 493-501.	4.0	5
61	Induced Polyakov supergravity on Riemann surfaces of higher genus. Classical and Quantum Gravity, 1994, 11, 767-784.	4.0	5
62	Redundancy of the quantum level gauge condition. Journal of Mathematical Physics, 1994, 35, 4477-4482.	1.1	0
63	The Polyakov action on the supertorus. Classical and Quantum Gravity, 1993, 10, 417-427.	4.0	4