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SCIENCE

Hidden Views of Vast Stellar Nurseries Unveiled in Epic Million-Image Mosaic

(May 22, 2023)

This image shows the L1688 region in the Ophiuchus constellation. New stars are born in the colorful clouds of gas and dust seen here. The infrared observations underlying this image reveal new details in the star-forming regions that are usually obscured by the clouds of dust. The image was produced with data collected by the VIRCAM instrument,



Credit: ESO/Meingast et al.

Read more at: <https://scitechdaily.com/hidden-views-of-vast-stellar-nurseries-unveiled-in-epic-million-image-mosaic/>

Solving the Chronic Pain Puzzle: Brain Signatures Revealed Through Machine Learning

(May 22, 2023)

In a groundbreaking study published in *Nature Neuroscience*, researchers have recorded and analyzed chronic pain-related data from the brain of patients suffering from pain disorders due to stroke or amputation (phantom limb pain). Using machine learning tools, the researchers were able to identify a brain region associated with chronic pain and specific biomarkers of the condition. *In a pioneering study, scientists have used machine learning tools to record and analyze brain data from chronic pain patients, identifying a specific brain region and biomarkers linked to chronic pain.*

Read More At: <https://scitechdaily.com/solving-the-chronic-pain-puzzle-brain-signatures-revealed-through-machine-learning/>

New Study Confirms: 20% of Adults Don't Want Children

(May 25, 2023)

The term “childfree” is used to describe individuals or couples who have made a conscious decision not to have children. This choice is often influenced by various factors, including personal preferences, lifestyle considerations, financial considerations, career aspirations, or concerns about overpopulation or environmental impact. In the previous summer, [Michigan State University](#) researchers announced that approximately 1.7 million adults in Michigan, about one in five, have opted not to have children, hence living a child-free life.

Read more at: <https://scitechdaily.com/new-study-confirms-20-of-adults-dont-want-children/>

Ancient Saber-Toothed Predator Sheds Light on the “Great Dying” Extinction Event

(May 23, 2023)

A recent study reveals intriguing insights into the catastrophic “Great Dying” extinction event 252 million years ago, focusing on the role of a tiger-sized, saber-toothed creature called *Inostrancevia*. *Unearthed fossils indicate that this creature migrated 7,000 miles across Pangaea, filling a gap left by extinct top predators in a far-flung ecosystem before becoming extinct itself. Originally only found in Russia, these creatures were unexpectedly discovered in South Africa’s Karoo Basin.*

Read more at: <https://scitechdaily.com/ancient-saber-toothed-predator-sheds-light-on-the-great-dying-extinction-event/>

From Forgotten Formula to Climate Game Changer: A New Tool for Converting Carbon Dioxide

(May 27, 2023)

Scientists at Cornell University have re-purposed the 120-year-old Cottrell equation to understand the reactions carbon dioxide undergoes when subjected to electrochemistry, with the goal of converting the gas into useful products. The researchers believe that the classic equation can help electrochemists control the reactions to create desirable products like ethylene, ethane, or ethanol, effectively transforming an environmental issue into a renewable resource.

Read more at: <https://scitechdaily.com/from-forgotten-formula-to-climate-game-changer-a-new-tool-for-converting-carbon-dioxide/>



ARTS

Venice Architectural Biennale gives overdue voice to long-silenced Africa

(May 21, 2023)

The 18th architectural Biennale, titled “The Laboratory of the Future,” explores decolonization and decarbonization, topics about which Africans have much to say, Lokko said, citing the long exploitation of the continent for both human and environmental resources. Scottish-Ghanaian architect Lesley Lokko is giving a platform to voices that have long been silenced at this year’s **Venice Architecture Biennale**, which opens Saturday, the first ever curated by an African, featuring a preponderance of work by Africans and the African diaspora.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/venice-architectural-biennale-voice-long-silenced-africa-8621393/>

How Museum on Wheels aims to ‘revolutionise the way we experience art, culture, and history’

(May 30, 2023)

Imagine if **museums**, instead of being buildings or enclosed stationary spaces, were moving entities, travelling across the world, presenting old treasures to people who may never have had the opportunity to see them otherwise. This idea becomes even more relevant considering that only 15 per cent of the population visits a museum every year, leaving a sizable proportion of individuals unable to access these institutions due to physical and geographical limitations.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/museum-on-wheels-delhi-celebrates-history-8633663/>



Italy's famous Farnesina Collection debuts in India with 72 contemporary artworks

(May 30, 2023)

'The Grand Italian Vision', which showcases avant-garde works of sculpture, mosaic, painting, photography, and installations, also marks the 75th anniversary of diplomatic relations between India and Italy, Italian ambassador Vincenzo de Luca said at the opening ceremony. After travelling out of Italy for the first time ever earlier this year, an exhibition featuring a broad selection of 72 important artworks from the famous Farnesina Collection opened here at Bikaner House on Friday.

