Csar de Julin Fernndez

List of Publications by Year in Descending Order

107 papers	2,330 citations	27 h-index	43 g-index
118 ext. papers	2,585 ext. citations	5.2 avg, IF	4.59 L-index

#	Paper	IF	Citations
107	High Magnetic Field Magneto-optics on Plasmonic Silica-Embedded Silver Nanoparticles. *Journal of Physical Chemistry C*, **2022**, 126, 1939-1945	3.8	1
106	3d Metal Doping of Core@Shell W□tite@ferrite Nanoparticles as a Promising Route toward Room Temperature Exchange Bias Magnets.. *Small*, **2022**, e2107426	11	1
105	Dense strontium hexaferrite-based permanent magnet composites assisted by cold sintering process. *Journal of Alloys and Compounds*, **2022**, 165531	5.7	0
104	Magneto-Plasmonic Nanoparticles. *Springer Series in Materials Science*, **2021**, 107-136	0.9	2
103	Optimizing the magnetic properties of hard and soft materials for producing exchange spring permanent magnets. *Journal Physics D: Applied Physics*, **2021**, 54, 134003	3	8
102	Dielectric Effects in FeO -Coated Au Nanoparticles Boost the Magnetoplasmonic Response: Implications for Active Plasmonic Devices. *ACS Applied Nano Materials*, **2021**, 4, 1057-1066	5.6	8
101	Magnetic performance of SrFe12O19?n0.2Fe2.8O4 hybrid magnets prepared by spark plasma sintering. *Journal Physics D: Applied Physics*, **2021**, 54, 204002	3	2
100	High magnetic coercive field in Ca-Al-Cr substituted strontium hexaferrite. *Journal of Alloys and Compounds*, **2021**, 883, 160768	5.7	3
99	OBP-functionalized/hybrid superparamagnetic nanoparticles for treatment.. *RSC Advances*, **2021**, 11, 11256-11265	3.7	2
98	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	7.7	3
97	FeCo Nanowire□trontium Ferrite Powder Composites for Permanent Magnets with High-Energy Products. *ACS Applied Nano Materials*, **2020**, 3, 9842-9851	5.6	6
96	Giant magneto-optical response in H+ irradiated Zn1?CoxO thin films. *Journal of Materials Chemistry C*, **2019**, 7, 78-85	7.1	9
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	1.3	3
94	Plasmon-enhanced magneto-optical detection of single-molecule magnets. *Materials Horizons*, **2019**, 6, 1148-1155	14.4	6
93	Role of Zn2+ Substitution on the Magnetic, Hyperthermic, and Relaxometric Properties of Cobalt Ferrite Nanoparticles. *Journal of Physical Chemistry C*, **2019**, 123, 6148-6157	3.8	41
92	Nutlin-loaded magnetic solid lipid nanoparticles for targeted glioblastoma treatment. *Nanomedicine*, **2019**, 14, 727-752	5.6	33
91	Stimuli-responsive lipid-based magnetic nanovectors increase apoptosis in glioblastoma cells through synergic intracellular hyperthermia and chemotherapy. *Nanoscale*, **2018**, 11, 72-88	7.7	48

