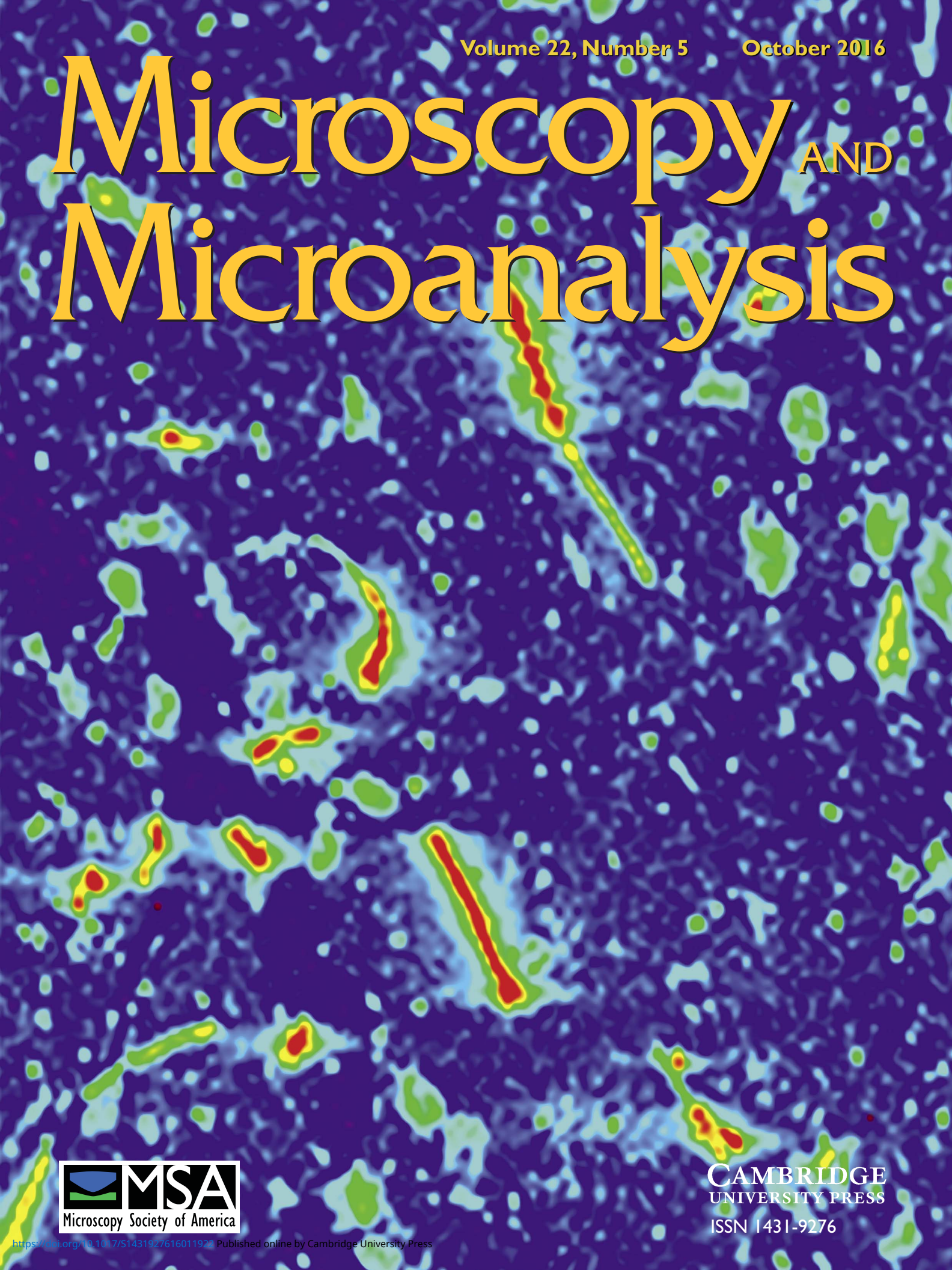
Volume 22, Number 5 October 2016

Microscopy AND Microanalysis



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DiATOME diamond knives

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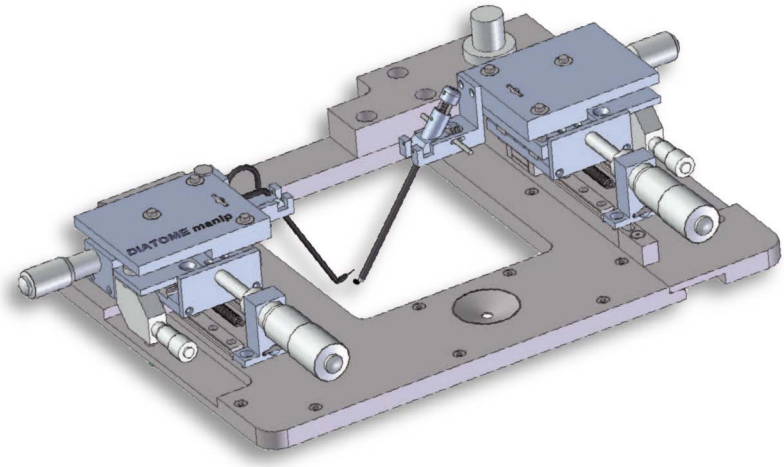
...and still innovating



NEW DiATOME manip

For easy handling and mounting of section ribbons.

