

### List of papers in SCI journals

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- 10 N. Basumallick, I. Chatterjee, P. Biswas, K. Dasgupta, **S. Bandyopadhyay**, "Fiber Bragg grating accelerometer with enhanced sensitivity," *Sensors and Actuators A: Physical*, Elsevier, Europe, Volume 173, Issue 1, J, pp. 108-115, 2012.
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- 17 Palas Biswas, Nandini Basumallick, Sankhyabrata Bandyopadhyay, Kamal Dasgupta, Ajay Ghosh, and **Somnath Bandyopadhyay**, "Sensitivity enhancement of Turn-Around-Point Long Period Gratings By Tuning Initial Coupling Condition" *IEEE Sensors Journal*, Volume 15, No. 2, pp. 1240-1245, 2015.
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- 22 Richard M. Carter, Robert R. J. Maier, Palas Biswas, Nandini Basumallick, **Somnath Bandyopadhyay**, Benjamin J. S. Jones, Scott McCulloch, and James S. Barton, " Experimental Difficulties With LPG Sensors Operating Close to the Phase Turning Points" *Journal of Lightwave Technology*, IEEE, Volume 34, No. 17, pp. 3999-4004, 2016.
- 23 Nandini Basumallick, Palas Biswas, Rajib Chakraborty, Sushanta Chakraborty, Kamal Dasgupta and **Somnath Bandyopadhyay**, "Fibre Bragg grating based accelerometer with extended bandwidth," *Measurement Science and Technology*, IOP, UK, Volume 27, Number 3, 035008 (8pp), 2016.

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- 27 Sankhyabrata Bandyopadhyay, Ignacio Del Villar, Nandini Basumallick, Palas Biswas, Tanoy Kumar Dey, **Somnath Bandyopadhyay**, "Long period fiber grating for biosensing: an improved design methodology to enhance add-layer sensitivity," IEEE Journal of Lightwave Technology, Volume 36, Issue 4, pp. 1178-1184, 2018
- 28 Sankhyabrata Bandyopadhyay, Nandini Basumallick, Sandip Bysakh, Tanoy Kumar Dey, Palas Biswas, **Somnath Bandyopadhyay**, "Design of turn around point long period fiber grating sensor with Au-nanoparticle self monolayer," Optics & Laser Technology, Volume 102, pp 254 – 261, 2018
- 29 "Analysis of the lowest order cladding mode near turn around point," Tanoy Kumar Dey, Sara Tombelli, Palas Biswas, Ambra Giannetti, Nandini Basumallick, Francesco Baldini, **Somnath Bandyopadhyay**, Cosimo Trono, Journal of Lightwave Technology, (Early access date of publication: 16.4.2020), DOI:10.1109/JLT.2020.2987795
- 30 Wideband Fiber Bragg Grating Accelerometer Suitable for Health Monitoring of Electrical Machines, Nandini Basumallick; Sayantani Bhattacharya; Tanoy Kumar Dey; Palas Biswas; **Somnath Bandyopadhyay**, IEEE, Sensors, Volume: 20, Issue: 24, Dec.15, 2020

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2. Vishnuprasad V.J., Palas Biswas, **Somnath Bandyopadhyay**, Nirmal K. Viswanathan, Balaji Srinivasan Predicting the Decay of Fiber Bragg Gratings from their Growth,June 21-24, 2010 Photosensitivity and Poling in Glass Waveguides (BGPP), Karlsruhe, Germany,OSA Technical Digest (CD) , 2010 paper BTuB4.OSA.
3. Linesh J, Libish TM, P. Biswas, **S. Bandyopadhyay**, K. Dasgupta, P. Radhakrishnan and V. P. N. Nampoori, Effect of etching on the refractive index and temperature sensitivity of a fiber Bragg grating12-15 December-2010, International Conference on Fiber Optics Photonics ( Photonic-2010) IIT-G, India.
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14. I. M. Nascimento; C. Gouveia ; Surnimal Jana ; Susanta Bera ; J.M. Baptista ; Paulo Moreira ; Palas Biwas ; **Somnath Bandyopadhyay** ; Pedro A. S. Jorge "High refractive index and temperature sensitivity LPGs for high temperature operation" July 22, 2013 8th Ibero-american Optics Meeting and 11th Latin American Meeting on Optics, Lasers, and Applications, Porto, Portugal Proc. SPIE, 8785, doi:10.1117/12.2027573), SPIE.
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25. Sayantani Bhattacharya, Nandini Basumullick, Palas Biswas, Kamal Dasgupta and **Somnath Bandyopadhyay**, “L-shaped cantilever based fiber Bragg grating accelerometer with enhanced sensitivity”, International Conference on Optics and Photonics (ICOP), India, 2015, Paper Code: IOP15-P400-99 SPIE, USA.
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29. Tanoy K. Dey, Palas Biswas, Sankhyabrata Bandyopadhyay, Nandini Basumallick, Kamal Dasgupta and **Somnath Bandyopadhyay**, “Sensitivity Analysis of a Dispersed Clad Mode to Surrounding Refractive Index”, II International Conference on Microwave and Photonics (ICMAP – 2015), ISM, Dhanbad, India, 2015.
30. Palas Biswas, Tanoy Kumar Dey, Nandini Basumallick, Sankhyabrata Bandyopadhyay, Ajay Ghosh and **Somnath Bandyopadhyay**, “Realization of high sensitive refractive index sensor with enhanced contrast using an over coupled long period fiber grating operating at mode transition” The International Conference on Fiber Optics and Photonics, IIT-Kanpur, India, Dec, 2016, ID number. Tu3G. 4, Optical Society of America.
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34. P. Biswas, S. Sharma, J. Canning and **S. Bandyopadhyay** “Regenerated Gratings: Redefined” Oral Presentation (presented by Prof. John Canning) 2016 Photonics and Fiber Technology Congress (ACOFT, BGPP, NP) Australia, Nov, 2016, ID number. BTh3B.3.pdf, Optical Society of America.
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40. Somnath Bandyopadhyay, Palas Biswas and Nandini Basumallick, "Fiber Bragg Grating Sensors: Structural Health Monitoring in High Voltage Environment", International Conference On Optics And Electro-Optics (ICOL-2019) (XLIII Symposium Of Optical Society Of India), October 19th - 22nd 2019, Dehradun, India Paper id. FIN-IT-05.
41. Nandini Basumallick, Rajarshi Mitra, Dipten Kumar, Palas Biswas, Somnath Bandyopadhyay, "Temperature Compensated Dynamic Strain Measurement using Twin Fiber Bragg Gratings and Tunable Laser Interrogation with Noise Cancelation", International Conference on Optics and Electro-Optics (ICOL-2019) (XLIII Symposium Of Optical Society Of India), October 19th - 22nd 2019, Dehradun, India, paper id EOS-OP-05.