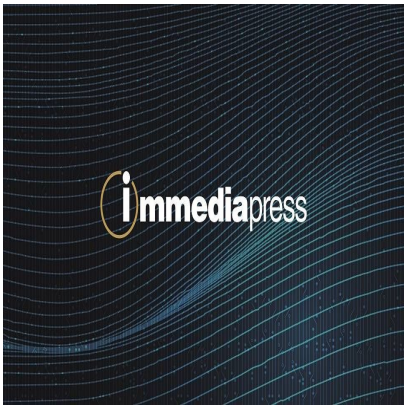

Park Systems Launches NX1: The Highest Resolution AFM for Atomic-Scale Imaging in Ambient Conditions

Descrizione

COMUNICATO STAMPA â?? CONTENUTO PROMOZIONALE

GWACHEON, South Korea, April 30, 2026 /PRNewswire/ â?? Park Systems Corp., the worldâ??s leading provider of atomic force microscopy (AFM) solutions, today announced the launch of the NX1 â?? a compact, high-performance AFM that delivers atomic resolution imaging in ambient conditions. Developed in collaboration with Prof. Franz J. Giessibl of the University of Regensburg, one of the worldâ??s foremost authorities on atomic resolution AFM, the NX1 brings a class of imaging performance previously confined to ultra-high vacuum environments into the reach of research labs worldwide.

The NX1 is based on Orpheus II, a prototype developed by Prof. Giessiblâ??s group at Regensburg that demonstrated atomic resolution imaging in ambient conditions was achievable. Park Systems engineered that concept into a fully realized commercial product â?? combining the Orpheus IIâ??s proven core architecture, including a Kovar body for exceptional thermal stability, with Park Systemsâ?? precision manufacturing, product reliability, and global AFM engineering expertise. The result is an instrument that achieves a noise floor about an order of magnitude lower than conventional AFM systems, making atomic-scale imaging accessible in everyday laboratory settings.

â??The NX1 is the result of combining Prof. Giessiblâ??s pioneering research with Park Systemsâ?? proven ability to bring the worldâ??s most advanced science to market,â?• said Dr. Sangâ??Joon Cho, Executive Vice President and Head of the Research Equipment Business Unit at Park Systems. â??Together, we have created something that neither side could have achieved alone: a truly reliable, supportable, and accessible instrument for researchers worldwide. This is the kind of platform that creates and shapes new markets.â?•

Designed for both performance and everyday usability, the NX1 supports standard silicon cantilevers as well as an optional qPlus (quartz tuning fork) sensor â?? enabling picometer-scale oscillation amplitudes and the high sensitivity to short-range forces. Probe exchange is simplified through a pre-aligned kinematic chip carrier system, and an integrated on-axis optical microscope provides a direct

view of the probe and sample throughout operation. The system is fully compatible with Park Systemsâ?? SmartScanâ?¢ operating software and SmartAnalysisâ?¢ image analysis platform.

â??Orpheus II proved the concept, but it was a research instrument â?? for experts only,â?• said Prof. Franz J. Giessibl, University of Regensburg. â??The expertise of Park Systems was essential to make this into a reliable product that the broader research community can use. The NX1 is what the idea always had the potential to become.â?•

The NX1 is now available for order. For technical specifications and application data, visit https://www.parksystems.com/en/products/research-afm/small-sample-afm/nx1 .

ABOUT PARK SYSTEMS

Park Systems is a global leader in nanometrology, providing advanced measurement solutions for research and industrial applications. With regional offices across the Americas, Europe, and Asia, the company supports customers in semiconductor manufacturing, materials science, and nanotechnology research.

Park Systemsâ?? technology portfolio includes atomic force microscopy (AFM), imaging spectroscopic ellipsometry, digital holographic microscopy, white light interferometry, and active vibration isolation systems.

Founded by Dr. Sang-il Park, a contributor to the invention of AFM at Stanford University, the company has grown through continuous innovation and strategic acquisitionsâ??including Accurion GmbH and LyncÃ©e Tec SAâ??to become a leading force in the global nanometrology industry.

For more information, visit www.parksystems.com

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Categoria

1. Comunicati

Tag

1. ImmediaPress

Data di creazione
Aprile 30, 2026
Autore
redazione