

César de Julián Fernández

List of Publications by Year in descending order

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2,883
citations

186265

28
h-index

197818

49
g-index

118
all docs

118
docs citations

118
times ranked

4195
citing authors

#	ARTICLE	IF	CITATIONS
1	Exploring the Magnetic Properties of Cobalt-Ferrite Nanoparticles for the Development of a Rare-Earth-Free Permanent Magnet. <i>Chemistry of Materials</i> , 2015, 27, 4048-4056.	6.7	237
2	Circular Magnetoplasmonic Modes in Gold Nanoparticles. <i>Nano Letters</i> , 2013, 13, 4785-4789.	9.1	113
3	Characterization of Free-Standing PEDOT:PSS/Iron Oxide Nanoparticle Composite Thin Films and Application As Conformable Humidity Sensors. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 6324-6332.	8.0	106
4	Strongly Exchange Coupled Core Shell Nanoparticles with High Magnetic Anisotropy: A Strategy toward Rare-Earth-Free Permanent Magnets. <i>Chemistry of Materials</i> , 2016, 28, 4214-4222.	6.7	98
5	Coexistence of plasmonic and magnetic properties in Au ₈₉ Fe ₁₁ nanoalloys. <i>Nanoscale</i> , 2013, 5, 5611.	5.6	92
6	Optical gas sensing of TiO ₂ and TiO ₂ /Au nanocomposite thin films. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 107-115.	7.8	89
7	At the frontier between heterogeneous and homogeneous catalysis: hydrogenation of olefins and alkynes with soluble iron nanoparticles. <i>Dalton Transactions</i> , 2010, 39, 8464.	3.3	89
8	Exploring the Effect of Co Doping in Fine Maghemite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8261-8270.	3.1	84
9	Active Targeting of Sorafenib: Preparation, Characterization, and In Vitro Testing of Drug-Loaded Magnetic Solid Lipid Nanoparticles. <i>Advanced Healthcare Materials</i> , 2015, 4, 1681-1690.	7.6	81
10	Synthesis, Structure, and Magnetic Properties of Co, Ni, and Co-Ni Alloy Nanocluster-Doped SiO ₂ Films by Sol-Gel Processing. <i>Chemistry of Materials</i> , 2002, 14, 3440-3447.	6.7	71
11	Stimuli-responsive lipid-based magnetic nanovectors increase apoptosis in glioblastoma cells through synergic intracellular hyperthermia and chemotherapy. <i>Nanoscale</i> , 2019, 11, 72-88.	5.6	69
12	Role of Zn ²⁺ Substitution on the Magnetic, Hyperthermic, and Relaxometric Properties of Cobalt Ferrite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6148-6157.	3.1	65
13	Spin-Polarization Transfer in Colloidal Magnetic-Plasmonic Au/Iron Oxide Hetero-nanocrystals. <i>ACS Nano</i> , 2013, 7, 857-866.	14.6	64
14	Influence of the temperature dependence of anisotropy on the magnetic behavior of nanoparticles. <i>Physical Review B</i> , 2005, 72, .	3.2	61
15	Structure and optical properties of Au-polyimide nanocomposite films prepared by ion implantation. <i>Applied Physics Letters</i> , 2004, 85, 5712-5714.	3.3	58
16	Crystal structures and magnetic properties of strontium and copper doped lanthanum ferrites. <i>Journal of Solid State Chemistry</i> , 2012, 191, 33-39.	2.9	53
17	Magnetism in Polymers with Embedded Gold Nanoparticles. <i>Advanced Materials</i> , 2007, 19, 875-877.	21.0	51
18	Nutlin-loaded magnetic solid lipid nanoparticles for targeted glioblastoma treatment. <i>Nanomedicine</i> , 2019, 14, 727-752.	3.3	51

