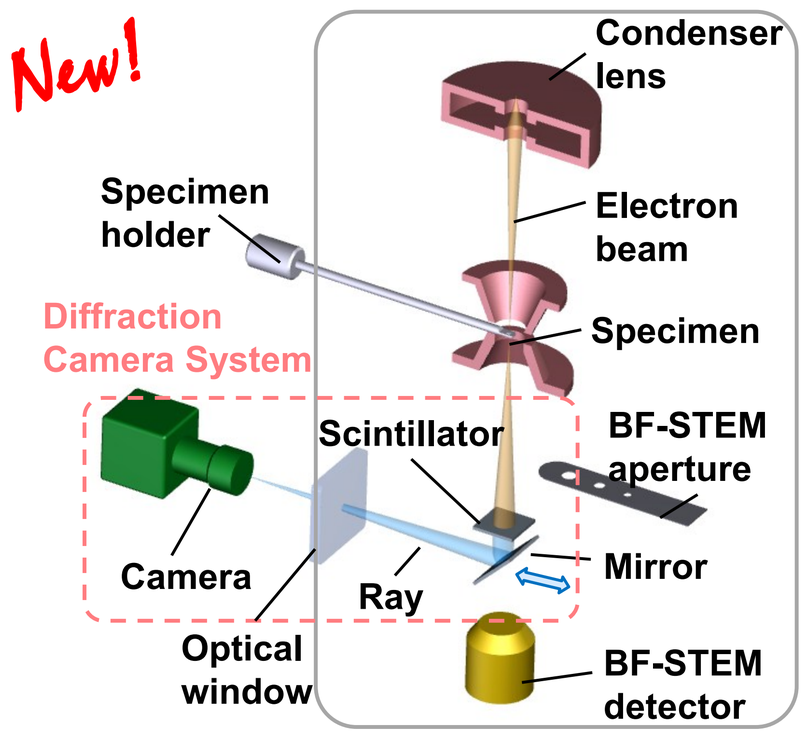
HITACHI
Inspire the Next

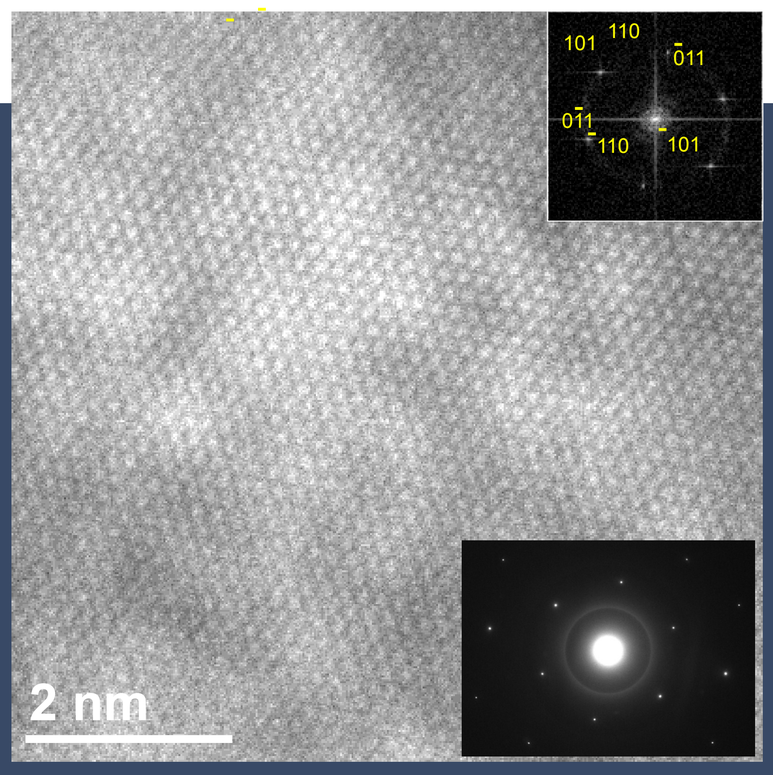
SU9000

XHR True Inlens SEM/STEM

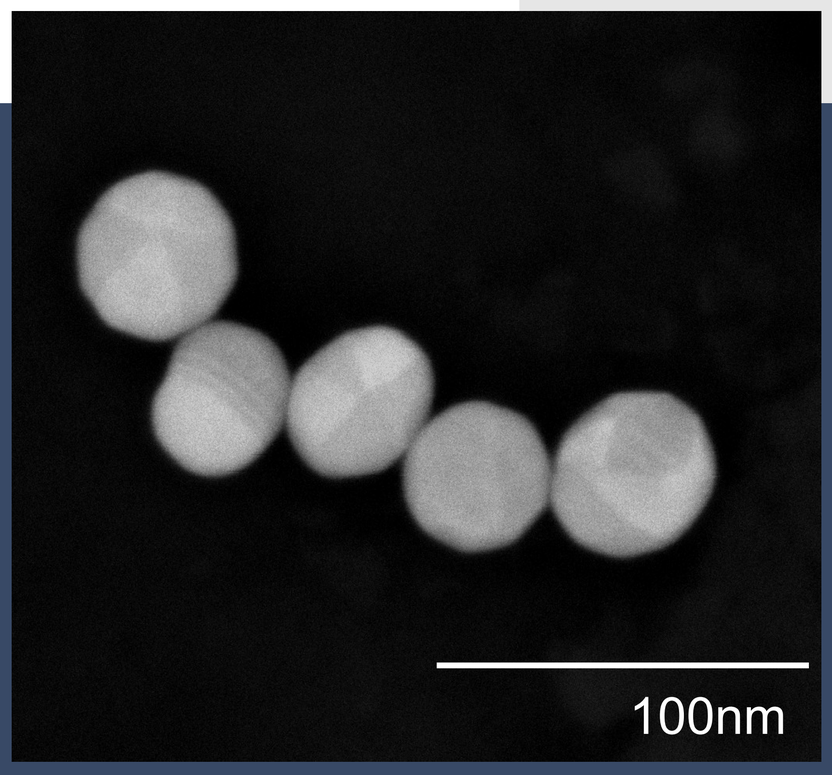
Diffraction Camera now available

- ***Highest usable resolution:***
  0.8nm @ 1kV (with beam deceleration)
  0.4nm @ 30kV
  0.34nm @ 30kV STEM (0.21nm attainable)
  (lattice structure of graphene)
- ***Novel Cold Field-Emission Gun***
  with high current stability and double current output compared to the conventional design for brilliant images
- ***Dual inlens detection with SE/BSE separation and energy filtering***
