

ملخص البحث رقم (٥) باللغة الانجليزية

ESTIMATION OF FIRING TEMPERATURE OF ISLAMIC CERAMIC USING XRD AND FTIR	عنوان البحث باللغة الانجليزية
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Abstract:

Firing minerals plays an important role in the estimation of firing temperature and thermal transformation in ceramic components. In this study, a comparison between XRD and FTIR was used in order to identify the firing minerals of ceramic from Al-Fūṣṭāṭ, Cairo (641 minerals described in this study, meta (e.g. Gehlenite and Wollastonite), and stable minerals (e.g. Diopside). The thermal minerals are an indicator of the firing temperature of archaeological ceramic. All 900 °C. The results indicate that the ceramic from Mamlūk period has high quality of production. Firing at high temperature produce hard ceramic that requires special conservation materials when it applied.