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19	Surface plasmon resonance optical gas sensing of nanostructured ZnO films. Sensors and Actuators B: Chemical, 2008, 130, 531-537.	7.8	49
20	Energy Product Enhancement in Imperfectly Exchange-Coupled Nanocomposite Magnets. Advanced Electronic Materials, 2016, 2, 1500365.	5.1	47
21	Coercivity of Fe-SiO ₂ nanocomposite materials prepared by ball milling. Journal of Applied Physics, 1994, 76, 6573-6575.	2.5	42
22	Photo-coercivity of Nano-stabilized Au:Fe Superparamagnetic Nanoparticles. Advanced Materials, 2010, 22, 4054-4058.	21.0	39
23	Supported μ and Fe^2 iron oxide nanomaterials by chemical vapor deposition: structure, morphology and magnetic properties. CrystEngComm, 2013, 15, 1039-1042.	2.6	39
24	Study of the gas optical sensing properties of Au-polyimide nanocomposite films prepared by ion implantation. Sensors and Actuators B: Chemical, 2005, 111-112, 225-229.	7.8	37
25	Coupling between magnetic and optical properties of stable Au-Fe solid solution nanoparticles. Nanotechnology, 2010, 21, 165701.	2.6	36
26	Characterization of FeCo-SiO ₂ Nanocomposite Films Prepared by Sol-Gel Dip Coating. Chemistry of Materials, 2003, 15, 2201-2207.	6.7	35
27	Structural and magnetic properties of mesoporous SiO ₂ nanoparticles impregnated with iron oxide or cobalt-iron oxide nanocrystals. Journal of Materials Chemistry, 2012, 22, 19276.	6.7	35
28	Influence of annealing atmosphere on metal and metal alloy nanoclusters produced by ion implantation in silica. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 176-179.	1.4	32
29	Coprecipitation of Oxalates: An Easy and Reproducible Wet-Chemistry Synthesis Route for Transition-Metal Ferrites. European Journal of Inorganic Chemistry, 2014, 2014, 875-887.	2.0	30
30	Dynamics of compositional evolution of Pd-Cu alloy nanoclusters upon heating in selected atmospheres. Physical Review B, 2005, 71, .	3.2	29
31	Topotaxial Phase Transformation in Cobalt Doped Iron Oxide Core/Shell Hard Magnetic Nanoparticles. Chemistry of Materials, 2017, 29, 1279-1289.	6.7	29
32	Structural and magnetic properties of Fe-Al silica composites prepared by sequential ion implantation. Nuclear Instruments & Methods in Physics Research B, 2004, 216, 245-250.	1.4	28
33	Topical Review: Progress and Prospects of Hard Hexaferrites for Permanent Magnet Applications. Journal Physics D: Applied Physics, 0, , .	2.8	27
34	Magnetic properties of Co and Ni based alloy nanoparticles dispersed in a silica matrix. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 479-484.	1.4	26
35	Functional magneto-plasmonic biosensors transducers: Modelling and nanoscale analysis. Sensors and Actuators B: Chemical, 2017, 239, 100-112.	7.8	25
36	X-ray Magnetic Circular Dichroism and Small Angle Neutron Scattering Studies of Thiol Capped Gold Nanoparticles. Journal of Nanoscience and Nanotechnology, 2009, 9, 6434-6438.	0.9	24

