



Breaking the Bottleneck in Medical Imaging Core Components: VITAL MedTech Unveils Its Vertical Integration Solution from Materials to Medical Systems at CMEF 2026

Descrizione

COMUNICATO STAMPA - CONTENUTO PROMOZIONALE

SHANGHAI, April 13, 2026 /PRNewswire/ - At CMEF 2026, VITAL MedTech, the healthcare unit of VITAL MATERIALS, unveiled a full range of innovations based on its semiconductor core technologies. It demonstrated its full vertical integration across core materials, chips, and medical systems.

Technology Breakthrough: Mastering Core Components Development Technology

Global medical imaging technology is transitioning from digitalization to precision. Experts point out that the future of medical imaging lies in the ability to capture weak vital signals - a capability directly determined by the physical properties of front-end detectors.

For years, the medical imaging industry has hit a bottleneck: heavy reliance on external supplies for core components of high-end imaging systems. Leveraging VITAL MATERIALS' expertise in first-to-fourth-generation semiconductor materials, VITAL MedTech translates semiconductor advantages into tangible clinical value in medical imaging.

Vertical Integration: From Materials to Medical Systems

At CMEF 2026, VITAL MedTech highlighted its core technologies built on semiconductors such as CZT, SiC, and InP, demonstrating its full vertical integration.

Precision-Oriented Diagnosis: Its self-developed CZT detectors break the physical limitations of traditional scintillator detectors and enable the capture of every X-ray photon, thus bringing higher energy resolution.

High-End MRI: Leveraging wide-bandgap semiconductor technology, the self-developed gradient amplifier with SiC units achieves extremely low switching losses and nanosecond-level response,

greatly enhancing slew rate and thermal management efficiency. This lays the foundation for low-helium / helium-free MRI systems with increased scanning speed and millisecond-level imaging capability.

Intelligent Imaging Data chain: With InP optoelectronic co-packaging technology, VITAL MedTech has realized an ultra-high-speed data transmission pathway that solves data congestion for massive datasets, thus enabling real-time processing of PB-scale raw data.

Empowering Clinical Practice: For Better Patient Care

Mr. Zhu Shihui, Founder and Chairman of VITAL MATERIALS, stated at the launch: “Semiconductors are the bedrock of high-end medical equipment. Our goal is not just to manufacture equipment, but to deliver more precise clinical tools through innovation in materials science, contributing our strength to healthcare.”

Experts noted that VITAL MedTech’s full-industry-chain model breaks the efficiency bottleneck of traditional R&D. It brings faster transformation of scientific achievements and new development pathways for the high-end medical equipment industry.

VITAL MedTech is transforming these core underlying technologies into solutions for diverse clinical scenarios, ensuring more patients benefiting from technological innovations.

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