臺灣大學雙球差SPECTRA 300 S/TEM
電子顯微鏡技術研討會

時間:2024/1/24 9:30-16:00
地點:國立臺灣大學工學院綜合大樓203國際演講廳

本次研討會聚焦於由Thermo Fisher SPECTRA 300 S/TEM，爲全臺灣學校研究單位擁有的第一台雙球面像差矯正器掃描穿透式電子顯微鏡，其中包括透過HRTEM + Image Cs Corrector、HRSTEM + Probe Cs Corrector改善相差，以及在這台機台上進行NBD算應力分布、low-dose高解析技術以及iDPC技術等操作。我們期待能與國內學研單位、對此技術感興趣的老師、同學以及相關廠商共同交流。請不要錯過這個難得的機會，踴躍報名參與，一同分享並深入瞭解SPECTRA 300 S/TEM所帶來的前沿科技及其在基礎科學研究中的卓越表現。期待您的參與！

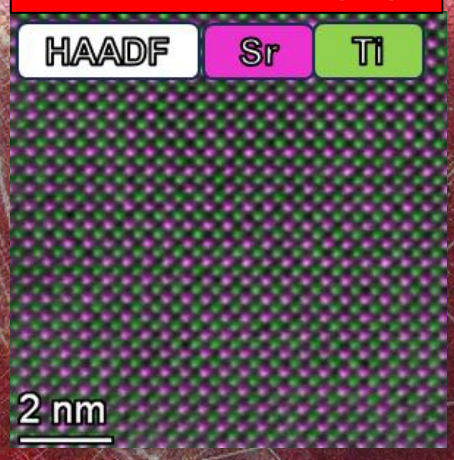
時間	流程	地點
9:30-10:00	報到	工綜203 國際會議廳
10:00-10:20	老師致詞	
10:20-11:10	演講主題:SPECTRA300	
11:10-11:30	Tea time	
11:30-12:00	演講主題:Dual Beam對於TEM sample preparation的重要性	
12:00-13:30	中午休息	
13:30-16:00	Spectra300實驗室參觀	工綜140室

Spectra 300 (S)TEM

The ultra-high-resolution, “all-in-one” solution for atomic scale materials characterization

Spectra 300 S-TWIN, X-FEG/Mono + S-CORR at 300kV

Spectra 300 S-TWIN, X-FEG/Mono + S-CORR at 300kV SrTiO3 [100]



活動報名連結

臺大貴儀

主辦單位:

國立臺灣大學貴儀中心　美商飛昱科技

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Spectra S/TEM—Simply Brighter

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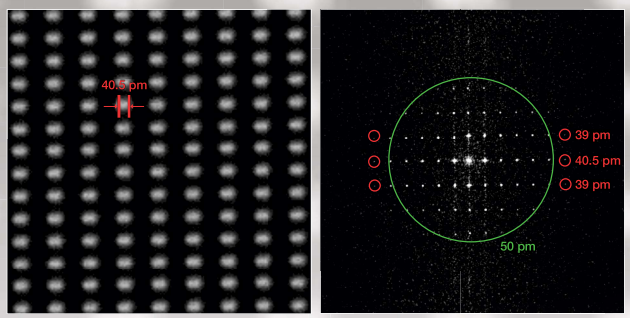
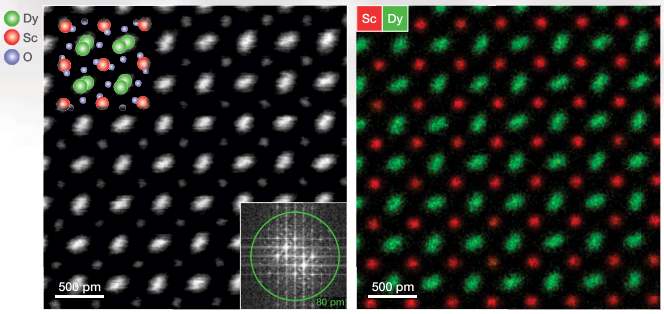
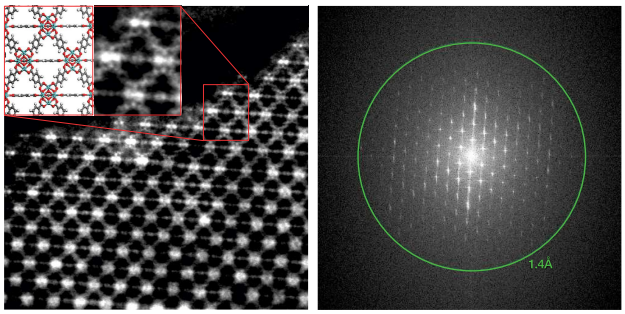


HAADF (DCFI) STEM image of GaN [212] at at 300kV taken on the Spectra 300 S/TEM showing 40.5 pm Ga-Ga dumbbell splitting and 39 pm resolution in the FFT on a wide gap (S-TWIN) pole piece.



$DyScO_3$ specimen investigated with the 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.*



Extreme-low-dose imaging (166 e-/ Å²) of the metal organic framework (MOF) UiO 66. A probe current of <0.5 pA was used in combination with iDPC and new sensitive STEM detectors to image atomic-level details in this highly dose-sensitive material. *Specimen courtesy of Professor Y. Han, King Abdullah University of Science and Technology.*

For high–contrast imaging and chemical analysis, the Spectra 200 S/TEM is ideal and offers a 200 kV X-CFEG.

The Spectra 300 S/TEM includes two monochromator options (X-FEG Mono or X-FEG UltiMono) and is designed for ultimate atomic-level imaging and analysis on the widest variety of samples.

1/24 2024報名請掃QR code

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