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37	Magnetic properties of Co-Ni alloy nanoparticles prepared by the sol-gel technique. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1251-E1252.	2.3	22
38	Single-electron transport and magnetic properties of Fe-SiO ₂ nanocomposites prepared by ion implantation. Physical Review B, 2007, 75, .	3.2	22
39	Influence of post-implantation thermal and laser annealing on the stability of metal alloy nanoclusters in silica. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 410-416.	1.4	21
40	Synthesis of wide band gap nanocrystals by ion implantation. Nuclear Instruments & Methods in Physics Research B, 2002, 191, 447-451.	1.4	21
41	Optical response of plasma-deposited zinc phthalocyanine films to volatile organic compounds. Sensors and Actuators B: Chemical, 2007, 127, 150-156.	7.8	21
42	Developing functionalized Fe ₃ O ₄ -Au nanoparticles: a physico-chemical insight. Physical Chemistry Chemical Physics, 2015, 17, 6087-6097.	2.8	21
43	Electronic and Magnetic Properties of Ni Nanoparticles Embedded in Various Organic Semiconductor Matrices. Journal of Physical Chemistry B, 2009, 113, 4565-4570.	2.6	20
44	Magnetic properties of Co-Cu nanoparticles dispersed in silica matrix. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 187-190.	2.3	19
45	Nanostructural and optical properties of cobalt and nickel oxide/silica nanocomposites. Materials Science and Engineering C, 2006, 26, 987-991.	7.3	19
46	Giant magneto-optical response in H ⁺ irradiated Zn _{1-x} Co _x O thin films. Journal of Materials Chemistry C, 2019, 7, 78-85.	5.5	19
47	Structure and magnetic properties of alloy-based nanoparticles silica composites prepared by ion-implantation and sol-gel techniques. Materials Science and Engineering C, 2001, 15, 59-61.	7.3	18
48	Structural and physical properties of cobalt nanocluster composite glasses. Journal of Non-Crystalline Solids, 2004, 336, 148-152.	3.1	18
49	Magneto-Optical Probe for Investigation of Multiphase Fe Oxide Nanosystems. Chemistry of Materials, 2015, 27, 466-473.	6.7	18
50	Thin film deposition by magnetic field-assisted pulsed laser assembly. Applied Surface Science, 1999, 138-139, 150-154.	6.1	17
51	Optimizing the magnetic properties of hard and soft materials for producing exchange spring permanent magnets. Journal Physics D: Applied Physics, 2021, 54, 134003.	2.8	17
52	Dielectric Effects in FeO-Coated Au Nanoparticles Boost the Magnetoplasmonic Response: Implications for Active Plasmonic Devices. ACS Applied Nano Materials, 2021, 4, 1057-1066.	5.0	17
53	Preparation and magnetic properties of monodispersed Zn ferrites of submicrometric size. Journal of Materials Science, 1993, 28, 2962-2966.	3.7	16
54	Lorentz microscopy sheds light on the role of dipolar interactions in magnetic hyperthermia. Nanoscale, 2015, 7, 7717-7725.	5.6	16

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55	Plasmon-enhanced magneto-optical detection of single-molecule magnets. <i>Materials Horizons</i> , 2019, 6, 1148-1155.	12.2	16
56	Size dependent hcp-to-fcc transition temperature in Co nanoclusters obtained by ion implantation in silica. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 250, 206-209.	1.4	15
57	Structure and thermal stability of Au-Fe alloy nanoclusters formed by sequential ion implantation in silica. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 250, 225-228.	1.4	15
58	AC loss analysis and domain structure in magnetostrictive amorphous wires. <i>Journal of Magnetism and Magnetic Materials</i> , 1992, 115, 295-306.	2.3	14
59	Laser generated plasmas characterized under magnetic field. <i>Applied Physics Letters</i> , 2006, 88, 044102.	3.3	14
60	MAGNETIC PROPERTIES OF ORGANIC COATED GOLD SURFACES. <i>Modern Physics Letters B</i> , 2007, 21, 303-319.	1.9	14
61	Electrochemical characterization of core@shell CoFe ₂ O ₄ /Au composite. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	14
62	FeCo Nanowire-Strontium Ferrite Powder Composites for Permanent Magnets with High-Energy Products. <i>ACS Applied Nano Materials</i> , 2020, 3, 9842-9851.	5.0	14
63	Dense strontium hexaferrite-based permanent magnet composites assisted by cold sintering process. <i>Journal of Alloys and Compounds</i> , 2022, 917, 165531.	5.5	14
64	Magnetic properties of Ni nanoparticles dispersed in silica prepared by high-energy ball milling. <i>Europhysics Letters</i> , 1998, 42, 91-96.	2.0	13
65	Sequential ion implantation of copper and cobalt in silica glass: A study by synchrotron radiation techniques. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002, 191, 406-410.	1.4	13
66	Optical sensing to organic vapors of fluorinated polyimide nanocomposites containing silver nanoclusters. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 418-424.	7.8	13
67	Surface plasmon resonance study on the optical sensing properties of nanometric polyimide films to volatile organic vapours. <i>Sensors and Actuators B: Chemical</i> , 2007, 120, 712-718.	7.8	13
68	Nanostructure, composition and magnetic properties in soft and hard Co-Ni nanoparticles: The effect on the magnetic anisotropy. <i>Inorganica Chimica Acta</i> , 2008, 361, 4138-4142.	2.4	13
69	Formation of silver nanoclusters in transparent polyimides by Ag-K ion-exchange process. <i>European Physical Journal D</i> , 2007, 42, 243-251.	1.3	12
70	3d Metal Doping of Core@Shell $\frac{1}{4}$ stite@ferrite Nanoparticles as a Promising Route toward Room Temperature Exchange Bias Magnets. <i>Small</i> , 2022, 18, e2107426.	10.0	11
71	Superparamagnetism and coercivity in HCP-Co nanoparticles dispersed in silica matrix. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1235-E1236.	2.3	10
72	Radiofrequency magnetron co-sputtering deposition synthesis of Co-based nanocomposite glasses for optical and magnetic applications. <i>Applied Surface Science</i> , 2004, 226, 62-67.	6.1	10

