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STATUE OF UNITY

Whenever we utter or hear the name of Sardar Vallabhbhai Patel, what we recall is the word 'Iron Man'. The project of building world's tallest statue of the 'Iron Man' in Gujarat has been declared a 'National Project' in the union budget 2014-15. This iconic structure which stands tall in the waters of river Narmada to represent the oneness of Indians. That's why Government of India has decided to celebrate Vallabhbhai Patel's birth anniversary on October 31 as 'National Unity Day'. Statue of Unity: an Icon of India An Iconic 182 meters Statue, that's a tribute to the Iron Man of India, is built at the Sadhu-Bet Island, approximately 3.5kms south of Sardar Sarovar Dam at Kevadia in the Narmada district of Gujarat. Its unique location will prove to be beneficial for eco-tourism and regional development. The 'Statue of Unity' is a dream project of Prime Minister Narendra Modi. It symbolizes Patel's impeccable work of uniting the disintegrated groups of nearly 565 princely states after the independence and building the Indian State. It stands as a tribute to the extraordinary administrative skills and bravery shown by the then home minister Sardar Vallabhbhai Patel in uniting India after the bloody and painful partition. The work order for Prime Minister Narendra Modi's pet

project 'Statue of Unity' the world's tallest statue of India's first home minister Sardar Vallabhbhai Patel, has been issued by the Gujarat government to leading engineering company Larsen and Toubro (L&T). The project is completed at a cost of Rs 2,979 crore. The 182- metre-tall 'Statue of Unity', which is double the size of New York's 'Statue of Liberty' (93 metres). The project will include an exhibition hall and audio- visual presentation on the life of Sardar Vallabhbhai Patel, which will become the centre of attraction for tourists from the all over the world. 75,000 cubic metres of concrete, 5,700 metric tonne of steel structure, 18,500 steel rods and 22,500 metric tonne of bronze will be used for the project. It goes without saying that the 'Statue of Unity' project will generate employment in the tribal area of Narmada district as well as boost the tourism sector.

Universal College of Engineering is awarded B+ grade by National Assessment and Accreditation Council (NAAC)

ISSUE - 004: NOV 2018
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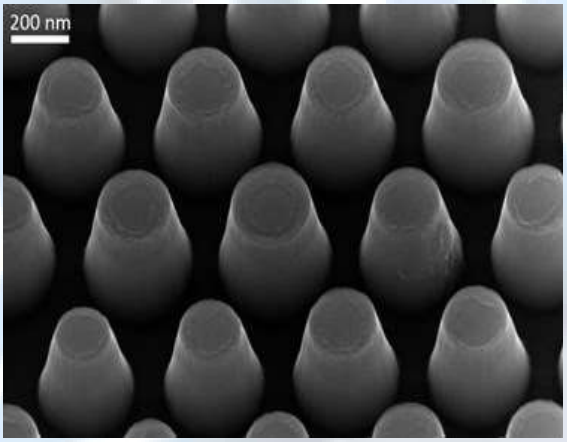
Nanoscale pillars as a building block for future information technology



A device concept that can efficiently transfer the information carried by electron spin to light at room temperature has been proposed by researchers from Linköping University and the Royal Institute of Technology in Sweden.

An electron spins around its own axis, either clockwise or counterclockwise. The rotation is referred to as spin-up and spin-down states. In spintronics, the two states represent the binary bits of 0 and 1 and thus, carry information. The information encoded by these spin states can in principle be converted by a light-emitting device into light, which then carries the information over a long distance through optical fibres. Such transfer of quantum information opens the possibility of future information technology that exploits both electron spin and light, and the interaction between them, a technology known as "opto-spintronics".

However, according to Weimin Chen of Linköping University, electrons easily lose their spin orientations when the temperature rises. This means that the information encoded in the electron spin is lost or too vague to be reliably converted to its distinct light. Now, researchers from Linköping University and the Royal Institute of Technology have devised an efficient spin-light interface.

The key element of the device is extremely small disks of gallium nitrogen arsenide (GaNAs). The disks are only a couple of nanometres high and stacked on top of each other with a thin layer of gallium arsenide (GaAs) between to form chimney-shaped nanopillars. For comparison, the diameter of a human hair is about a thousand times larger than the diameter of the nanopillars.

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The researchers hope that their proposed device will inspire new designs of spin-light interfaces, which hold great promise for future opto-spintronics applications.

http://www.newelectronics.co.uk/electronics-news/nanoscale-pillars-as-a-building-block-for-future-information-technology/189976/

"Invention is the most important product of man's creative brain. The ultimate purpose is the complete mastery of mind over the material world, the harnessing of human nature to human needs."
-Nikola Tesla

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ISSUE - 004: NOV 2018
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