Mr. Debdulal Saha

Full List of Publications

1. Debdulal Saha, Kalyan Kumar Mistry, Runa Giri, Animesh Guha, Kamalendu Sensgupta, "Dependence of moisture absorption property on sol-gel process of transparent nano-structured γ-Al_2O_3 ceramics" Sensors and Actuators B, Vol. 109, 9 (2005) pp.363-366

2. Kalyan Kumar Mistry, Debdulal Saha, Kamalendu Sengupta, "Sol-gel processed Al_2O_3 thick film template as sensitive capacitive trace moisture sensor" Sensors and Actuators B, Vol.106, (2005) pp. 258-262

3. Debdulal Saha, Runa Giri, Kalyan Kumar Mistry, Kamalendu Sengupta, "Magnesium chromate-TiO_2 spinel tape cast thick film as humidity Sensor" Sensors and Actuators B, Vol.107, (2005) pp.323-331

4. Debdulal Saha, Kamalendu Sengupta, "High temperature humidity sensor for detection of leak through slits and cracks in pressurized Nuclear power reactor pipes" Sensors & Transducers Vol. 77, Issue 3, (2007) pp.1025-1031

5. Debdulal Saha, Kamalendu Sengupta, "Nano structure metal oxide ceramic thin film for detection of trace moisture using CMOS timer" Sensors & Transducers Vol. 80, Issue 6, (2007) pp. 1239-1245

6. Debdulal Saha, Kamalendu Sengupta, "Trace Moisture Response Property of Thin Film Nano Porous γ-Al_2O_3 for Industrial Application" Sensors & Transducers Vol.85, Issue 11, (2007) pp. 1714-1720

7. Debdulal Saha, Santanu Das and Kamalendu Sengupta, "Development of commercial trace moisture sensor following sol-gel thin film technique" Sensors and Actuators B, Vol. 128, Issue 2, (2008) pp. 383-387

8. Dilip Kumar Ghara, Debdulal Saha and Kamalendu Sengupta, "A Dew Point Meter Comprising a Nanoporous Thin Film Alumina Humidity Sensor with a Linearizing Capacitance Measuring Electronics" Sensors & Transducers, Vol. 88, Issue 2, (2008) pp. 59-65

9. Dilip Kumar Ghara, Debdulal Saha and Kamalendu Sengupta, "Leak rate and location analysis through slits and cracks in pipes by nano porous ceramics humidity sensors" International Journal on Smart Sensing and Intelligent System, Vol. 1, No. 3, (2008) pp.784-798

10. Dilip Kumar Ghara, Debdulal Saha & Kamalendu Sengupta, "Implementation of linear trace moisture sensor by nano porous thin film moisture sensor and NLAmp" International Journal on Smart Sensing and Intelligent System, Vol. 1, No. 4, (2008) pp. 955-969

11. Saakshi Dhanekar, Tarikul Islam, S. S. Islam, Kamalendu Sengupta, Debdulal Saha, "Effect of Organic Vapour on Porous Alumina Based Moisture Sensor in Dry Gases" Sensors & Transducers Journal, Vol. 6, Special Issue, August 2009, pp. 117-127

List of Presentations in Conferences

1. "Role of micronised andalusite on mullitization in low cement Castable matrix" 5Th Indian International Refractories Congress, Bhubaneswar, Orissa, India.7-8 February 2002. D.Saha, S.C. Mitra and P.K. Daspodder. Dept.of Chemical Technology. University of Calcutta.
2. "Fabrication of nano materials using alumina for making thick/thin film trace moisture sensors". Debdulal Saha, Santanu Das, K.Sengupta. National Conference on Sensors and Actuators: Emerging Technological Challenges (NCSA-06), CGCRI, Kolkata, December 21-22, 2006.

3. "Development of Nano Porous Sol-Gel Thin Films for sensing trace moisture present in transformer oil". Debdulal Saha, Kamalendu Sengupta, 10th International Conference on Advanced Materials (IUMRS-ICAM 2007) Organized by MRSI in association with IISc, Bangalore from 8-13 October, 2007.

4. "Development of thin film nano-porous hygro sensor for detection of trace moisture during the preparation of uranium and plutonium palate in Glove Box condition for fast breeder test reactor". Debdulal Saha, Dilip Kumar Ghara & Kamalendu Sengupta, 8th International Conference on Catalysis in Membrane Reactors (ICCMR8), December 18-21, 2007, Central Glass & Ceramic Research Institute (CGCRI), Kolkata, India.

5. "A naval sol-gel thin film nano porous α-Alumina for low PPMv moisture sensing". Debdulal Saha, Dilip Kumar Ghara & Kamalendu Sengupta ,International Conference on High-Tech Aluminas and unfolding their Business Prospects (ALUMINAS 2008) jointly organized by Indian Ceramics Society and Central Glass & Ceramics Research Institute, Venue CGCRI. Kolkata from 28th February to 1st March, 2008.

6. "Study of Cross- Sensitivity of Porous Alumina based Trace Moisture Sensor in Dry Gases". S. Dhanekar, P.M.Z. Hasan, S. Hussain, T. Islam, S.S. Islam, K. Sengupta and Deb. Saha. 3rd International Conference on Sensing Technology, Nov. 30 – Dec. 3, 2008, Tainan.

7. "Nanoporous γ-alumina as capacitive sensor for on-line detection of water vapour in transformer oil" Debdulal Saha, Moutushi Dutta Choudhury & Kamalendu Sengupta. International Conference on Electroceramics (ICE-2009) organized by Delhi University, 13-17 December, 2009.