90	Colloidal Au/iron oxide nanocrystal heterostructures: magnetic, plasmonic and magnetic hyperthermia properties. *Journal of Materials Chemistry C*, **2018**, 6, 12329-12340	7.1	6
89	Tailoring nanostructured surfaces with plasmonic/magnetic multifunctional response. *Applied Physics Letters*, **2018**, 113, 101908	3.4	2
88	Topotaxial Phase Transformation in Cobalt Doped Iron Oxide Core/Shell Hard Magnetic Nanoparticles. *Chemistry of Materials*, **2017**, 29, 1279-1289	9.6	23
87	Functional magneto-plasmonic biosensors transducers: Modelling and nanoscale analysis. *Sensors and Actuators B: Chemical*, **2017**, 239, 100-112	8.5	18
86	Energy Product Enhancement in Imperfectly Exchange-Coupled Nanocomposite Magnets. *Advanced Electronic Materials*, **2016**, 2, 1500365	6.4	37
85	Strongly Exchange Coupled Core|Shell Nanoparticles with High Magnetic Anisotropy: A Strategy toward Rare-Earth-Free Permanent Magnets. *Chemistry of Materials*, **2016**, 28, 4214-4222	9.6	71
84	Tuning morphology and magnetism of magnetite nanoparticles by calix[8]arene-induced oriented aggregation. *CrystEngComm*, **2016**, 18, 8591-8598	3.3	3
83	Lorentz microscopy sheds light on the role of dipolar interactions in magnetic hyperthermia. *Nanoscale*, **2015**, 7, 7717-25	7.7	15
82	Exploring the Magnetic Properties of Cobalt-Ferrite Nanoparticles for the Development of a Rare-Earth-Free Permanent Magnet. *Chemistry of Materials*, **2015**, 27, 4048-4056	9.6	180
81	Active Targeting of Sorafenib: Preparation, Characterization, and In Vitro Testing of Drug-Loaded Magnetic Solid Lipid Nanoparticles. *Advanced Healthcare Materials*, **2015**, 4, 1681-90	10.1	63
80	Exploring the magnetic properties of ferrite nanoparticles for the development of rare-earth-free permanent magnet **2015**,		2
79	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	10.1	
78	Magneto-Optical Probe for Investigation of Multiphase Fe Oxide Nanosystems. *Chemistry of Materials*, **2015**, 27, 466-473	9.6	14
77	Developing functionalized Fe3O4-Au nanoparticles: a physico-chemical insight. *Physical Chemistry Chemical Physics*, **2015**, 17, 6087-97	3.6	21
76	Coprecipitation of Oxalates: An Easy and Reproducible Wet-Chemistry Synthesis Route for Transition-Metal Ferrites. *European Journal of Inorganic Chemistry*, **2014**, 2014, 875-887	2.3	27
75	Electrochemical characterization of core@shell CoFe2O4/Au composite. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	12
74	Circular magnetoplasmonic modes in gold nanoparticles. *Nano Letters*, **2013**, 13, 4785-9	11.5	86
73	Spin-polarization transfer in colloidal magnetic-plasmonic Au/iron oxide hetero-nanocrystals. *ACS Nano*, **2013**, 7, 857-66	16.7	61

72	Supported and iron oxide nanomaterials by chemical vapor deposition: structure, morphology and magnetic properties. *CrystEngComm*, **2013**, 15, 1039-1042	3.3	35
71	Coexistence of plasmonic and magnetic properties in Au89Fe11 nanoalloys. *Nanoscale*, **2013**, 5, 5611-9	7.7	77
70	Au clustering formation by implantation in silica: optical, magnetic and sensing properties. *Radiation Effects and Defects in Solids*, **2013**, 168, 418-430	0.9	1
69	Characterization of free-standing PEDOT:PSS/iron oxide nanoparticle composite thin films and application as conformable humidity sensors. *ACS Applied Materials & Interfaces*, **2013**, 5, 6324-32	9.5	84
68	Charge compensation and magnetic properties in Sr and Cu doped La-Fe perovskites. *EPJ Web of Conferences*, **2013**, 40, 15005	0.3	5
67	Structural and magnetic properties of mesoporous SiO2 nanoparticles impregnated with iron oxide or cobalt-iron oxide nanocrystals. *Journal of Materials Chemistry*, **2012**, 22, 19276		30
66	Crystal structures and magnetic properties of strontium and copper doped lanthanum ferrites. *Journal of Solid State Chemistry*, **2012**, 191, 33-39	3.3	39
65	Exploring the Effect of Co Doping in Fine Maghemite Nanoparticles. *Journal of Physical Chemistry C*, **2012**, 116, 8261-8270	3.8	73
64	Near-field optical characterization of interacting and non-interacting gold nanoparticles embedded in a silica thin film. *Optics Communications*, **2011**, 284, 3118-3123	2	
63	At the frontier between heterogeneous and homogeneous catalysis: hydrogenation of olefins and alkynes with soluble iron nanoparticles. *Dalton Transactions*, **2010**, 39, 8464-71	4.3	81
62	Coupling between magnetic and optical properties of stable Au-Fe solid solution nanoparticles. *Nanotechnology*, **2010**, 21, 165701	3.4	32
61	Photocoercivity of nano-stabilized Au: Fe superparamagnetic nanoparticles. *Advanced Materials*, **2010**, 22, 4054-8	24	31
60	Electronic and magnetic properties of Ni nanoparticles embedded in various organic semiconductor matrices. *Journal of Physical Chemistry B*, **2009**, 113, 4565-70	3.4	20
59	X-ray magnetic circular dichroism and small angle neutron scattering studies of thiol capped gold nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 6434-8	1.3	21
58	Surface plasmon resonance optical gas sensing of nanostructured ZnO films. *Sensors and Actuators B: Chemical*, **2008**, 130, 531-537	8.5	46
57	Optical gas sensing of TiO2 and TiO2/Au nanocomposite thin films. *Sensors and Actuators B: Chemical*, **2008**, 132, 107-115	8.5	78
56	Magneto-optical studies on the molecular cluster Fe4 in different polymeric environments. *Inorganica Chimica Acta*, **2008**, 361, 3970-3974	2.7	6
55	Nanostructure, composition and magnetic properties in soft and hard CoNi nanoparticles: The effect on the magnetic anisotropy. *Inorganica Chimica Acta*, **2008**, 361, 4138-4142	2.7	13