The mounting of the manipulator is easy. The original plate on the cryochamber is removed. The manipulator is fixed in 5 minutes.

Applications

- **Frozen hydrated biological samples (CEMOVIS)**
- **Room temperature sectioning of water sensitive samples**
  - Dry resin sectioning of biological samples for chemical analysis
  - Dry sectioning of industrial samples such as polymers

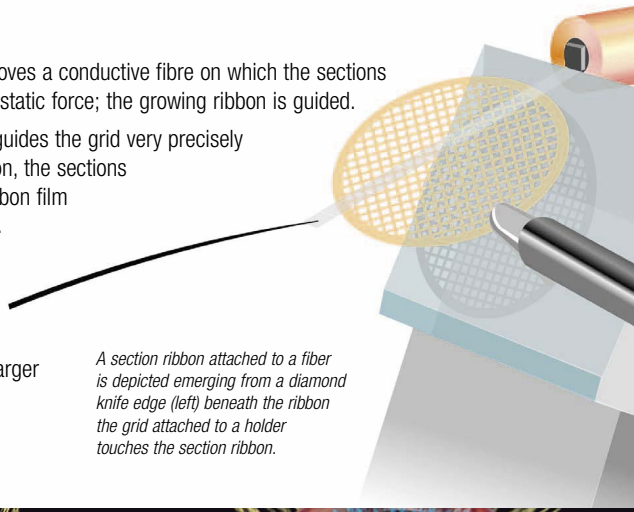
Functionality

The left manipulator moves a conductive fibre on which the sections are attached by electrostatic force; the growing ribbon is guided.

The right manipulator guides the grid very precisely below the section ribbon, the sections are attached to the carbon film with electrostatic force.

Compatability

Leica cryochambers FC6 and FC7 equipped with a Crion ionizer/charger adaption on other cryochambers upon request



A section ribbon attached to a fiber is depicted emerging from a diamond knife edge (left) beneath the ribbon the grid attached to a holder touches the section ribbon.

"NEW" trimtool 90

Many requests from customers doing FIB cutting of biological and technical sample blocks have motivated us to relaunch the trim 90 blade: With the trim 90 blade the surface of the blocks as well as the 90° inclined block sides may be trimmed for the following FIB processing.

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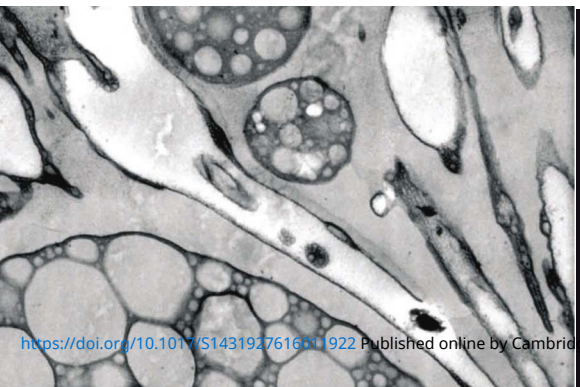

