

Dr. Arindam Midya, Ph.D.



❖ Personal Details

Sex- Male
Nationality: Indian

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Contact Details:

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❖ **Current Position:Assistant Professor, Department of Physics, City College, (Under Calcutta University).**

❖ **Membership details:**

❖ **Member of Editorial Board:**

❖ **Educational qualifications:**

Course	University
B.Sc. (Physics Hons.)2005	The University of Burdwan
M.Sc. in Physics 2007	Indian Institute of Technology, Kharagpur
Ph.D. Physics, 2015	Saha Institute of Nuclear Physics
Post Doc., Singapore, 2015-2018	National University of Singapore

❖ **Technical workshop & Academic Training:**

1. Special Winter School Organized by Human Resource Development Centre, Mizoram University, 09th - 22nd February, 2021
2. 30th Orientation Course (Online) Organized by Human Resource Development Centre, Mizoram University, 09th - 22nd February, 2021
3. 4-Week Induction/Orientation Programme for "Faculty inUniversities/Colleges/Institutesof Higher Education, Ramanujan College (under MHRD), 2020
4. International Conference on Materials for Advanced Technologies (ICMAT – 2017), 18-23 June 2017, Suntec Singapore
5. International conference on Magnetic Materials and Applications (MagMA-2013), IIT-Guwahati, 5-7 Dec 2013.
6. International Conference on Frontiers of Condensed Matter Physics, ICTP Trieste - Italy, 11-15 Nov 2013.
7. International Conference on Strongly Correlated Electron Systems SCES2013, University of Tokyo, Japan, 5-9 Aug 2013.
8. International School on Functional Materials: School: March 28-April 01, 2011
Conference: April 02-03, HRI Allahabad.
9. The International Conference on Magnetic Materials, SINP Kolkata 25-29 Oct 2010

❖ Previous working experience:

NA

❖ Area of expertise and Research Interest:

Magnetism in Oxides, Thermoelectric properties, Experimental condensed matter Physics

❖ Research Projects:

a) Completed:

b) Ongoing Project:

❖ Publication:

1. Investigation of large dielectric permittivity and relaxation behavior of DyMnO₃ single crystal M Patra, A Midya, P Mandal *Solid State Commun.* 353 114845 (2022)
2. Effect of Co and Mg doping at Cu site on structural, magnetic and dielectric properties of α -Cu₂V₂O₇, AbjaKeshar Kar, Bidisa Chattopadhyay, Ratnadwip Singha, Abhisikta Barman, Md A Ahmed, A Midya, S Bandyopadhyay, Devajyoti Mukherjee, D Jana, Prabhat Mandal *J. Phys.: Condens. Matter* 34 075702 (2022)
3. Magnetic and magnetocaloric properties of layered van der Waals CrCl₃ S Mondal, A Midya, MM Patidar, V Ganesan, P Mandal *Applied Physics Letters* 117, 092405 (2020)
4. Magnetic properties of the one-dimensional S=3/2 Heisenberg antiferromagnetic spin-chain compound Na₂Mn₃O₇ Chandragiri Venkatesh, Bilwadal Bandyopadhyay, A. Midya, Krishnan Mahalingam, V. Ganesan, and Prabhat Mandal *Phys. Rev. B* 101, 184429 (2020)
5. Origin of quasilocal plasmons in Nb-substituted EuTiO₃ A. Chaudhuri, A. Midya, K. Rubi, X. Chi, T. C. Asmara, X. J. Yu, R. Mahendiran, and A. Ruydy *Phys. Rev. B* 100, 085145 (2019)
6. Magnetoresistance and thermoelectric transport in EuTi_{1-x}Nb_xO₃ A Midya, K Rubi, A Chaudhuri, A Ruydy, R Mahendiran *Solid State Communications* 293, 33-39 (2019)
7. Enhanced Magnetocaloric Effect Driven by Hydrostatic Pressure in Na-Doped LaMnO₃ R Das, A Midya, M Kumari, A Chaudhuri, X Yu, A Ruydy, R Mahendiran *The Journal of Physical Chemistry C* 123 (6), 3750-3757 (2019)
8. Colossal magnetoresistance in low-doped EuTi_{1-x}Nb_xO₃ ($x = 0.003$ and 0.005) A Midya, K Rubi, R Mahendiran *Journal of Applied Physics* 125 (2), 023910 (2019)
9. *Continuously Varying Critical Exponents Beyond Weak Universality*, N. Khan, P. Sarkar, A. Midya, P. Mandal, P. K. Mohanty, *Scientific Reports* 7, 45004 (2017).
10. *Geometrically frustrated GdInO₃: An exotic system to study negative thermal expansion and spin-lattice coupling*, B. Paul, S. Chatterjee, A. Roy, A. Midya, P. Mandal, V. Grover, A. K. Tyagi, *Physical Review B* 95, 054103 (2017)
11. Determination of intrinsic ferroelectric polarization in lossy improper ferroelectric systems
12. U Chowdhury, S Goswami, D Bhattacharya, A Midya, P Mandal *Applied Physics Letters* 109 (9), 092902 (2016)
13. Magnetocaloric properties of Eu_{1-x}La_xTiO₃ ($0.01 \leq x \leq 0.2$) for cryogenic magnetic cooling K Rubi, A Midya, DV MaheswarRepaka, RV Ramanujan *Journal of Applied Physics* 119 (2016)
14. Magnetoelectric coupling and exchange bias effects in multiferroic NdCrO₃ A Indra, K Dey, A Midya, P Mandal, O Gutowski, U Rütt, S Majumdar, *Journal of Physics: Condensed Matter* 28 (16), 166005 (2016)
15. Large adiabatic temperature and magnetic entropy changes in EuTiO₃ A Midya, P Mandal, K Rubi, R Chen, JS Wang, R Mahendiran, G Lorusso, *Physical Review B* 93 , 094422 (2016)

