

Investigation and Characterization of Two Painted Limestone Stelae, Egyptian Museum, Cairo, Egypt,	عنوان البحث باللغة الانجليزية
فحص وتحليل لوحين من الحجر الجيري الملون، المتحف المصري، القاهرة، مصر	عنوان البحث باللغة العربية
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Abstract:

In this framework, a multi-analytical approach was used to map and identify the types of pigments used on two polychrome limestone stelae from the Middle Kingdom, of two officials named of Henu, son of Sobek-Hetep [CG 20212] and Imeny, son of Neb-Ieyou [CG 20594]. This study provides a deeper understanding of the painting techniques, and the condition of the objects. The painted layers on the stone were analyzed by using several analytical methods such as Scanning Electron Microscopy Coupled with Energy Dispersive X-Ray Detector (SEM-EDX), portable x-ray fluorescence (pXRF), x-ray diffraction (XRD) and Fourier Transform Infrared (FTIR)). The Portable noninvasive systems allowed accurate analysis of the employed pigments in both objects. Pigments including Egyptian blue, Egyptian green, goethite, hematite, calcite, and carbon black were detected in both painted stelae under investigation, by both scientific analyses and multispectral imaging.