

Nion UltraSTEM™ 100

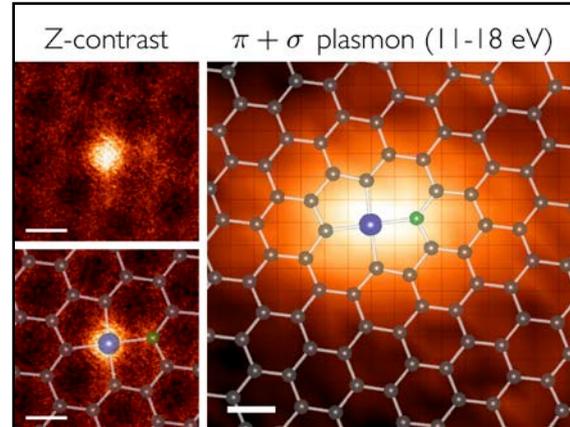
Dedicated Scanning Transmission Electron Microscope

Instrument Specifications:

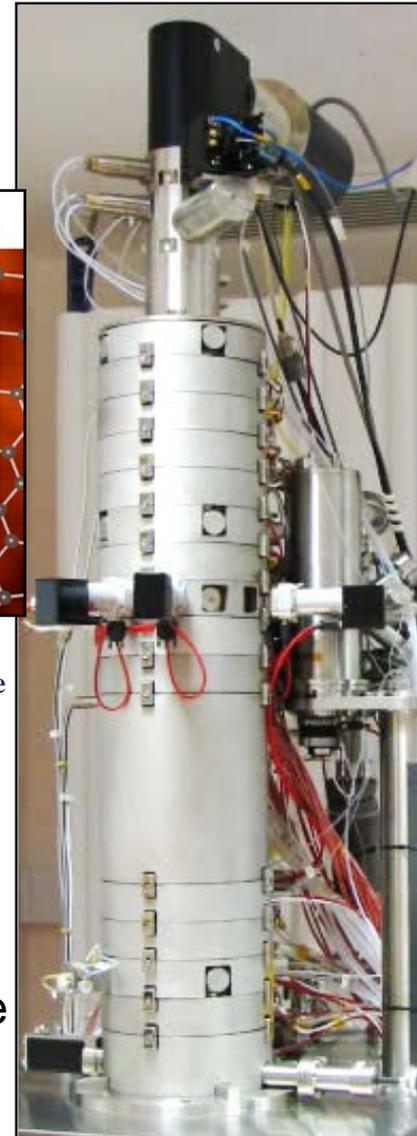
- Cold field emission gun
- 3rd generation C₃/C₅ aberration corrector
- 60-100kV operation
- <1Å spatial resolution at 100 kV
- <1.1Å spatial resolution at 60 kV
- >0.5nA of current with atom-sized probe
- <350meV energy resolution at 100 kV
- Gatan Enfina EELS
- Ultra-stable sample stage
- Up to 5 samples can be loaded/exchanged with no vacuum degradation
- Flexible electron optics (diffraction and CTEM modes)

Instrument Applications:

Atomic resolution imaging and spectroscopy at mid- and low-voltage with single atom sensitivity



Atomically localized plasmon enhancement in monolayer graphene due to substitutional Si and N atoms



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