

Tapati Sarkar

List of Publications by Year in descending order

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61
papers

1,664
citations

331670
21
h-index

289244
40
g-index

61
all docs

61
docs citations

61
times ranked

2751
citing authors

#	ARTICLE	IF	CITATIONS
1	Proximity enhanced magnetism at NiFe ₂ O ₄ /Graphene interface. AIP Advances, 2022, 12, .	1.3	3
2	Antiferromagnetic short-range order and cluster spin-glass state in diluted spinel ZnTiCoO ₄ . Journal of Physics Condensed Matter, 2022, , .	1.8	4
3	Towards bi-magnetic nanocomposites as permanent magnets through the optimization of the synthesis and magnetic properties of SrFe ₁₂ O ₁₉ nanocrystallites. Journal Physics D: Applied Physics, 2021, 54, 124004.	2.8	17
4	Tuning the Magnetic Properties of Hardâ€“Soft SrFe ₁₂ O ₁₉ /CoFe ₂ O ₄ Nanostructures via Composition/Interphase Coupling. Journal of Physical Chemistry C, 2021, 125, 5927-5936.	3.1	33
5	Synthesis of BaTiO ₃ -CoFe ₂ O ₄ nanocomposites using a one-pot technique. Inorganica Chimica Acta, 2021, 520, 120313.	2.4	4
6	Combined Bottom-Up and Top-Down Approach for Highly Ordered One-Dimensional Composite Nanostructures for Spin Insultronics. ACS Applied Materials & Interfaces, 2021, 13, 37500-37509.	8.0	6
7	Experimental advances in charge and spin transport in chemical vapor deposited graphene. JPhys Materials, 2021, 4, 042007.	4.2	10
8	Exploring the magnetic properties and magnetic coupling in SrFe ₁₂ O ₁₉ /Co _{1-x} Zn _x Fe ₂ O ₄ nanocomposites. Journal of Magnetism and Magnetic Materials, 2021, 535, 168095.	2.3	11
9	Compositional dependence of the magnetic state of Co _{3-x} Zn _x TeO ₆ solid solutions. Journal of Alloys and Compounds, 2021, 884, 161111.	5.5	2
10	Novel mixed precursor approach to prepare multiferroic nanocomposites with enhanced interfacial coupling. Journal of Magnetism and Magnetic Materials, 2020, 511, 166792.	2.3	19
11	Ultimate Spin Currents in Commercial Chemical Vapor Deposited Graphene. ACS Nano, 2020, 14, 12771-12780.	14.6	33
12	Neutron diffraction evidence for local spin canting, weak Jahnâ€“Teller distortion, and magnetic compensation in Ti _{1-x} Mn _x Co ₂ O ₄ spinel. Journal of Physics Condensed Matter, 2020, 32, 245801.	1.8	8
13	LaFeO ₃ -CoFe ₂ O ₄ bi-magnetic composite thin films prepared using an all-in-one synthesis technique. Journal of Magnetism and Magnetic Materials, 2020, 503, 166622.	2.3	11
14	Symbiotic, low-temperature, and scalable synthesis of bi-magnetic complex oxide nanocomposites. Nanoscale Advances, 2020, 2, 851-859.	4.6	22
15	Antiferromagnetism, spin-glass state, Hâ€“T phase diagram, and inverse magnetocaloric effect in Co ₂ RuO ₄ . Journal of Physics Condensed Matter, 2020, 32, 485806.	1.8	22
16	Interplay of charge density wave and multiband superconductivity in layered quasi-two-dimensional materials: The case of $\text{Co}_{2-x}\text{Ru}_x\text{O}_4$. Journal of Physics Condensed Matter, 2020, 32, 485806.	1.8	22
17	Room temperature ferrimagnetism in Yb-doped relaxor ferroelectric PbFe ₂ /3W ₁ /3O ₃ . Applied Physics Letters, 2019, 115, 072902.	3.3	7
18	Cation ordering, ferrimagnetism and ferroelectric relaxor behavior in Pb(Fe _{1-x} Sc _x) ₂ W _{1-x} O ₃ solid solutions. European Physical Journal B, 2019, 92, 1.	1.5	6

