

Date: 30 Oct 2024

Vacuum vessel repair - From high-tech robot to standard scratch pads

<https://www.iter.org/node/20687/high-tech-robot-standard-scratch-pads>

ITER Director-General visits India

<https://www.iter.org/node/20687/iter-director-general-visits-india>

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

AI Meets Fusion: CMU, Princeton Join Forces to Pursue Clean, Abundant Power

<https://www.ri.cmu.edu/ai-meets-fusion-cmu-princeton-join-forces-to-pursue-clean-abundant-power/>

PPPL supports SMART fusion

<https://www.neimagazine.com/news/pppl-supports-smart-fusion/>

L&T wins (Significant*) Order to deploy advance welding technology for the Global Nuclear Fusion Project

<https://www.larsentoubro.com/pressreleases/2024-10-25-lt-wins-significant-order-to-deploy-advance-welding-technology-for-the-global-nuclear-fusion-project/>

Nuclear Fusion's New Idea: An Off-the-Shelf Stellarator

<https://spectrum.ieee.org/the-off-the-shelf-stellarator>

A new nuclear fusion startup has raised \$900M in Series A funding

<https://www.power-eng.com/nuclear/a-new-nuclear-fusion-startup-has-raised-900m-in-series-a-funding/>

Commonwealth Fusion Systems Granted Radioactive Materials License for SPARC Fusion Machine

<https://cfs.energy/news-and-media/commonwealth-fusion-systems-granted-radioactive-materials-license-for-sparc-fusion-machine>

Fusion energy: The photon revolution in clean power generation

<https://www.openaccessgovernment.org/fusion-energy-the-photon-revolution-in-clean-power-generation/184401/>

For heating plasma in fusion devices, researchers unravel how electrons respond to neutral beam injection

<https://sciencex.com/wire-news/491320393/for-heating-plasma-in-fusion-devices-researchers-unravel-how-ele.html>

Pitchers rejoice? Plasma irradiation might prevent tendon re-tears

<https://www.eurekalert.org/news-releases/1061799>

MIT affiliates receive 2024-25 awards and honors from the American Physical Society

<https://news.mit.edu/2024/mit-affiliates-receive-american-physical-society-awards-honors-1028>

Scientists discover a promising way to create new superheavy elements

<https://phys.org/news/2024-10-scientists-superheavy-elements.html>

Excited ion-scale turbulence by a magnetic island in fusion plasmas

<https://www.nature.com/articles/s41598-024-75268-6>

First nuclear fuel produced for Bolivia's research reactor

<https://www.world-nuclear-news.org/articles/nuclear-fuel-manufactured-for-bolivia-research-reactor>

Argentina boosts radioisotope export capacity

<https://www.neimagazine.com/news/argentina-boosts-radioisotope-export-capacity/>

Changjiang outer dome installed

<https://www.neimagazine.com/news/changjiang-outer-dome-installed/>

TerraPower and Seaborg sign Korean cooperation agreements

<https://www.world-nuclear-news.org/articles/terrapower-and-seaborg-sign-korean-cooperation-agreements>

India will have its own Space Station by 2035, which will be known as "Bharatiya Antriksh Station"

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=2068495>

A push for planetary defence

<https://www.nature.com/articles/s41567-024-02685-9>

[Of Interest] For this Stanford Engineer, Frugal Invention Is a Calling

<https://spectrum.ieee.org/manu-prakash>

[Of Interest] Gandhi Inspired a New Kind of Engineering

<https://spectrum.ieee.org/gandhi-engineering>

Recent Peer-Reviewed Articles of Interest

Development of a Digital Twin System for Snake Endoscope Manipulator in Fusion Reactors

<https://www.sciencedirect.com/science/article/pii/S1738573324005333>

Observation of magnetic islands in tokamak plasmas during the suppression of edge-localized modes

<https://www.nature.com/articles/s41567-024-02666-y>

Known mechanisms that increase nuclear fusion rates in the solid state

<https://iopscience.iop.org/article/10.1088/1367-2630/ad091c>

Novel thick-target inverse kinematics method for the astrophysical $^{12}\text{C}+^{12}\text{C}$ fusion reaction

<https://link.springer.com/article/10.1007/s41365-024-01573-4>

Dynamic of bifurcation, chaotic structure and multi soliton of fractional nonlinear Schrödinger equation arise in plasma physics

<https://www.nature.com/articles/s41598-024-72744-x>