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FYI - **Fusion News/Alerts**

A dual ion beam tests new steel under fusion energy-producing conditions
https://phys.org/news/2025-08-dual-ion-steel-fusion-energy.html

Korean Research Team Proves 'Multi-scale Coupling,' a Plasma Physics Challenge
https://www.businesskorea.co.kr/news/articleView.html?idxno=249018

NASA races to put nuclear reactors on moon and Mars
https://phys.org/news/2025-08-nasa-nuclear-reactors-moon-mars.html

Is the electric charge distribution in space actually the opposite?
https://www.eurekalert.org/news-releases/1093783

New laser-plasma accelerator could soon deliver X-ray pulses
https://physicsworld.com/a/new-laser-plasma-accelerator-could-soon-deliver-x-ray-pulses/

Novel insights & solutions to power exhaust
https://www.tue.nl/en/research/research-groups/science-and-technology-of-nuclear-fusion/novel-insights-solutions-to-power-exhaust

Gold survives impossible heat, defying physics limits
https://www.sciencedaily.com/releases/2025/08/250810093351.htm

Experimental device demonstrates how electron beams reconfigure plasma structure
https://phys.org/news/2025-08-experimental-device-electron-reconfigure-plasma.html

NSF Awards Grant to Study Dust Contamination in Semiconductor Manufacturing
https://physics.uiowa.edu/news/2025/08/nsf-awards-grant-study-dust-contamination-semiconductor-manufacturing

AWAKE accelerator upgrade gets a head start
https://home.cern/news/news/accelerators/awake-accelerator-upgrade-gets-head-start

Department of Energy Announces Initial Selections for New Reactor Pilot Program
https://www.energy.gov/articles/department-energy-announces-initial-selections-new-reactor-pilot-program

'I left the school buzzing and on a high'
https://physicsworld.com/a/i-left-the-school-buzzing-and-on-a-high/

Recent Peer-Reviewed Articles of Interest

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Design and upgrades of the TCV fast ion loss detector
https://pubs.aip.org/aip/rsi/article/96/8/083504/3358340/Design-and-upgrades-of-the-TCV-fast-ion-loss

A brief perspective on fluid mechanics research
https://pubs.aip.org/aip/pof/article/37/8/081401/3357892/A-brief-perspective-on-fluid-mechanics-research

Effects of reflected electrons on the efficiency of high-power gyrotrons
https://pubs.aip.org/aip/pop/article/32/8/083103/3357930/Effects-of-reflected-electrons-on-the-efficiency

Ion energy distributions driven by the ultra-low frequency electrical asymmetry effect in biased inductively coupled plasmas
https://pubs.aip.org/aip/pop/article/32/8/083503/3357931/Ion-energy-distributions-driven-by-the-ultra-low

Linear Landau damping, Schrödinger equation, and fluctuation theorem
https://pubs.aip.org/aip/pop/article/32/8/080701/3358057/Linear-Landau-damping-Schrodinger-equation-and

Real-time control of plasma dose delivery in plasma medicine using deep reinforcement learning
https://pubs.aip.org/aip/apl/article/127/5/053701/3357864/Real-time-control-of-plasma-dose-delivery-in

Phase plane analysis and interaction of solitons and breathers in dusty plasmas with generalized (r, q) polarization force
https://pubs.aip.org/aip/pof/article/37/8/087115/3357886/Phase-plane-analysis-and-interaction-of-solitons

Mastering autonomous assembly in fusion application with learning-by-doing: A peg-in-hole study
https://www.sciencedirect.com/science/article/pii/S0952197625018998

Advances in Titanium-Based Lithium-Ion Sieves: From Fundamental Design to Industrial Applications for Sustainable Lithium Recovery
https://www.sciencedirect.com/science/article/pii/S2213343725032701

Magnetohydrodynamic operating regimes of pulsed plasma accelerators for efficient propellant utilization
https://pubs.aip.org/aip/jap/article/138/6/063303/3358420/Magnetohydrodynamic-operating-regimes-of-pulsed

[*Of Interest*]

When we stop funding science, we hurt our future
https://www.aps.org/about/news/2025/08/stop-funding-science-hurt-future