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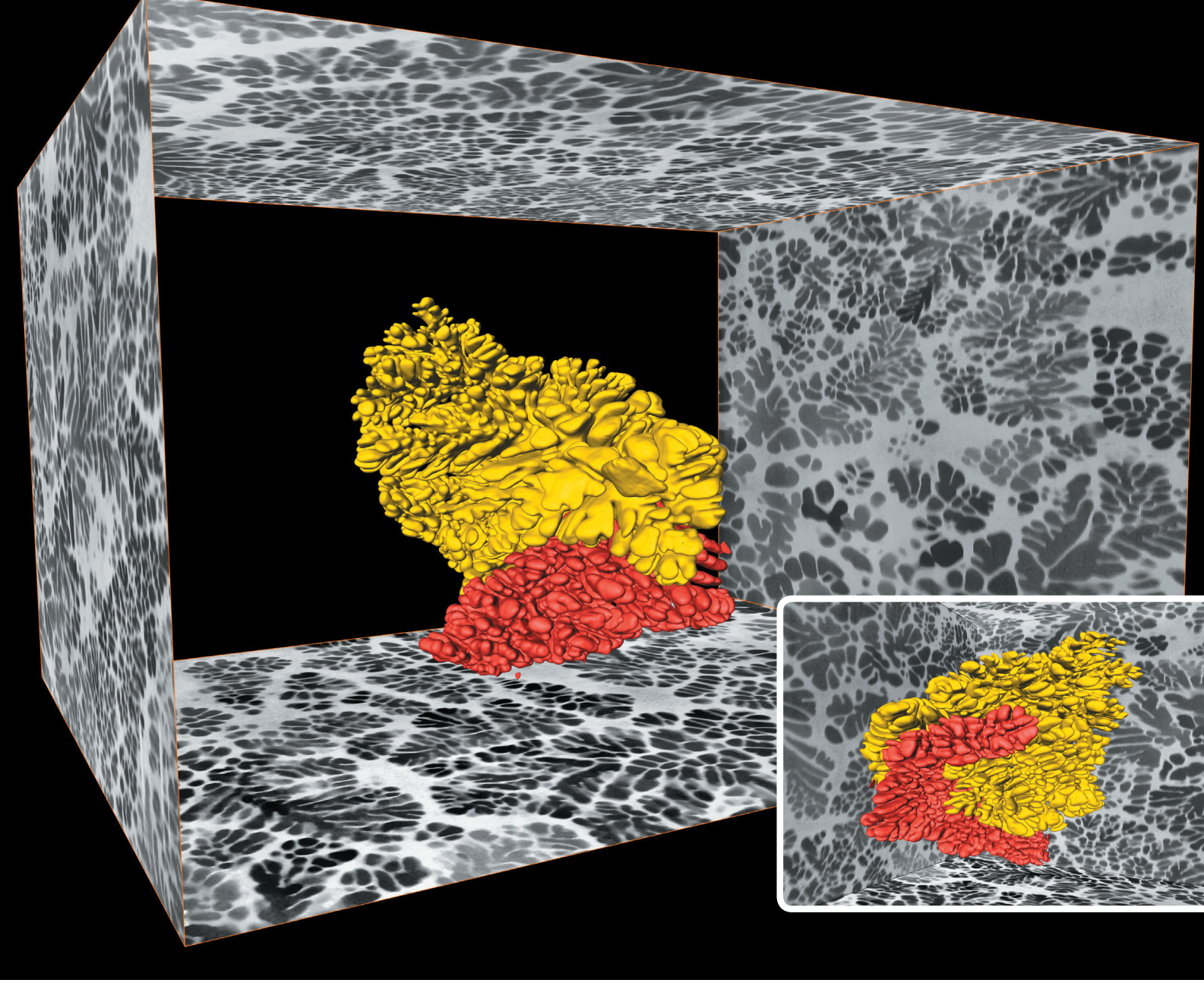

FEI Avizo® 3D visualization of two large adjacent crystalline dendrites of a bulk-metallic-glass matrix composite ($Zr_{58.5}Ti_{14.3}Nb_{5.2}Cu_{6.1}Ni_{4.9}Be_{11.0}$). Data was obtained by large volume serial sectioning tomography using the Helios PFIB DualBeam. The sectioned block is about 90×80×70 µm³. Sample from The University of Tennessee, USA. Images courtesy of The University of Manchester.

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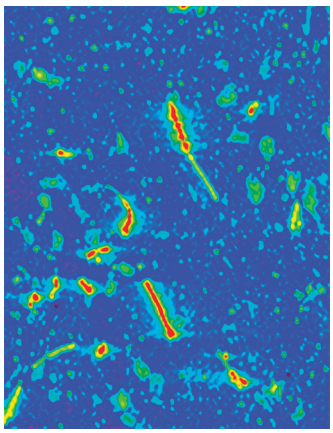

On the Cover: X-ray fluorescence map of human lung exposed to asbestos. For further information see Pascolo et al., pp 1062–1071.

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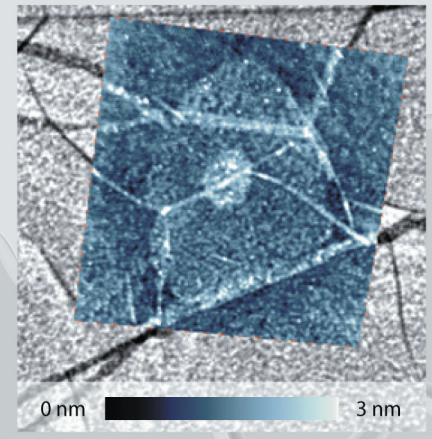

