# Dr. Maheshkumar Lahu Mane

(M.Sc. Ph.D.)

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Personal Information **Date of Birth**: 10<sup>th</sup> Jan 1985

Address

Official : Assistant Professor & Head,

Department of Physics,

S.G.R.G. Shinde Mahavidyalaya,

Paranda,

Dist. Osmanabad (M.S.)- 413502 (India)

**Residential**: "Mahadev Nivas",

At. Post. Deolali (Dhoki),

Tq. Kallamb,

Dist. Osmanabad(M.S.)-413508 (India)

Marital Status : Married

Languages : English, Hindi, Marathi, Sanskrit

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# Educational Qualification

Doctor of Philosophy (Physics),

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) India,

Topic: "Studies on the effect of irradiation on the properties of ferrite materials"

(August 2011)

Master of Science (Physics),

(GOLD MEDAL with 1st rank)

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) India,

Grade: First Class with distinction (2007)

Bachelor of Science (Phys, Elect, Comp. Sci.),

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) India,

Grade: First Class (2005)

# Honors & Awards

- 1. Certificate of excellence given by International Society of Science and Technology, Mumbai and Bio-nano Frontier for outstanding oral paper presentation in "International Conference on Laser and Advanced Materials" held at Abasaheb Garware College, Pune on March 6-8, 2010
- 2. Best oral paper presentation award in "UGC Sponsored One Day State Level Seminars On Nanoscience and Nanotechnology Present Scenario" organized by Department of Physics, Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi Dist. Osmanabad (M.S.) on 21st Nov. 2009
- 3. Awarded "UGC Research Fellowship in Science for Meritorious Students (RFSMS)" sponsored by University Grant Commission, India
- 4. "Late Totaram Sonaji Teli Memorial Gold Medal" for securing highest number of marks amongst the successful candidates at M.Sc. (Physics)



	during March/April 2007
	5. <b>"Mr and Mrs Keshav and Sulbha Pujari Paritoshik"</b> for securing highest number of marks amongst the successful candidates at M.Sc. (Physics) during March/April 2007
	6. <b>"Certificate of Merit"</b> for securing highest number of marks amongst the successful candidates at M.Sc. (Physics)
	7. Awarded "Eklavya Scholarship" during two years of M.Sc. (Physics) funded by Government of India
Career Profile	1. Working as an Assistant Professor and Head, Department of Physics and Computer Science, Shikshan Maharshi Guruvarya R. G. Shinde Mahavidyalaya, Paranda Dist. Osmanabad-413502 (M.S.) India since 02 <sup>nd</sup> November 2011 to till date
	2. <b>Nodal Officer, Centre of Skill Development</b> (Broadcasting and Journalism, Professional Accounting and Taxation), Shikshan Maharshi Guruvarya R. G. Shinde Mahavidyalaya, Paranda Dist. Osmanabad-413502 (M.S.) India
	3. One year experience of conducting practical's and projects at P.G. level, in Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad 431 004 (M. S.) India.
Orientation/ Refresher Courses	1. <b>"27th Orientation Course"</b> conducted by UGC-Human Resource Development Center, Punjabi University, Patiala during 1st – 28th October 2015 with <b>'A'</b> grade
	2. "UGC-Sponsored Special Summer School Programme 2012" (equivalent to orientation/refresher course) conducted by UGC-Academic Staff college, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-431004 during 23 <sup>rd</sup> July 2012 to 11 <sup>th</sup> August 2012 with 'A' grade.
Research	h-index:
Profile	Google Scholar : 19
Prome	Scopus : 18
	Publons : 16
	<u>Citations:</u>
	Google Scholar : 1083
	Scopus : 0880
	Publons : 0756
	Research Publications:
	International Journals : 38
	Conference Proceedings : 16
	Book Chapter : 01
	International Conferences : 11
	National Conferences : 06
	State Level Conferences : 05
	Conferences/Workshops attended:

International Conferences : 07
National Conferences : 15
State Level Conferences : 04
Workshops : 06

# **Memorial Lectures:**

Invited speaker : 01 Oral Presentations : 02

# Ph.D. Guideship:

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

# Research Projects:

Minor Research Project : 01

# Research Publications

#### **First Author:**

- 1. **Maheshkumar L. Mane** (corresponding author), Sagar E. Shirsath, Varsha C. Chavan, S. A. Ghodake, S. S. More, K. M. Jadhav, Effect of synthesis method on structural and magnetic properties of lithium ferrite, *Science Park Research Journal* (Special Issue) 2015
- Maheshkumar L. Mane (corresponding author), V. N. Dhage, Sagar E. Shirsath, R. Sundar, K. Ranganathan, S. M. Oak, K. M. Jadhav, Nd:YAG laser irradiation effects on the structural and magnetic properties of polycrystalline cobalt ferrite, *Journal of Molecular Structure*, 1035 (2013) 27-30 (Impact Factor: 1.63)
- 3. **Maheshkumar L. Mane** (corresponding author), V. N. Dhage, Sagar E. Shirsath, R. Sundar, K. Ranganathan, S. M. Oak, K. M. Jadhav, Nd:YAG laser irradiation effects on electrical properties of polycrystalline Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub>, *Journal of Alloys and Compounds*, 511 (2012) 31-34 (Impact Factor: 2.29)
- 4. **Maheshkumar L. Mane**(corresponding author), V. N. Dhage, R. Sundar, K. Ranganathan, S. M. Oak, D. R. Shengule, K. M. Jadhav, Effect of Nd:YAG laser irradiation on structural, morphological, cation distribution and magnetic properties of nanocrystalline CoFe<sub>2</sub>O<sub>4</sub>, *Applied Surface Sciences*, 257 (20) (2011) 8511-8517 (Impact Factor: 2.10)
- Maheshkumar L. Mane, Sagar E. Shirsath, Vinod N. Dhage, K. M. Jadhav, Modifications in structural, cation distribution and magnetic properties of <sup>60</sup>Co gamma irradiated Li-ferrite, *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 269 (2011) 2026-2031 (Impact Factor: 1.21)
- 6. **Maheshkumar L. Mane,** R. Sundar, K. Ranganathan, S. M. Oak, K. M. Jadhav, Effects of Nd:YAG laser irradiation on structural and magnetic properties of Lio.5Fe2.5O4, *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 269 (2011) 466-471 (Impact Factor: 1.21)
- 7. **Maheshkumar L. Mane,** V. N. Dhage, K. Ranganathan, S. M. Oak, K. M. Jadhav, Influence of Nd:YAG laser irradiation on AC impedance and

