

2023년 신규 장비 및 서비스 세부내용

장비명	원자탐침현미경			
모델명	Atomic Force Microscope- II (Jupiter XR)			
제조사	Oxford			
도입일	2023.06.20	서비스 시작일	2023.08.21	
상세스펙	[Sample] · Up to 210mm in diameter, up to 35mm tall		[Scanner] · X-Y range 100μm ,< 8 inch wafer · Z range 12μm	[Mode] · Tapping Mode · Contact Mode
	Included Operating Modes · Contact mode · DART PFM · Dual AC · Dual AC Resonance Tracking (DART) · Electrostatic Force Microscopy (EFM) · Force curves · Force Mapping Mode (force volume) · Force modulation · Frequency modulation · Kelvin Probe Force Microscopy (KPFM) · Lateral Force Mode (LFM) · Loss tangent imaging · Magnetic Force Microscopy (MFM) · Nanolithography · Nanomanipulation · Phase imaging · Piezoresponse Force Microscopy (PFM) · Switching spectroscopy PFM · Tapping mode (AC mode) · Tapping mode with digital Q control · Vector PFM			
	Included because Jupiter XR comes with blueDrive · AM-FM Viscoelastic Mapping Mode · Contact Resonance Viscoelastic Mapping Mode			
	Optional Operating Modes · Conductive AFM (CAFM) with ORCA™ and Eclipse™ Mode · Current mapping with Fast Force Mapping · Electrochemical Strain Microscopy (ESM) · Fast Force Mapping Mode · High voltage PFM · Nanoscale Time Dependent Dielectric Breakdown (nanoTDDB)			
응용분야	▪ Nanomaterial Growth and Characterisation ▪ Measurement of Chemical and Molecular Composition ▪ Automotive Tyres ▪ Battery Technology ▪ Solar and PV Technology ▪ Material Composition and Structure ▪ Mechanical and Electrical Properties ▪ Failure Analysis ▪ Measurement of Polymer and Polymer Phase Properties ▪ Imaging of Layered Polymer Structures and Failure Analysis ▪ Analysing Polymer Additives ▪ Characterisation of Low Dimensional Structures ▪ Fabrication and Characterisation of Light Emitting Devices ▪ 나노물질 성장 및 특성화 ▪ 화학 및 분자 조성 측정 ▪ 자동차 타이어 ▪ 배터리 기술 ▪ 태양광 및 PV 기술 ▪ 재료 구성 및 구조 ▪ 기계적 및 전기적 특성 ▪ 실패 분석 ▪ 폴리머 및 폴리머 상 특성 측정 ▪ 적층 폴리머 구조의 이미징 및 고장 분석 ▪ 폴리머 첨가제 분석 ▪ 저차원 구조의 특성화 ▪ 발광소자의 제조 및 특성화			
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