

Publications (since 2007)

Sl.No.	Title of the Paper	Name of the Author(s)	Journal Name	Volume No. Page No.	Year
1)	Determination of thermal diffusivity of Basalt fiber reinforced epoxy composite using infrared thermography	V Kalyanavalli, TK Abilasha Ramadhas, D Sastikumar	Measurement	134, 673-678	2019
2)	Long pulse thermography investigations of basalt fiber reinforced composite	V. Kalyanavalli, T.K. Abilasha Ramadhas, D. Sastikumar	NDT and E International	100, 84-91	2018
3)	Sensing characteristics of clad-modified (Ho-doped Bi ₂ O ₃ nanoparticles) fibre optic gas sensor	<u>Manjula, M</u> <u>Karthikeyan, B.</u> Sastikumar, D.	Optical Fiber Technology, Volume	45, 35-39.	2018
4)	Fiber optic gas sensor based on light detection from the samarium oxide clad modified region	S. Devendiran, D. Sastikumar	Optical Fiber Technology	46, 215-220	2018
5)	In situ growth of Prussian blue nanocubes on polypyrrole nanoparticles: facile synthesis, characterization and their application as fiber optic gas sensor	Muthusamy Suganthi, Charles Julie, <u>Renganathan, B.</u> Sastikumar, D.	Journal Of Materials Science	53, 15401 -15417	2018
6)	A High Sensitivity Isopropanol Vapor Sensor Based on Cr ₂ O ₃ -SnO ₂ Hetero junction Nano composites via Chemical Precipitation Route	Jawaher K.R, Indirajith R, Krishnan S, Robert, R Pasha SKK, Deshnnukh K, Sastikumar D, Das SJ.	Journal of nanoscience and nanotechnology	18, 5454-5460	2018

7)	Development of room Temperature fiber optic gas sensor using clad modified $Zn_3(VO_4)_2$	Subramanian M Dhayabaran VV Sastikumar, D Shanmugavadivel M.	Journal of alloys and compounds	750, 153-163	2018
8)	Microstructural and mechanical properties of Al_2O_3/ZrO_2 nanomultilayer thin films prepared by pulsed laser deposition	Balakrishnan, G Sastikumar, D Kuppusami, P Babu, RV, Il Song Jung	Applied Physics A- Materials Science & Processing	124	2018
9)	Effect of Co on the magnetic and gas sensing properties of SnO_2 nanoparticles	R. N. Mariammal, N. Rajamanickam, B. Renganathan, D. Sastikumar, and K. Ramachandran	Journal of Applied Physics	122, 124504-1 to 124504-6	2017
10)	Sensing characteristics of nanocrystalline bismuth oxide clad-modified fiber optics gas sensor	Manjula M, Karthikeyan B, Sastikumar D.	Optics and Laser in Engineering	95, 78-82.	2017
11)	Photoluminescence properties of carbon nanoparticles synthesized from activated carbon powder (4% ash) by laser ablation in solution	Gaurav Kumar Yogesh, E.P. Shuaib, D. Sastikumar	Materials Research Bulletin	91, 220-226	2017
12)	Gas sensing based on detection of light radiation from a region of modified cladding (nanocrystalline ZnO) of an optical fiber	S. Devendiran, D. Sastikumar	Optics & Laser Technology	89, 186–191	2017,
13)	Size–strain distribution analysis of SnO_2 nanoparticles and their multifunctional applications as fiber optic gas sensors, supercapacitors and optical limiters	K. Manikandan S. Dhanuskodi, Anitta Rose Thomas, N. Maheswari, G. Muralidharan D. Sastikumar	Royal Society of Chemistry, Advances,	6, 90559–90570	2016

14)	Effect of functional groups on dielectric, optical gas sensing properties of graphene oxide and reduced graphene oxide at room temperature	T. Kavinkumar, D. Sastikumar S. Manivannan	Royal Society of Chemistry, Advances,	5 , 10816-10825 ..	2015
15)	Pure and Iso-Butyl Methyl Ketone Treated Multi-Walled Carbon Nanotubes for Ethanol and Methanol Vapor Sensing	Shobin, LR Renganathan, B Sastikumar, D Park, KC Manivannan, S	IEEE Sensors Journal	14 , 1238-1243	2014
16)	Phase Transition and thermal expansion studies of alumina thin film prepared by reactive pulsed laser deposition	Balakrishnan G, Thirumurugesan R Mohandas E Sastikumar D Kuppusami P Song, J, I	J. Nanoscience and nanotechnology	14 , 7728-7733	2014
17)	Transition metal doped nanocrystalline $\text{Li}_2\text{B}_4\text{O}_7$ for gas sensing applications	S. Dhanuskodi , R.Mohandoss , B.Renganathan , D.Sastikumar	Optics & Laser Technology	64 , 204 – 212	2014
18)	Spectroscopic and fiber optic ethanol sensing properties Gd doped ZnO nanoparticles	J.L. Noel, R. Udayabhaskar, B. Renganathan, <u>SMuthuMariappan</u> D. Sastikumar , B. Karthikeyan	<u>Spectrochimica Acta Part A</u>	132 , 634–638	2014,
19)	Glycerol mediated synthesis of silver nanowires for room temperature ammonia vapor sensing	L.R. Shobin, D. Sastikumar , S. Manivannan	Sensors and Actuators A : Physical,	A 214 , 74–80	2014
20)	Measurement of nonlinear refractive index of pure and doped KTP crystals by Z-scan technique using cw He-Ne Laser	Gandhi, JR, Rathnakumari, M, Ramamurthi K, Babu, RR, Sastikumar D Sureshkumar,P	Optik	125 , 6462-6465	2014
21)	Nanocrystalline samarium oxide coated fiber optic gas sensor	B. Renganathan D. Sastikumar <u>R. Srinivasan</u> A.R. Ganesan	Materials Science and Engineering: B	186 , 122–127	2014