- dielectric properties of lithium ferrite, *Radiation Effects and Defects in Solids*, 166 (6) (2011) 435–444 (Impact Factor: 0.40)
- 8. **Maheshkumar L. Mane,** V. N. Dhage, P. S. Aghav, M. K. Babrekar, K. M. Jadhav, Effect of Gamma Irradiation on the Physical Properties of Nanocrystalline Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub>, *AIP conference proceeding*, 1349 (2011) 1131-1132

- 9. Vinod N. Dhage, **M. L. Mane,** S. M. Rathod, A. B. Shinde, K. M. Jadhav, Electrical and dielectric properties of chromium substituted barium hexaferrites, *Research Journey*, March 2019 Special Issue 168 (B)
- 10. Akshay B. Ghumare, Varsha M. Mane, **Maheshkumar L. Mane**, Kishan S. Lohar, Influence of Sintering Time on Structural Behabiour of Copper Ferrite Nanoparticles, *J. Biol. Chem. Chron.* 5 (3) (2019) 137-139 (Special Issue: ETCMS-2019)

# **2018**

- 11. Akshay B. Ghumare, **Maheshkumar L. Mane** (corresponding author), Sagar E. Shirsath, K. S. Lohar, Role of pH and sintering temperature on the properties of tetragonal-cubic phases composed copper ferrite nanoparticles, *Journal of Inorganic and Organomettallic Polymers and Materials*, (2018) (Impact Factor:1.75)
- 12. A. S. Gaikwad, S. S. More, R. V. Kathare, **M. L. Mane**, R. B. Borade, Y. A. Vijapure, A. B. Kadam, Barium Titanate (BaTiO<sub>3</sub>) synthesized by sol-gel auto-combustion method, *Int. Res. J. of Science & Engineering*, (2018 Special Issue A5) 41-45

# **2017**

- 13. B. G. Toksha, Sagar E. Shirsath, **M. L. Mane**, K. M. Jadhav, Auto-ignition synthesis of CoFe<sub>2</sub>O<sub>4</sub> with Al<sup>3+</sup> substitution for high frequency applications, *Ceramic International* 43 (2017) 14347-14353 (Impact Factor: 2.986)
- S. B. Shelke, Santosh Wadgane, M. L. Mane, Sunil Satpute, A. S. Gaikwad, B. H. Devmunde, V. S. Shinde, C. U. Nikam, Tailoring the Structural and Magnetic Properties of Co2+ substituted Co-Cu-Cr ferrite Nanoparticles, International Journal of Advanced Research in Basic and Applied Sciences, (Special Issue Jan 2017) 101-105
- Shivaji D. Waghmare, S. M. Kabur, Rameshwar R. Kothawale, M. L. Mane, T. N. Lokhande, Rajaram S. Mane, Bismuth ferrite (BiFeO3) thin films for electrochemical capacitor performance, Advances in Materials Science (2017 Special Issue) 258-264

#### 2016

16. Varsha C. Chavan, Sagar E. Shirsath, **Maheshkumar L. Mane** (corresponding author), R. H. Kadam, Surendra S. More, Transformation of hexagonal to mixed spinel crystal structure and magnetic properties of Co<sup>2+</sup> substituted BaFe<sub>12</sub>O<sub>19</sub>, *Journal of Magnetism and Magnetic Material* 398 (2016) 32-37

#### (Impact Factor: 1.826)

# <u>2015</u>

- 17. Mohd. Hashim, Sagar E. Shirsath, S.S. Meena, **M. L. Mane**, Shalendra Kumar, Pramod Bhatt, Ravi Kumar, N. K. Prasad, S.K. Alla, Jyoti Shah, R.K. Kotnala, K.A. Mohammed, Erdogan Senturk, Alimuddin, Manganese ferrite prepared using reverse micelle process: Structural and magnetic properties characterization, *Journal of Alloys and Compounds* 642 (2015) 70-77 (Impact Factor: 2.29)
- 18. Vivek Chaudhari, R. H. Kadam, **M. L. Mane,** Sagar E. Shirsath, A. B. Kadam, D. R. Mane, Effect of La<sup>3+</sup> Impurity on Magnetic and Electrical Properties of Co-Cu-Cr-Fe Nanoparticles, *Journal of Nanoscience and Nanotechnology* 15 (2015) 4268-4275
- 19. Varsha C. Chavan, Sagar E. Shirsath, **Maheshkumar L. Mane** (corresponding author), Surendra S. More, Effect of Dy<sup>3+</sup> substitution on the structural properties of barium hexaferrite nanoparticles, *Journal of Chemical and Pharmaceutical Research* 7(4) (2015) 675-678
- 20. S. P. Kamble, **Maheshkumar L. Mane,** V. N. Dhage, V. D. Mote, Yuvraj Sudake, G. B. Jadhav, P. W. Khirade, Wet-Chemical synthesis and characterizations of copper oxide nanoparticles and their applications, *Science Park Research Journal* (Special Issue) 2015
- 21. Varsha C. Chavan, **Maheshkumar L. Mane** (corresponding author), Sagar E. Shirsath, R. H. kadam, S. A. Ghodake, S. S. More, Growth, Structural and magnetic properties of Mn<sup>3+</sup> sunstituted ZnFe<sub>2</sub>O<sub>4</sub> nanoparticles by autocombustion technique, *Science Park Research Journal* (Special Issue) 2015