54	Magnetism in Polymers with Embedded Gold Nanoparticles. *Advanced Materials*, **2007**, 19, 875-877	24	49
53	Thermal evolution of cobalt nanocrystals embedded in silica. *Materials Science and Engineering C*, **2007**, 27, 193-196	8.3	9
52	Surface plasmon resonance study on the optical sensing properties of nanometric polyimide films to volatile organic vapours. *Sensors and Actuators B: Chemical*, **2007**, 120, 712-718	8.5	11
51	Optical response of plasma-deposited zinc phthalocyanine films to volatile organic compounds. *Sensors and Actuators B: Chemical*, **2007**, 127, 150-156	8.5	17
50	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	2.8	8
49	Formation of silver nanoclusters in transparent polyimides by Ag-K ion-exchange process. *European Physical Journal D*, **2007**, 42, 243-251	1.3	11
48	MAGNETIC PROPERTIES OF ORGANIC COATED GOLD SURFACES. *Modern Physics Letters B*, **2007**, 21, 303-319	1.6	11
47	Single-electron transport and magnetic properties of Fe□SiO2 nanocomposites prepared by ion implantation. *Physical Review B*, **2007**, 75,	3.3	21
46	Optical sensing to organic vapors of fluorinated polyimide nanocomposites containing silver nanoclusters. *Sensors and Actuators B: Chemical*, **2006**, 118, 418-424	8.5	12
45	Laser generated plasmas characterized under magnetic field. *Applied Physics Letters*, **2006**, 88, 044102	3.4	13
44	Nanostructural and optical properties of cobalt and nickel□xide/silica nanocomposites. *Materials Science and Engineering C*, **2006**, 26, 987-991	8.3	17
43	Annealing effects on the structural and magnetic properties of Fe□l silica nanocomposites prepared by sequential ion implantation. *Materials Science and Engineering C*, **2006**, 26, 1151-1155	8.3	1
42	Size dependent hcp-to-fcc transition temperature in Co nanoclusters obtained by ion implantation in silica. *Nuclear Instruments & Methods in Physics Research B*, **2006**, 250, 206-209	1.2	13
41	Structure and thermal stability of Au□e alloy nanoclusters formed by sequential ion implantation in silica. *Nuclear Instruments & Methods in Physics Research B*, **2006**, 250, 225-228	1.2	15
40	Dynamics of compositional evolution of Pd-Cu alloy nanoclusters upon heating in selected atmospheres. *Physical Review B*, **2005**, 71,	3.3	25
39	Magnetic properties of Co□u nanoparticles dispersed in silica matrix. *Journal of Magnetism and Magnetic Materials*, **2005**, 290-291, 187-190	2.8	17
38	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	8.5	32
37	Gold/titania nanocomposites thin films for optical gas sensing devices **2005**,		3

