

Devendra Singh

Programme : Ph.D. (Nanotechnology)
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Educational Information:



Ph.D. (Pursuing): Centre for Research in Nanotechnology & Science, Indian Institute of Technology Bombay, Mumbai, India, (2008 onwards) .



M. Tech. (Advanced Materials Science & Technology): First Class First, National Institute of Technology, Deemed University, Durgapur, West Bengal, India, 2008.



M. Sc. (Physics with specialization in X-Rays): First Class, CSJM University, Kanpur, Uttar Pradesh, India, 2004.



B. Sc. (Physics, Chemistry, Mathematics): Second Class, Lucknow University, Uttar Pradesh, India, 2002.

Research Highlights:

Structural, optical and electrical properties of wide band-gap semiconductor nano-crystalline thin films prepared by RF Magnetron sputtering technique.

Field of Work / Interest:

Epitaxial thin films and Nanostructured materials for optoelectronic-devices.

Credentials:

- ✚ Got 1st position (Gold-Medal) in M.Tech. Course (Advanced Materials Science & Technology) from Department of Physics, NIT Durgapur (Deemed University), WB, India (2008).
- ✚ M.Sc. in Physics with Second specialization in Condensed Matter Physics from CSJM University, Kanpur, UP, India (2005-2006).
- ✚ Got "Organizational Color" as a Mess-Councilor at Hostel-13 for one year in IIT Bombay as a part of hostel council (2009-2010).
- ✚ Academic Unit Representative Academic Affairs (AURAA) member under Institute Academic Council (Post Graduate) for the Academic year of 2011-12 at IIT Bombay.
- ✚ Actively participated as organizing member of TechConnect in Techfest-2012 at IIT Bombay, 2012.

- ✚ Got "Sports Color" for sports activities at Hostel-13, IIT Bombay as a part of council (2011-2012).
- ✚ Co-convenor, 1st In-house Meet of Nanotechnology & Science (imnano'2012), organized by Centre for Research in Nanotechnology & Science (CRNTS), Indian Institute of Technology Bombay,.
- ✚ Currently, Executive Member of Academic Affairs PG council'2012-13.

Publications:

1. D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*Effect of Thickness on the Epitaxial Quality of ZnO Grown on Sapphire by Reactive RF Magnetron Sputtering*" Thin Solid Films (communicated).
2. P. Mohanta, D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*Effect of ZnO buffer layer thickness on the epitaxial growth of GaN by reactive magnetron sputtering*" Thin Solid Films (communicated).
3. D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*Effect of Substrate Temperature on Microstructure of Epitaxial ZnO Films Grown on Sapphire by Sputtering*" AIP Conf. Proc. 1447, 769 (2012).
4. D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*Microstructural Studies of Epitaxial ZnO Films Deposited on Sapphire by Reactive rf Magnetron Sputtering*" AIP Conf. Proc. 1349, 793 (2011).
5. P. Mohanta, D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*Effect of Buffer Layer Growth Temperature on Epitaxial GaN Films by Magnetron Sputtering*" AIP Conf. Proc. 1447, 661 (2012).
6. P. Mohanta, D. Singh, R. Kumar, T. Ganguli, R.S. Srinivasa, S.S. Major "*HRXRD study of epitaxial GaN films grown on ZnO buffer layers by magnetron sputtering*" AIP Conf. Proc. 1349, 675 (2011).
7. P. Kumbhakar, D. Singh, C. S. Tiwary, A. K. Mitra "*Chemical synthesis and visible photoluminescence emission from monodispersed ZnO nanoparticles*", Chalcogenide Letters Vol. 5, No. 12, Dec 2008, p. 387 - 394.

Experience:

- CBSE XII level Physics in Kendriya Vidyalaya RDSO, Lucknow, UP (Jan 2005 – May 2005)
- CBSE X-XII level Physics & Mathematics in PPJ Saraswati Vihar (fully residential school) Nainital, Uttarakhand, India (May 2005 - July 2006).