### **2014**

- 22. Vinod N. Dhage, **M. L. Mane**, A. B. Shinde, S. M. Rathod, S. V. Gaikwad, S. V. Kshirsagar, K. M. Jadhav, Remarkable Influence of Al3+ substitution on the Properties of Barium Hexaferrite Nanoparticles, IJARBAS, 1(1) 2014
- 23. R. H. Kadam, Suresh T. Alone, **Maheshkumar L. Mane**, A. R. Biradar, Sagar E. Shirsath, Phase evaluation of Li<sup>+</sup> substituted CoFe<sub>2</sub>O<sub>4</sub> nanoparticles, their characterizations and magnetic properties, *Journal of Magnetism and Magnetic Materials*, 355(2014)70–75 (Impact Factor: 1.826)
- 24. Sagar E. Shirsath, **Maheshkumar L Mane**, Yukiko Yasukawa, Xiaoxi Liu, Akimitsu Morisako, Self-ignited high temperature synthesis and enhanced super-exchange interactions of Ho<sup>3+</sup>-Mn<sup>2+</sup>-Fe<sup>3+</sup>-O<sup>2-</sup> ferromagnetic nanoparticles, *Physical Chemistry Chemical Physics*,16 (2014)2347-2357 (Impact Factor: 3.81)

#### 2013

25. Sagar E. Shirsath, M. L Mane, Yukiko Yasukawa, Xiaoxi Liu, Akimitsu Morisako, Chemical tuning of structure formation and combustion process in CoDy<sub>0.1</sub>Fe<sub>1.9</sub>O<sub>4</sub> nanoparticles: Influence@pH, *Journal of Nanoparticle Research* (2013) 15:1976 (Impact Factor: 3.29)

- 26. V. V. Awati, S. M. Rathod, Sagar E. Shirsath, **Maheshkumar L. Mane** (corresponding author), Fabrication of Cu<sup>2+</sup> substituted nanocrystalline Ni-Zn ferrite by solution combustion route: Investigations on structure, cation occupancy and magnetic behavior, *Journal of Alloys and Compounds*, 553(2013) 157-162 (Impact Factor: 2.29)
- 27. Sagar E. Shirsath, R. H. Kadam, **M. L. Mane**, Ali Ghasemi, Yukiko Yasukawa, Xiaoxi Liu and Akimitsu Morisako, Permeability and magnetic interactions in Co<sup>2+</sup> substituted Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub> alloys, *Journal of Alloys and Compounds*,3(2013) 29 (Impact Factor: 2.29)
- 28. Sagar E. Shirsath, **Mahesh L. Mane**, Ali Ghasemi, Yukiko Yasukawa, Xiaoxi Liu, Akimistu Morisako, Structural and magnetic properties of Mn<sup>3+</sup> substituted ordered and disordered Lio<sub>5</sub>Cro<sub>5</sub>Fe<sub>2</sub>O<sub>4</sub> nanoparticles, *IEEE transactions on Magnetics*, 05/2013 (Impact Factor: 1.36)
- 29. S. J. Haralkar, R. H. Kadam, S. S. More, Sagar E. Shirsath, **M. L. Mane**, Swati Patil, D. R. Mane, Intrinsic magnetic, structural and resistivity properties of ferromagnetic Mn<sub>0.5</sub>Zn<sub>0.5</sub>Al<sub>x</sub>Fe<sub>2-x</sub>O<sub>4</sub> nanoparticles, *Material Research Bulletin*,48 (2013) 1189–1196 (Impact Factor: 2.11)
- 30. Vivek Chaudhari, Sagar E. Shirsath, **M. L. Mane**, R. H. Kadam, S. B. Shelke, D. R. Mane, Crystallographic, magnetic and electrical properties of Ni<sub>0.5</sub>Cu<sub>0.25</sub>Zn<sub>0.25</sub>La<sub>x</sub>Fe<sub>2-x</sub>O<sub>4</sub> nanoparticles fabricated by sol-gel method, *Journal of Alloys and Compounds*, 549 (2013) 213-220 (Impact Factor: 2.29)
- 31. K. S. Lohar, S. M. Patange, **M. L. Mane**, Sagar E. Shirsath, Cation distribution investigation and characterizations of Ni<sub>1-x</sub>Cd<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> nanoparticles synthesized by citrate gel process, *Journal of Molecular Structure*, 1032 (2013) 105-110 (Impact Factor: 1.63)
- 32. Vinod N. Dhage, **M. L. Mane,** S. S. Sawant, A. B. Shinde, K. M. Jadhav, Synthesis and characterizations of Cr<sup>3+</sup> substituted barium hexaferrite nanoparticles, *Bionano frontier*, 6(4) (2013) 201-204 (Impact Factor: 0.20)
- 33. S. A. Ghodake, J. S. Ghodake, B. P. Ladgaonkar, **Maheshkumar L. Mane,** K. M. Jadhav, S. S. Suryawanshi, Thermal variation of magnetic properties in nickel substituted Cu-Zn ferrite prepared by oxalate precursor route, *Golden Research Thought*, 2 (10) (2013) (Impact Factor: 0.22)
- 34. V. V. Awati, S. M. Rathod, **Maheshkumar L. Mane** (corresponding author), K. C. Mohite, Influence of Zn<sup>2+</sup> doping on the structural and surface morphological properties of nanocrystalline Ni-Cu spinel ferrite, *International Nano Letters*, (2013) 3:29