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73	High Magnetic Field Magneto-optics on Plasmonic Silica-Embedded Silver Nanoparticles. Journal of Physical Chemistry C, 2022, 126, 1939-1945.	3.1	10
74	Thermal evolution of cobalt nanocrystals embedded in silica. Materials Science and Engineering C, 2007, 27, 193-196.	7.3	9
75	Magneto-optical studies on the molecular cluster Fe ₄ in different polymeric environments. Inorganica Chimica Acta, 2008, 361, 3970-3974.	2.4	9
76	High magnetic coercive field in Ca ²⁺ /Al ³⁺ substituted strontium hexaferrite. Journal of Alloys and Compounds, 2021, 883, 160768.	5.5	9
77	Magneto-optical detection of the relaxation dynamics of alloy nanoparticles with a high-stability magnetic circular dichroism setup. Journal of Magnetism and Magnetic Materials, 2007, 316, e798-e801.	2.3	8
78	Tuning morphology and magnetism of magnetite nanoparticles by calix[8]arene-induced oriented aggregation. CrystEngComm, 2016, 18, 8591-8598.	2.6	8
79	Colloidal Au/iron oxide nanocrystal heterostructures: magnetic, plasmonic and magnetic hyperthermia properties. Journal of Materials Chemistry C, 2018, 6, 12329-12340.	5.5	8
80	Blocking temperature distribution in implanted Co ²⁺ /Ni nanoparticles obtained by magneto-optical measurements. Journal of Magnetism and Magnetic Materials, 2003, 262, 111-115.	2.3	7
81	Compositional evolution of Pd-based nanoclusters under thermal annealing in ion implanted SiO ₂ . Nuclear Instruments & Methods in Physics Research B, 2004, 218, 433-437.	1.4	7
82	Structure and magnetic properties of Fe ²⁺ /Pd silica composites prepared by sequential ion implantation. Journal of Non-Crystalline Solids, 2004, 345-346, 681-684.	3.1	7
83	Thermally activated demagnetization in Fe-SiO ₂ granular solids. Scripta Metallurgica Et Materialia, 1995, 33, 1709-1716.	1.0	6
84	Magnetic characterization of ion implanted CoNi-SiO ₂ granular film. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 627-630.	2.3	6
85	Grazing-incidence small-angle X-ray scattering and X-ray diffraction from magnetic clusters obtained by Co + Ni sequential ion implantation in silica. Journal of Applied Crystallography, 2003, 36, 732-735.	4.5	6
86	Unraveling the mechanism of the one-pot synthesis of exchange coupled Co-based nano-heterostructures with a high energy product. Nanoscale, 2020, 12, 14076-14086.	5.6	6
87	<title>Gold/titania nanocomposites thin films for optical gas sensing devices</title>. , 2005, , .		5
88	Charge compensation and magnetic properties in Sr and Cu doped La-Fe perovskites. EPJ Web of Conferences, 2013, 40, 15005.	0.3	5
89	Magnetic performance of SrFe ₁₂ O ₁₉ •Zn _{0.2} Fe _{2.8} O ₄ hybrid magnets prepared by spark plasma sintering. Journal Physics D: Applied Physics, 2021, 54, 204002.	2.8	5
90	Phase segregation and interactions in Dy-substituted melt spun Nd-Fe-B alloys. IEEE Transactions on Magnetics, 1995, 31, 3683-3685.	2.1	4

