

NEWSLETTER**HI-TECH & INNOVATION****22 - 28 December 2025****New chip module slashes AI data center energy use**

Researchers at Jiufengshan Lab in Hubei unveiled a gallium nitride power module that cuts AI data center power loss by 30%, reduces module size by 30%, and halves costs. A 1-GW center could save nearly 300 million kWh annually, cutting electricity bills by about 240 million yuan (around \$34 million). The China-developed technology has entered pilot validation, with mass production expected within three to five years. (**China Daily**)

Hong Kong to launch tech park amid sci-tech development push

HONG KONG plans to open Hetao Hong Kong Park, hosting more than 60 enterprises in life sciences, microelectronics, new energy, and AI. Located in the Northern Metropolis near Shenzhen, the park aims to advance Hong Kong as an international innovation hub, boost the Greater Bay Area, and strengthen China's technological self-reliance. (**Xinhua**)

China's commercial satellites boost global connectivity

China's Spacesail Qianfan Constellation partners with Airbus' HBCplus to deliver high-speed, low-latency broadband for airlines. The low-orbit network, now 108 satellites, tested in Malaysia, Mongolia, and Kazakhstan. Agreements with TELEBRAS (Brazil) and Thailand's National Telecom expand applications in smart cities, disaster relief, ocean logistics, enhancing global digital infrastructure and bridging connectivity gaps. (**China Daily**)

Scientists crack long-life “code” of zinc-bromine flow batteries

Researchers led by Li Xianfeng at the Dalian Institute of Chemical Physics developed a new bromine-based double-electron-transfer system, enabling long-life zinc-bromine flow batteries. Experiments showed stable operation over 700 cycles, total lifetime over 1,400 hours, and energy efficiency above 78%. The technology is commercially promising for grid-scale and renewable energy storage. (**Science and Technology Daily**)

China advances intrusive brain-machine interface clinical trials

Chinese scientists at the Center for Brain Science and Intelligent Technology achieved a breakthrough in invasive brain-machine interfaces, enabling a spinal-injured patient to control 3D physical environments and smart robots via thought. The system features high-precision, low-latency decoding, enhancing user experience. Commercial applications include assistive devices, rehabilitation, and human-computer interaction technologies. (**CCTV**)