Read more at:

<https://indianexpress.com/article/lifestyle/art-and-culture/italys-famous-farnesina-collection-debuts-in-india-with-72-contemporary-artworks-8636546>



Credit: PTI Photo/Manish Sain

900 weavers from UP worked nearly 10 lakh man hours to craft hand-knotted carpets for the new Parliament building

(May 28, 2023)

"Originally the carpet that was laid out was from the British era as it was part of our colonial past and was inspired by the Parliament in England. So, we wanted to make a real India story," said Jasmine Roy, vice president (design and business) Obeetee Carpets. India's new [Parliament building](#) has hand-knotted carpets, covering 35,000 square feet of area, woven by nearly 900 weavers from the Bhadohi and Mirzapur districts of Uttar Pradesh.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/newly-inauguratedparliament-building-hand-knotted-carpet-10-lakh-man-hours-8633046>

Architect who created viral miniature model of Chepauk stadium opens up about gifting it to 'thala' MS Dhoni

(May 30, 2023)

The miniature model also has a mini four-inch TV installed for playing a three-minute video of some of his "precious moments in cricket and from his life". Recently, fans could not keep calm when a picture of the ever-smiling MS Dhoni looking over a [miniature model](#) of Chennai's Chepauk Stadium took the internet by storm. While it is no big deal to find every move of the Chennai Super Kings' 'captain cool' go viral, this particular picture grabbed extra attention.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/architect-viral-miniature-chepauk-stadium-model-thala-ms-dhoni-csk-ipl-gift-8625765/>



TECHNOLOGY

He Shiniest Spy: How Everyday Objects Can Be Turned Into “Cameras”

(May 22, 2023)

Researchers from MIT and Rice University have developed a computer vision system called ORCa (Objects as Radiance-Field Cameras), that uses AI to turn any shiny object into a camera by mapping reflections off its surface. Images of the object, taken from different angles, are used to convert the object’s surface into a virtual sensor that captures and maps reflections, thereby allowing depth estimation and offering novel perspectives.

Read more at: <https://scitechdaily.com/the-shiniest-spy-how-everyday-objects-can-be-turned-into-cameras/>



Credit: Courtesy of the researchers

Researchers Discover New Ancestral Mechanism of Defense Against Nanoparticles

(May 22, 2023)

Scientists from the Finnish Hub for Development and Validation of Integrated Approaches (FHAIVE) and Tampere University have uncovered a novel response mechanism related to nanoparticle exposure that’s shared across various species. Dr. Giusy del Giudice, a doctoral researcher, through extensive data analysis concerning the molecular response to nanomaterials, has shed light on an ancestral epigenetic defense mechanism.

Read more at: <https://scitechdaily.com/researchers-discover-new-ancestral-mechanism-of-defense-against-nanoparticles/>



Credit: Giusy del Giudice / Tampere University

MIT's AI System Reveals Internal Structure of Materials From Surface Observations

(May 25, 2023)

A machine-learning method developed at MIT detects internal structures, voids, and cracks inside a material, based on data about the material's surface. On the top left cube, the missing fields are represented as a gray box. Researchers then leverage an AI model to fill in the blank (center). Then, the geometries of composite microstructures are identified based on the complete field maps using another AI model (bottom right). A new method could provide detailed information about internal structures, voids, and cracks, based solely on data about exterior conditions.

Read more at: <https://scitechdaily.com/mits-ai-system-reveals-internal-structure-of-materials-from-surface-observations/>

Cancer and AI – Can ChatGPT Be Trusted?

(May 28, 2023)

A recent study found that the AI chatbot, ChatGPT, provided 97% correct responses to common cancer myths and misconceptions, but raised concerns due to its indirect and potentially confusing language, emphasizing the need for caution in advising patients to use chatbots for cancer information. A study published in the *Journal of The National Cancer Institute Cancer Spectrum* delved into the increasing use of chatbots and artificial intelligence (AI) in providing cancer-related information. The researchers discovered that these digital resources accurately debunk common myths and misconceptions about cancer.

