

# Rabindra Nath Bhowmik

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

1,116  
citations

331670

21  
h-index

414414

32  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1185  
citing authors

#	ARTICLE	IF	CITATIONS
1	Study of the modified magnetic, dielectric, ferroelectric and optical properties in Ni substituted $GdFe_{1-x}Ni_xO_3$ orthoferrites. <i>Nanotechnology</i> , 2022, 33, 035705.	2.6	0
2	Compositional dependence of structural, magnetic and spin-phonon coupling properties in $Fe_{2-x}Ga_xO_3$ ( $x=0.6\pm 1.2$ ) system with orthorhombic symmetry. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164164.	5.5	5
3	Structural phase stabilization via Ba site doping with bivalent Sr, Ca and Zn ions and Fe site doping with trivalent Cr and Ga ions in the $BaFe_{12}O_{19}$ hexaferrite and its magnetic modification. <i>CrystEngComm</i> , 2022, 24, 5269-5288.	2.6	10
4	Existence of two spin dynamics in the temperature and magnetic field dependence of the magnetization curves of ferrimagnetic $Co_{1.75}Fe_{1.25}O_4$ and its composite with $BaTiO_3$ . <i>Journal of Physics and Chemistry of Solids</i> , 2021, 155, 110103.	4.0	2
5	<a href="https://doi.org/10.1039/c1cp21007a">https://doi.org/10.1039/c1cp21007a</a> structured <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Pb</mml:mi><mml:mn>6</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Co</mml:mi><mml:mn>9</mml:mn></mml:msub><mml:mo>(</mml:mo><mml:msub><mml:mi>Tj</mml:mi>E</mml:mi>T</mml:mi>Q</mml:mi>q</mml:mi>1</mml:mi>1</mml:mi>0</mml:mi>7</mml:mi></mml:math>	3.2	1
6	Experimental study of multiple magnetic transitions in micrometer and nano-grain sized $Ni_3TeO_6$ -type oxide. <i>Journal of Applied Physics</i> , 2020, 128, 123902.	2.5	5
7	Effect of heat treatment on structural and magnetic properties of $\hat{I}\pm\text{-Fe}_{1.8}\text{Ga}_{0.2}\text{O}_3$ thin film. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	0
8	Tuning of structural phase, magnetic spin order and electrical conductivity in mechanical alloyed material of $\hat{I}\pm\text{-Fe}_2\text{O}_3$ and $\hat{I}\pm\text{-Cr}_2\text{O}_3$ oxides. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 514, 167173.	2.3	8
9	High-Temperature Thermal Cycling Effect on the Irreversible Responses of Lattice Structure, Magnetic Properties, and Electrical Conductivity in $Co_{2.75}Fe_{0.25}O_{4+\hat{I}}$ Spinel Oxide. <i>Inorganic Chemistry</i> , 2020, 59, 6763-6773.	4.0	11
10	Non-equilibrium magnetic properties in bimorphic phases of $ErR_3$ . <i>Journal Physics D: Applied Physics</i> , 2020, 53, 365304.	2.8	5
11	Physical properties of $R_3R_3$ ( $R = Gd, Tb, Ho$ ) compounds with coexisting polymorphic phases. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16923-16936.	2.8	13
12	Lattice and magnetic structure in $Co_{1.25}Fe_{1.75}O_4$ spinel ferrite using temperature dependent neutron diffraction. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
13	Influence of Particle Size on the Electrical Properties and Magnetic Field Dependent $\hat{I}\pm V$ Characteristics of Nanocrystalline $ZnFe_2O_4$ . <i>Transactions of the Indian Ceramic Society</i> , 2019, 78, 111-120.	1.0	5
14	Structural, magnetic and magneto-electric properties of Cr doped $\hat{I}\pm\text{-Fe}_2\text{O}_3$ . <i>AIP Conference Proceedings</i> , 2019, , .	0.4	2
15	Flexible and self-standing nickel ferrite/PVDF-TrFE cast films: promising candidates for high-end magnetoelectric applications. <i>Dalton Transactions</i> , 2019, 48, 16961-16973.	3.3	45
16	Meta-stable magnetic transitions and its field dependence in $Co_{2.75}Fe_{0.25}O_4$ ferrite. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
17	Dopamine functionalization of $BaTiO_3$ : an effective strategy for the enhancement of electrical, magnetoelectric and thermal properties of $BaTiO_3$ -PVDF-TrFE nanocomposites. <i>Dalton Transactions</i> , 2018, 47, 2039-2051.	3.3	74
18	Non-equilibrium character of resistive switching and negative differential resistance in Ga-doped $Cr_2O_3$ system. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 457, 17-29.	2.3	17