- 35. D. H. Bobade, S. M. Rathod, **Maheshkumar L. Mane** (corresponding author), Sol-gel auto-combustion synthesis, structural and enhanced magnetic properties of Ni<sup>2+</sup> substituted nanocrystalline Mg-Zn spinel ferrite, *Physica B: Condensed matter*, 407 (2012) 3700-3704 (Impact Factor: 1.06)
- 36. A. A. Birajdar, Sagar E. Shirsath, R. H. Kadam, M. L. Mane, D. R. Mane, A.

- R. Shitre, Permeability and magnetic properties of Al<sup>3+</sup> substituted Ni<sub>0.7</sub>Zn<sub>0.3</sub>Fe<sub>2</sub>O<sub>4</sub> nanoparticles, *Journal of Applied Physics*, 112, (2012), 053908 (Impact Factor: 2.17)
- 37. S. J. Haralkar, R. H. Kadam, S. S. More, Sagar E. Shirsath, **M. L. Mane**, Swati Patil, D. R. Mane, Substitutional effect of Cr<sup>3+</sup> ions on the properties of Mg-Zn ferrite nanoparticles, *Phyica B: Condense Matter*, 407 (2012) 4338–4346 (Impact Factor: 1.06)
- 38. R. H. Kadam, A. R. Biradar, **M. L. Mane**, Sagar E. Shirsath, Sol-gel autocombustion synthesis of Li<sub>3x</sub>MnFe<sub>2-x</sub>O<sub>4</sub> and their characterizations, *Journal of Applied Physics*, 112, (2012), 043902 (Impact Factor: 2.17)
- 39. Sagar E. Shirsath, S. M. Patange, R. H. Kadam, **M. L. Mane**, K. M. Jadhav, Structure refinement, cation site location, spectral and elastic properties of Zn<sup>2+</sup> substituted NiFe<sub>2</sub>O<sub>4</sub>, *Journal of Molecular Structure*, 1024 (2012) 77–83 (Impact Factor: 1.63)
- Sagar E. Shirsath, R. H. Kadam, S. M. Patange, M. L. Mane, Ali Ghasemi, Akimitsu Morisako, Enhanced magnetic properties of Dy<sup>3+</sup> substituted Ni-Cu-Zn ferrite nanoparticles, *Applied Physics Letters*, 100 (2012) 042407 (Impact Factor: 3.84)
- 41. V. V. Awati, S. M. Rathod, **Maheshkumar L. Mane**(corresponding author),S. P. Kamble, Frequency and composition dependent dielectric behaviour of Cu<sup>2+</sup> substituted nanocrystallineNi<sub>0.8-x</sub>Cu<sub>x</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub>ferrites, *Indian Streams Research Journal*, 2 (10)(2012) (Impact Factor: 0.22)
- 42. Vivek Chaudhari, Sagar E. Shirsath, **Maheshkumar L. Mane**, R. H. Kadam, D. R. Mane, Larger ionic radii dependent properties of La<sup>3+</sup> substituted Co-Cu-Cr-Fe nanoparticles, *Indian Streams Research Journal*, 2 (8), (2012) (Impact Factor: 0.22)
- 43. Madhavi Chaudhari, Sagar E. Shirsath, **Maheshkumar L. Mane,** R. H. Kadam, D. R. Mane, Structural development in Cr<sup>3+</sup> substituted nano-particles of Co<sub>0.5</sub>Mg<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> ferrite, *Indian Streams Research Journal*, 2 (8), (2012) (Impact Factor: 0.22)
- 44. S. A. Ghodake, **Maheshkumar L. Mane**, K. M. Jadhav, S. S. Suryawanshi, Chemical synthesis, structural aspects and magnetic behaviour of Ni-Cu-Zn spinel ferrite, *Indian Streams Research Journal*, June (2012) 1-4 (Impact Factor: 0.22)

- 45. Bhagawan G. Toksha, Sagar E. Shirsath, **Maheshkumar L. Mane**, Sunil M. Patange, Santosh S. Jadhav, Kamalakar M. Jadhav, Auto-combustion High-temperature Synthesis, Structural and Magnetic Properties of CoCrxFe2-xO4 (0 ≤ x ≤ 1.0), *Journal of Physical Chemistry C*, 115 (2011) 20905-20912 (Impact Factor: 4.80)
- 46. P. S. Aghav, Vinod N. Dhage, **Maheshkumar L. Mane**, D. R. Shengule, R. G. Dorik, K. M. Jadhav, Effect of aluminum substitution on the structural and magnetic properties of cobalt Ferrite synthesized by sol-gel auto combustion