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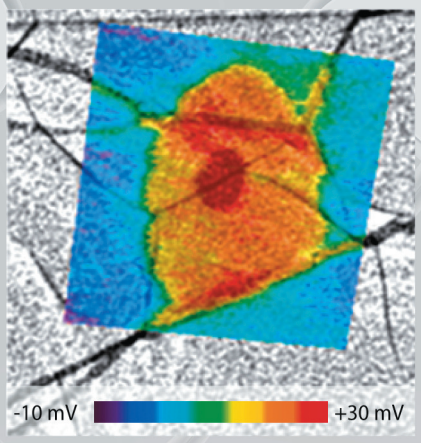
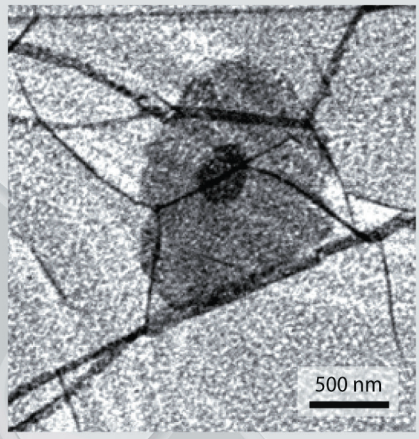


KFM/SEM Overlay*



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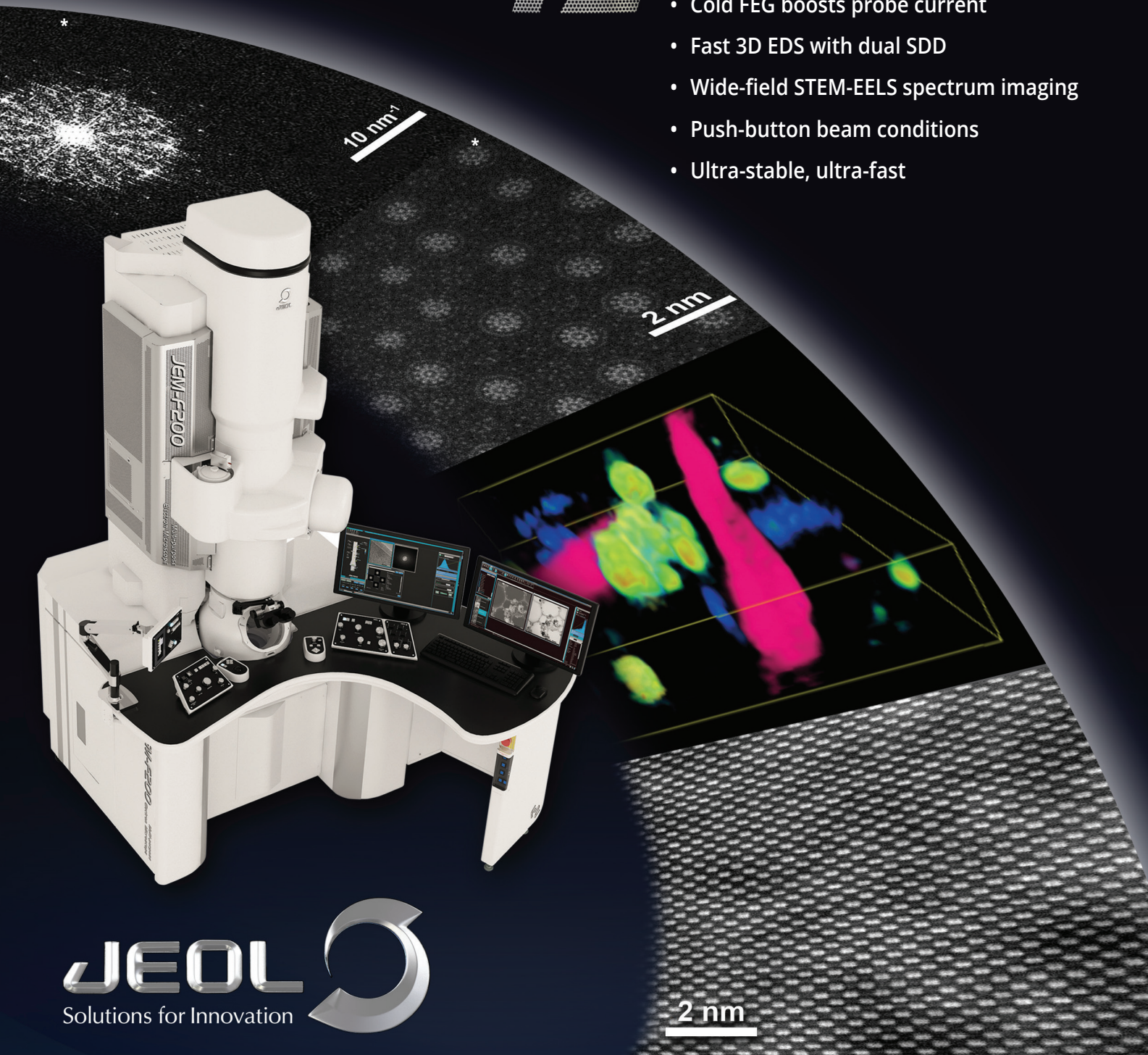

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