

1. Full Name : Dr. Bendre Subhash Tulshiram
2. Educational Qualification : M.Sc. Ph.D
3. Area of Research/Expertise : Materials Science
4. Awards/Fellowships/Prizes received : Dr. Ray Lecture Competition Award of Indial Physics Association for 1986-87
5. Contact Information : Department of Physics,  
School of Physical Sciences,  
North Maharashtra University,  
PB No. -80, Jalgaon – 425 001(MS) India  
e.mail : [stbendre@nmu.ac.in](mailto:stbendre@nmu.ac.in)  
Phone No. : 0257-2257478
6. List of Publication : 25
1. A Novel Solution Combustion Method for the Synthesis of CMR Material  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$   
*S.T. Bendre, P.B. Patil, P.P. Jagtap, Swati Pandya, L.S. Sharath Chandra, Deepti Jain, D.M. Phase and V. Ganesan*  
*Indian Journal of Cryogenics, 33, 2-4, (2008)*
  2. Enhanced Ferroelectric and Dielectric Properties of  $\text{BiFe}_{0.95}\text{Zn}_{0.05}\text{O}_3$  Multiferroic Ceramics by Solution Combustion Method (SCM)  
*Yogesh A. Chaudhari, Prashant P. Jagtap, Ebrahim M. Abuassaj, Pramod B. Patil and Subhash T. Bendre*  
*Archives of Physics Research, 2(3), 60-66 (2011)*
  3. Effect of Processing Parameters on the Improvement of Ferroelectric and Dielectric Investigations in  $\text{BiFeO}_3$  Multiferroic Ceramics  
*Yogesh A Chaudhari and Subhash T Bendre*  
*Invertis Journal of Renewable Energy, 1 (4), 207-213 (2011)*
  4. Ferroelectric and Dielectric Properties of  $\text{BiFe}_{0.5}\text{Zn}_{0.05}\text{O}_3$ Ceramics by Solution Combustion Method (SCM)  
*Yogesh Chaudhari, Amrita Singh, Pramod Patil, Prashant Jagtap, Ebrahim Abuassaj, Ratnamala Chatterjee and Subhash Bendre*  
*Proceedings of International Conference on Nano Science, Engineering and Advanced Computing (ICNEAC – 2011) , 186-188 (2011), ISBN-978-81-8465-683-1*
  5. Multiferroic properties in  $\text{BiFe}_{1-x}\text{Zn}_x\text{O}_3$  ( $x=0.1-0.2$ ) ceramics by solution combustion method(SCM)  
*Y.A. Chaudhari, A.Singh, E.M.Abuassaj, R. Chatterjee and S.T. Bendre*  
*Journal of Alloys and Compounds, 518, 51-57 (2012)*  
Impact Factor: 2.28
  6. Large Magnetoresistance in Manganite Perovskite Oxide  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ ,  
*P.P. Jagtap, Y.A. Chaudhari, E.M. Abuassaj, P.B. Patil and S.T. Bendre*  
*Advanced Science Letters, 5, 1-3 (2012)*  
Impact Factor: 1.25
  7. Structural, magnetic and dielectric properties of nano-crystalline Ni-doped  $\text{BiFeO}_3$  ceramics formulated by self-propagating high temperature synthesis  
*Yogesh A Chaudhari, Chandrashekhar M. Mahajan, Prashant P. Jagtap and Subhash T. Bendre*  
*Journal of Advanced Ceramics, 2(2), 135-140 (2013)*
  8. Ferroelectric and Dielectric Properties of nanocrystalline  $\text{BiFeO}_3$  Multiferroic Ceramics Synthesized by Solution Combustion Method (SCM)