Read more at: <https://scitechdaily.com/cancer-and-ai-can-chatgpt-be-trusted/>

Engineers Develop the First Fully Integrated Wearable Ultrasound System for Deep-Tissue Monitoring

(May 27, 2023)

A team of engineers from UC San Diego has successfully created a fully integrated system for deep-tissue monitoring. A group of engineers from the [University of California San Diego](https://www.ucsd.edu/) have successfully created the inaugural entirely integrated wearable ultrasound system for deep-tissue tracking, applicable even for mobile individuals. This innovation may prove crucial for monitoring cardiovascular health and represents a significant milestone for one of the foremost labs specializing in wearable ultrasound technology.

Read more at: <https://scitechdaily.com/engineers-develop-the-first-fully-integrated-wearable-ultrasound-system-for-deep-tissue-monitoring/>



SPORTS

Kohli among first batch of players to leave for WTC final (May 22, 2023)

Virat Kohli will be among the first batch of India players to leave for the World Test Championship (WTC) final against Australia in London, departing in the wee hours of Tuesday. Kohli's Royal Challengers Bangalore teammate Mohammad Siraj will also board the same flight, a day after their team was knocked out of the IPL. Spinners R Ashwin and Axar Patel, and all-rounder Shardul Thakur, will also be on the flight as well as the team's support staff led by Rahul Dravid.



Read more at: <https://indianexpress.com/article/sports/cricket/kohli-among-first-batch-of-players-to-leave-for-wtc-final-8623185/>

Paris 2024 organisers working on putting Olympic flame on Eiffel Tower -source

(May 22, 2023)

Paris 2024 organisers have been working on installing the Olympic flame on the Eiffel Tower, a source with direct knowledge of the matter told Reuters on Monday. It was not clear whether the flame would stay on the iconic monument throughout the July 26-Aug. 11 sports extravaganza. The source added that the flame would not be put at the top of the Eiffel Tower, however, for technical reasons.

Read more at: <https://indianexpress.com/article/sports/sport-others/paris-2024-organisers-working-on-putting-olympic-flame-on-eiffel-tower-source-8622974/>

Ganemat Sekhon, from a family of shooters, wins skeet silver at World Cup

(May 24, 2023)

Two 22-year-olds, Ganemat Sekhon and Darshna Rathore made it a day to remember for India by winning silver and bronze respectively at the ISSF World Cup in Almaty. Ganemat and Darshna had to battle difficult conditions, including the wind, to finish on the podium. Assem Orynbay of Kazakhstan won gold following a shoot-off after she and Ganemat finished the 60-shot final with 50 hits each.



Credit: NRAI/Twitter

Read more at;

<https://indianexpress.com/article/sports/sport-others/ganemat-sekhon-from-a-family-of-shooters-wins-skeet-silver-at-world-cup-8625436/>

Hockey star Rani Rampal sheds light on how periods affect sportswomen and how to deal with them

(May 25, 2023)

When former India hockey captain Rani Rampal was a young girl growing up in a rural area, no one talked to her about menstrual cycles and how her body would react to it. And then one day the inevitable happened. Her mother hurriedly told her to use a cloth and that was the end of the discussion. Having picked up a hockey stick at the age of 6 at the Shahbad hockey academy in Haryana, Rani suddenly realised that for anywhere between 3-6 days, her body would be affected in different ways and it would impact her sporting ambitions the most.

Read more at: <https://indianexpress.com/article/sports/hockey/hockey-star-rani-rampal-sheds-light-on-how-periods-affect-sportswomen-and-how-to-deal-with-them-8627419/>

Tactically-strong Prannoy and clutch-play star Kidambi Srikanth sizzle at Malaysia Masters

(May 26, 2023)

Li Shifeng, the reigning All England champion, was cruising in the first set of Round 2 at Malaysia Masters. But for the second day in a row, HS Prannoy overcame the first set lapse, to score victories against fancied names – Li on Thursday and Chou Tien Chen a day prior. Patient, prolonged rallying did the trick as the Chinese was thwarted and cornered into making errors after playing a tight controlled opener, as Prannoy won 13-21, 21-16, 21-11 against the talented Chinese on the brink of Top Ten at World No 11.

Read more at: <https://indianexpress.com/article/sports/badminton/tactically-strong-prannoy-and-clutch-play-star-kidambi-srikanth-sizzle-at-malaysia-masters-8628958/>