

## Dr. Mala S

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### Education

	Degree	Year	Institute	Specialization
1	Ph.D	2023	Siddaganga Institute of Technology	Thin film sensors
2	M.Tech.	2012	Siddhartha Institute of Technology	Digital Electronics
3	B.E	2023	Kalpataru Institute of Technology	Electronics and Communication

### Professional Experience

	Date (from-to)	Designation	Organization
1	2011-till date	Assistant Professor	SIT
2	2004-2010	Lecturer	SIT

*(Please fill in reverse order. Current designation should be at the top)*

### Positions held

- Dept. Placement coordinator

### Affiliations of Professional organizations

- Life member of ISTE

### Awards and Honors

- Received best paper award in International Conference on Computer Science & Information Technology, CSIT-2011

- Received KSCST project of the year award during the Seminar and Exhibition held at SDM Institute of Technology, 13<sup>th</sup> and 14<sup>th</sup> July 2012
- Received KSCST project of the year award during the Seminar and Exhibition held at NMAM Institute of Technology, 11<sup>th</sup> and 12<sup>th</sup> August 2017

### Courses Taught

#### Undergraduate Courses

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| 1. Basic Electronics                       | 2. Operating systems                     |
| 3. Electrical and electronics measurements | 4. Optical Networks                      |
| 5. Information theory and coding           | 6. Embedded systems                      |
| 7. Digital electronic circuits             | 8. Digital System Design Using VHDL      |
| 9. Foundations of Electronic Engg          | 10. Control systems                      |
| 11. Digital System Design Using Verilog    | 12. Electronic Measurements              |
| 13. Network Analysis                       | 14. Integrated Circuits and Applications |
| 15. CMOS VLSI Design                       | 16. Smart materials and smart systems    |
| 17. Introduction to C programming          | 18. Sensors for biomedical applications  |

### Research Areas

- Thin film sensors

### Publications

#### Journals

- Mala, S., H. K. E. Latha, and A. Udayakumar. "Design and Fabrication of Indium Tin Oxide Based Thin Film Piezoresistive Pressure Sensor." *Experimental Techniques* (2024): pp 1-13.
- Lalithamba, H. S., H. K. E. Latha, N. Narendra, and S. Mala. "Green Synthesis, Structural, Electrical and Catalytic Properties of Nano-MgO." *Journal of Electronic Materials* 53, no. 1 (2024), pp 30-40.
- Mala, S., H. K. E. Latha, and A. Udayakumar. "Influence of post-deposition annealing temperature on structural and electrical properties of TiW contact thin films." *Journal of the Korean Physical Society* 83, no. 3 (2023), pp 194-199.

- Mala, S., H. K. E. Latha, A. Udayakumar, and H. S. Lalithamba. "Green synthesis of ITO nanoparticles using Carica papaya seed extract: impact of annealing temperature on microstructural and electrical properties of ITO thin films for sensor applications." *Materials Technology* 37, no. 10 (2022), pp 1432-1438.
- Latha, H. K. E., S. Mala, and A. Udayakumar. "Investigation on Strain Sensitivity and Temperature Behaviour of Nitrogen Doped 3C-SiC Thin Films." *Journal of Mines, Metals and Fuels* (2022), pp 266-272.
- Mala, S., H. K. E. Latha, H. S. Lalithamba, and A. Udayakumar. "A study on the impact of tin concentration on microstructural, dielectric and conductivity properties of ITO nanoparticles." *Materials Today: Proceedings* 60 (2022), pp 839-848.
- Savitha, D., Latha, H.K.E., Lalithamba, H.S., Mala, S. and Jeppu, Y.V.,. Structural, optical and electrical properties of undoped and doped (Al, Al+ Mn) ZnO nanoparticles synthesised by green combustion method using terminalia catappa seed extract. *Materials Today: Proceedings*, 60,( 2022), pp.988-997.
- Mala S, Haraluru Kamala Eshwaraiah Latha, Haraluru Shankaraiah Lalithamba, and Andi Udayakumar. "The Effect of Tin Concentration on Microstructural, Optical and Electrical Properties of ITO Nanoparticles Synthesized Using Green Method." *Iranian Journal of Materials Science & Engineering* 18, no. 4 (2021).

### Conference Proceedings

- Mala, S., Reddy, C., Girish, M.L., NM, M.K. and Monoj, S.B., 2024, December. Design of a 32-Bit ALU Using Cadence tools. In *2024 4th International Conference on Mobile Networks and Wireless Communications (ICMNWC)* (pp. 1-6). IEEE.
- Mala S., Lalithamba, H.S., Suman, H.V., Tejas, N.R., Vivek, G. and Rakshith, R., 2024, May. Synthesis and Characterization of Titanium dioxide Nanoparticles for Sensor Applications. In *2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)* (pp. 1-5). IEEE.
- Mala, S., Vidyashree, H.R. and Chanda, K., 2024, August. Yolo model-based license plate extraction and toll generation for smart parking systems. In *2024 2nd International Conference on Networking, Embedded and Wireless Systems (ICNEWS)* (pp. 1-7). IEEE.
- Mala, S., Lalithamba, H.S., Gowda, N., Manoja, K.N., Pavankumar, R. and Kishore, T.J., 2023, July. Synthesis and Characterization of Silver Nanoparticles for Gas Sensing Applications, *International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)* (pp. 1-6). IEEE.

- Mala, S., K. B. Ashwini, H. K. E. Latha, and A. Udayakumar. "Effect of deposition temperature on microstructure properties of SiC thin films deposited using RF magnetron sputtering." In AIP Conference Proceedings, vol. 2105, no. 1. AIP Publishing, 2019.