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19	Unusual bidirectional frequency dependence of dynamical susceptibility in hexagonal intermetallic Pr <sub>2</sub> Ni <sub>0.95</sub> Si <sub>2.95</sub> . Scientific Reports, 2018, 8, 14870.	3.3	26
20	Magnetic field controlled electronic state and electric field controlled magnetic state in $\hat{\text{I}}\pm\text{-Fe}_{1.6}\text{Ga}_{0.4}\text{O}_3$ oxide. AIP Conference Proceedings, 2018, , .	0.4	0
21	Electric field controlled magnetic exchange bias and magnetic state switching at room temperature in Ga-doped $\hat{\text{I}}\pm\text{-Fe}_2\text{O}_3$ oxide. Journal of Magnetism and Magnetic Materials, 2018, 462, 105-118.	2.3	21
22	Effect of annealing temperatures on the electrical conductivity and dielectric properties of Ni <sub>1.5</sub> Fe <sub>1.5</sub> O <sub>4</sub> spinel ferrite prepared by chemical reaction at different pH values. Materials Research Express, 2017, 4, 126105.	1.6	17
23	Structure, magnetic and electronic properties in Ga doped $\hat{\text{I}}\pm\text{-Cr}_2\text{O}_3$ oxide. AIP Conference Proceedings, 2017, , .	0.4	0
24	Semiconductor to metallic type transition in Ni <sub>1.5</sub> Fe <sub>1.5</sub> O <sub>4</sub> ferrite. AIP Conference Proceedings, 2016, , .	0.4	1
25	Study of magnetic field induced spin order in diluted antiferromagnetic states in a Ga doped $\hat{\text{I}}\pm\text{-Fe}_2\text{O}_3$ system prepared by a chemical route and air annealing. RSC Advances, 2016, 6, 112960-112970.	3.6	10
26	Role of pH value during material synthesis and grain-grain boundary contribution on the observed semiconductor to metal like conductivity transition in Ni <sub>1.5</sub> Fe <sub>1.5</sub> O <sub>4</sub> spinel ferrite. Materials Chemistry and Physics, 2016, 177, 417-428.	4.0	24
27	Tuning of composite cubic spinel structure in Co <sub>1.75</sub> Fe <sub>1.25</sub> O <sub>4</sub> spinel oxide by thermal treatment and its effects on modifying the ferrimagnetic properties. Journal of Alloys and Compounds, 2016, 680, 315-327.	5.5	23
28	Dielectric properties of $\hat{\text{I}}\pm\text{-Fe}_{1.6}\text{Ga}_{0.4}\text{O}_3$ oxide: A promising magneto-electric material. Journal of Alloys and Compounds, 2016, 680, 31-42.	5.5	37
29	Study of current-voltage characteristics of ferromagnetic $\hat{\text{I}}\pm\text{-Fe}_{1.64}\text{Ga}_{0.36}\text{O}_3$ oxide under magnetic fields. AIP Conference Proceedings, 2015, , .	0.4	1
30	Structure and magnetic properties of the composite of Co <sub>1.75</sub> Fe <sub>1.25</sub> O <sub>4</sub> and BaTiO <sub>3</sub> . AIP Conference Proceedings, 2015, , .	0.4	1
31	Effect of structural phase transformation in FeGaO <sub>3</sub> on its magnetic and ferroelectric properties. AIP Conference Proceedings, 2015, , .	0.4	1
32	Ga doped hematite ( $\hat{\text{I}}\pm\text{-Fe}_2\text{O}_3$ ): A promising magnetic sensor material. , 2015, , .		0
33	Air annealing effects on lattice structure, charge state distribution of cations, and room temperature ferrimagnetism in the ferrite composition Co <sub>2.25</sub> Fe <sub>0.75</sub> O <sub>4</sub> . Materials Research Express, 2015, 2, 036101.	1.6	24
34	Magnetic and electrical properties of Ti-substituted lanthanum bismuth manganites. Journal of Materials Science, 2015, 50, 3562-3575.	3.7	30
35	Structural phase change in Co <sub>2.25</sub> Fe <sub>0.75</sub> O <sub>4</sub> spinel oxide by vacuum annealing and role of coexisting CoO phase on magnetic properties. Journal of Alloys and Compounds, 2015, 646, 161-169.	5.5	30
36	Structural characterization and ferromagnetic properties in Ga <sup>3+</sup> -doped $\hat{\text{I}}\pm\text{-Fe}_2\text{O}_3$ system prepared by coprecipitation route and vacuum annealing. Journal of Applied Physics, 2014, 116, .	2.5	32