9. Process conditions for deposition of good quality thin films of  $Y_1Ba_2Cu_3O_{7-\delta}$  superconductor on  $ZrO_2$ ,  $SrTiO_3$  and  $Si/ZrO_2$  substrates by XeCl Pulsed Excimer Laser Ablation  
*S.T.BENDRE, V.N.KOINKAR, R.D.VISPUTE, R.VISWANATHAN, A.M.DHOTE, S.M.CHAUDHARI,  
S.M.KANETKAR and S.B.OGALE*  
*Solid State Communications, Vol.78, No.5, 345-348(1990)*  
*Impact Factor: 1.534*
10. Thin and ultra thin epitaxial films of  $Y_1Ba_2Cu_3O_{7-\delta}$  deposited on  $LiNbO_3$  substrates by Pulsed Excimer Laser Ablation  
*P. GUPTASARMA, S.T.BENDRE, S.B.OGALE, M.S.MULTANI, and R.VIJAYRAGHAVAN*  
*Physica C, 203, 129-138 (1992)*  
*Impact Factor: 0.718*
11. Influence of Magnetic impurities on current transport in epitaxial thin films of  $Y_1Ba_2Cu_3O_{7-\delta}$   
*S.B.OGALE, S.T.BENDRE, P. GUPTASARMA, and M.S.MULTANI*  
*Solid State Communications, Vol.78, No.4, 285-290(1991)*  
*Impact Factor: 1.534*
12. Ion-Implantation-Induced Structural Modifications in  $Y_1Ba_2Cu_3O_{7-\delta}$  superconductor  
*S.N.YEDAVE, P.D.KODALI, S.T.BENDRE, R.VISHWANATHAN, S.M.KANETKAR, S.M.CHAUDHARI AND  
S.B.OGALE*  
*Solid State Communications, Vol.70, No.12, 1131-1135(1989)*  
*Impact Factor: 1.534*
13. Inhibition of aqueous degradation of  $Y_1Ba_2Cu_3O_{7-x}$  high  $T_c$  Superconductor by Nitrogen ion implantation  
*S.M.CHAUDHARI , R.VISHWANATHAN, S.T.BENDRE, P.P.NAWALE, S.M.KANETKAR, AND S.B.OGALE*  
*Journal of Applied Physics, 66(9), 4509-4511 (1989)*  
*Impact Factor: 2.210*
14. Process parameters optimization for deposition of High  $T_c$  superconducting thin films on Si and other substrate materials.  
*R.D.VISPUTE, S.T.BENDRE, R.VISHWANATHAN, S.M.CHAUDHARI , S.M.KANETKAR, AND S.B.OGALE*  
*Bulletin of Material Science, Vol.14(2), 443 - 449(1991)*  
*Impact Factor: 0.584*
15. Ion beam and thermally - induced interface reaction between high- $T_c$  superconductor thin film and metal overlayer  
*R.VISHWANATHAN, S.N.YEDAVE, S.T. BENDRE, S.M. KANETKAR S.M.CHAUDHARI , AND S.B.OGALE*  
*Bulletin of Material Science, Vol.14(2), 435 - 441 (1991)*  
*Impact Factor: 0.584*
16. Pulsed Excimer Laser deposition of High  $T_c$  Superconductor thin films on Si with and without oxide barrier  
*R.D.VISPUTE, S.T. BENDRE, S.M.CHAUDHARI , S.M.KANETKAR, AND S.B.OGALE*  
*Proceedings of SPIE's Growth of semiconductor Structures and High  $T_c$  Thin films on Semiconductors, San Diego, California, Vol.1285, 259-266 (1990)*
17. Design, Construction and calibration of a PZT Micromanipulator for Scanning Tunneling Microscope (STM)  
*S.T.BENDRE and C.DHARMADHIKARI*  
*Journal of Optics, Vol.17, No.3, 67 - 70(1988)*  
*Impact Factor: 1.990*
18. Epitaxial Thin films of  $Y_1Ba_2Cu_4O_8$  Superconductor Deposited by Laser Ablation of Solution derived complex Target

*P.GUPTASARMA, V.R.PALKAR, M.S.MULTANI, R.VIJAYRAGHAVAN, S.T.BENDRE, and S.B.OGALE,  
Solid State Communications, Vol.79, 851- 855(1991)  
Impact Factor: 1.534*