- process, *Physica B: Condensed matter*, 406 (23) (2011) 4350-4354 (Impact Factor: 1.06)
- 47. Sagar E. Shirsath, B.G. Toksha, **Maheshkumar L. Mane**, V.N. Dhage, D.R. Shengule, K. M. Jadhav, Frequency, temperature and In<sup>3+</sup> dependent electrical conduction in NiFe<sub>2</sub>O<sub>4</sub>, *Powder Technology*, 212 (2011) 218-223 (Impact Factor: 2.08)
- 48. Vinod N. Dhage, **M. L. Mane,** M. K. Babrekar, C. M. Kale, K. M. Jadhav, Influence of chromium substitution on structural and magnetic properties of BaFe<sub>12</sub>O<sub>19</sub>, powder prepared by sol-gel auto combustion method, *Journal of Alloys and Compounds*, 509 (2011) 4394-4398 (Impact Factor: 2.29)
- 49. Vinod N. Dhage, **M. L. Mane**, A. P. Keche, C. T. Birajdar, K. M. Jadhav, Structural and magnetic behaviour of aluminium doped barium hexaferrite nanoparticles synthesized by solution combustion technique, *Physica B: Condensed matter*, 406 (2011) 789-793 (Impact Factor: 1.06)
- 50. Vinod N. Dhage, **M. L. Mane,** S. E. Shirsath, S. P. Jadhav, R. P. Gunjal, K. M. Jadhav, Structural and Magnetic Characterization of BaFe<sub>12</sub>O<sub>19</sub> Nanoparticles, *AIP conference proceeding*, 1349 (2011) 273-274
- 51. S. P. Jadhav, J. B. Mote, V. N. Dhage, **M. L. Mane**, N. D. Shinde, Effect of Al<sup>3+</sup>-Cr<sup>3+</sup> Substitution on Structural, Cation Distribution and Magnetic Properties of MgFe<sub>2</sub>O<sub>4</sub> Prepared by Chemical Co-precipitation Method, *AIP conference proceeding*, 1349 (2011) 409-410

- 52. M. K. Babrerkar, **M. L. Mane**, V. N. Dhage, S. J. Shukla, K. M. Jadhav, Synthesis and structural properties of nanosized cobalt ferrite thin film grown by spray pyrolysis technique, *Bionano frontier*, (2010) ICLAM (spl), 108-109(Impact Factor: 0.20)
- 53. Manisha R. Patil, **M. L. Mane**, P.K. Gaikwad, S. D. More, V. B. Kawade, K. M. Jadhav, Effect of sintering temperature on the properties of nanosized nickel ferrite, *Bionano frontier*, (2010) ICLAM (spl), 74-75 (Impact Factor: 0.20)
- 54. C.T. Birajdar, **M. L. Mane**, V. N. Dhage, M. K. Babrekar, S. P. Jadhav, K. M. Jadhav, Synthesis, structural and magnetic properties of magnesium ferrite nano-particles, *Bionano frontier*, (2010) NCANDT (spl), 176-180 (Impact Factor: 0.20)

# Memorial Lectures

- 1. Influence of synthesis route on properties of ferrite nanaoparticles, One day National Seminar on "Scope in Interdisciplinary Science" Organized by Department of Chemistry and Botany, Baburao Patil College of Arts and Science, Angar on 25<sup>th</sup> January 2017 (Invited Speaker)
- 2. Synthesis and structural properties of nanosized cobalt ferrite thin film grown by spray pyrolysis technique, "International Conference on Laser and Advanced Materials" held at Abasaheb Garware College, Pune on March 6-8, 2010 (Outstanding Paper Presentation Award)

	3. Laser irradiation induced modifications in structural and magnetic behaviour of nanocrystalline lithium ferrite, "UGC Sponsored One Day State Level Seminars On Nanoscience and Nanotechnology Present Scenario" organized by Department of Physics Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi on 21st November 2009 (Best Paper Presentation Award)
Book Chapter	Sagar E. Shirsath, Danyang Wang, S. S. Jadhav, <b>M. L. Mane</b> , Sean Li, Ferrites Obtained by Sol-gel Method, Handbook of Sol-Gel Science and Technology (Springer International Publishing AG 2018), pp. 1-41
Minor Research Project	Chemical synthesis, structural and magnetic characterization of hexaferrite nanoparticles, Funded by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (ongoing)
Abstracts in Conference Proceedings'	International  1. Vinod N. Dhage, M. L. Mane, A. B. Shinde, S. M. Rathod, B. J. Patil, K. M. Iadhay, Effect of Aluminum substitution on the dielectric properties of
	Jadhav, Effect of Aluminum substitution on the dielectric properties of barium hexaferrite nanoparticles, International Conference On Advanced Materials Development & Performance (AMDP 2017), Savitribai Phule Pune
	<ol> <li>University, Pune during 11-15 July 2017</li> <li>Maheshkumar L. Mane, Sagar E. Shirsath, V. C. Chavan, R. H. Kadam, Rare earth Tb<sup>3+</sup> substitution effect on structural and magnetic properties of nanocrystalline cobalt ferrite, UGC sponsored International Conference on "Emerging Horizons in Biochemical Sciences and Nanomaterial's (EHBCSN-2013)" Organized by Department of Chemistry and Microbiology, Shri Shivaji Mahavidyalaya, Barshi during 28<sup>th</sup> – 30<sup>th</sup> November 2013.</li> </ol>
	3. Sagar E. Shirsath, <b>Mahesh L. Mane</b> , Yukiko Yasukawa, Xiaoxi Liu, Akimitsu Morisako, Influence of pH on the Structural and Magnetic Properties of CoDy <sub>0.1</sub> Fe <sub>1.9</sub> O <sub>4</sub> Nanoparticles, The 11 <sup>th</sup> International Conference on Ferrites (ICF 11), April 15-19, 2013, Okinawa, Japan
	4. <b>M.L. Mane,</b> S.E. Shirsath, R.H. Kadam, X. Liu, A. Morisako, Infusion of rare earth Tb <sup>3+</sup> ions in nanocrystalline Sr-hexagonal structure, 12 <sup>th</sup> Joint MMM/Intermag Conference, Chicago (USA) IEEE Trans. on magnetic during January 14-18, 2013
	5. Sagar E. Shirsath, <b>Mahesh L. Mane</b> , Ali Ghasemi, Yukiko Yasukawa, Xiaoxi Liu, Akimitsu Morisako, Structural and magnetic properties of Mn³+ substituted ordered and disordered Lio <sub>5</sub> Cro <sub>5</sub> Fe <sub>2</sub> O <sub>4</sub> nanoparticles,12 <sup>th</sup> Joint MMM/Intermag Conference, Chicago (USA) IEEE Trans. on magnetic during January 14-18, 2013
	6. S. A. Ghodake, <b>Maheshkumar L. Mane</b> , K. M. Jadhav, S. S. Suryawanshi, "Oxalate precursor synthesis of Ni-Cu-Zn spinel ferrite and their characterizations for MLC applications", 2 <sup>nd</sup> International Conference on "Emerging Trends in Chemical Sciences" (ETCS -12) organized by Solapur