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37	Dielectric properties and signature of multi-ferroelectricity in Co <sub>2</sub> FeO <sub>4</sub> : A structurally single phased and bi-phased spinel oxide. Journal of Alloys and Compounds, 2014, 589, 247-257.	5.5	19
38	Study of microstructure and semiconductor to metallic conductivity transition in solid state sintered Li <sub>0.5</sub> Mn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> spinel ferrite. Journal of Applied Physics, 2013, 114, .	2.5	29
39	Grain size dependent magnetization, electrical resistivity and magnetoresistance in mechanically milled La <sub>0.67</sub> Sr <sub>0.33</sub> MnO <sub>3</sub> . Journal of Alloys and Compounds, 2012, 511, 22-30.	5.5	40
40	Dielectric and magnetic study of BaTi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>3</sub> ceramics, synthesized by solid state sintering, mechanical alloying and chemical routes. Ceramics International, 2012, 38, 5069-5080.	4.8	27
41	Structural, magnetic and electrical study of nano-structured $\hat{\pm}$ -Fe <sub>1.4</sub> Ti <sub>0.6</sub> O <sub>3</sub> . Journal of Physics and Chemistry of Solids, 2012, 73, 330-337.	4.0	7
42	Study of surface magnetism, exchange bias effect, and enhanced ferromagnetism in $\hat{\pm}$ -Fe <sub>1.4</sub> Ti <sub>0.6</sub> O <sub>3</sub> alloy. Journal of Applied Physics, 2011, 109, .	2.5	20
43	La Doped Disorder in La <sub>[sub x]</sub> Ca <sub>[sub 2<math>\hat{\sim}</math>x]</sub> FeMoO <sub>[sub 6]</sub> Ferrimagnet: Magnetic and Thermoelectric Study. , 2011, , .		0
44	Grain size dependent magneto-transport in La <sub>0.67</sub> Sr <sub>0.33</sub> MnO <sub>3</sub> . , 2011, , .		0
45	Structural and electrical conductivity study of mechanical alloyed $\hat{\pm}$ -Fe <sub>[sub 1.4]</sub> Ti <sub>[sub 0.6]</sub> O <sub>[sub 3]</sub> oxide. , 2011, , .		1
46	Disorder induced magnetism and electrical conduction in La doped Ca <sub>2</sub> FeMoO <sub>6</sub> double perovskite. Journal of Applied Physics, 2010, 108, 103908.	2.5	12
47	Connectivity between electrical conduction and thermally activated grain size evolution in Ho-doped CoFe <sub>2</sub> O <sub>4</sub> ferrite. Journal Physics D: Applied Physics, 2010, 43, 465002.	2.8	19
48	Study of disorder effects in La substituted Ca <sub>2</sub> FeMoO <sub>6</sub> ferrimagnet using magnetic and transport measurements. Journal of Alloys and Compounds, 2009, 486, 536-542.	5.5	11
49	Evidence of disorder induced magnetic spin glass phase in Sr <sub>2</sub> FeMoO <sub>6</sub> double perovskite. Journal of Applied Physics, 2009, 106, .	2.5	41
50	Magnetism of crystalline and amorphous La <sub>0.67</sub> Ca <sub>0.33</sub> MnO <sub>3</sub> nanoparticles. Journal of Applied Physics, 2009, 105, .	2.5	43
51	Structural And Magnetic Transition In Mechanically Milled La <sub>[sub 0.67]</sub> Ca <sub>[sub 0.33]</sub> MnO <sub>[sub 3]</sub> . AIP Conference Proceedings, 2008, , .	0.4	1
52	Magnetic order and electrical conductivity scaling of the spinel oxide Mn <sub>0.5</sub> Ru <sub>0.5</sub> Co <sub>2</sub> O <sub>4</sub> . Physical Review B, 2006, 74, .	3.2	44
53	Lattice expansion and noncollinear to collinear ferrimagnetic order in aMnCr <sub>2</sub> O <sub>4</sub> nanoparticle. Physical Review B, 2006, 73, .	3.2	68
54	Role of strain-induced anisotropy on magnetic enhancement in mechanically alloyedCo <sub>0.2</sub> Zn <sub>0.8</sub> Fe <sub>2</sub> O <sub>4</sub> nanoparticle. Physical Review B, 2005, 72, .	3.2	50

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55	Magnetic enhancement in antiferromagnetic nanoparticle of $\text{CoRh}_2\text{O}_4$ . Physical Review B, 2004, 69, .	3.2	105
56	Magnetic enhancement of $\text{Co}_{0.2}\text{Zn}_{0.8}\text{Fe}_2\text{O}_4$ spinel oxide by mechanical milling. Physical Review B, 2003, 68, .	3.2	40
57	Re-entrant spin glass and magnetoresistance in $\text{Co}_{0.2}\text{Zn}_{0.8}\text{Fe}_{1.6}\text{Ti}_{0.4}\text{O}_4$ spinel oxide. Journal of Applied Physics, 2003, 93, 2780-2788.	2.5	14
58	Structural and magnetic properties of room temperature milled $\text{Co}_{0.2}\text{Zn}_{0.8}\text{Fe}_2\text{O}_4$ spinel oxide. Journal of Materials Science, 2002, 37, 4391-4398.	3.7	7
59	Enhanced magnetoresistance on substitution of Mn in $\text{SrRuO}_3$ . Journal of Physics Condensed Matter, 2001, 13, 9481-9488.	1.8	8
60	Size dependent magnetic phase of nanocrystalline $\text{Co}_{0.2}\text{Zn}_{0.8}\text{Fe}_2\text{O}_4$ . Journal of Applied Physics, 2001, 90, 4138-4142.	2.5	27