

Date: 09 Jul 2025

FYI - Fusion News/Alerts

Boronization system takes shape as ITER prepares for a tungsten wall

<https://www.iter.org/node/20687/boronization-system-takes-shape-iter-prepares-tungsten-wall>

[Latest ITER Newline: <https://www.iter.org/whatsnew/464>]

"May your night be quiet and peaceful"

<https://www.mpg.de/25008570/support-for-colleagues-in-the-ukraine>

Understanding How the Sun Shines: From Triton Decay to Proton-Proton Fusion

<https://www.energy.gov/science/np/articles/understanding-how-sun-shines-triton-decay-proton-proton-fusion>

Fusion Energy Breakthroughs: Powering the Future in 2025

<https://medium.com/@quantumglyphs1/fusion-energy-breakthroughs-powering-the-future-in-2025-52c9a8cb9949>

Google's electricity demand is skyrocketing

<https://www.technologyreview.com/2025/07/03/1119627/google-electricity-fusion-ai/>

How to use fusion to get to Proxima Centauri's potentially habitable exoplanet

<https://phys.org/news/2025-07-fusion-proxima-centauri-potentially-habitable.html>

A new way to wobble: Scientists uncover mechanism that causes formation of planets

<https://www.pppl.gov/news/2025/new-way-wobble-scientists-uncover-mechanism-causes-formation-planets-0>

Record-Breaking Results Bring Fusion Power Closer to Reality

<https://www.scientificamerican.com/article/record-breaking-results-bring-fusion-power-closer-to-reality/>

Flux equipartition in astrophysical plasma turbulence

<https://www.science.org/doi/full/10.1126/sciadv.adv8988>

Researchers claim their AI model simulates the human mind. Others are skeptical

<https://www.science.org/content/article/researchers-claim-their-ai-model-simulates-human-mind-others-are-skeptical>

CERN announces first successful oxygen collisions at LHC

<https://inspenet.com/en/noticias/cern-announces-first-successful-oxygen-collisions-at-lhc/>

A new platform for developing advanced metals at scale

<https://news.mit.edu/2025/new-platform-foundation-alloy-developing-advanced-metals-scale-0703>

Dark dwarfs lurking at the center of our galaxy might hint at the nature of dark matter

<https://phys.org/news/2025-07-dark-dwarfs-lurking-center-galaxy.html>

United States Tackles Nuclear Waste Researchers transform the most persistent radioactive sludge

<https://spectrum.ieee.org/nuclear-waste-reprocessing-transmutation>

Empowering Educators and Advancing Nuclear Science Education

<https://www.iaea.org/newscenter/news/empowering-educators-and-advancing-nuclear-science-education>

Double plasma progress at DESY

<https://cerncourier.com/a/double-plasma-progress-at-desy/>

Physicists observe image rotation in plasma

<https://phys.org/news/2025-07-physicists-image-rotation-plasma.html>

Pioneering space probe reveals secrets of mysterious solar barrier

<https://www.qmul.ac.uk/media/news/2025/science-and-engineering/se/pioneering-space-probe-reveals-secrets-of-mysterious-solar-barrier.html>

ELI and LLNL strengthen their transatlantic big laser collaboration

<https://optics.org/news/16/7/14>

Recent Peer-Reviewed Articles of Interest

Design description and thermo-hydraulic assessment of the steering mirror for the EU DEMO Electron Cyclotron system

<https://www.sciencedirect.com/science/article/pii/S0920379625005095>

Development of a flight simulator for the WEST plasma and control system

<https://www.sciencedirect.com/science/article/pii/S0920379625004958>

The manufacturing and assembly of the MITICA beam source and beam line components

<https://www.sciencedirect.com/science/article/pii/S0920379625004995>

Enhanced proton acceleration via Petawatt Laguerre–Gaussian lasers

<https://www.nature.com/articles/s42005-025-02205-y>

Effect of plasma sheath on high hypersonic vehicle communication systems

<https://pubs.aip.org/aip/pop/article/32/7/073504/3351797/Effect-of-plasma-sheath-on-high-hypersonic-vehicle>

Why Do Small-Scale Irregularities Migrate Beyond the Equatorial Plasma Bubble?

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2024GL114399>

FYI – LIBRARY NEWS/ALERTS

Chaotic and quasi-periodic dynamics in fractional-order nonlinear wave systems within dispersive-dissipative media

<https://www.nature.com/articles/s41598-025-03938-0>

The tokamak system code D0FUS and its first applications: Impact of and confinement scaling law on power plant design

<https://www.sciencedirect.com/science/article/pii/S0920379625004661>

Measurement of field generation at plasma interfaces due to fast electron beam currents from high-intensity laser–plasma interactions

<https://pubs.aip.org/aip/pop/article/32/7/073105/3351796/Measurement-of-field-generation-at-plasma>

Comparative analysis of R&D topics considering tritium handling technologies in K-DEMO using the analytic hierarchy process

<https://www.sciencedirect.com/science/article/pii/S0920379625004806>

[Of Interest]

Making science careers more accessible to people with disabilities

<https://physicsworld.com/a/making-science-careers-more-accessible-to-people-with-disabilities/>

‘It’s a nightmare.’ U.S. funding cuts threaten academic science jobs at all levels

<https://www.science.org/content/article/it-s-nightmare-u-s-funding-cuts-threaten-academic-science-jobs-all-levels>