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	<b>Paper Title:</b>	<b>Influence of Peripheral Effects on the Electro Physical Properties of Schottky Diodes</b>	
1.	<p><b>Abstract:</b> In Cu-nSi Shottky diode (SD) with different diameters additional electric field (AEF) arising due to the limitation of the contact surface with free surfaces of the contacting materials significantly influence on its electrophysical properties. In SD at the active participation of AEF formed a effective potential barrier height. In SD at the active participation of AEF formed a effective potential barrier height. Forward and initial reverse I-V characteristics SD are determined by the current flowing through as periphery of contact surface as its rest surface and is well described by the thermionic emission theory, as in the idealized homogeneous SD. In a forward and primary reverse bias with increasing diameter SD of 6µm to 100 µm effective potential barrier height and the contact resistance increased, but the ideality factor and proportionality coefficient remain virtually unchanged. STM images SD and their I-V characteristics show that, the contribution of peripheral current to total current of SD increases with increasing reverse voltage. The second section of the reverse I-V characteristics SD, which consists only of peripheral current is represented by a straight line in a semi-logarithmic scale. The potential barrier height, a dimensionless coefficient, the contact resistance, the area and the width of the periphery of the contact surface different from that for of the first initial portion I-V characteristics SD.</p> <p><b>Keywords:</b> contact metal – semiconductor, inhomogeneous Schottky barrier, peripheral current Schottky diode, additional electric field, semiconductor converters, limitation of contact surface.</p> <p><b>References:</b></p> <p>[1] C.M. Sze, “Physics of Semiconductor Devices”, Part 1. 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2.	<b>Authors:</b>	<b>Bijeta Dash</b>	
	<b>Paper Title:</b>	<b>Management of Road Pavement Using High Strength Concrete and Sustainable Material</b>	
	<p><b>Abstract:</b> Highway &amp; Road Concrete pavement maintenance is a routine work performed to keep pavement which is exposed to normal conditions of traffic and nature such as wind, rain, show, temperature, etc. as near to its original conditions as possible, all types of concrete pavements require maintenance of cracks, potholes, depressions and other types of distress. In major cities and towns utility cuts and repaints are major contributors to the need for pavement maintenance, Repairing of pavement deteriorations at the proper time and the proper manner method can significantly increase the life of the pavement. Early detection and repair of minor defects are among the most important activates of the road maintenance department. Now – a days the use of 12 hours created mix for patching inhere traffic road way in urban areas. The current 12 Hrs benid of strength gain to 4 hours only. This work uses high</p>		8-14

early strength cement and chemical admixtures on one hand and low water cement ration and / or high conventional cement contents. Sustained materials on the other hand attain early strength, conclusive recommendations of a combination of these techniques and / or the individual techniques used based on strength criterion (compressive strength) and durability criterion is made. Admixtures like steel fibers, polypropylene fibers, aluminum pins, clips etc of non rusting metals are being used in this technique. This increases the wear and tear strength at the patch. Shrinkage reducing admixtures (SRA) one not being commonly used, now – a days. The use SRA and HPC or high strength concrete is descreying of further research Synthetic fibers are often uses to increase wearing strength. Possible benefits of use at such admixtures is increasing resistances to shrinkage, creating improved band strength. Finder reinforced concrete has been shown in several studies to be more restant to shrinkage cracking (Padron and Zolo, 1990, Gryzbowsti and shah, 1990) Conrek key word road pavement maintenance, high strength concrete, sustainable materials

**Keywords:** Concrete Road Pavement maintenance, High strength concrete, sustainable materials.

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3. Xiaojun Li1 And Haifang Wen, Ph.D., P.E., M.Asce2 Effects Of Preoverlay Pavement Conditions And Preoverlay Repair Methods On The Performance Of Asphaltic Concrete Overlays J. Transp. Eng. 2014.140:42-49.

