

Date: 30 Aug 2024

## **Inside China's race to lead the world in nuclear fusion**

<https://www.nature.com/articles/d41586-024-02759-x>

## **Bubbling, frothing and sloshing: Long-hypothesized plasma instabilities finally observed**

<https://www.pppl.gov/news/2024/bubbling-frothing-and-sloshing-long-hypothesized-plasma-instabilities-finally-observed>

## **Japan start-up aims to launch world's first steady-state fusion reactor in 2034**

<https://www.reuters.com/business/energy/japan-start-up-aims-launch-worlds-first-steady-state-fusion-reactor-2034-2024-08-30/>

## **Computer simulations show Swedish fusion initiative could have global impact**

<https://www.computerweekly.com/feature/Computer-simulations-show-Swedish-fusion-initiative-could-have-global-impact>

## **Quenching the intense heat of a fusion plasma may require a well-placed liquid metal evaporator**

<https://www.pppl.gov/news/2024/quenching-intense-heat-fusion-plasma-may-require-well-placed-liquid-metal-evaporator>

## **Micro-plasma jet improves triggering in pulsed power technology**

<https://ww2.aip.org/scilight/micro-plasma-jet-improves-triggering-in-pulsed-power-technology>

## **Webinar: The role of fusion energy in a decarbonized electricity system**

**Date:** Thursday, September 12, 2024; 7:30 - 8:30pm GMT [1 am - 2:00 am, 13 Sep 2024]

**Register:** <https://www.eventbrite.com/e/the-role-of-fusion-energy-in-a-decarbonized-electricity-system-webinar-tickets-972233786427>

## **The UK nuclear fusion start-up helping the US develop stealth submarines**

<https://www.ft.com/content/570267a4-657e-4c6b-805d-7b29a637e546>

## **Funding secured for underground microreactor**

<https://www.neimagazine.com/news/funding-secured-for-underground-microreactor/>

## **An American Nuclear Renaissance Starts by Reviving the Atomic Age of Old**

<https://www.aei.org/economics/an-american-nuclear-renaissance-starts-by-reviving-the-atomic-age-of-old/>

## **Superconductor surprises with strongly interacting electrons**

<https://www.nature.com/articles/d41586-024-02559-3>

## **Novel features of r-process nucleosynthesis shed light on origin of heavy elements**

<https://www.eurekalert.org/news-releases/1055925>

### **IEA reports boost for nuclear market**

<https://www.neimagazine.com/analysis/iea-reports-boost-for-nuclear-market/>

### **Recent Peer-Reviewed Articles of Interest**

#### **Rayleigh–Taylor turbulence in strongly coupled dusty plasmas**

<https://pubs.aip.org/aip/pop/article/31/8/082306/3310165/Rayleigh-Taylor-turbulence-in-strongly-coupled>

#### **Overview of Large Helical Device experiments of basic plasma physics for solving crucial issues in reaching burning plasma conditions**

<https://iopscience.iop.org/article/10.1088/1741-4326/ad3a7a>

#### **Catalytic decomposition of NH<sub>3</sub> as a by-product of magnetically confined nuclear fusion**

<https://www.sciencedirect.com/science/article/abs/pii/S0920379624004939>

#### **Proton beams generated via thermonuclear deuterium–deuterium fusion by means of modified cavity pressure acceleration-type targets as a candidate for proton–boron fusion driver**

<https://pubs.aip.org/aip/pop/article/31/8/084503/3309931/Proton-beams-generated-via-thermonuclear-deuterium>

#### **Effect of welding parameters on microstructure and mechanical properties of dissimilar AISI 304/ductile cast iron fusion welded joints**

<https://www.nature.com/articles/s41598-024-70050-0>