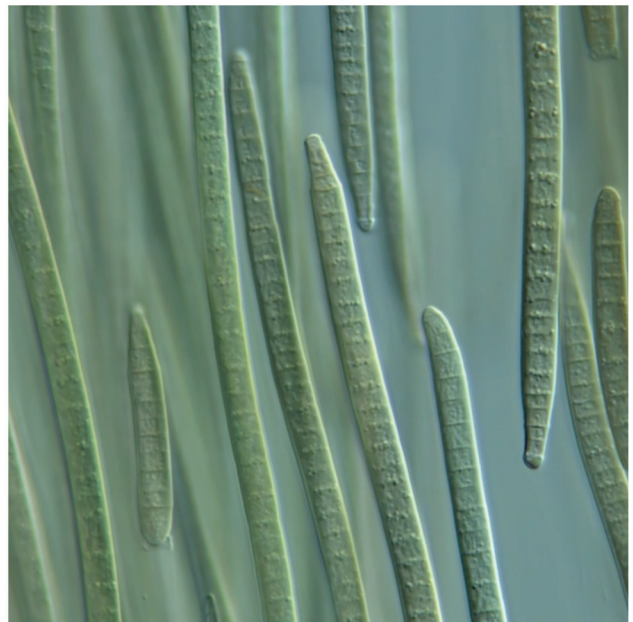
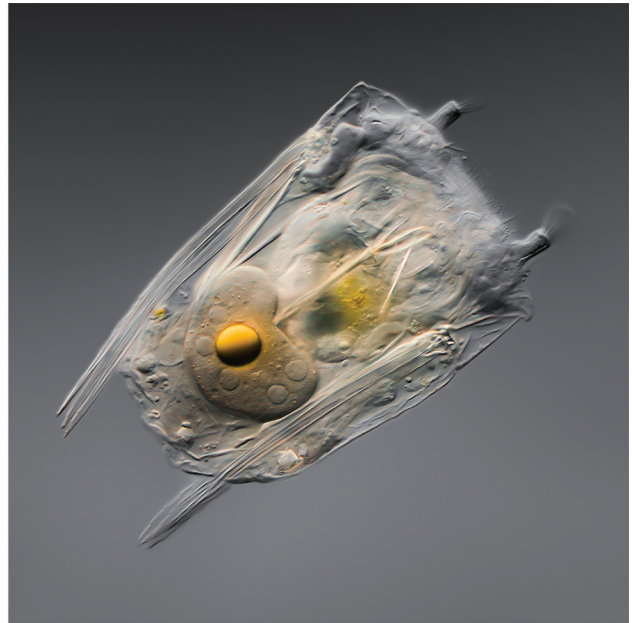