- University, Solapur, India on November 2-4, 2012
- 7. R. H. Kadam, **M. L. Mane,** S. M. Patange, Santosh S. Jadhav, K. S. Lohar, Sagar E. Shirsath, Electrical and magnetic properties of Ni<sub>0.4</sub>Cu<sub>0.4</sub>Zn<sub>0.2</sub>Cr<sub>x</sub>Fe<sub>2-xO4</sub> nanoparticles, International Conference on High Pressure Science and Technology, BARC Mumbai (India) 2011
- 8. Vinod N. Dhage, **M. L. Mane**, M.K. Babrekar, U. B. Dindore, K. M. Jadhav, Structural and Magnetic properties of BaFe<sub>12</sub>O<sub>19</sub> prepared by sol-gel autocombustion technique, International Conference on Recent Trends in Nano Bio-Science, organized by Department of Physics, P.G. College of Science Saifabad, Osmania University Hyderabad-500 004 during February 24-26, 2010
- 9. S. V. Rajmane, U. B. Dindore, C. T. Birajdar, **M. L. Mane**, S. P. Jadhav, K.M. Jadhav, Magnetic properties of bulk and nanosized copper ferrite, "97<sup>th</sup> Indian Science Congress Association" held at Thiruvananthapuram on 3<sup>rd</sup> to 7<sup>th</sup>January 2010
- 10. A. P. Keche, S. E. Shirsath, B. G. Toksha, **M. L. Mane,** K. M. Jadhav, Synthesis and magnetic properties of Li Ferrite by Sol-gel technique, "International conference on magnetic materials and their applications for 21<sup>st</sup> century", Organized by National Physical Laboratory New Delhi in 2008
- 11. A. P. Keche, V.N. Dhage, **M. L. Mane,** B. G. Toksha, K. M. Jadhav, Structural and magnetic studies of nanosized nickel ferrite prepared by Sol-gel method, "53<sup>rd</sup> DAE Symposium", BARC Mumbai, 2008

#### **National**

- 12. Vinod N. Dhage, **M. L. Mane,** A. B. Shinde, K. M. Jadhav, Aluminium Substitution Effect on the properties of Barium Hexaferrite Synthesized by Sol-Gel Autocombustion Technique, National Conference on Recent Trends and Development in Materials Science 2017, Department of Physics, Indraraj Arts, Commerce and Science College, Sillod Dist. Aurangabad 431112, on 16<sup>th</sup> December 2017
- 13. S. P. Kamble, **M. L. Mane**, G. B. Jadhav, P. W. Khirade, Wet-chemical synthesis of CTBA assisted copper oxide nanoparticles and their applications, National seminars on Advances in Innovative Materials and Applications, Department of Physics, Gopikabai Sitaram Gawande Mahavidyalaya, Umarkhed-445206 (MS) ) on 21st September 2013
- 14. L. A. Dhale, R. H. Kadam, Y. A. Vijapure, S. E. Shirsath, S. B. Shelke, **M. L. Mane**, Sol-Gel synthesis and structural characterization of Pr<sub>x</sub>NiFe<sub>2-x</sub>O<sub>4</sub> ferrite nanoparticles, National conference on Physics of Nanomaterial's and Applications (NCPNA-2012), Department of Physics, D.B.F. Dayanabad College of Arts and Science, Solapur during 14<sup>th</sup> 15<sup>th</sup> December 2012
- 15. M. K. Babrekar, S. M. Chavan, **Maheshkumar L. Mane**, V. N. Dhage, C. T. Birajdar, K. M. Jadhav, Development of nanocrystalline Cobalt ferrite thin films for gas sensing applications, National Seminar on Physics of Materials and Materials Based Device Fabrication (NSPM-MDF-2011), Department of

