List of Publications

(a) Papers Published in Peer-Reviewed International Journals

- **Sunny**, Vinod Kumar, V. N. Mishra, R. Dwivedi and R. R. Das, "Classification and Quantification of Binary Mixtures of Gases/Odors Using Thick Film Gas Sensor Array Responses", *IEEE Sensors Journal*, Vol. 15, No. 2, pp.1252-1260, February 2015.

- **Sunny**, Vinod Kumar, V. N. Mishra, R. Dwivedi and R. R. Das, "Role of Exposure and Recovery Transients in Classification of Gases/Odors with Thick Film Sensor Array", *IEEE Transaction on Nanotechnology*, Vol. 13, Iss. 6, pp 1266-1272 Nov. 2014 .

- **Sunny**, V. N. Mishra, R. Dwivedi and R. R. Das, "Classification of Gases/Odors Using Dynamic Responses of Thick Film Gas Sensor Array", *IEEE Sensors Journal*, Vol. 13, No. 12,pp. 4924- 4930, December 2013.

- **Sunny**, V. N. Mishra, R. Dwivedi and R. R. Das, "Quantification of Individual Gases/Odors Using Dynamic Response of Gas Sensor Array with ASM Feature Technique", *IEEE Sensors Journal*, Vol. 14, No.4, pp. 1006-1011, April 2014.

- **Sunny**, V. N. Mishra, R. Dwivedi and R. R. Das, "Performance Comparison of Linear Discriminant Analysis and Principal Component Analysis for Classification of Gases/Odors with Neural Classifier", *Advanced Science, Engineering and Medicine*, Vol. 5, pp.1051-1057, 2014.

- **Sunny**, Vinod Kumar, V. N. Mishra, R. Dwivedi and R. R. Das, "Fabrication and Characterization of Integrated Thick Film Gas Sensor Array for Detection of LPG, Nitrous Oxide, Acetone and 2-Propanol", *Advanced Science, Engineering and Medicine*, Vol. 6, pp. 1210-1217, 2014.

- **Sunny**, V. N. Mishra, R. Dwivedi and R. R. Das, "Gases/Odors Identification with Artificial Immune Recognition System Using Thick Film Gas Sensor Array Responses", *IEEE Sensors Journal*, Vol. 13, No. 8, 3039-3045, August 2013.

- **Sunny**, R. Kumar,V. N. Mishra, R. Dwivedi and R. R. Das,"A Dynamic Response, Transformed cluster Analysis and Radial Basis Function Neural Network Based Gases/Odors Identification Approach Using a Thick Film Gas Sensor Array", *Journal of Computational and Theoretical Nanoscience*, Vol. 11, No. 4, pp. 1199-1204, 2014.

- Vinod Kumar, **Sunny**, Ishpal Rawal, V.N. Mishra, R. Dwivedi, R.R. Das, "Fabrication and Characterization of Gridded Pt/SiO2/Si MOS Structure for Hydrogen and Hydrogen

Sulphide Sensing", *Journal of Materials Chemistry and Physics,* Vol. 146, Iss. 3, pp.-418-424, 2014.

- Vinod Kumar, **Sunny**, V.N. Mishra, R. Dwivedi, R.R. Das, "Influence of gridded gate structure on gas sensing behavior of hydrogen", *Journal of Applied Physics,* Vol. 115, 204514-1-5, 2014.

(b) Papers Published/Presented in International/National Conferences

- **Sunny**, V. N. Mishra, R. R. Das and R. Dwivedi , "Identification of Gases/Odors Using TCA Data Preprocessing Technique", *International Conference On Artificial Intelligence and Soft Computing, (AISC-2012),* pp. 143-145, 7th - 9th December 2012.

- **Sunny**, Vinod Kumar, V. N. Mishra, R. R. Das and R. Dwivedi, "Qualitative Classification of Gases/Odors Using Thick Film Sensor Array Response with Simple Feed-forward Neural Network Training Functions, *International Conference on Emerging Trends in Electrical, Communication and Information Technologies (ICECIT-2012),* Elsevier Conference proceedings, Vol. 1, pp. 209-213, 2012.

- Vinod Kumar, **Sunny**, J. K. Srivastava, V. N. Mishra, R. Dwivedi, Pt Gate MOS Sensor for Hydrogen Detection, *International Conference on Emerging Trends in Electrical, Communication and Information Technologies (ICECIT-2012),* Elsevier Conference proceedings, Vol. 2. pp. 82-85, 2012.

- **Sunny**, V. N. Mishra, R. R. Das and R. Dwivedi, "Gases/Odors Classification Using K-means, Hierarchical Clustering and Self Organizing Map" The 4th International Conference on Electronics, Communications and Networks, Beijing, China, Dec.12th-15th, 2014 (*Accepted on 15 Nov. 2014*).