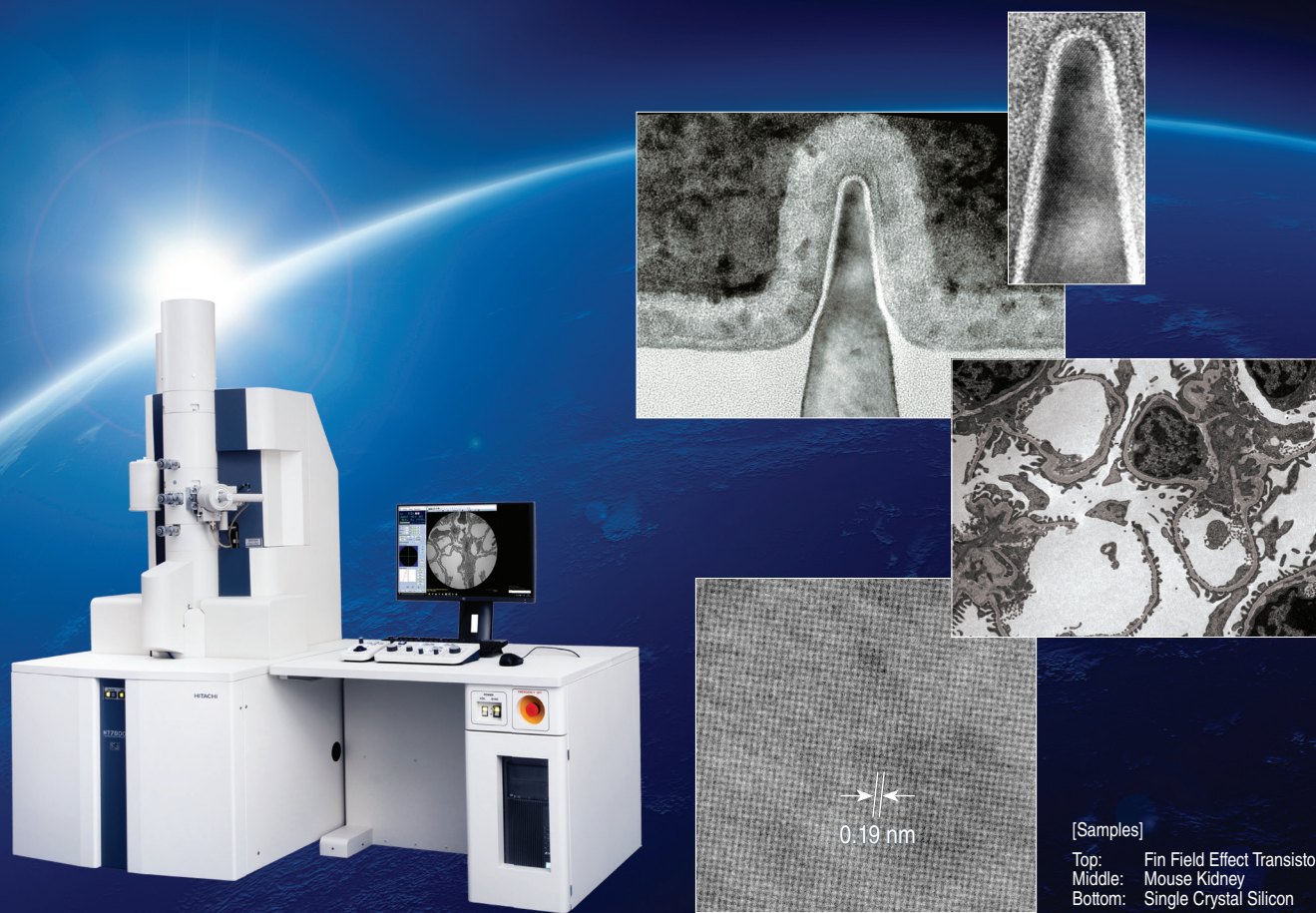
Microscopy TODAY

Volume 27 Number 5 2019 September



The NEXT Generation of 120 kV TEM

Innovation, Performance, and Reliability—The Hitachi *HT7800* Series



[Samples]

Top: Fin Field Effect Transistor
Middle: Mouse Kidney
Bottom: Single Crystal Silicon

