

## FYI - Fusion News/Alerts

### **Terabytes - ITER demonstrates fast data transfer to Japan and the US**

<https://www.iter.org/node/20687/iter-demonstrates-fast-data-transfer-japan-and-us>  
[Latest ITER Newline: <https://www.iter.org/whatsnew/479>]

### **ITER project back on track**

<https://www.neimagazine.com/news/iter-project-back-on-track/>

### **Europe delivers all cold valve boxes for the ITER neutral beam cryopumps**

<https://fusionforenergy.europa.eu/news/cold-valve-boxes-iter-neutral-beam-cryopumps/>

### **FAST Fusion Project Completes Conceptual Design**

<https://www.world-energy.org/article/54624.html>

### **Is it time to think about critical resources for fusion energy?**

<https://www.polytechnique-insights.com/en/columns/energy/nuclear-fusion-constrained-by-scarce-resources/>

### **Behind the Fusion Scene: Koichiro Yamamoto**

<https://kyotofusioneering.com/en/news/2025/11/28/3592>

### **Kyoto Fusioneering and Shimadzu Corporation Jointly Develop a Prototype of a Turbomolecular Pump Designed for Operation in Tritium Environments**

<https://kyotofusioneering.com/en/news/2025/12/03/3598>

### **Google-backed fusion group moves to commercialise neutral-beam technology**

<https://www.ft.com/content/5ce71dfd-7ebe-4030-a5d5-ab68d84ab272>

### **Investment in fusion private sector initiatives reaches 13 billion EUR**

<https://fusionforenergy.europa.eu/news/f4e-fusion-observatory-investment-private-sector/>

### **Helical Fusion, Developer of Next-Generation Clean Energy Through Nuclear Fusion, Completes USD 5.5M Series A Extension Round**

<https://www.businesswire.com/news/home/20251204842199/en/Helical-Fusion-Developer-of-Next-Generation-Clean-Energy-Through-Nuclear-Fusion-Completes-USD-5.5M-Series-A-Extension-Round>

### **Unique university experiment empowers the future of fusion**

<https://engineering.wisc.edu/blog/unique-university-experiment-empowers-the-future-of-fusion/>

### **F4E contract signed to deliver ITER assembly tools**

<https://fusionforenergy.europa.eu/news/f4e-contract-signed-to-deliver-iter-assembly-tools/>

### **Ten years of Wendelstein 7-X – ten years of world-leading fusion research**

<https://nachrichten.idw-online.de/2025/12/01/ten-years-of-wendelstein-7-x-ten-years-of-world-leading-fusion-research>

**Squeeze inside a fusion reactor with a Nat Geo photographer**

<https://www.nationalgeographic.com/science/article/stellarator-fusion-reactor-inside-wendelstein-7-x>

**TAE Technologies and UKAEA partner to commercialise fusion tech**

<https://www.gov.uk/government/news/tae-technologies-and-ukaea-partner-to-commercialise-fusion-tech>

**The Atom and the Algorithm: Nuclear Energy and AI are Converging to Shape the Future**

<https://www.iaea.org/newscenter/statements/the-atom-and-the-algorithm-nuclear-energy-and-ai-are-converging-to-shape-the-future>

**Gallery of young debris disks around distant stars**

<https://www.mpg.de/25784351/spheres-debris-disk-gallery>

**TAE, UKAEA create joint venture**

<https://www.world-nuclear-news.org/articles/tae-ukaea-create-joint-venture>

**Delivering Nuclear Energy: Promise vs. Regulatory Reality**

<https://www.powermag.com/delivering-nuclear-energy-promise-vs-regulatory-reality/>

**The nuclear renaissance: Understanding nuclear's role in connected energy systems**

<https://www.niauk.org/the-nuclear-renaissance-understanding-nuclears-role-in-connected-energy-systems/>

**First fuel produced for molten salt reactor experiment**

<https://www.world-nuclear-news.org/articles/first-fuel-produced-for-molten-salt-reactor-experiment>

**Four utilities form the Great Plains New Nuclear Consortium**

<https://www.ans.org/news/article-7591/four-utilities-form-the-great-plains-new-nuclear-consortium/>

**LLNL Conducts Milestone Nuclear Survivability Experiment at NIF**

<https://lasers.llnl.gov/news/llnl-conducts-milestone-nuclear-survivability-experiment-nif>

**China's Giant Underground Neutrino Observatory Just Released Its First Results—And They're Promising**

<https://www.scientificamerican.com/article/juno-neutrino-observatory-releases-first-results/>

**South Korea, Türkiye deepen nuclear energy ties**

<https://www.neimagazine.com/news/south-korea-turkiye-deepen-nuclear-energy-ties/>

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

**Characterisation of turbulence suppression by fast-ion-Alfvénic instability**

<https://www.nature.com/articles/s42005-025-02390-w>

**First demonstration of improved yield with reduced adiabat in inertial confinement fusion implosions on the National Ignition Facility**

<https://pubs.aip.org/aip/pop/article/32/12/122701/3373618/First-demonstration-of-improved-yield-with-reduced>

**Hall instability in strongly coupled magnetized dusty plasma**

<https://iopscience.iop.org/article/10.1088/1402-4896/ae254d>

**General Design of the Neutral Beam Injection System and Integration with ITER**

<https://www.sciencedirect.com/science/chapter/edited-volume/abs/pii/B9780444827623501440>

**Electron Cyclotron Emission–Based Separatrix Identification in ITER with OMFIT Synthetic Modeling**

<https://www.tandfonline.com/doi/full/10.1080/15361055.2025.2580012>

**The dispersion of terahertz signals propagating in a hypersonic plasma sheath under a time-varying magnetic field**

<https://pubs.aip.org/aip/adv/article/15/12/125106/3373736/The-dispersion-of-terahertz-signals-propagating-in>

**Low-power flexible MXene-based resistive random access memory by oxygen plasma**

<https://pubs.aip.org/aip/apl/article/127/22/223507/3374118/Low-power-flexible-MXene-based-resistive-random>

**Ponderomotive potential in a complex plasma**

<https://pubs.aip.org/aip/pop/article/32/12/123701/3373619/Ponderomotive-potential-in-a-complex-plasma>

**Fast end-to-end plasma density profile reconstruction from microwave reflectometer data on EAST**

<https://iopscience.iop.org/article/10.1088/1741-4326/ae2694>

### **[Of Interest]**

**Could Symbolic AI Unlock Human-Like Intelligence?**

<https://www.scientificamerican.com/article/could-symbolic-ai-unlock-human-like-intelligence/>