

Tapati Sarkar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9457379/publications.pdf>

Version: 2024-02-01

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	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
2	Crystal structure and physical properties of half-doped manganite nanocrystals of less than 100-nm size. Physical Review B, 2008, 77, .	3.2	135
3	Effect of size reduction on the ferromagnetism of the manganite La ^{1-x} Ca ^x MnO ₃ (x=0.33). New Journal of Physics, 2010, 12, 123026.	2.9	90
4	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
5	Magnetic structure of the magnetocaloric compound AlFe ₂ B ₂ . Journal of Alloys and Compounds, 2016, 664, 784-791.	5.5	54
6	Structural, magnetic, and transport properties of nanoparticles of the manganite Pr _{0.5} Ca _{0.5} MnO ₃ . Journal of Applied Physics, 2007, 101, 124307.	2.5	49
7	Size induced arrest of the room temperature crystallographic structure in nanoparticles of La _{0.5} Ca _{0.5} MnO ₃ . Applied Physics Letters, 2008, 92, 123104.	3.3	49
8	Magnetic compensation, field-dependent magnetization reversal, and complex magnetic ordering in $\text{Co}_{1-x}\text{Mn}_x\text{Zr}_2\text{S}_6$ materials: The case of $\text{Co}_2\text{Zr}_2\text{S}_6$. Physical Review B, 2015, 92, .	3.2	46
9	Competition between ferrimagnetism and magnetic frustration in zinc substituted YBaFe ₄ O ₇ . Chemistry of Materials, 2010, 22, 2885-2891.	6.7	29
10	Ultimate Spin Currents in Commercial Chemical Vapor Deposited Graphene. ACS Nano, 2020, 14, 12771-12780.	14.6	33
11	Tuning the Magnetic Properties of Hard-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
12	On the nature of magnetic state in the spinel Co ₂ SnO ₄ . Journal of Physics Condensed Matter, 2015, 27, 166001.	1.8	31
13	Phase diagram, structures and magnetism of the FeMnP _{1-x} Si _x -system. RSC Advances, 2015, 5, 8278-8284.	3.6	29
14	Magnetism of the orthorhombic charge ordered CaBaCo ₄ O ₇ doped with Zn or Ga: a spectacular valency effect. Journal of Materials Chemistry, 2012, 22, 18043.	6.7	27
15	Composition dependence of the multifunctional properties of Nd-doped Bi ₄ Ti ₃ O ₁₂ ceramics. Journal of Materials Science: Materials in Electronics, 2017, 28, 7692-7707.	2.2	27
16	Low-temperature anomalous magnetic behavior of Co ₂ TiO ₄ and Co ₂ SnO ₄ . Journal of Applied Physics, 2016, 120, .	2.5	26
17	Spectacular switching from ferrimagnetism to antiferromagnetism by zinc doping in orthorhombic CaBaCo ₄ O ₇ . Applied Physics Letters, 2012, 100, .	3.3	25