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19	Controlling magnetic coupling in bi-magnetic nanocomposites. <i>Nanoscale</i> , 2019, 11, 14256-14265.	5.6	21
20	Cationic distribution, exchange interactions, and relaxation dynamics in Zn-diluted MnCo ₂ O ₄ nanostructures. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	10
21	Modification of the structure and magnetic properties of ceramic La ₂ CoMnO ₆ with Ru doping. <i>Journal of Alloys and Compounds</i> , 2018, 752, 420-430.	5.5	12
22	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ba</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mathvariant="normal">O</mml:mi><mml:mn>9</mml:mn><mml:msub><mml:mi>O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> hexagonal perovskites in the light of spin-orbit coupling and local structural distortions. <i>Physical Review B</i> , 2018, 97, .	3.2	17
23	Tunable single-phase magnetic behavior in chemically synthesized AFeO ₃ -MFe ₂ O ₄ (A = Bi or La, M = Co or Ni) nanocomposites. <i>Nanoscale</i> , 2018, 10, 22990-23000.	5.6	25
24	Nature of magnetic ordering in nanocomposites of Zn _{1-Ni O} and NiO. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2018, 103, 46-52.	2.7	3
25	Composition dependence of the multifunctional properties of Nd-doped Bi ₄ Ti ₃ O ₁₂ ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 7692-7707.	2.2	27
26	The role of Tb-doping on the structural and functional properties of Bi _{4-x} TbxTi ₃ O ₁₂ ferroelectric phases with the Aurivillius type structure. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 4914-4924.	2.2	4
27	Proposed Bose-Einstein condensation of magnons in nanostructured films of Gd at low temperature and its manifestations in electrical resistivity and magnetoresistance. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 255701.	1.8	1
28	Magnetic phase diagram of Co(Cr _{1-x} Al _x) ₂ O ₄ (x=0.0-1.0). <i>Journal of Applied Physics</i> , 2017, 122, 073908.	1	
29	Perovskite solid solutions La _{0.75} Bi _{0.25} Fe _{1-x} Cr _x O ₃ : Preparation, structural, and magnetic properties. <i>Journal of Solid State Chemistry</i> , 2017, 254, 166-177.	2.9	1
30	Low-temperature anomalous magnetic behavior of Co ₂ TiO ₄ and Co ₂ SnO ₄ . <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	26
31	Pb ₂ MnTeO ₆ Double Perovskite: An Antipolar Anti-ferromagnet. <i>Inorganic Chemistry</i> , 2016, 55, 4320-4329.	4.0	20
32	Thermal evolution of the spin ordering at the concomitant spin-orbital rearrangement temperature in RVO ₃ (R=Lu, Yb and Tm). <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 409, 87-91.	2.3	2
33	Hydrogenation-Induced Structure and Property Changes in the Rare-Earth Metal Gallide NdGa: Evolution of a [GaH] ₂ Polyanion Containing Peierls-like Ga-H Chains. <i>Inorganic Chemistry</i> , 2016, 55, 345-352.	4.0	15
34	Magnetic structure of the magnetocaloric compound AlFe ₂ B ₂ . <i>Journal of Alloys and Compounds</i> , 2016, 664, 784-791.	5.5	54
35	Magnetic compensation, field-dependent magnetization reversal, and complex magnetic ordering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. <i>Physical Review B</i> , 2015, 92, .	4.6	
36	Irreversible structure change of the as prepared FeMnP _{1-x} Six-structure on the initial cooling through the curie temperature. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 374, 455-458.	2.3	13

