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	Paper Title:	Enhancement of Energy Absorption for Crashworthiness Application: Octagonal-Shape Longitudinal Members	
	<p>Abstract: This study examines the crashworthiness performance of the octagonal thin wall tube, based on numerical simulation. The purpose is to find the optimal design with the lowest weight and best crashworthiness parameters in order to protect the passengers' life. Octagonal members with various trigger mechanisms (circular, square and elliptical triggers) with different distributions from the free end of tube were compared with mild steel A36 tube of 2 mm wall thickness, filled with hollow aluminium foam. The filled steel tube has given better results by enhancing the energy absorption by 15% and 36.8 in case of direct and oblique impact respectively .While The better result has given by enhancing CFE by 30%and 9.9% in case of direct and oblique impact respectively.</p> <p>Keywords: direct and oblique impact load, thin wall, energy absorption, CFE, Trigger and aluminum foam</p> <p>References:</p> <ol style="list-style-type: none"> Ahmad, Z. (2009). Impact and energy absorption of empty and foam-filled conical tubes. Queensland University Of Technology Australia, December 2009. Z. Fan, G. Lu And K. Liu, 2011, Quasi-Static Axial Compression Of Thin-Walled Tubes Different Cross-Sectional Shapes.Engineering Structures. Alavi Nia, A., & Parsapour, M. (2014). Comparative analysis of energy absorption capacity of simple and multi-cell thin-walled tubes with triangular, square, hexagonal and octagonal sections. Thin-Walled Structures, 74, 155-165. Song, J., Chen, Y., & Lu, G. (2012). Axial crushing of thin-walled structures with origami patterns . Thin-Walled Structures, 54, 65-71. Mamalis, A. G., Manolakos, D. E., Baldoukas, A. K., & Viegelaun, G. L. (1991). Energy dissipation and associated failure modes when axially loading polygonal thin-walled cylinders. Thin-Walled Structures, 12(1), 17-34. Zhang, X., & Zhang, H. (2012). Experimental and numerical investigation on crush resistance of polygonal columns and angle elements. 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Authors:	Ahmed Shamil Mustafa, Mohammed Jabbar Mohammed, Muthana Najim Abdulleh		
Paper Title:	Double-Data Rate DDR Memory Review		