22)	Fiber optic gas sensors with vanadium oxide and tungsten oxide nanoparticle coated claddings	B. Renganathan D.Sastikumar , S.GokulRaj, A.R.Ganesan	Optics Communicati ons	315 , 74-78	2014
23)	Nanocrystalline cerium oxide coated fiber optic gas sensor	B. Renganathan, D. Sastikumar A. Chandra Bose, R. Srinivasan , A.R. Ganesan	Current Applied Physics	14 , 467-471	2014
24)	Growth of nanolaminate structure of tetragonal zirconia by pulsed laser deposition,	G. Balakrishnan, P. Kuppusami, D. Sastikumar Jung Il Song	Nanoscale Research Letters	8 , 82	2013
25)	Effect of substrate temperature on microstructure and optical properties of nanocrystalline alumina thin films	Balakrishnan, G, Sundari, ST , Ramaseshan, R , Thirumurugesan, R, Mohandas, E , Sastikumar D Kuppusami, P, Kim, TG, Song, JI	Ceramics international	39, 9017- 9023	2013
26)	Development of high sensitivity ethanol gas sensor based on Co-doped SnO2 nano particles by microwave irradiation technique	M. Parthibavarman, B. Renganathan, D. Sastikumar	Current Applied Physics	13 , 1537- 1544	2013
27)	Gas sensing property of lithium tetraborate clad modified fiber optic sensor	Mohandoss, S. Dhanuskodi, B. Renganathan, D. Sastikumar	Current Applied Physics	13 , 957-963	2013
28)	Effect of magnetism on the ethanol sensitivity of undoped and Mn-doped CuO nanoflakes	R.N. Mariammal, K. Ramachandran, G. Kalaiselvan, S. Arumugam, B. Renganathan, D. Sastikumar	Applied Surface Science	<u>270</u> , 545–552	2013
29)	Improved ethanol sensing characteristics of sol–gel derived nano crystalline manganese doped lithium tetraborate	R. Mohandoss S. Dhanuskodi B. Renganathan D. Sastikumar	Sensors and Actuators A	203 , 310–315	2013

30)	Laser processed TiC–Al ₁₃ Fe ₄ composite layer formation on Al–Si alloy,	A.Viswanathan, D.Sastikumar , HarishKumar, A.K.Nath	Optics and Lasers in Engineering	50 , 1321– 1329	2012
31)	High temperature x-ray diffraction studies of zirconia thin films prepared by reactive pulsed laser deposition	G Balakrishnan, P. Kuppusami, S. Murugesan, E. Mohandas, D.Sastikumar	Cryst. Res. Technol.	47 , 415 – 422	2012
32)	Characterization of Al ₂ O ₃ /ZrO ₂ nano multilayer thin films prepared by pulsed laser deposition,	G. Balakrishnan, P. Kuppusami, S. Murugesan, C. Ghosh, R. Divakar, E. Mohandas, D.Sastikumar	Materials Chemistry and Physics,	133 , 299– 303	2012
33) 1	Single-walled carbon nanotubes wrapped poly-methyl methacrylate fiber optic sensor for ammonia, ethanol and methanol vapors at room temperature	S. Manivannan, A.M. Saranya, B. Renganathan, D. Sastikumar , G. Gobi, Kyu Chang Park,	Sensors and Actuators B	171– 172 , 634– 638	2012
34) 1	On the enhancement of ethanol sensing by CuO modified SnO ₂ nanoparticles, using fiber-optic sensor	R.N. Mariammal, K. Ramachandran, B. Renganathan, D. Sastikumar	Sensors and Actuators B	169 , 199– 207	2012
35) 2	Ethanol sensor using ZnO and ZnO:CdO nanorods by fiber-optic technique.	R. N. Mariammal, V.M.Susila, B.Renganathan, D.Sastikumar , K. Ramachandran	Sensors Letters	50 , 1321– 1329	2012
36)	Ethanol Gas Sensing of Mn-Doped CoFe ₂ O ₄ Nanoparticles	Devi, PI; Rajkumar, N; Renganathan, B D.Sastikumar Ramachandran, K	IEEE Sensors Journal	11 , 1395- 1402	2011
37) 2	Synthesis, growth and characterization of 4-bromo-4-chloro benzylidene aniline— A third order non linear optical material	A.Subashini, R. Kumaravel, S. Leela, Helen Stoeckli Evans, D.Sastikumar , K. Ramamurthi	Spectrochimica Acta Part A	78 , 935–941	2011

