



STUDY OF NANOTECHNOLOGY IN COMMUNICATION SYSTEMS

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Abstract:

This paper presents an insight into some of the recent breakthroughs in nanotechnology which includes various traditional devices like transistors, light emitting diode, capacitors, integrated circuits to achieve efficiency resulting in lesser time and low power consumption. Nanotechnology can be applied to the field of electronics using carbon nanotubes, which when used on a polyamide substrate of a semiconductor wafer provides high mobility, flexibility, shock resistance, on off ratios and switching speeds, impossible to be achieved with glass plates as substrates. Its usage in Active Matrix Organic Light Emitting Diode displays results in high current driving capability unlike polycrystalline silicon in traditional Liquid Crystal Displays. Lately semiconductor nanowires have been developed, exhibiting transparency and highly uniform electrical performance. CNT FETs have come of age where single walled CNTs replace the silicon channel resulting in strong coupling thus shrinking the FET size. This paper an overview of many issues related to nanotechnology in communication systems are discussed, and also paper will provides a brief ideas of the potential application of various nanotechnology developments in the communication systems and the potential for future possibilities researches that may lead to improved communication systems.



Biography:

Dr. Sumit Kumar Gupta Dean, Faculty of Science Parishkar College of Global Excellence Jaipur, India, in the Department of Physics, With over 17 years of teaching, research, and administrative experience, he has held various administrative positions as the Head of Department in various degree colleges and engineering colleges and has a vast experience of teaching in IIT-JEE Institute

Recent Publications:

- Sumit Kumar Gupta, J Am Acad Orthop Surg, 2012
- Sumit Kumar Gupta, Indian J Psychol Med, 2015
- Sumit Kumar Gupta, Toxicol Int, 2015
- Sumit Kumar Gupta, Indian J Pharmacol ,2015
- Sumit Kumar Gupta, Indian J Psychiatry, 2014

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