**Authors:** Y. Chalapathi Rao, Santhi Rani

**Paper Title:** Energy Efficiency and Maximizing Network Lifetime for WSNs using ACO Algorithm

**Abstract:** Wireless Sensor Networks (WSNs) carry out both monitoring and communication task. WSN's have attractive a great deal of study due to their low cost and wide range applications. A WSN is a distributed system consisting of many small sensor nodes delayed in environments to sense the physical world. WSNs have a large number of applications in real time monitoring, such as battle field surveillance, environment monitor, personal health monitor and so on. The main challenging problem in WSNs is power consumption and maximizing the network lifetime. WSNs is a demanding task, in this paper proposed an ACO based approaches that can be prolonging the network lifetime and minimizing the power consumption. ACO is a well known Meta heuristic inspired by the foraging behavior of real ants. Ants are stochastic constructive procedures that build solutions while walking on a constructive graph. This paper considers the problem of finding the maximum number of connected covers in different WSNs. A number of methods have been proposed for finding one connected cover from a WSN. The connected covers are a more direct way to minimize power consumption and prolong the network lifetime. The proposed approach has been applied to different WSNs. The compared result shows that the performance and efficiency of the approach with LEACH and PARA, ACO is a successful method for maximizing the network lifetime and minimize power consumption.

**Keywords:** Ant colony Optimization (ACO) algorithm, Energy efficiency, LEACH, Network lifetime, PARA, WSNs.

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4.	<p><b>Authors:</b></p>	<p><b>Triveni P. Kulli, Maheswari A</b></p>	
	<p><b>Paper Title:</b></p>	<p><b>Vision Based Human Gesture Analysis for Human Machine Interactive Applications</b></p>	
	<p><b>Abstract:</b> In human-Machine Interaction (HMI), hand gestures provide an interactive natural communication between human and machines. Specifically, the visual interpretation of hand gestures will improve the usability, efficiency and quality of HMI. Recently, researchers are more interested in exploring computer vision-based analysis and interpretation of hand gestures, especially after the release of Microsoft Kinect depth sensor. Major applications of human gesture analysis are surveillance, medicine, enhanced visual games, man-machine interface and animation. Using the low cost and high reliable sensor 'Kinect' with its SDK tool kit for windows gives a way to solve with ease some of the difficult problems encountered when working with conventional cameras. The main objective of this project is to control the Human Machine Interactive applications such as graphical user interface, translating of sign language and stroke rehabilitation using Human Gesture Analysis techniques using the Microsoft's Kinect sensor and LabVIEW, a powerful software tool from National Instruments.</p> <p><b>Keywords:</b> Human gestures, Kinect Sensor, Skeletal Analysis, NILabVIEW, Data Acquisition</p> <p><b>References:</b></p> <p>[1] Toyin Osunkoya<sup>1</sup>, and John-Chern Chern<sup>2</sup> Department of Mathematics and Computer Science Chicago State University Chicago, IL 60628, "Gesture-Based Human-Computer-Interaction Using Kinect for Windows Mouse Control and PowerPoint Presentation".</p> <p>[2] Thi-Lan Le, Minh-Quoc Nguyen, Thi-Thanh-Mai, "Human posture recognition using human skeleton provided by Kinect", Nguyen International Research Institute MICAHUST - CNRS/UMI-2954 -GRENOBLE INPHANOI UNIVERSITY of SCIENCE and TECHNOLOGY VIET NAM, 978-1-4673-2088-7/13©2013 IEEE</p> <p>[3] OrasaPatsadu, ChakaridaNukoolkit and BunthitWatanapa, School of Information Technology King Mongkut's University of Technology Thonburi Bangkok, Thailand, "Human Gesture Recognition Using Kinect Camera" 978-1-4673-1921-8/12©2012 IEEE</p> <p>[4] Shengli Zhou, Fei Fei, Guanglie Zhang, John D. 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All rights reserved doi:10.1016/j.imavis.2011.12.001</p> <p>[8] Leandro Miranda a, Thales Vieira a, Dimas Martíneza, Thomas Lewinerb, Antonio W. Vieira c,d, Mario F. M. Campos c, a Institute of Mathematics, UFAL, Maceió, Brazil, b Department of Mathematics, PUC-Rio, Rio de Janeiro, Brazil, c Department of Computer Science, UFMG, Belo Horizonte, Brazil, d Department of Mathematics, UNIMONTES, Montes Claros, Brazil</p> <p>[9] Pradeep Kumar B P "design and development of HCI using gesture recognition" has Presented in international conference on emerging innovative technology for a sustainable world (ICEITSW-2013) conducted by Oklahoma state university</p> <p>[10] Pradeep Kumar B P "design and development of human computer interface using svm" presented in International conference on Emerging Trends in Engineering (ICETE-12) 15th and 16th May 2012</p> <p>[11] Y. Tao, H. Hu, and H. 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5.	<p><b>Authors:</b></p>	<p><b>M. Sivakumar, M. Claret Stany, T. Balasubramani</b></p>	
	<p><b>Paper Title:</b></p>	<p><b>Cellular Manufacturing in Carriage Building Press Shop using by Rank Order Clustering (ROC)</b></p>	
	<p><b>Abstract:</b> Lean manufacturing has proven to be an effective strategy to increase productivity and cost competitiveness in the manufacturing industry. Cellular manufacturing (CM) is one of the tool of lean manufacturing. Cellular Manufacturing is one of the initiatives that major businesses in the U.S have been to adopt in order to remain in an increasingly global market. It is a fairly new application of group technology. For effective analysis of existing layout for Carriage Building (CB) press shop and to propose new layout, its needed to examine operation like</p>		28-33

