



### Publications Template

| # | Research Title  | Field                               | Abstract  | Year of Publication<br>Publishing | Publishing Link "URL"   |
|---|---|-------------------------------------|---|-----------------------------------|---|
| 1 | Performance Analysis & Comparative Study of Uniform, Apodized and pi-phase shifted FBGs for Array of High Performance Temperature Sensors | Optical Electronics & Communication | Hanan M. El-Gammal, Heba A. Fayed, Ahmed Abd El-Aziz and Moustafa H. Aly, "Performance Analysis & Comparative Study of Uniform, Apodized and pi-phase shifted FBGs for Array of High Performance Temperature Sensors," <i>Optoelectronics and Advanced Materials Journal – Rapid Communication (OAM-RC)</i> , vol. 9, no. 9-10, September-October 2015, p. 1251-1259. | 2015                              | <a href="https://www.semanticscholar.org/paper/Performance-analysis-%26-comparative-study-of-and-for-El-Gammal-Fayed/1c874b47b16056987e10b96169de893eedbaff3">https://www.semanticscholar.org/paper/Performance-analysis-%26-comparative-study-of-and-for-El-Gammal-Fayed/1c874b47b16056987e10b96169de893eedbaff3</a> |
| 2 | A new hybrid FBG with a $\pi$ -shift for temperature sensing in overhead high voltage transmission lines                                  | Optical Electronics & Communication | El-Gammal, H.M., El-Badawy, ES.A., Rizk, M.R.M., Aly, M.H., "A new hybrid FBG with a $\pi$ -shift for temperature sensing in overhead high voltage transmission lines," <i>Journal of Optical and Quantum Electronics, Springer</i> , vol. 52, no. 53, pp. 1-24, 2020.  | 2020                              | <a href="https://rdcu.be/cQuLo">https://rdcu.be/cQuLo</a>   |
| 3 | Strain sensing in underwater acoustics with a hybrid $\pi$ -shifted FBG and different interrogation methods                               | Optical Electronics & Communication | Hanan M. El-Gammal, Nour Eldin Ismail, Mohamed R. M. Rizk, Moustafa H. Aly, "Strain sensing in underwater acoustics with a hybrid $\pi$ -shifted FBG and different interrogation methods", <i>Journal of Optical and Quantum Electronics, Springer</i> , vol. 54, no. 4, pp. 1-24, 2022.  | 2022                              | <a href="https://link.springer.com/article/10.1007/s11082-022-03583-1">https://link.springer.com/article/10.1007/s11082-022-03583-1</a>   |