36	Influence of the temperature dependence of anisotropy on the magnetic behavior of nanoparticles. *Physical Review B*, **2005**, 72,	3.3	58
35	Laser ablation using high repetition rate Cu/HBr laser. *Thin Solid Films*, **2004**, 453-454, 345-349	2.2	
34	Structural and magnetic properties of Fe?l silica composites prepared by sequential ion implantation. *Nuclear Instruments & Methods in Physics Research B*, **2004**, 216, 245-250	1.2	24
33	Compositional evolution of Pd-based nanoclusters under thermal annealing in ion implanted SiO2. *Nuclear Instruments & Methods in Physics Research B*, **2004**, 218, 433-437	1.2	6
32	Superparamagnetism and coercivity in HCP-Co nanoparticles dispersed in silica matrix. *Journal of Magnetism and Magnetic Materials*, **2004**, 272-276, E1235-E1236	2.8	10
31	Magnetic properties of Co?i alloy nanoparticles prepared by the sol-gel technique. *Journal of Magnetism and Magnetic Materials*, **2004**, 272-276, E1251-E1252	2.8	19
30	Radiofrequency magnetron co-sputtering deposition synthesis of Co-based nanocomposite glasses for optical and magnetic applications. *Applied Surface Science*, **2004**, 226, 62-67	6.7	10
29	Structure and optical properties of Au-polyimide nanocomposite films prepared by ion implantation. *Applied Physics Letters*, **2004**, 85, 5712-5714	3.4	55
28	Structural and physical properties of cobalt nanocluster composite glasses. *Journal of Non-Crystalline Solids*, **2004**, 336, 148-152	3.9	16
27	Structure and magnetic properties of Fe?d silica composites prepared by sequential ion implantation. *Journal of Non-Crystalline Solids*, **2004**, 345-346, 681-684	3.9	5
26	Au?u and Pd?u nanoclusters obtained by ion implantation in silica: stability under thermal annealing. *Journal of Non-Crystalline Solids*, **2004**, 345-346, 667-670	3.9	3
25	Blocking temperature distribution in implanted Co?i nanoparticles obtained by magneto-optical measurements. *Journal of Magnetism and Magnetic Materials*, **2003**, 262, 111-115	2.8	7
24	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	3.8	5
23	Characterization of FeCo?iO2 Nanocomposite Films Prepared by Sol?el Dip Coating. *Chemistry of Materials*, **2003**, 15, 2201-2207	9.6	33
22	Sequential ion implantation of copper and cobalt in silica glass: A study by synchrotron radiation techniques. *Nuclear Instruments & Methods in Physics Research B*, **2002**, 191, 406-410	1.2	12
21	Synthesis of wide band gap nanocrystals by ion implantation. *Nuclear Instruments & Methods in Physics Research B*, **2002**, 191, 447-451	1.2	19
20	Magnetic characterization of ion implanted CoNi-SiO2 granular film. *Journal of Magnetism and Magnetic Materials*, **2002**, 242-245, 627-630	2.8	6
19	Synthesis, Structure, and Magnetic Properties of Co, Ni, and Co?i Alloy Nanocluster-Doped SiO2 Films by Sol?el Processing. *Chemistry of Materials*, **2002**, 14, 3440-3447	9.6	62

18	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	8.3	17
17	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	1.2	25
16	Influence of post-implantation thermal and laser annealing on the stability of metal□lloy nanoclusters in silica. *Nuclear Instruments & Methods in Physics Research B*, **2001**, 175-177, 410-416	1.2	17
15	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	1.2	23
14	Metal-Alloy Nanocluster Formation in Silica Glass by Sequential Ion Implantation. *Materials Research Society Symposia Proceedings*, **2000**, 647, 1		
13	Thin film deposition by magnetic field-assisted pulsed laser assembly. *Applied Surface Science*, **1999**, 138-139, 150-154	6.7	16
12	Magnetic viscosity of granular Fe films prepared by laser ablation. *Journal of Magnetism and Magnetic Materials*, **1999**, 196-197, 96-98	2.8	4
11	Magnetic properties of Ni nanoparticles dispersed in silica prepared by high-energy ball milling. *Europhysics Letters*, **1998**, 42, 91-96	1.6	13
10	Highly homogeneous nanoparticulate Fe films prepared by laser ablation. *IEEE Transactions on Magnetics*, **1998**, 34, 1108-1110	2	3
9	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	2.8	2
8	Magnetic viscosity in Fe?SiO2 granular solids. *Journal of Magnetism and Magnetic Materials*, **1995**, 140-144, 375-376	2.8	
7	Phase segregation and interactions in Dy-substituted melt spun Nd-Fe-B alloys. *IEEE Transactions on Magnetics*, **1995**, 31, 3683-3685	2	4
6	Thermally activated demagnetization in Fe-SiO2 granular solids. *Scripta Metallurgica Et Materialia*, **1995**, 33, 1709-1716		5
5	Magnetic hardening by crystallization of amorphous precursors using very high heating rates. *Journal of Applied Physics*, **1994**, 76, 6840-6842	2.5	2
4	Coercivity of Fe-SiO2 nanocomposite materials prepared by ball milling. *Journal of Applied Physics*, **1994**, 76, 6573-6575	2.5	35
3	Preparation and magnetic properties of monodispersed Zn ferrites of submicrometric size. *Journal of Materials Science*, **1993**, 28, 2962-2966	4.3	13
2	AC loss analysis and domain structure in magnetostrictive amorphous wires. *Journal of Magnetism and Magnetic Materials*, **1992**, 115, 295-306	2.8	14
1	Topical Review: Progress and Prospects of Hard Hexaferrites for Permanent Magnet Applications. *Journal Physics D: Applied Physics*,	3	12