



전계방출형 주사전자현미경 FE-SEM

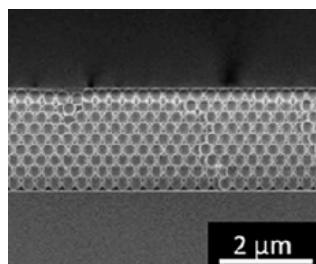
Hitachi SU-70

- ▶ Schottky gun (ZrO₂W emitter), STEM, EDS, EBSD
- ▶ Resolution : 1.0 nm at 15 kV, 1.6 nm at 1 kV
- ▶ Accelerating voltage : 0.1 ~ 30 kV
- ▶ Probe current : Up to 100 nA

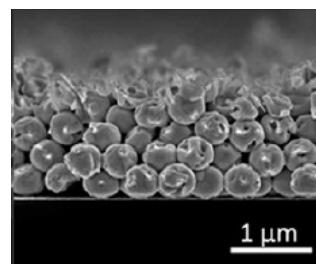


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연구지원 및 공동연구를 수행하고 있습니다.

대표적 연구지원사례 / Selected research



▶ PS Opal



▶ SiO₂ Inverse Opal

대표 이용자 논문 / Publication

- ▶ Weon-Sik Chae, Dara Van Gough, Sung-Kyoung Ham, PailV.Braun. "Effect of Ordered Intermediate Porosity on Ion Transport in Hierarchically Nanoporous Electrodes". *ACS Applied Materials & Interfaces*. 2012. 3973-3979.
- ▶ Weon-Sik Chae, Eun-Jin Choi, Yun-Ku Jung, Jin-Seung Jung, Jin-Kyu Lee. "Time-resolved Photoluminescence properties of semiconductor quantum dot superlattices of different microcrystal shapes". *Applied Physics Letters*. 2014 153101.

활용 분야 / Application

- ▶ 바이오 및 재료분야의 구조분석
 - structural analysis in biology and material science
- ▶ EDS를 이용한 화학조성 분석 (정성/정량분석)
 - chemical analysis using EDS (Qualitative and quantitative analysis)
- ▶ EBSD를 이용한 결정방위 분석
 - The crystal orientation analysis using EBSD