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37	Phase diagram, structures and magnetism of the FeMnP _{1-x} Si _x -system. RSC Advances, 2015, 5, 8278-8284.	3.6	29
38	Strong Electron Hybridization and Fermi-to-Non-Fermi Liquid Transition in LaCu ₃ Ir ₄ O ₁₂ . Chemistry of Materials, 2015, 27, 211-217.	6.7	16
39	Nanocrystalline Ni ₅ P ₄ : a hydrogen evolution electrocatalyst of exceptional efficiency in both alkaline and acidic media. Energy and Environmental Science, 2015, 8, 1027-1034.	30.8	435
40	On the nature of magnetic state in the spinel Co ₂ SnO ₄ . Journal of Physics Condensed Matter, 2015, 27, 166001.	1.8	31
41	Successive phase transitions in the orthovanadate TmVO ₃ . Journal Physics D: Applied Physics, 2015, 48, 345003.	2.8	4
42	Hole Doping and Structural Transformation in CsTl _{1-x} Hg _x Cl ₃ . Inorganic Chemistry, 2015, 54, 1066-1075.	4.0	10
43	Strain heterogeneity and magnetoelastic behaviour of nanocrystalline half-doped La, Ca manganite, La _{0.5} Ca _{0.5} MnO ₃ . Journal of Physics Condensed Matter, 2014, 26, 435303.	1.8	4
44	Designing Polar and Magnetic Oxides: Zn ₂ FeTaO ₆ - in Search of Multiferroics. Journal of the American Chemical Society, 2014, 136, 8508-8511.	13.7	68
45	Lifting the geometric frustration through a monoclinic distortion in YBaFe ₄ O _{7.0} : Magnetism and transport. Journal of Solid State Chemistry, 2013, 205, 225-235.	2.9	8
46	Spectacular switching from ferrimagnetism to antiferromagnetism by zinc doping in YBaFe ₄ O ₇ . Applied Physics Letters, 2012, 100, .	3.3	25
47	Substitution effect of manganese for iron in YBaFe ₄ O ₇ ferrite: structure, magnetism and oxygen hyperstoichiometry. Journal of Materials Chemistry, 2012, 22, 18923.	6.7	6
48	Gallium substituted YBaFe ₄ O ₇ : from a ferrimagnetic cluster glass to a cationic disordered spin glass. Journal of Materials Chemistry, 2012, 22, 4728.	6.7	4
49	Magnetism of the YBaCo ₄ O ₇ doped with Zn or Ga: a spectacular valency effect. Journal of Materials Chemistry, 2012, 22, 18043.	6.7	27
50	XAFS investigation of the role of orientational disorder in the stabilization of the ferromagnetic metallic phase in nanoparticles of La _{0.5} Ca _{0.5} MnO ₃ . Journal of Physics Condensed Matter, 2012, 24, 336001.	1.8	10
51	Electrical transport properties of nanostructured ferromagnetic perovskite oxides La _{0.67} Ca _{0.33} MnO ₃ and La _{0.5} Sr _{0.5} CoO ₃ at low temperatures (5 K \leq T \leq 0.3 K) and high magnetic field. New Journal of Physics, 2012, 14, 023026.	2.9	19
52	Oxygen hyperstoichiometric hexagonal ferrite CaBaFe ₄ O _{7.5} . Journal of Physics Condensed Matter, 2012, 24, 336001.	3.2	17
53	Oxygen excess in the YBaFe ₄ O ₇ cobaltite hexagonal structure: The ferrimagnet CaBaCo ₄ O _{7.5} . Journal of Solid State Chemistry, 2011, 184, 2588-2594.	2.9	18
54	Competition between Ferrimagnetism and Magnetic Frustration in Zinc Substituted YBaFe ₄ O ₇ . Chemistry of Materials, 2010, 22, 2885-2891.	6.7	29

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55	Hysteretic "Magnetic" Transport Structural Transition in $\text{La}_{114}\text{Cobaltites}$: Size Mismatch Effect. Chemistry of Materials, 2010, 22, 6467-6473.	6.7	22
56	Effect of size reduction on the ferromagnetism of the manganite $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ ($x=0.33$). New Journal of Physics, 2010, 12, 123026.	2.9	90
57	Transport Properties of Nanoparticles of Complex Oxides: Likely Presence of Coulomb Blockade at Low Temperature. Journal of Nanoscience and Nanotechnology, 2009, 9, 5315-5322.	0.9	1
58	Crystal structure and physical properties of half-doped manganite nanocrystals of less than 100-nm size. Physical Review B, 2008, 77, .	3.2	135
59	Size induced arrest of the room temperature crystallographic structure in nanoparticles of $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. Applied Physics Letters, 2008, 92, 123104.	3.3	49
60	Effect of Size Reduction on Charge Ordering in $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. Journal of Nanoscience and Nanotechnology, 2007, 7, 2020-2024.	0.9	6
61	Structural, magnetic, and transport properties of nanoparticles of the manganite $\text{Pr}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. Journal of Applied Physics, 2007, 101, 124307.	2.5	49