U41-TXM, HZB	
Microscope type	TXM
Source	Undulator beamline, linear polarization
Condenser/Objective aperture	Partially coherent illumination
Energy range	250 – 1500 eV
Spectral resolution	up to $E/\Delta E = 10^4$
Zone plates for user operation	dr_n = 25 nm, 40 nm
Spatial resolution	2D: ≈10 nm half-period (depends on objective) 3D: ≈36 nm Rayleigh criterion
Sample format	1) Special designed rectangular grids (HZB-2 or IFR-1) having 2 mm x 1 mm sample area and open grid slits width 50 µm x 200 µm or 150 µm x 700 µm these grids are cryo- and tomography- compatible 2) 3 mm diameter EM grids(cryo possible and tomography) or $3.5 \cdot 3.5$ mm^2 wafer (no cryo and no tomography possible)
Tomography capability	yes
Tilt range	-80°…. +80°
Cryo capability	yes – LN_2 temperature
Detector type	Thinned, backside illuminated CCD, 1340 pixel x 1300 pixel
X-ray magnification	adjustable, value depends on the used objective
Light microscope	BF, DIC, fluorescence
Filter sets for light fluorescence microscope	Filter set 38 from Zeiss, GFP, ex 470, emm 525; Filter set 43 from Zeiss, Cy 3 (rhodamin), ex 545, emm 605
Raw data format	*.spe (WinView); 3.407 MB per image
Data analysis software capabilities available	ImageJ, Imod (eTomo)
Preparation Lab	BioLab (restricted access): safety level S1 (genetically modified organisms (GMOs) belonging to safety level S1 (GenTG) allowed); incubator; plasma cleaner; plunge freezer (liquid ethane); fluorescence light microscope LEICA DMI6000B; cryo light microscopy stage