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Date: 16 Jul 2025

FYI - **Fusion News/Alerts**

Cryodistribution system - All auxiliary cold boxes connected
https://www.iter.org/node/20687/all-auxiliary-cold-boxes-connected
[Latest ITER Newsline: https://www.iter.org/whatsnew/465]

European Union to invest 202 million EUR to IFMIF-DONES
https://fusionforenergy.europa.eu/news/eu-invest-ifmif-dones-fusion-facility/

Japan's Helical Fusion raises $15M in Series A funding
https://www.ans.org/news/2025-07-14/article-7189/japans-helical-fusion-raises-15m-in-series-a-funding/

AI and Its Growing Energy Demand
https://www.cmu.edu/work-that-matters/energy-innovation/ai-and-its-growing-energy-demand

Blades of light: A tabletop method for generating megatesla magnetic fields
https://www.eurekalert.org/news-releases/1091187

DOE Awards 38M Node-Hours of Computing Time to Support Cutting-Edge Research
https://www.hpcwire.com/off-the-wire/doe-awards-38m-node-hours-of-computing-time-to-support-cutting-edge-research/

Predictive Theory Revises Understanding of Alpha Processes During the Big Bang and in Massive Stars
https://www.energy.gov/science/np/articles/predictive-theory-revises-understanding-alpha-processes-during-big-bang-and

Researchers confirm "helicity barrier", unravelling solar mysteries
https://www.qmul.ac.uk/spcs/news-and-events/news/items/researchers-confirm-helicity-barrier-unravelling-solar-mysteries.html

Mysterious 'Dark Dwarfs' may be hiding at the heart of the Milky Way
https://www.eurekalert.org/news-releases/1090398

Black holes could act as cosmic supercolliders
https://physicsworld.com/a/black-holes-could-act-as-cosmic-supercolliders/

Molecular Simulations Show Graphite 'Hijacks' Diamond Formation Through Unexpected Crystallization Pathways
https://www.ucdavis.edu/news/molecular-simulations-show-graphite-hijacks-diamond-formation-through-unexpected

Energy and Innovation Summit Brings Government and Industry Leadership to CMU
https://www.cmu.edu/news/stories/archives/2025/july/energy-and-innovation-summit-brings-government-and-industry-leadership-to-cmu

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Recent Peer-Reviewed Articles of Interest

A neural master equation framework for multiscale modeling of molecular processes: application to atomic-scale plasma processes
https://www.nature.com/articles/s41524-025-01677-4

Creation and characterization of warm dense matter isochorically heated by an intense laser-driven proton beam to temperatures exceeding 100 eV
https://www.nature.com/articles/s42005-025-02206-x

Integrated design and analysis of optical performance for the ITER T-monitor high-power laser diagnostic
https://www.sciencedirect.com/science/article/pii/S0920379625004910

Lingshu: A modular real-time control system framework for experimental tokamaks
https://www.sciencedirect.com/science/article/pii/S0920379625005058

Numerical investigation of magneto-inertial fusion targets magnetized by dynamic enforcement of helical current flow
https://pubs.aip.org/aip/pop/article/32/7/072710/3352390/Numerical-investigation-of-magneto-inertial-fusion

Performance of boron carbide as an inertial confinement fusion ablator and its comparison with polystyrene under the combined effect of soft and hard x-rays of the drive spectrum
https://pubs.aip.org/aip/pop/article/32/7/072711/3352418/Performance-of-boron-carbide-as-an-inertial

Numerical features of the fifth-order nonlinear Kawahara equation for modeling shallow water waves
https://pubs.aip.org/aip/pof/article/37/7/077133/3352412/Numerical-features-of-the-fifth-order-nonlinear

[*Of Interest*]

China tops the world in artificial intelligence publications, database analysis reveals
https://www.science.org/content/article/china-tops-world-artificial-intelligence-publications-database-analysis-reveals

Inside the International Atomic Energy Agency Archives Unit
https://www.aip.org/library/ex-libris-universum/inside-the-international-atomic-energy-agency-archives-unit