38)	Nanocrystalline ZnO coated fiber optic sensor for ammonia gas detection	B. Renganathan, D. Sastikumar , G. Gobi, N. Rajeswari Yogamalar, A. Chandra Bose	Optics & Laser Technology	43 , 1398– 1404	2011
39)	Gas sensing properties of a clad modified fiber optic sensor with Ce, Li and Al doped nanocrystalline zinc oxides	B. Renganathan, D.Sastikumar , G.Gobi, N.Rajeswari Yogamalar, A. Chandra Bose	Sensors and Actuators B	156 , 263-270	2011
40)	Influence of oxygen partial pressure on the properties of pulsed laser deposited nanocrystalline zirconia thin films	G. Balakrishnan T.N. Sairam, P. Kuppusami R.Thiumurugesan, E. Mohandas V. Ganesan, D. Sastikumar	Applied Surface Science	257 , 8506– 8510	2011
41)	Thermal stability of CeO ₂ /ZrO ₂ multilayer thin films prepared by pulsed laser deposition	G. Balakrishnan P. Kuppusami S. Murugesan Chanchal Ghosh Divakar Ramachan dran E. Mohandas D. Sastikumar	Transactions of the Indian Institute of Metals	64 , 297– 299	2011
42)	Fiber Optic Displacement Sensor for Measuring the Thickness of a Transparent Plate	Gobi, G , Sastikumar, D , Renganathan, B	Sensors Letters	9 , 451-456	2011
43)	A study of microstructural and optical properties of nanocrystalline ceria thin films prepared by pulsed laser deposition	G. Balakrishnan, S.Tripura Sundari P. Kuppusami, P.Chandra Mohan, M.P. Srinivasan, E. Mohandas, V. Ganesan, D.Sastikumar	Thin Solid Films	519 , 2520- 2526	2011
44)	Determination of the thickness of a transparent plate using a reflective fiber optic displacement sensor	D.Sastikumar , G.Gobi B. Renganathan	Optics and Laser Technology,	42 , 911-917	2010

45)	Structural and optical properties of γ -alumina thin films prepared by pulsed laser deposition	G. Balakrishnan, P. Kuppusami S.Tripura Sundari R.Thirumurugesan V.Ganesan , E. Mohandas, D.Sastikumar	Thin Solid Films	518, 3898-3902.	2010
46)	Optical Fiber Coated with Nanocrystalline Tin Oxide for Ammonia Vapour Sensing	B. Renganathan, G.Gobi D.Sastikumar , R.Srinivasan, A. Chandra Bose	Sensors letters	8, 292-296	2010
47)	Synthesis and properties of Ceria thin films prepared by Pulsed Laser Deposition	G.Balakrishnan, P.Kuppusami, , T.N.Sairam R.Thirumurugesan, E.Mohandas D.Sastikumar	J Nanoscience and Nanotechnology	9, 5421-5424	2009
48)	Influence of background gas atmosphere on the formation of chromium oxide thin films prepared by pulsed laser deposition	G.Balakrishnan, P.Kuppusami, T.N.Sairam, R.V.Subba Rao, E.Mohandas D.Sastikumar	Surface Engineering,	25, 223-227.	2009
49)	Evaluation of corrosion and wear resistance titanium nitride (TiN) coated on mild steel (MS) with brush plated nickel interlayer	Subramanian, B, Ashok, K , Subramanian, K Sastikumar, D , Selvan, G ; Jayachandran, M	Surface engineering	25, 490-495	2009
50)	Formation of WC-iron silicide (Fe_5Si_3) composite clad layer on AISI 316L stainless steel by high power (CO_2) laser	A. Viswanathan, D. Sastikumar , Harish Kumar, A.K.Nath,	Surface and Coatings Technology,	203, 1618-1623.	2009
51)	Fiber-optic sensor to estimate surface roughness of corroded metals	<u>Gobi, G</u> Sastikumar, D. <u>Ganesh, AB</u> , <u>Radhakrishnan, T</u>	Optica applicata	39, 5-11	2009
52)	TiC reinforced composite layer formation on Al-Si alloy by laser processing	A.Viswanathan Sastikumar, D. <u>Kamachimudali, U.</u> <u>Harish Kumar,</u> <u>Nath, A. K.</u>	Surface Engineering	23, 123-128	2007

53)	Laser irradiation of AISI 316L stainless steel coated with Si ₃ N ₄ and Ti	A.Viswanathan, D. Sastikumar , P.Rajarajan, Harish Kumar, A.K.Nath	Optics and Laser Technology,	39, 1504- 1513	2007
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