- Physics Shivaji University, Kolhapur 2011
- 16. M. K. Babrekar, V. N. Dhage, **M. L. Mane**, A. P. Keche, S. M. Chavan, K. M. Jadhav, Electrical and optical characterization of NiFe<sub>2</sub>O<sub>4</sub> thin film prepared by spray pyrolysis technique, "National Seminar on Advanced Materials (NSAM-2010)" during March 19-20, 2010 in the Department of Physics, Shivaji University, Kolhapur
- 17. D. E. Kakde, V. K. Barote, M. K. Babrekar, **M. L. Mane**, A. A. Pandit, K. M. Jadhav, Influence of Wo₃ on the Structural and Magnetic Properties of Ni-Cu-Zn Ferrites, "National Conference on Materials Science: Trends & Future-2010" Sponsored by- UGC & CSIR New Delhi held at Vidyabharati Mahavidyalaya, Amravati-444602 (M.S.) on January 6-7, 2010

#### State

- 18. **Maheshkumar L. Mane,** Sagar E. Shirsath, R. H. Kadam, A. B. Ghumare, Sintering effect on the crystal chemistry of nanostructured Mg-Ni-Zn ferrite, State level seminar on "Green Chemistry as an Environmental Benign Chemistry" held at Department of Chemistry, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 31st August 2013
- 19. **Maheshkumar L. Mane,** S. B. Deshmukh, V. C. Chavan, Sagar E. Shirsath, Effect of Zn<sup>2+</sup> substitution on the structural and magnetic behavior of nanostructured Mg-Ni ferrite, State level seminar on "Green Chemistry as an Environmental Benign Chemistry" held at Department of Chemistry, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 31st August 2013
- 20. D. H. Bobade, V. V. Awati, **M. L. Mane**, Crystallographic phenomenon of Ni<sup>2+</sup> doped nanocrystalline Mg<sub>0.7-x</sub>Ni<sub>x</sub>Zn<sub>0.3</sub>Fe<sub>2</sub>O<sub>4</sub> spinel ferrite in situ: X-ray diffraction and infrared spectroscopy technique, State level conference on "Recent Trends in Biophysics and Medical Electronics" at Department of Physics, K. J. Somaiya College of Arts, Commerce and Science, Kopargaonon10-11<sup>th</sup> February 2012
- 21. **Maheshkumar L. Mane,** Sagar E. Shirsath, K. M. Jadhav, Physical properties of gamma ray irradiated nanocrystalline Co-ferrite prepared by sol-gel autocombustion technique, State level conference on "Recent Trends in Material science" at Department of Physics, C. T. Bora College Shirur Dist Pune on 20-21st January 2012
- 22. **Maheshkumar L. Mane,** V. N. Dhage, M. K. Babrekar, M. R. Patil, K. M. Jadhav, Laser irradiation induced modifications in structural and magnetic behaviour of nanocrystalline lithium ferrite, "UGC sponsored One Day State Level Seminars on Nanoscience and Nanotechnology Present Scenario" organized by Department of Physics Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi on 21st November 2009 (**Best Paper Award**)

# Conferences Attended

#### **International**

 Second International Conference on Advance in Material Science (ICAMS-2017) Organized by Raje Ramrao Mahavidyalaya Jath, Dist Sangli during 22-23 December 2017

- 2. UGC sponsored International Conference on "Emerging Horizons in Biochemical Sciences and Nanomaterial's (EHBCSN-2013)" Organized by Department of Chemistry and Microbiology, Shri Shivaji Mahavidyalaya, Barshi during  $28^{\rm th}-30^{\rm th}$  November 2013
- 3. "55<sup>th</sup> DAE-Solid State Physics Symposium 2010" held at Manipal University (K.S.) during 26-30 December 2010
- 4. "International Conference on lasers and Advanced Materials (ICLAM)" organized by Department of physics, M. E. S. Abasaheb Garware College Pune during 6-8 March 2010
- 5. "International Conference on Recent Trends in Nano Bio-Science" organized by Department of Physics, P.G. College of Science Saifabad, Osmania University, Hyderabad-500 004 during February 24-26, 2010
- 6. "97th Indian Science Congress Association" held at Thiruvananthapuram during  $3^{\rm rd}-7^{\rm th}$  January 2010
- 7. "International conference on magnetic materials and their application for 21st century" Organized by National Physical Laboratory, New Delhi in 2008

#### **National**

- National Seminar on "Revised NAAC Guidelines" organized by S. M. Dnyandeo Mohekar Mahavidyalaya Kallamb Dist. Osmanabad on 9th February 2019
- National conference on "Emerging Trends in Chemistry and Materials Science (ETCMS-2018) organized by Department of Chemistry and Physics, G. M. D. Arts, B. W. Commerce and Science College, Sinnar during 18<sup>th</sup> – 19<sup>th</sup> January 2019
- National conference on "Nanostructured Materials and Nanotechnology" Organized by Department of Chemistry and Physics of M. S. P. Mandal's Shri Muktanand College, Gnagapur Dist. Aurangabad held on 1st December 2018
- National Conference on "Recent Advances in Green Chemistry and Physics", Organized by IQAC, Department of Chemistry and Physics, Shri Chatrappati Shivaji College, Omerga, held on 27th April 2018.
- 12. National Seminar on "New Nano Materials, devices, Technology & Applications in Physics and Electronics" Organized by Department of Physics and Electronics, Shri Shivaji Mahavidyalaya, Barshi during 24th January 2018.
- 13. One day National Seminar on "Scope in Interdisciplinary Science" Organized by Department of Chemistry and Botany, Baburao Patil College of Arts and Science, Angar on 25th January 2017
- 14. National conference on "Innovation in Nanomaterials and Nanotechnology (NCINMNT-2017)" Organized by Rajashi Shahu arts, Commerce and Science College, Pathri Dist. Aurangabad on 21st January 2017.

