

## Publications in Last Five Years in the Department of Electronics, Vidyasagar University

14-15	<ol style="list-style-type: none"> <li>1. <i>S. Dutta and P. Chattopadhyay</i>, “<b>Saturated velocity model of MESFET in the presence of non-uniform distribution of channel impurities and interface states at the gate contact</b>”, Indian Journal of Pure and Applied Physics, Vol-52, pp. 783-788, Nov. 2014.</li> <li>2. <i>S. Dutta, S. Sinha and A.Panda</i>, “<b>Application of a Schottky Diode as a Temperature Sensor</b>”, Journal of Physical Sciences, Vol-20, pp. 189-193, Dec. - 2015.</li> <li>3. <i>Aswini Kumar Mallick and Somenath Sarkar</i>, “<b>Empirical relations to determine the normalized spot size of a single-mode trapezoidal index fiber and computation of its propagation characteristics</b>”, Optical Engineering, SPIE, 53(7), 076103(1-7), July.- 2014.</li> <li>4. <i>Sanchita Pramanik and Somenath Sarkar</i>, “<b>Fiber Raman gain amplifier performance study using simple coupled-mode analysis</b>”, Journal of Modern Optics, Taylor &amp; Francis, Vol. 62, No. 13, Page No.1110-1113, March-2015.</li> </ol>
15-16	<ol style="list-style-type: none"> <li>1. <i>A.Pal, R.P.Ghosh</i>, “<b>Enhancement of Gain of Printed Dipole Antennas using Reflector</b>” 2<sup>nd</sup> URSI regional conference on Radio Science,16-19<sup>th</sup> Nov. 2015, Conference Proceedings (Abstract)pp-97, JNU, New Delhi.</li> <li>2. <i>G.Patra, R.P.Ghosh</i>, “<b>Evaluation of Specific Absorption Rate of Papaya Fruit( Caria Papaya)exposed to radio wave following ICNIRP guideline</b>” 2<sup>nd</sup> URSI regional conference on Radio Science, 16-19<sup>th</sup> Nov. 2015,Conference Proceedings (Abstract), pp. 36 , JNU, New Delhi.</li> <li>3. <i>S.I.Mondal, R.P.Ghosh</i>, “<b>Multiband wearable antennas</b>” International Conference on Microelectronics, Communication, and Computing (Microcom) NIT, Durgapur, 23-25<sup>th</sup> Jan, 2015. Conference Proceedings (Pen Drive format).</li> <li>4. <i>Anup Karak, Sanchita Pramanik and Somenath Sarkar</i>, “<b>Effect of lower and upper parabolic dips in refractive index profile on performance of coaxial fiber Raman gain amplifier</b>”, Optical Engineering, SPIE, Vol. 55, No.3, Page No. 036103, March- 2016.</li> <li>5. <i>Prosenjit Roy Chowdhury, Sanchita Pramanik and Somenath Sarkar</i>, “<b>A simple and elegant technique connecting Marcuse spot size relations to variational formulations in single-mode fiber characterization</b>”, Journal of Modern Optics, Taylor &amp; Francis, Vol. 63, No. 6, Page No.580-585, Sep.-2015.</li> <li>6. <i>Susmita Bala, B. Rana, Partha Pratim Sarkar</i>, “<b>Gain Enhancement of a Compact Antenna using Dielectric Slab</b>”, National conference on “Materials, Device and Circuits in Communication Technology” (MDCCT 2016), National Conference on “ Material , Devices and Circuits in Communication Technology (MDECT-2016) at University of Burdwan WB, 19-20 Feb 2016.</li> <li>7. <i>Susmita Bala, B.Rana, Aditi Banerjee, Moupriya Mahapatral</i> “<b>Design of</b></li> </ol>

