

LIST OF PUBLICATIONS

(In National and International Journals)

1. Electrochemical polarization on the surface of moist superconducting oxides, B. Dash, D. Behera, M.D. Srichandan, N.C. Mishra, K. Patnaik and B.B. Deo, Bulletin of Electrochemistry **53** (1989) 242.
2. Crystallochemical analysis of Charge and Spin dynamics in YBCO substituted by trivalent metal ions at Cu site, H.P. Mohapatra, D. Behera, B. Dash, N.C. Mishra and K. Patnaik, Physica C **185-189** (1991) 739.
3. Metastability induced charge and spin fluctuations in 123 type Superconductors, H.P. Mohapatra, D. Behera, S. Misra, N.C. Mishra and K. Patnaik, Journal of Superconductivity, **6** (1993) 359.
4. Heavy ion irradiation induced transient behaviour studies in Cuprate Superconductors, T. Mohanty, A.K. Mohapatra, P.K. Samal, B.N. Dash, D. Behera, H.P. Mohapatra, S. Misra, N.C. Mishra, K. Patnaik, L. Senapati, D. Kanjilal and G.K. Mehta, Indian J. Physics, **69A** (1995) 29.
5. Role of alkaline earth metal in charge transfer in cuprate superconductors, P.K. Samal, H.P. Mohapatra, S. Misra, S. Mohapatra, N.C. Mishra, G.S. Roy, D. Behera and K. Patnaik, Indian J. Physics, **69A** (1995) 45.
6. Silver Substitution Effect in Growth of Order in Oxygen Disorder

- 123 Type Cuprate Superconductors, D. Behera, H.P. Mohapatra, P.K. Samal, S. Misra, K. Patnaik and N.C. Mishra, *Materials Science Forum* **223-224**, (1996) 377.
7. Ag-Doping-Induced Coordination Incompatibility and Its Effect on Superconductivity in YBCO, D. Behera, N.C. Mishra and K. Patnaik, *Journal of Superconductivity* **10** (1997) 27.
 8. Evidence in favour of no appreciable Cu(3d)-O(2p) hybridization in undoped and Zn doped YBCO superconductors, S. Raj, B.B. Dhal, H.C. Padhi, D. Behera and N.C. Mishra, *Solid State Communication* **105** (1998) 767.
 9. DC Electrical Resistivity Study of Granularity in YBa₂Cu₃O₇/Ag Composites, D. Behera, K. Patnaik and N.C. Mishra, *J. Superconductivity* **11** (1998) 641.
 10. 140 MeV Si-ion irradiation induced Tc enhancement in YBCO thin films, N.C. Mishra, D. Behera, T. Mohanty, K. Patnaik, L. Senapati, O.G. Singh, D. Kanjilal, G.K. Mehta and R. Pinto, *Modern Phys. Letters* **13** (1999) 79.
 11. Granularity Controlled Irradiation Response of Cuprate Superconductors, N.C. Mishra, D. Behera, T. Mohanty, D. Mohanta, D. Kanjilal, G.K. Mehta and R. Pinto, *Nuclear Instruments and Meth. B* **156** (1999) 30.

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1. Crystallochemical analysis of Oxygen ordering in YBCO, N.C. Mishra, D. Behera, M. Adhikari, H.P. Mohapatra, K. Maharana and K. Patnaik, National conference on Superconductivity, Aurangabad, 1991.
2. Crystallochemical analysis of Charge and Spin Dynamics in YBCO with varying Oxygen Content, H.P. Mohapatra, D. Behera, B. Dash, N.C.