- ***BF/DF Duo STEM detector with variable DF scattering angle selection up to 650mrad (option)***
- ***4-signal simultaneous display ability***
- ***Minimized sample contamination***
  by high vacuum level in specimen chamber
- ***Large solid angle EDX, cryo holder, beam deceleration*** and other options
- ***Diffraction camera (option)***

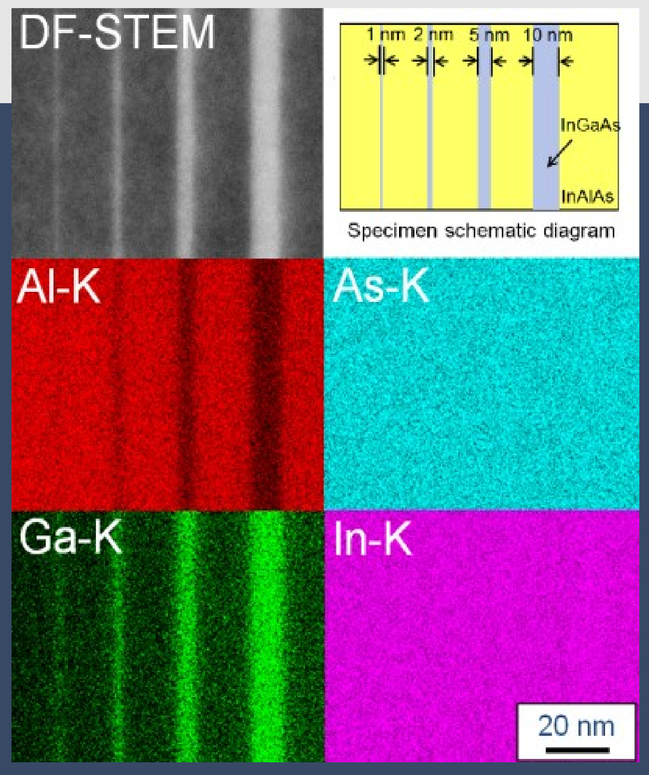




BF-STEM image of Graphene and its Diffraction pattern.
(V_{acc}=30 kV, Mag.: x 3,000,000)



HA-BSE image of Au- nanoparticles, featuring their crystal nature.
(V_{acc}=3kV, Mag.: x 500,000)



30kV EDX map of III-V QWS
Mag.: x 1,000,000 t=15min