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91	Highly homogeneous nanoparticulate Fe films prepared by laser ablation. IEEE Transactions on Magnetism, 1998, 34, 1108-1110.	2.1	4
92	Magnetic viscosity of granular Fe films prepared by laser ablation. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 96-98.	2.3	4
93	Au@Cu and Pd@Cu nanoclusters obtained by ion implantation in silica: stability under thermal annealing. Journal of Non-Crystalline Solids, 2004, 345-346, 667-670.	3.1	4
94	Exploring the magnetic properties of ferrite nanoparticles for the development of rare-earth-free permanent magnet. , 2015, , .		4
95	Addressing the Influence of Localized Plasmon Resonance on the Magneto-Optical Properties of Cobalt Ferrite Nanoparticles. Journal of Nanoscience and Nanotechnology, 2019, 19, 4946-4953.	0.9	4
96	Magnetic hardening by crystallization of amorphous precursors using very high heating rates. Journal of Applied Physics, 1994, 76, 6840-6842.	2.5	3
97	OBP-functionalized/hybrid superparamagnetic nanoparticles for <i>Candida albicans</i> treatment. RSC Advances, 2021, 11, 11256-11265.	3.6	3
98	Magnetic viscosity in melt spun magnets prepared by crystallization of amorphous precursors using different heating rates. Journal of Magnetism and Magnetic Materials, 1995, 140-144, 1055-1056.	2.3	2
99	Annealing effects on the structural and magnetic properties of Fe@Al silica nanocomposites prepared by sequential ion implantation. Materials Science and Engineering C, 2006, 26, 1151-1155.	7.3	2
100	Tailoring nanostructured surfaces with plasmonic/magnetic multifunctional response. Applied Physics Letters, 2018, 113, 101908.	3.3	2
101	Magneto-Plasmonic Nanoparticles. Springer Series in Materials Science, 2021, , 107-136.	0.6	2
102	Au clustering formation by implantation in silica: optical, magnetic and sensing properties. Radiation Effects and Defects in Solids, 2013, 168, 418-430.	1.2	1
103	Drug Targeting: Active Targeting of Sorafenib: Preparation, Characterization, and In Vitro Testing of Drug-Loaded Magnetic Solid Lipid Nanoparticles (Adv. Healthcare Mater. 11/2015). Advanced Healthcare Materials, 2015, 4, 1734-1734.	7.6	1
104	Magnetic viscosity in Fe-SiO ₂ granular solids. Journal of Magnetism and Magnetic Materials, 1995, 140-144, 375-376.	2.3	0
105	<title>Evolution of the free plasma expansion in jets produced by laser ablation</title>. , 1998, , .		0
106	Metal-Alloy Nanocluster Formation in Silica Glass by Sequential Ion Implantation. Materials Research Society Symposia Proceedings, 2000, 647, 1.	0.1	0
107	The Magnetic Properties of Metal-Alloy Glass Composites Prepared by Ion Implantation. AIP Conference Proceedings, 2003, , .	0.4	0
108	Laser ablation using high repetition rate Cu/HBr laser. Thin Solid Films, 2004, 453-454, 345-349.	1.8	0

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109	Near-field optical characterization of interacting and non-interacting gold nanoparticles embedded in a silica thin film. <i>Optics Communications</i> , 2011, 284, 3118-3123.	2.1	0
110	Optical Sensing to Organic Vapors of Fluorinated Polyimide Nanocomposites containing Silver Nanoclusters. , 2008, , .		0