

Date: 26 Mar 2025

### FYI - Fusion News/Alerts

#### **Augmented reality goes to work for nuclear fusion**

<https://www.iter.org/node/20687/augmented-reality-goes-work-nuclear-fusion>

[Latest ITER Newline: <https://www.iter.org/whatsnew/452>]

#### **F4E delivers thousands of in-vessel supports to wire up ITER**

<https://fusionforenergy.europa.eu/news/in-vessel-supports-iter-diagnostics-delivered/>

#### **Focused Energy and RWE to build 1GW fusion pilot plant in Germany**

<https://www.power-technology.com/news/focused-energy-rwe-fusion-energy-pilot-germany/>

#### **How Researchers Found a Greener Way to Make Fuel for Nuclear Fusion—By Accident**

<https://www.scientificamerican.com/article/nuclear-fusion-requires-certain-fuel-and-researchers-have-found-a-greener/>

#### **Gas injection setup in new fusion system is guided by public-private research**

<https://www.eurekalert.org/news-releases/1077624>

#### **Nuclear fusion fuel without toxic mercury**

<https://cen.acs.org/energy/nuclear-power/Nuclear-fusion-fuel-without-toxic/103/web/2025/03>

#### **Energy: Fusion, from ENEA innovative laser**

<https://www.media.enea.it/en/press-releases-and-news/years-archive/year-2025/nuclear-fusion-from-enea-innovative-laser.html>

#### **Plasma channel guides electrons to 10 GeV**

<https://pubs.aip.org/physicstoday/online/44138/Plasma-channel-guides-electrons-to-10-GeV>

#### **Pioneering women in fusion: Adelle Wright co-authors a modern introduction to stellarator theory**

<https://engineering.wisc.edu/blog/pioneering-women-in-fusion-adelle-wright-co-authors-a-modern-introduction-to-stellarator-theory/>

#### **High-energy-density physics unlocks mysteries that start with the stars.**

<https://www.lanl.gov/media/publications/national-security-science/0325-the-power-of-plasma>

#### **General Atomics and UC San Diego Launch Fusion Data Science and Digital Engineering Center**

<https://today.ucsd.edu/story/general-atomics-and-uc-san-diego-launch-fusion-data-science-and-digital-engineering-center>

#### **IAEA Visits India to Strengthen Cooperation in Energy and Cancer Treatment**

## FYI – LIBRARY NEWS/ALERTS

<https://www.iaea.org/newscenter/news/iaea-visits-india-to-strengthen-cooperation-in-energy-and-cancer-treatment>

**Researchers capture first laser-driven, high-resolution CT scans of dense objects**

<https://phys.org/news/2025-03-capture-laser-driven-high-resolution.html>

**A possible way to generate electricity using Earth's rotational energy**

<https://phys.org/news/2025-03-generate-electricity-earth-rotational-energy.html>

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

**Fusion energy: from basic research to commercialization**

<https://link.springer.com/article/10.1007/s12210-025-01322-8>

**Core-edge integrated predictive studies of ST40 and NSTX plasmas with the scrape-off layer box model**

<https://pubs.aip.org/aip/pop/article/32/3/032513/3340317/Core-edge-integrated-predictive-studies-of-ST40>

**A multi-scale microstructure to address the strength-ductility trade off in high strength steel for fusion reactors**

<https://www.nature.com/articles/s41467-025-58042-8>

**Near-ideal relaxed MHD in slab geometry**

<https://pubs.aip.org/aip/pop/article/32/3/032510/3340120/Near-ideal-relaxed-MHD-in-slab-geometry>

**Equivalent spherical capacitor of non-spherical grains in a laboratory dusty plasma**

<https://pubs.aip.org/aip/pop/article/32/3/033703/3340793/Equivalent-spherical-capacitor-of-non-spherical>

**Virtual simulator for the ITER Agile Robot Transporter with an inverse kinematic algorithm considering joint limits and collision avoidance**

<https://www.sciencedirect.com/science/article/pii/S0920379625001280>

**Understanding of parameter dependence among the radiative collapse data in LHD plasmas with a causal discovery approach**

<https://pubs.aip.org/aip/pop/article/32/3/033903/3340255/Understanding-of-parameter-dependence-among-the>

**Design, development and manufacture of the ITER Torus and cryostat cryopumps**

<https://www.sciencedirect.com/science/article/pii/S0920379625001395>

### **[Of Interest]**

**Meet ‘qudits’: more complex cousins of qubits boost quantum computing**

<https://www.nature.com/articles/d41586-025-00939-x>