- Mishra and K. Patnaik, Proc. of International Conf. on Materials and Mechanism of Superconductivity, High Tc Superconductors (M2S-HTSC III), Kanazawa (1991).
3. Crystallochemical analysis of Charge and Spin Dynamics in YBCO substituted by Trivalent Metal Ions at Cu Site, H.P. Mohapatra, D. Behera, B. Dash, N.C. Mishra and K. Patnaik, Proc. Int. Nat. Conf. on Materials and Mechanism of Superconductivity, High Tc Superconductors (M2S-HTSC III), Kanazawa (1991).
 4. Anharmonic lattice vibration induced charge transfer in 123 type systems, S. Misra, H.P. Mohapatra, D. Behera, N.C. Mishra, K. Patnaik and B. Deo, Third National Conf. on Phonon Physics, Cochin University, Cochin 1993.
 5. Ultrasonic velocity and a Attenuation in Ag doped GdBa Cu O superconductor, R. Shreekumar, J. Philips, D. Behera, H.P. Mohapatra, S. Misra and N.C. Mishra, Third National Conf. on Phonon Physics, Cochin University, Cochin 1993.
 6. Defect induced metastability and charge transfer mechanism in cuprate Superconductor, D.Behera, N.C. Mishra, S.Mishra, H.P.Mohapatra and K.Patnaik, Condensed Matter Days, Institute of Physics, Bhubaneswar 1993.
 7. Defect annealing studies in GdBaCu O system by heavy ion irradiation, T. Mohanty, A. Mohapatra, B.N.Dash, D.Behera, H.P.Mohapatra, S. Misra, N.C. Mishra, L.Senapati, D.Kanjilal, and G.K.Mehta; Physics and Technology of Particle Accelerators and their Applications, Calcutta Nov 25-27, 1993.
 8. Studies of metastability in Cuprate Superconductors induced by Heavy ion irradiation, Tanuja Mohanty, Ajit Mohapatra, B.N.Dash, D.Behera, H.P.Mohapatra, S.Misra, N.C. Mishra, L.Senapati, D.Kanjilal and G.K.Mehta, Group Monitoring Meeting of Nuclear Science Centre, New Delhi, 1994.

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10. Heavy ion irradiation induced transient behaviour studies in cuprate superconductors, T. Mohanty, A.K. Mohapatra, P.K. Samal, B.N. Dash, D. Behera, H.P. Mohapatra, S. Misra, N.C. Mishra, K. Patnaik, L. Senapati, D. Kanjilal and G.K. Mehta, Condensed Matter Physics Workshop, Calcutta, August (1994).
11. Role of alkaline earth metal in charge transfer in cuprate superconductors, P.K. Samal, H.P. Mohapatra, S. Misra, S. Mohapatra, N.C. Mishra, G.S. Roy, D. Behera and K. Patnaik, Condensed Matter Physics Workshop, Calcutta, August (1994).
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13. Diffusion Assisted Defect Annealing Studies in High Energy Heavy Ion Irradiated Cuprates, T. Mohanty, D. Behera, B.N. Dash, H.P. Mohapatra, N.C. Mishra, K. Patnaik, L. Senapati, D. Kanjilal, G.K. Mehta, International Seminar on Current Developments in Disordered Materials, Kurukshetra (1996).
14. Silver Substitution Effect on the Growth of Order in Oxygen Disordered 123 Type Cuprate Superconductors, D. Behera, H.P. Mohapatra, P.K. Samal, K. Patnaik and N.C. Mishra, International Seminar on Current Developments in Disordered Materials, Kurukshetra (1996).
15. Non-equilibrium oxygen ordering in thermally quenched and ion irradiated 123 type cuprate superconductors, D. Behera, T. Mohanty, H.P. Mohapatra, P.K. Samal, S. Misra, N.C. Mishra and K. Patnaik. Bulletin of Orissa Physical Society 5 (1996)14.

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17. Study of Percolative Conduction in YBCO-Ag Composites, D. Behera, K. Patnaik and N.C. Mishra, Condensed Matter Days, Santiniketan (1997) P-56.
18. Granularity Control in YBCO/Ag Thick Films Prepared by Diffusion Reaction Technique, D. Behera, N.C. Mishra and K. Patnik. IUMRS-ICF 98 International Conference, Bangalore 1998.
19. Granularity Controlled Irradiation Response of Cuprate Superconductors, N.C. Mishra, D. Behera, T. Mohanty, D. Mohanta, D. Kanjilal, G.K. Mehta and R. Pinto, International Conference on Swift Heavy Ions in Materials Engineering and Characterization (SHIMEC - 1998), NSC, New Delhi (1998).
20. 120 MeV S- ion Irradiation Induced Inter and Intra-granular Modification in YBCO Thick Films, D. Behera, N.C. Mishra, K. Patnik, D. Kanjilal and G.K. Mehta, International Conference on Swift Heavy Ions in Materials Engineering and Characterization (SHIMEC - 1998), NSC, New Delhi (1998)
21. Effect of Ag addition on Reaction Diffusion in YBCO Composite Thick Films, D. Behera, D. Mohanta, N.C. Mishra and K. Patnik, Proceedings of DAE Solid State Physics Symposium, vol. 41 (1998) P-365.
22. Ag Induced Suppression of Irradiation Response in YBCO/Ag Thin Films, D. Behera, T. Mohanty, D. Mohanta, K. Patnaik, L. Senapati, D. Kanjilal and G.K. Mehta, R. Pinto and N.C. Mishra, Proceedings of DAE Solid State Physics Symposium vol. 41 (1998) P-369.