



#### Helios NanoLab™ DualBeam™

Meet your most stringent 2D and 3D nanoscale characterization, prototyping, and sample preparation needs.

- Ultra to extreme high-resolution monochromated FE-SEM technology
- Best-in-class FIB performance
- Especially well-suited for soft or delicate materials, like nanotubes, polymers, particles, ceramics and metals



#### Quanta™ SEM

Image any sample; collect all data with this highly versatile SEM

- High and low vacuum modes, plus Environmental SEM (ESEM) operation
- Imaging and analysis of samples in their natural states
- Supports *in situ* dynamic experiments, including heating, humidity cycling and tensile testing



#### Scios™ DualBeam

Take your lab to the next level of achievement.

- Fast, high resolution 2D and 3D characterization—even for magnetic and non-conductive samples
- Clear distinction between materials and topographic contrast
- Rapid creation of site-specific samples for S/TEM, EBSD, or atom probe



#### Inspect™ SEM

Obtain fast answers for materials characterization and inspection

- High quality imaging and analysis for process control and failure analysis
- Easy to use for all experience levels
- Robust platform for multi-sample or multi-user laboratories



#### Versa 3D™ DualBeam

Explore new dimensions with FEI's most versatile DualBeam.

- Accepts a wide range of samples, from the conventional to the non-traditional
- Highly configurable platform with flexible detector and analytical options
- Optional Environmental SEM (ESEM) extends applications to include *in situ* dynamic studies



#### Vion™ Plasma FIB

Get outstanding milling and imaging performance in one instrument.

- Combines Xe plasma source with FIB
- Up to 20× speed increase for site-specific cross sectioning or bulk material removal
- High-contrast, high-resolution imaging
- Excellent low current or low kV polishing for sample preparation



#### Verios™ XHR SEM

Get unprecedented precision and surface-specific information.

- Second-generation XHR SEM technology
- Sub-nanometer resolution over the full 1 keV to 30 keV energy range
- Excellent materials contrast
- Extraordinary low-voltage performance



#### Titan Themis™ S/TEM

Get fast, easy access to atomic-scale information.

- Proven aberration-corrected optics
- Outstanding XEDS performance
- Powerful new software
- 16 megapixel CMOS camera
- Enhanced Piezo stage



#### Nova NanoSEM™

Experience uncompromised ultra-high resolution imaging and analysis.

- Excellent low kV imaging and high current for analytical applications
- Unique low vacuum mode
- Accommodates challenging uncoated, heavily charging, or contaminating samples



#### Talos™ S/TEM

Experience the fastest chemical analysis in multiple dimensions.

- New-generation technology for accelerated nanoscale analysis
- Fast acquisition of high quality, 2D and 3D S/TEM and EDS data
- Automated, simplified operation



#### Tecnai™ G2 Series

Gain fast analysis of a wide variety of materials with no compromises.

- Automated for repeatability
- High-throughput S/TEM imaging and characterization
- Ultra-high-resolution, high contrast imaging
- Superb analytical performance
- Easy to use platform



#### Tecnai Femto™ UEM

Study kinetics and phase transitions at atomic and molecular spatial scale.

- New 4D dynamic ultra-fast TEM for imaging and spectroscopy with femtosecond time resolution
- Multi-mode operation: stroboscopic, single pulse and continuous modes
- Easy to customize and optimize performance for a desired experiment



#### Titan™ ETEM

Gain detailed understanding of material structure—performance relationships.

- Characterize functional nanomaterials at nano- and atomic scales
- Study the geometric and electronic structures as well as chemical composition
- Dedicated environmental TEM enables *in situ* studies of gas-solid interactions