<p>material travel distance for each part number, machineries used. In order to valid analysis here Clustering techniques are used.</p> <p><b>Keywords:</b> Lean manufacturing, Cellular manufacturing.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Christian Becker, Armin Scholl (2006) A survey on problems and methods in generalized assembly line balancing, European Journal of Operational Research 168 . pp.694–715.</li> <li>2. Eric Molleman et al (2012) The evolution of a cellular manufacturing system – a longitudinal case study, Int. J. Production Economics 75 (2002) 305–322.</li> <li>3. Fawaz A. Abdulmalek, Jayant Rajgopal (2007) Analyzing the benefits of lean manufacturing and value stream mapping via simulation: A process sector case study, Int. J. Production Economics 107 ,pp.223–236.</li> <li>4. Haeryip sihombing , Kannan rassiah and Parahsakthi chidambaram ( 2011) Line balancing analysis of tuner product manufacturing, International Journal of Engineering Science and Technology (IJEST), ISSN : 0975-5462, Vol. 3 No. 6 June 2011.</li> <li>5. Hosseini Nasab , Aliheidari bioki , H. Khademi Zare (2012) Finding a probabilistic approach to analyze lean manufacturing, Journal of Cleaner Production 29-30. pp.73-81.</li> <li>6. Hubert k Rampersad and anwar EI Homsy (2008) TPS Lean and six sigma book,sara books private limited, value stream mapping, pp.28-33</li> <li>7. Kulak, M.B. Durmusoglu, S. Tufekci (2005) A complete cellular manufacturing system design methodology based on axiomatic design principles, Computers &amp; Industrial Engineering 48. pp765–787</li> <li>8. Matthias Holweg (2007)The genealogy of lean production, Journal of Operations Management 25 .pp.420–437.</li> <li>9. Mikell P Groover , Automation, production systems and computer integrated manufacturing , third edition,pp. 525-528.</li> <li>10. Nils Boysen , Malte Fliedner , and Armin Scholl (2007) A classification of assembly line balancing problems, European Journal of Operational Research 183 . pp.674–693 .</li> <li>11. Nuchara Kriengkarakot ,Nalin Pianthong ( 2007) The Assembly Line Balancing Problem :Review articles, KKU Engineering Journal Vol. 34 No .2 , pp.133 – 140</li> <li>12. Rachna Shah ,Peter T. Ward (2003) Lean manufacturing: context, practice bundles, and performance, Journal of Operations Management 21, pp.129–149.</li> <li>13. Rahani A, Muhammad al-Ashraf (2012) Production Flow Analysis through Value Stream Mapping: A Lean Manufacturing Process Case Study, Procedia Engineering 41,pp.1727 – 1734.</li> <li>14. Ravikumar Marudhamuthu, Marimuthu krishnaswamy,and Damodaran Moorthy Pillai (2011) The Development and Implementation of Lean Manufacturing Techniques in Indian garment Industry, JJMIE, Volume 5, ISSN 1995, pp. 527 – 532.</li> <li>15. Sule Itir Satoglu, M. Bulent Durmusoglu ,Ibrahim Dogan (2006) Evaluation of the conversion from central storage to decentralized storages in cellular manufacturing environments using activity-based costing, Int. J. Production Economics 103 ,pp.616–632.</li> </ol>	