- 15. National Conference on "Material Synthesis for device level applications" organized by Department of Physics, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 29<sup>th</sup> 30<sup>th</sup> January 2015
- National Conference on "Material science and technology" organized by Department of Physics, Milliya Arts, Science and Management Science college, Beed on 23-24th December 2014
- 17. National seminars on "Water pollution and soil waste management for natural resources conservation" organized by Department of Chemistry, Jawahar Arts, Science and Commerce college, Andur Dist. Osmanabad during 17th – 18th February 2014
- 18. National Conference on Emerging Trends In Lasers and Advance Materials (NCETAM 2013) organized by Department of Physics, M. E. S. Abasaheb Garware College Pune during 28 29th October 2013
- 19. National seminars on Advances in Innovative Materials and Applications, Department of Physics, Gopikabai Sitaram Gawande Mahavidyalaya, Umarkhed, Dist. Yavatmal-445206 (MS) during 21st September 2013
- 20. National conference on Physics of Nanomaterials and Applications (NCPNA-2012), Department of Physics, D. B. F. Dayanabad College of Arts and Science, Solapur during 14<sup>th</sup> 15<sup>th</sup> December 2012
- 21. "National seminars on Recent Techniques in Materials Characterization" organized by Department of Physics SSGM College Kopergaon on 29 January 2010
- 22. "National Conference on Current Trends in Material Research for Advanced Technology (NCMRAT–2007)" Organized by Department of Physics Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

#### State level

- 23. State level seminar on "Green Chemistry as an Environmental Benign Chemistry" held at Department of Chemistry, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 31st August 2013
- 24. State level conference on "Recent Trends in Biophysics and Medical Electronics" organized by Department of Physics, K. J. Somaiya College of Arts, Commerce and Science, Kopargaonon 10-11th February 2012
- 25. State level conference on "Recent Trends in Material Science" organized by Department of Physics, C. T. Bora College, Shirur Dist. Pune on  $20^{\rm th}-21^{\rm st}$  January 2012.
- 26. "UGC sponsored One Day State Level Seminars on Nanoscience and Nanotechnology Present Scenario" organized by Department of Physics Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi on 21st November 2009

#### **Workshops**

27. "Science Academies Lecture Workshop on Probing Electronic States in

- Molecules and Molecular Materials" Organized by Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in collaboration with Indian Academy of Sciences, India from 21st to 25th October 2010.
- 28. Short course on Characterization of Polymers Using Thermal Analysis, Rheology and Calorimetry, Organized by Waters (India) private limited Bangalore, at Aurangabad during 17th April 2009
- 29. "Low Temperature and High Magnetic Field Facilities at UGC-DAE CSR, Indore" held during the period 6-7<sup>th</sup> March 2009
- 30. "INDO-RUSSIAN Workshop on Self-propagating High Temperature synthesis (SHS)" Organized by Indian Institute of Science, Bangalore
- 31. "67<sup>th</sup> BARNS-IANCAS National Workshop on Radiochemistry and Applications of Radioisotopes" Organized by Department of Physics Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in collaboration with IANCAS in 2008
- 32. "Workshop on Awareness Programme of Training, Job Opportunities in Research and Projects for Engineering Graduates and Science Post Graduate in DAE Organizations (WAP-2008)" Organized by Department of Physics Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

# Reviewer of Journals

- 1. Materials Chemistry and Physics
- 2. Journal of Alloys and Compounds
- 3. Journal of Physics and Chemistry of Solids
- 4. Journal of Applied Research and Technology
- 5. Journal of Molecular Structure
- 6. Surface and coating technology
- 7. Ceramic International
- 8. Physica B
- 9. International nano letters
- 10. Radiation effects and defects in solids
- 11. Optical and Quantum Electronics
- 12. Science publications

# Extension Works

# Research:

- 1. Examiner for State Level Children's Science Congress 2019
- 2. Examiner for district level INSPIRE award
- 3. Acted as Chair person for Lead lectures in National seminars on "Material Synthesis for device level applications" organized by Department of Physics, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 29th 30th

January 2015

- 4. Acted as Chair person for Lead lectures in State level seminar on "Green Chemistry as an Environmental Benign Chemistry" held at Department of Chemistry, Ramkrishana Paramhansa Mahavidyalaya, Osmanabad on 31st August 2013
- 5. Worked as an examiner for poster presentation session in "State level conference on Recent Trends in Material Science" organized by Department of Physics, C. T. Bora College Shirur Dist. Pune (M.S.) India on 20th 21st January 2012.

#### Academic:

- 6. Subject Expert for Interviews conducted by various institutes.
- 7. Worked as an Expert for B. Sc. practical examinations conducted by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad 431 004 (M.S.) India
- 8. Worked as an Department Representative (D. R.) for the Academic year 2006-2007, in Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad 431 004 (M.S.) India.
- 9. Worked in "Earn and Learn" scheme during the academic years 2005-2007.

# Society Memberships

- Member of Indian Science Congress Association, (Membership No A4884)
   2010
- 2. Member of Marathwada Economical Association (MEA)

#### Dr. Maheshkumar Lahu Mane

http://www.researchgate.net/profile/Dr\_Maheshkumar\_Mane/ http://scholar.google.com/citations?user=30 uBK0AAAAJ&hl=en https://publons.com/researcher/2765614/maheshkumar-l-mane/ https://www.scopus.com/authid/detail.uri?authorId=36834191000