#	ARTICLE	IF	CITATIONS
19	Tunable single-phase magnetic behavior in chemically synthesized $\text{AFeO}_3 \cdot \text{MFe}_2\text{O}_4$ (A = Bi or La, M = Co or Ni) nanocomposites. <i>Nanoscale</i> , 2018, 10, 22990-23000.	5.6	25
20	Hysteretic Magnetic Transport Structural Transition in $\text{Ca}_{1-x}\text{La}_x\text{CoAl}_2$ Cobaltites: Size Mismatch Effect. <i>Chemistry of Materials</i> , 2010, 22, 6467-6473.	6.7	22
21	Symbiotic, low-temperature, and scalable synthesis of bi-magnetic complex oxide nanocomposites. <i>Nanoscale Advances</i> , 2020, 2, 851-859.	4.6	22
22	Antiferromagnetism, spin-glass state, H-T phase diagram, and inverse magnetocaloric effect in Co_2RuO_4 . <i>Journal of Physics Condensed Matter</i> , 2020, 32, 485806.	1.8	22
23	Controlling magnetic coupling in bi-magnetic nanocomposites. <i>Nanoscale</i> , 2019, 11, 14256-14265.	5.6	21
24	$\text{Pb}_2\text{MnTeO}_6$ Double Perovskite: An Antipolar Anti-ferromagnet. <i>Inorganic Chemistry</i> , 2016, 55, 4320-4329.	4.0	20
25	Electrical transport properties of nanostructured ferromagnetic perovskite oxides $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ and $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$ at low temperatures ($5 \text{ K} < T < 0.3 \text{ K}$) and high magnetic field. <i>New Journal of Physics</i> , 2012, 14, 033026.	2.9	19
26	Novel mixed precursor approach to prepare multiferroic nanocomposites with enhanced interfacial coupling. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 511, 166792.	2.3	19
27	Oxygen excess in the $\text{CaBaCo}_4\text{O}_{7.50}$ cobaltite hexagonal structure: The ferrimagnetic $\text{CaBaCo}_4\text{O}_{7.50}$. <i>Journal of Solid State Chemistry</i> , 2011, 184, 2588-2594.	2.9	18
28	Oxygen hyperstoichiometric hexagonal ferrite $\text{CaBaFe}_4\text{O}_9$. http://www.w3.org/1998/Math/MathML $\text{CaBaFe}_4\text{O}_9$	3.2	17
29	Hexagonal perovskites in the light of spin-orbit coupling and local structural distortions. <i>Physical Review B</i> , 2018, 97, ...	3.2	17
30	Towards bi-magnetic nanocomposites as permanent magnets through the optimization of the synthesis and magnetic properties of $\text{SrFe}_{12}\text{O}_{19}$ nanocrystallites. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 124004.	2.8	17
31	Strong Electron Hybridization and Fermi-to-Non-Fermi Liquid Transition in $\text{LaCu}_3\text{Ir}_4\text{O}_{12}$. <i>Chemistry of Materials</i> , 2015, 27, 211-217.	6.7	16
32	Hydrogenation-Induced Structure and Property Changes in the Rare-Earth Metal Gallide NdGa_2 : Evolution of a $[\text{GaH}]^{2-}$ Polyanion Containing Peierls-like Ga-H Chains. <i>Inorganic Chemistry</i> , 2016, 55, 345-352.	4.0	15
33	Irreversible structure change of the as prepared FeMnP_1S_6 structure on the initial cooling through the curie temperature. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 374, 455-458.	2.3	13
34	Modification of the structure and magnetic properties of ceramic $\text{La}_2\text{CoMnO}_6$ with Ru doping. <i>Journal of Alloys and Compounds</i> , 2018, 752, 420-430.	5.5	12
35	$\text{LaFeO}_3\text{-CoFe}_2\text{O}_4$ bi-magnetic composite thin films prepared using an all-in-one synthesis technique. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 503, 166622.	2.3	11
36	Exploring the magnetic properties and magnetic coupling in $\text{SrFe}_{12}\text{O}_{19}/\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ nanocomposites. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 535, 168095.	2.3	11