<p><b>Authors:</b></p>	<p><b>K. Ramya, V. B. K. L Aruna</b></p>
<p><b>Paper Title:</b></p>	<p><b>Implementation of Fused Add and Multiply Operator using Radix 8 Algorithm</b></p>
<p><b>6. Keywords:</b> Add-multiply operator, Modified booth recoding, Partial products and Radix8 algorithm.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Paladugu Srinivas Teja, “Design of Radix-8 Booth Multiplier Using Koggestone Adder for High Speed Arithmetic Applications,” EEIEJ, vol. 1, no. 1, February 2014.</li> <li>2. P. S. Tulasiram and R. Seshasayanan, “Implementation of Modified Booth Recoded Wallace Tree Multiplier for fast Arithmetic Circuits,” Journal of Advanced Research in Computer Science and Software Engineering, Volume 4, Issue 10, October 2014.</li> <li>3. Kostas Tsoumanis, “An Optimized Modified Booth Recoder for Efficient Design of the Add-Multiply Operator,” IEEE transactions on circuits and systems—I: regular papers, vol. 61, no. 4, April 2014.</li> <li>4. Z. Huang, “High-Level Optimization Techniques for Low-Power Multiplier Design,” Ph.D., University of California, Department of Computer Science, Los Angeles, CA, 2003.</li> <li>5. Z. Huang and M. D. Ercegovic, “High-performance low-power left-to-right array multiplier design,” IEEE Trans. Comput., vol. 54, no. 3, pp.272–283, Mar. 2005.</li> <li>6. O. L. Macsorley, “High-speed arithmetic in binary computers,” Proc.IRE, vol. 49, no. 1, pp. 67–91, Jan. 1961.</li> <li>7. Lakshmanan, m. othman, m.a.m. ali, “Design and Characterization of Parallel Prefix Adders using FPGA’S,” journal of computers, vol. 5, no. 10, October 2012.</li> </ol>	<p><b>Abstract:</b> many complex arithmetic operations are based on addition and multiplication operations which are used in many DSP applications. This paper presents implementation of add-multiply operation by using conventional and fused design architectures. In the proposed paper a modified booth recoding technique for implementation of fused add-multiply (FAM) operator is introduced. By using modified booth recoding technique [2] partial products in multiplication will be reduced to half and further implementation of FAM by using radix8 booth algorithm is done which reduces the partial products further to one third of the number [1].After comparing all the architectures, the proposed radix8 booth algorithm yields considerable reductions in terms of area and critical path delay as compared to radix4 booth algorithm. The proposed design is targeted on a XILINX virtex-6 device and examined using VHDL simulator in XILINX 14.2 version.</p> <p style="text-align: right;"><b>34-37</b></p>