	<p><b>Compact Microstrip Antenna Using Fractal Geometry</b>”, National conference on “ Frontline Research in Computer Communication and Device” , at Dept. of Electronics and Communication Engineering , RCC Institute of Information Technology , 29<sup>th</sup> -30<sup>th</sup> December 2015, Kolkata.</p>
16-17	<ol style="list-style-type: none"> <li>1. <i>S. Dutta</i>, <b>“A theoretical study on the linearity of the Id-T curve of a SiC MESFET for sensor application”</b>, Superlattices and Microstructures, Vol 101, pp. 446-454., Jan.-2017.</li> <li>2. <i>Aswini Kumar Mallick and Somenath Sarkar</i>, <b>“Detailed variational analysis of single mode trapezoidal index fiber involving two simple approximations of fundamental mode with comparison relating accurate prediction of propagation characteristics”</b>, Journal of Modern Optics, Taylor &amp; Francis, <b>64</b>(6), 646-652, Nov.-2016.</li> <li>3. <i>Aswini Kumar Mallick, Sumanta Mukhopadhyay and Somenath Sarkar</i>, <b>“Coupling of a laser diode to single mode circular core trapezoidal index fiber via hyperbolic microlens on the fiber tip and construction of empirical relations to determine the optimum back focal length”</b>, Optik-International Journal for Light and Electron Optics, Elsevier, <b>127</b>(23), 11418-11426, Dec.- 2016.</li> </ol>
17-18	<ol style="list-style-type: none"> <li>4. <i>A. Manna, S. Saha and S. C. Saha</i> <b>“Fabrication and characterization of Al/n-CdSe Schottky barrier under different annealing temperatures”</b>, Chalcogenide Letters, Vol. 14, No. 7, July-2017, p- 283</li> <li>5. <i>A. Manna, R. Bhattacharya, A. K. Bhunia, S. Saha and S. C. Saha</i>, <b>“Fabrication and characterization of natural dye sensitized solar cell based on CdSe nanorods”</b>, IOSR Journal of Applied Physics, Vol. 9, Issue 6, Dec-2017, p- 22.</li> <li>6. <i>A. Manna, R. Bhattacharya, S. Saha and S. C. Saha</i>, <b>“Transition from CdSe nanoparticles to CdSe nanorods with growth time”</b>, Journal of Physical Sciences, Vol. 22, Dec.-2017, p-115.</li> <li>7. <i>S. Dutta</i>, <b>“Impact of parasitic resistances on the electrical characteristics of a SiC MESFET”</b>, Superlattices and Microstructures, Vol 110, pp. 10-18, Oct.- 2017.</li> <li>8. <i>S. Dutta</i>, <b>“A theoretical approach to study the optical sensitivity of a MESFET”</b>, AIP Conference proceedings, <b>1953</b>, 140002, 2018.</li> <li>9. <i>S. Dutta</i>, <b>“Frequency performance of a SiC MESFET for a moderately doped buffer layer”</b>, International Journal of Electronics Letters, Vol-6 pp. 58-69, Jan. 2018.</li> <li>10. <i>S. Dutta</i>, <b>“A theoretical study on the temperature dependent RF performance of a SiC MESFET”</b>, International Journal of Electronics, Vol 105, pp. 1117-1128, Jan.-2018.</li> <li>11. <i>R.P. Ghosh, K. Patra, B. Gupta, S.C. Chowdhury</i>, <b>“Accurate formula to determine resonance frequency of double sided printed dipole antenna”</b>, IETE Journal of Physics, Vol.64, pp. 331-336, Aug.-2017.</li> <li>12. <i>Aswini Kumar Mallick and Somenath Sarkar</i>, <b>“Aspect ratio based nonlinear effects in spot size dependent propagation characteristics of trapezoidal index</b></li> </ol>

	<p><b>single mode fiber</b>", Optik-International Journal for Light and Electron Optics, Elsevier, <b>140</b>, 205-210, July- 2017.</p> <p>13. <i>Anup Karak and Sanchita Pramanik</i>, "<b>Analysis and dispersion engineering for generation of ultra-flattened dispersion in photonic crystal fibers</b>", 1<sup>st</sup> International Conference on Emerging Trends in Engineering and Science (ETES 2018), 23-24 March, 2018 organized by Asansol Engineering College, Asansol, West Bengal, India.</p>
18-19	<ol style="list-style-type: none"> <li>1. <i>A. Manna, A.K.Bhunia, S. Saha and S. C. Saha</i>, "<b>Structural and Optical characterization of CdSe nanoparticles-protein bioconjugate</b>", IOSR- Journal of Applied Physics , Vol.10, Jun.-2018, pp. 01-07.</li> <li>2. <i>A. Manna, R. Bhattacharya, S. Saha and S. C. Saha</i>, "<b>Tempure induced structural transition of CdSe nanoparticles to CdSe nanorings</b>", J Phy. Sc. 23,231 (Dec-2018).</li> <li>3. <i>Anirban Roy Chowdhury, Ivy Dutta, Aswini Kumar Mallick, Somenath Sarkara</i>, "<b>Prediction of power transmission coefficient and the aspect ratio of a single mode trapezoidal index fiber by using splice loss technique</b>", Optik-International Journal for Light and Electron Optics, Elsevier, <b>153</b>, 1-8, Jan.-2018.</li> <li>4. <i>Anup Karak and Sanchita Pramanik</i>, "<b>Analysis and dispersion engineering for generation of ultra-flattened dispersion in photonic crystal fibers</b>", Springer Nature Singapore Pte Ltd. 2019, U. Biswas et al. (eds.), Advances in Computer, Communication and Control, Lecture Notes in Networks and Systems 41.</li> <li>5. <i>Susmita Bala</i>, "<b>Wideband Microstrip Antenna Using Parasitic Patch Element</b>", International Journal of Advanced Research in Engineering and Technology (IJARET) Volume 10, Issue 2, March - April 2019, pp. 564-570.</li> </ol>