2.	<p>Abstract: Computer is one most important twenty-first century technology, the large volume of data and store it makes of old memories are not enough. In this paper we offer a historical overview of Double Data Rate (DDR) memory being play a key role in the development of computer with also who passed him in addition to the basics of their work and develop in the future.</p> <p>Keywords: Double-Data Rate DDR, Synchronous Dynamic Random Access Memory (SDRAM)</p> <p>References:</p> <ol style="list-style-type: none"> 1. J. Romo, "DDR Memories Comparison and overview," Beyond Bits, p. 70. 2. J. A. Faue and J. Heightley, "System and method for supporting sequential burst counts in double data rate (DDR) synchronous dynamic random access memories (SDRAM)," ed: Google Patents, 2002. 3. S.-H. Kim, W.-O. Lee, J.-H. Kim, S.-S. Lee, S.-Y. Hwang, C.-I. Kim, et al., "A low power and highly reliable 400Mbps mobile DDR SDRAM with on-chip distributed ECC," in Solid-State Circuits Conference, 2007. ASSCC'07. IEEE Asian, 2007, pp. 34-37. 4. I. H. Veendrick, "Memories," in Nanometer CMOS ICs, ed: Springer, 2008, pp. 289-363. 5. O. H.-D. RANDOM-ACCESS, "TESTING AND TESTABLE DESIGN OF HIGH-DENSITY RANDOM-ACCESS MEMORIES." 6. Memory System Design. (2014). Available: http://www.altera.com 7. S. Kyomin, N. Taesik, S. Indal, S. Yong, B. Wonil, K. Sanghee, et al., "A 1.2V 30nm 3.2Gb/s/pin 4Gb DDR4 SDRAM with dual-error detection and PVT-tolerant data-fetch scheme," in Solid-State Circuits Conference Digest of Technical Papers (ISSCC), 2012 IEEE International, 2012, pp. 38-40. 8. P. Nam, D. Dreps, R. Mandrekar, and N. Nanju, "Driver design for DDR4 memory subsystems," in Electrical Performance of Electronic Packaging and Systems (EPEPS), 2010 IEEE 19th Conference on, 2010, pp. 297-300. 	10-12				
3.	<table border="1"> <tr> <td>Authors:</td> <td>C. K. Panigrahi, Chitralakha Jena, Satyapriya Satpathy, Pradosh Ranjan Parida</td> </tr> <tr> <td>Paper Title:</td> <td>Design and Performance of Photo Voltaic Pumping System</td> </tr> </table> <p>Abstract: Energy in general and electrical energy in particular is not only at the center of sustainable development, but also at the center of development itself. Thus Energy is critical for sustainable development because it is not only necessary for economic development, but also because this necessity drives societies towards environmentally unsound energy use and could severely compromise the planet itself. With steep increase in the supply – demand gap of energy, the shortage of energy has become global problem. With seemingly poor trend of capacity increase, the burden of importing energy is increasing particularly for India in the south Asian countries. Now it has become essential to opt for alternative sources of energy. Use of solar energy in all the sectors is one of the feasible options. Electric pumps can be conveniently replaced by solar PV pumps. The initiative needs very less investment and will power. In this paper, an effort has been made to show the effectiveness of PV solar pump in place of a conventional electric pump in industry.</p> <p>Keywords: PV solar pump,</p> <p>References:</p> <ol style="list-style-type: none"> 1. Narayana, P.B.; Reddy, B.R.S.; Motepalli, P.; Dubey, S., "Design & simulation of solar DC pump in simulink," Energy Efficient Technologies for Sustainability (ICEETS), 2013 International Conference on , vol., no., pp.429,431, 10-12 April 2013. 2. Kappali, M.; Uday Kumar, R.Y., "An approach to reduce the size and cost of PV panel in solar water pumping," Industrial and Information Systems (ICIIS), 2010 International Conference on , vol., no., pp.608,613, July 29 2010-Aug. 1 2010 doi: 10.1109/ICIINFS.2010.5578633. 3. Surendra, T. S.; Subbaraman, S. V V, "Solar PV water pumping comes of age in India," Photovoltaic Specialists Conference, 2002. Conference Record of the Twenty-Ninth IEEE , vol., no., pp.1485,1488, 19-24 May 2002 doi: 10.1109/PVSC.2002.1190891. 4. Shrestha, J.N., "Solar PV water pumping system for rural development in Nepal: problems and prospects," Energy Conversion Engineering Conference, 1996. IECEC 96., Proceedings of the 31st Intersociety , vol.3, no., pp.1657,1662 vol.3, 11-16 Aug 1996, doi: 10.1109/IECEC.1996.553350. 5. Yousuf, N.B.; Salim, K.M.; Haider, R.; Alam, M.R.; Zia, F.B., "Development of a three phase induction motor controller for solar powered water pump," Developments in Renewable Energy Technology (ICDRET), 2012 2nd International Conference on the , vol., no., pp.1,5, 5-7 Jan. 2012. 6. Kappali, M.; Uday Kumar, R.Y., "An approach to reduce the size and cost of PV panel in solar water pumping," Industrial and Information Systems (ICIIS), 2010 International Conference on , vol., no., pp.608,613, July 29 2010-Aug. 1 2010 doi: 10.1109/ICIINFS.2010.5578633. 	Authors:	C. K. Panigrahi, Chitralakha Jena, Satyapriya Satpathy, Pradosh Ranjan Parida	Paper Title:	Design and Performance of Photo Voltaic Pumping System	13-17
Authors:	C. K. Panigrahi, Chitralakha Jena, Satyapriya Satpathy, Pradosh Ranjan Parida					
Paper Title:	Design and Performance of Photo Voltaic Pumping System					
	<table border="1"> <tr> <td>Authors:</td> <td>Abu Sadat Md. Sayem Rahman, Md. Anisul Islam, Kazi Md. Shorowordi</td> </tr> <tr> <td>Paper Title:</td> <td>Electrode position and Characterization of Copper Oxide Thin Films for Solar Cell Applications</td> </tr> </table> <p>Abstract: Copper oxide thin films are being considered in thin film solar cells for its unique photovoltaic properties. Electrodeposition is one of the cheapest processes to deposit copper oxide thin films. In this study, copper oxide was electrodeposited on the copper substrate in an electrolyte bath containing 0.2M CuSO₄.5H₂O, 3M lactic acid and NaOH. A Potentiostat /Galvan stat with silver chloride electrode (Ag/AgCl) as a reference electrode was used for electrodepositing. During deposition, the bath temperature and pH were maintained at 60C and 12-12.5 respectively. Copper oxide was deposited at different potentials and deposition time. The films deposited at different electrode position conditions were characterized by Scanning Electron Microscopy (SEM), Energy-dispersive X-ray spectroscopy (EDS) and UV Spectrometer. From visual inspection it was found that copper oxide film is black and adherent on copper substrate. The SEM study revealed that copper oxide films became more compact and grain sizes of copper oxide films decreased at more negative potentials in deposition potential range. EDS analysis showed that percentage of oxygen in the copper oxide films increased with more negative potentials at the deposition potential range. It was found that with increase of time more adherent and uniform film</p>	Authors:	Abu Sadat Md. Sayem Rahman, Md. Anisul Islam, Kazi Md. Shorowordi	Paper Title:	Electrode position and Characterization of Copper Oxide Thin Films for Solar Cell Applications	18-24
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thickness occurs. The variation of current density and thickness of copper oxide films with different deposition parameters were analyzed. The absorption spectrums which represent the optical properties were also correlated with the deposition parameters.

Keywords: Copper oxide; Electrodeposition; Solar cell; Film thickness; Optical absorbance.

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