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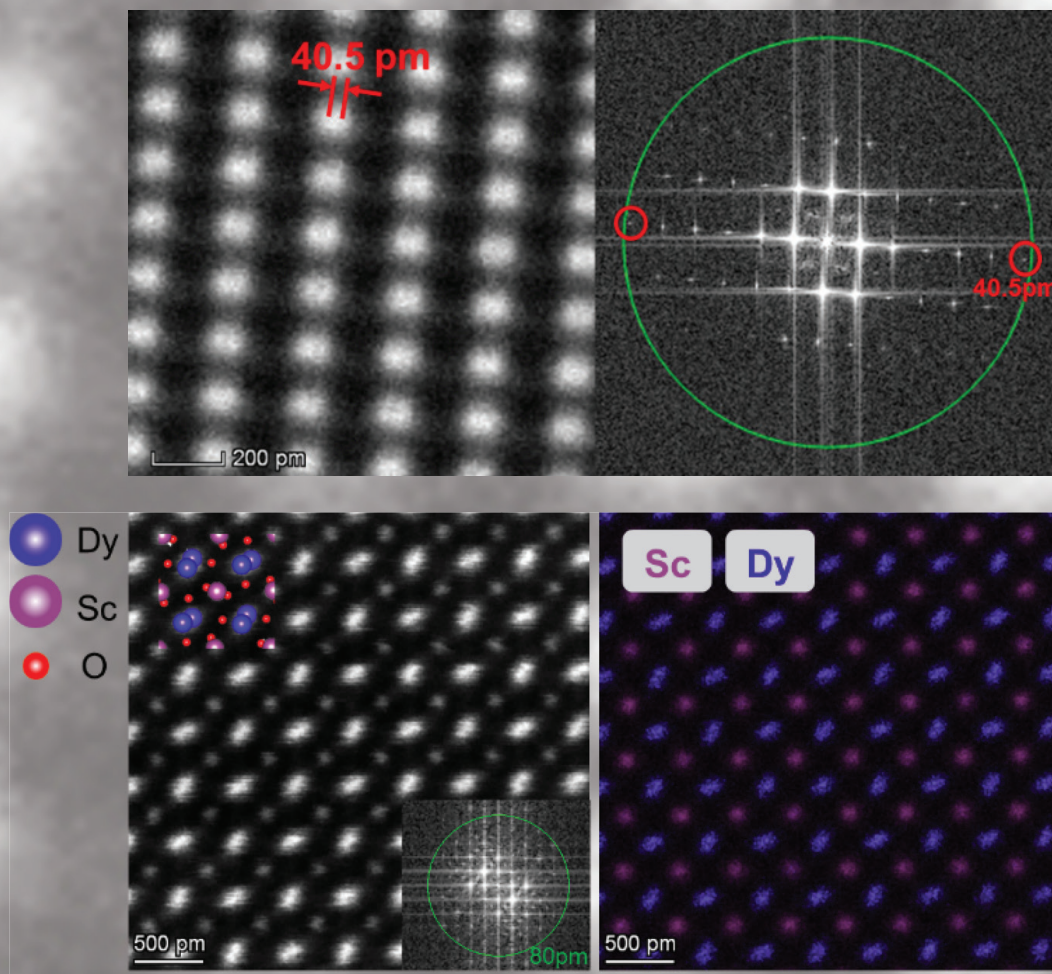


Figure 1a (top): HAADF (DCFI) STEM image of GaN [212] at 300 kV showing 40.5 pm Ga-Ga dumbbell splitting and 39 pm resolution in the FFT on a wide gap (S-TWIN) pole piece.

Figure 1b (bottom): DyScO₃ specimen investigated with a Spectra 200 S/TEM. The combined ultra-high brightness of the X-CFEG, resolving power of the S-CORR and large solid angle (1.76 Sr) of the Dual-X detectors results in high signal to noise ratio, atomic resolution, raw and unfiltered EDX maps that can be collected with up to 90 pm resolution. *Sample courtesy: Professor L.F. Kourkoutis, Cornell University.*

Spectra S/TEM—Simply Brighter

For scientists to advance their understanding of complex samples and develop innovative materials, they must have access to robust, precise instrumentation capable of correlating form and function, as well as resolving space, time, and frequency. Thermo Fisher Scientific introduces the new Spectra scanning transmission electron microscope (S/TEM) with two models designed for all materials science applications: the Spectra 200 is the high-throughput S/TEM powered by a new-cold field emission gun (X-CFEG) and the Spectra 300 is the highest resolution S/TEM optionally equipped with either a high-energy-resolution extreme field emission gun (X-FEG)/Mono or an ultra-high-energy resolution X-FEG/UltriMono.

Find out more at thermofisher.com/spectra200
and thermofisher.com/spectra300

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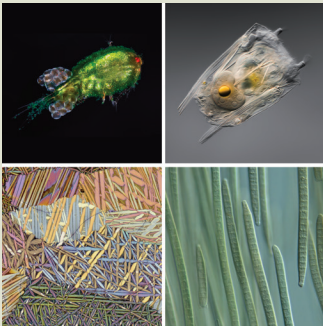
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Winners of the 2019 *Microscopy Today* Micrograph Awards. Clockwise from upper left: 1st Prize in the Published category, 1st Prize in the Open category, 1st Prize in the Video category, and the winner of the People's Choice Award.

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