

## Compare the Microscopes in detail

	<b>High Voltage TEM</b> JEM-1300NEF	<b>Atomic Resolution Analytical TEM</b> JEM-ARM200CF	<b>Cs-Corrected STEM/TEM</b> JEM-ARM200F	<b>3D tomography TEM</b> JEM-3200FSK	<b>Lorenz TEM</b> TECNAI G2-F20	<b>Digital TEM</b> TECNAI-20	<b>Holography TEM</b> HF-3300X	<b>Conventional TEM</b> JEM-2100HC	<b>Conventional TEM</b> JEM-2000EX	<b>Micro-Calorimeter FESEM</b> TES+ULTRA55
Installation location	ITO Campus・CE20	ITO Campus・CE21	ITO Campus・CE21	ITO Campus・CE21	Chikushi Campus	ITO Campus・CE21	ITO Campus・CE21	ITO Campus・CE21	ITO Campus・CE21	ITO Campus・CE21
Accelerating voltage	400,600,800,1000,1200	30,60,80,120,200	60,80,120,200	300	100-200	100-200	100,200,300	100,120,200	80-200	0.1-30
Emission Gun	LaB6	C-FEG*2	T-FEG*1	T-FEG*1	T-FEG*1	LaB6	C-FEG*2	LaB6	W	T-FEG
TEM resolution(nm)	0.12 point 0.10 lattice	0.11 point 0.10 lattice	0.11 point 0.10 lattice	0.26 point 0.14 lattice	0.24 point	0.24 point	0.14lattice	0.31 point 0.14 lattice	0.35 point	1.0-4.0 SEM image
STEM	minimum probe diameter	1.6 nm	0.1 nm	0.2 nm	4 nm	0.3 nm	2 nm	—	—	—
	HAADF	—	○	○	—	○	—	—	—	—
	ABF	—	○	○	—	—	—	—	—	—
XEDS	type	SDD	SDD	SDD	Si(Li)	Si(Li)	Si(Li)	—	—	TES Si
	solid angle	0.07 sr	2.0 sr	0.8 sr	0.22 sr	0.13 sr	0.13 sr	—	—	0.0022 sr 0.026 sr
	energy resolution	130 eV	130 eV	130 eV	140 eV	—	140 eV	—	—	20 eV 130 eV
EELS	Ω	Gatan Imaging Filter	Gatan Imaging Filter	Ω	—	—	Gatan Imaging Filter	—	—	—
3D tomography	○	○	—	○	○	○	—	○	—	—
Sample inclination angle	X:±70 Y:±20	X,Y:±25	X,Y:±25	X:±70 Y:±30	X:±80 Y:±30	X:±80 Y:±25	X:±15 Y:±15	X:±38 Y:±30	X:±45 Y:±30	T:-3~70 R:360
Convergent electron diffraction	△	○	○	—	○	○	—	—	—	—

\*1 Thermal Field Emission Gun

\*2 Cold Field Emission Gun