19. Thermal Neutron effect on  $Y_1Ba_2Cu_3O_7$   
*S.S.OBAYD, B.S.M. RAO, S.T.BENDRE, R.VISHWANATHAN, S.M.CHAUDHARI, S.M.KANETKAR, AND  
S.B.OGALE*  
*J. Radional. Nucl. Chem. Letters, 153(2), 117- 123(1991)*  
ISSN (printed): 0236-5731. ISSN (electronic): 1588-2780
20. Photon Scanning Tunnelling Microscope  
*S.T.BENDRE*  
*Physics Education, Vol.7(3), 256- 257(1990)*  
ISSN 0031-9120 (Print) ISSN 1361-6552 (Online)
21. Epitaxial Thin films of  $Y_1Ba_2Cu_4O_8$  by Laser Ablation  
*V.R.PALKAR, P.GUPTASARMA, S.T.BENDRE, S.B.OGALE and M.S.MULTANI*  
*Physica C, 185, 1963- 1964(1991)*  
*Impact Factor:0.718*
22. Use of Zn doping for tuning of the operating temperature of Bolometer based on the high  $T_c$  oxide superconductor thin film of  $Y_1Ba_2Cu_3O_7$   
*S.B.OGALE, M.VEDVYAS, S.T.BENDRE, AND S.M.KANETKAR*  
*Appl. Phys. Lett., 61(17), 2105 - 2107(1992)*  
*Impact Factor: 3.794*
23. Structural, morphological and superconducting properties of the thin films of High  $T_c$  oxide superconductors deposited by Pulsed Laser Ablation  
*S.B.OGALE , S.M.KANETKAR, R.D.VISPUTE, R.VISHWANATHAN, AND S.T. BENDRE*  
*Physical and Material Properties of High temperature Superconductors Edited by S.K.MALIK and  
S.S.SHAH,*  
*Nova Science Publication, ISBN1-56072-114-6, (1993)*
24. Influence of Zn and Fe doping on the bolometric response of the 123 Epitaxial thin films  
*M.VEDVYAS, S.T.BENDRE, AND S.M.KANETKAR AND S.B. OGAE*  
*Proceeding : World Congress on Superconductivity, Munich, Germany, September 14-18, 1992*
25. Current transport in  $Y_1Ba_2Cu_{3-x}M_xO_7$  ( $M \equiv Fe, Zn$ ) epitaxial thin films  
*S.B. OGAE, S.T. BENDRE, P. GUPTASARMA AND M. MULTANI*  
*J.Appl.Phys. 70(10), 5763, 1991*  
*Impact Factor: 2.210*

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|---|--|
| 7. Number of Post Doc students at Present               | : NIL  |
| 8. Number of Ph.D students Passed out                   | : 01<br>Dr. Yogesh A. Chaudhari<br>Assistant Professor                 |
| 9. Number of Ph.D students at Present                   | : 03<br>Mr. Prashant P. Jagtap<br>Mr. E.M.Abuassaj<br>Mr. Pramod Patil |
| 10. Number of M.Phil students passed out                | : 01<br>Mr. Prashant P. Jagtap<br>Assistant Professor                  |
| 11. Number of M.Phil students at present                | : Nil  |
| 12. Number of Project Fellow/Assistant/staff at present | : Nil  |
| 13. Number of Books Written                             | : Nil  |

14. Number of Books (invited to write) communicated : Nil
15. Number of Patents : 01  
Solar Powered Hybrid Bicycle (Submitted)
16. Number of Research Papers Published : 25
17. Citation index(h), Number of citations till date:
- |           | All | Since 2008 |
|-----------|-----|------------|
| Citations | 40  | 3          |
| h-index   | 4   | 1          |
| i10-index | 0   | 0          |
18. Scientific Name of Your lab : Materials Research Laboratory
19. Scientific Instruments/Facility available : Low Temperature Resistivity Measurement
20. Research Projects Completed : 02

No.	Name of the Research Project	Funding Agency	Amount
1.	Development of Superconductivity Programme At the newly born University	Third World Academy of Sciences (TWAS) Italy	US \$ 4200
2.	Synthesis and characterization of diamond thin films (Co-investigator)	All India Council for Technical Education New Delhi	Rs. 04.00 lakhs

21. Research Projects on going : 01

No.	Name of the Research Project	Funding Agency	Amount
1.	UGC SAP Phase II (Coordinator)	UGC, New Delhi	Rs. 43.75 lakhs
2.	VigyanPrasar (Equipment Grant) (Coordinator)	VP, New Delhi	Rs. 08.00 lakhs

22. Research Projects Submitted : 01

No.	Name of the Research Project	Funding Agency	Amount
1	Renewable Energy - Demonstration Project	MEDA, Pune	Rs. 30.00 lakhs

23. Scientific Collaborators : Prof. Dr. Pablo D. Esquinazi (Head)  
Superconductivity and Magnetism Division  
University of Leipzig, Leipzig, GERMANY.

24. Other Activity : Coordinator – Rajiv Gandhi Science and Technology Commission  
NMU, Centre