#	ARTICLE	IF	CITATIONS
37	XAFS investigation of the role of orientational disorder in the stabilization of the ferromagnetic metallic phase in nanoparticles of $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 336001.	1.8	10
38	Hole Doping and Structural Transformation in CsTlHgCl_3 . <i>Inorganic Chemistry</i> , 2015, 54, 1066-1075.	4.0	10
39	Cationic distribution, exchange interactions, and relaxation dynamics in Zn-diluted MnCo_2O_4 nanostructures. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	10
40	Experimental advances in charge and spin transport in chemical vapor deposited graphene. <i>JPhys Materials</i> , 2021, 4, 042007.	4.2	10
41	Lifting the geometric frustration through a monoclinic distortion in $\text{Ca}_{114}\text{YBaFe}_4\text{O}_7$: Magnetism and transport. <i>Journal of Solid State Chemistry</i> , 2013, 205, 225-235.	2.9	8
42	Neutron diffraction evidence for local spin canting, weak Jahn-Teller distortion, and magnetic compensation in $\text{TiMnCo}_2\text{O}_4$ spinel. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 245801.	1.8	8
43	Room temperature ferrimagnetism in Yb-doped relaxor ferroelectric $\text{PbFe}_{2/3}\text{W}_{1/3}\text{O}_3$. <i>Applied Physics Letters</i> , 2019, 115, 072902.	3.3	7
44	Effect of Size Reduction on Charge Ordering in $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 2020-2024.	0.9	6
45	Substitution effect of manganese for iron in $\text{Ca}_{114}\text{YBaFe}_4\text{O}_7$ ferrite: structure, magnetism and oxygen hyperstoichiometry. <i>Journal of Materials Chemistry</i> , 2012, 22, 18923.	6.7	6
46	Cation ordering, ferrimagnetism and ferroelectric relaxor behavior in $\text{Pb}(\text{Fe}_{1-x}\text{Sc}_x)_2\text{W}_3\text{O}_3$ solid solutions. <i>European Physical Journal B</i> , 2019, 92, 1.	1.5	6
47	Combined Bottom-Up and Top-Down Approach for Highly Ordered One-Dimensional Composite Nanostructures for Spin Insulatronics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37500-37509.	8.0	6
48	Gallium substituted $\text{Ca}_{114}\text{YBaFe}_4\text{O}_7$: from a ferrimagnetic cluster glass to a cationic disordered spin glass. <i>Journal of Materials Chemistry</i> , 2012, 22, 4728.	6.7	4
49	Strain heterogeneity and magnetoelastic behaviour of nanocrystalline half-doped La, Ca manganite, $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 435303.	1.8	4
50	Successive phase transitions in the orthovanadate TmVO_3 . <i>Journal Physics D: Applied Physics</i> , 2015, 48, 345003.	2.8	4
51	The role of Tb-doping on the structural and functional properties of $\text{Bi}_{1-x}\text{Tb}_x\text{Ti}_3\text{O}_{12}$ ferroelectric phases with the Aurivillius type structure. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 4914-4924.	2.2	4
52	Synthesis of $\text{BaTiO}_3\text{-CoFe}_2\text{O}_4$ nanocomposites using a one-pot technique. <i>Inorganica Chimica Acta</i> , 2021, 520, 120313.	2.4	4
53	Antiferromagnetic short-range order and cluster spin-glass state in diluted spinel ZnTiCo_4 . <i>Journal of Physics Condensed Matter</i> , 2022, .	1.8	4
54	Nature of magnetic ordering in nanocomposites of $\text{Zn}_{1-x}\text{Ni}_x\text{O}$ and NiO . <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2018, 103, 46-52.	2.7	3

#	ARTICLE	IF	CITATIONS
55	Proximity enhanced magnetism at NiFe ₂ O ₄ /Graphene interface. AIP Advances, 2022, 12, .	1.3	3
56	Thermal evolution of the spin ordering at the concomitant spin-orbital rearrangement temperature in RVO ₃ (R=Lu, Yb and Tm). Journal of Magnetism and Magnetic Materials, 2016, 409, 87-91.	2.3	2
57	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
58	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
59	Proposed Bose-Einstein condensation of magnons in nanostructured films of Gd at low temperature and its manifestations in electrical resistivity and magnetoresistance. Journal of Physics Condensed Matter, 2017, 29, 255701.	1.8	1
60	Magnetic phase diagram of Co(Cr _{1-x} Al _x) ₂ O ₄ (x=0.0-1.0). Journal of Applied Physics, 2017, 122, 073908.	2.0	1
61	Perovskite solid solutions La _{0.75} Bi _{0.25} Fe _{1-x} Cr _x O ₃ : Preparation, structural, and magnetic properties. Journal of Solid State Chemistry, 2017, 254, 166-177.	2.9	1