16. Giant magnetothermal conductivity and magnetostriction effect in the charge ordered $\text{NdO}_{0.8}\text{Na}_{0.2}\text{MnO}_3$ compound, B Samantaray, N Khan, A Midya, S Ravi, P Mandal *Europhysics Letters* 113 , 17003(2016)
17. Giant magnetocaloric effect in ferromagnetic superconductor $\text{RuSr}_2\text{GdCu}_2\text{O}_8$, A Midya, P Mandal *Journal of Applied Physics* 116 (22), 223905 (2014)
18. Effect of pressure on the magnetic and superconducting transitions of $\text{GdFe}_{1-x}\text{Co}_x\text{AsO}$ ($x= 0, 0.1, 1$) compounds GK Selvan, D Bhoi, S Arumugam, A Midya, P Mandal *Superconductor Science and Technology* 28 (1), 015009 (2014)
19. Giant magnetocaloric effect in antiferromagnetic DyVO_4 compound A Midya, N Khan, D Bhoi, P Mandal *Physica B: Condensed Matter* 448, 43-45 (2014)
20. 3d-4f spin interaction and field-induced metamagnetism in RCrO_4 ($R = \text{Ho, Gd, Lu}$) compounds A Midya, N Khan, D Bhoi, P Mandal *Journal of Applied Physics* 115 (17), 17E114 (2014)
21. Field-Induced Spin-Structural Transition and Giant Magnetostriction in Ising Chain $\alpha\text{-CoV}_2\text{O}_6$ M Nandi, N Khan, D Bhoi, A Midya, P Mandal *The Journal of Physical Chemistry C* 118, 1668-1673 (2014)
22. Large magnetocapacitance in electronic ferroelectric manganite systems U Chowdhury, S Goswami, D Bhattacharya, A Midya, P Mandal, P Das, *Journal of Applied Physics* 114, 194104 (2013)
23. 3d-4f spin interaction induced giant magnetocaloric effect in zircon-type DyCrO_4 and HoCrO_4 compounds A Midya, N Khan, D Bhoi, P Mandal *Applied Physics Letters* 103 (9), 092402 (2013)
24. Formation of nanosizegriffiths-like clusters in solid solution of ferromagnetic manganite and cobaltite D Bhoi, N Khan, A Midya, M Nandi, A Hassen, P Choudhury, P Mandal *The Journal of Physical Chemistry C* 117, 16658 (2013)
25. Critical exponents and irreversibility lines of $\text{La}_{0.9}\text{Sr}_{0.1}\text{CoO}_3$ single crystal N Khan, A Midya, P Mandal, D Prabhakaran *Journal of Applied Physics* 113 (18), 183909 (2013)
26. Giant magnetocaloric effect in magnetically frustrated compounds A Midya, N Khan, D Bhoi, P Mandal *Applied Physics Letters* 101 (13), 132415(2012)
27. Anomalous thermal expansion of Sb_2Te_3 topological insulator P Dutta, D Bhoi, A Midya, N Khan, P Mandal, S Samatham, V Ganesan *Applied Physics Letters* 100, 251912 (2012)
28. Anisotropic magnetic properties and giant magnetocaloric effect in antiferromagnetic R MnO_3 crystals ($R = \text{Dy, Tb, Ho, and Yb}$) A Midya, S N Das, P Mandal, S Pandya, V Ganesan *Physical Review B* 84 (23), 235127 (2011)
29. Critical behavior in single-crystalline N Khan, A Midya, K Mydeen, P Mandal, A Loidl, D Prabhakaran *Physical Review B* 82, 064422(2010)
30. Magnetocaloric effect in HoMnO_3 crystal A Midya, P Mandal, S Das, S Banerjee, L S Chandra, V Ganesan, *Applied Physics Letters* 96 (14) (2010)

❖ [Awards:](#)

❖ [List of Participation in Seminar, Conference and Workshop](#)

International/National:

1. International Conference on Materials for Advanced Technologies (ICMAT – 2017), 18-23 June 2017, Suntec Singapore

2. International conference on Magnetic Materials and Applications (MagMA-2013), IIT-Guwahati, 5-7 Dec 2013.
3. International Conference on Frontiers of Condensed Matter Physics, ICTP Trieste - Italy, 11-15 Nov 2013.
4. International Conference on Strongly Correlated Electron Systems SCES2013, University of Tokyo, Japan, 5-9 Aug 2013.
5. International School on Functional Materials: School: March 28-April 01, 2011
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6. The International Conference on Magnetic Materials, SINP Kolkata 25-29 Oct 2010

❖ Workshops/Events organized

1. Member of Organizing Committee, National Webinar on COVID-19, 2020