

Optical Tweezers/TIRF System

Specification	
Lasers	Optical Tweezers: 1064 nm (3W) TIRF: 405nm (100mW); 488nm (100mW); 561nm (50mW); 642 nm (100mW)
Microscope	
Stand	Inverted: Nikon Ti2-U
Sample stage	Piezo Nano Positioning Module - XYZ
Filter cubes for observation	Filter Set 49(G365, FT395, BP445/50); Filter Set 38 HE(BP470/40, FT495, BP525/50); Filter Set 43 HE (BP 550/25, FT570, BP605/70); Filter Set 50 (BP 640/30, FT660, BP 690/50); Quad Band Emitter 446(40)/523(50)/600(50)/677(40)
Objectives	CFI Aplanachromat 100XOil1.49, WD 0.13mm (Trapping); CFI Aplanachromat 60x/1.0 W, WD 2.8mm(Detection)
Accessories	Petri-dish heater controller Acoustic isolation with heating option Piezo nano positioning module
Optical Tweezers Module	JPK NanoTracker 2
TIRF Module	Roper iLas2 ring-TIRF unit
Detector	Ximaca camera (Optical Tweezers); Evolve 512 EMCCD camera (TIRF)
Software	Linux, JPK 7.0 (Optical Tweezers); Windows 7, MetaMorph 7.10.2.240 (TIRF)
Application	Manipulation, force and tracking experiments; TIRF; FRAP