

Название публикации:

Luminescent method for porcelain identification

Авторы:

Platova, RA [1] ; Rassulov, VA [2] ; Platov, YT [1]

[1] GV Plekhanov Russian Univ Econ, 36 Stremyannyi Lane, Moscow 117997, Russia

[2] NM Fedorovsky All Russian Sci Res Inst Mineral Re, Moscow 119017, Russia

Сведения об издании:

JOURNAL OF APPLIED SPECTROSCOPY

Том: 85 Выпуск: 2 Стр.: 274-278

DOI: 10.1007/s10812-018-0644-2

Опубликовано: MAY 2018

Тип документа: Article

Аннотация:

Porcelain identification according to the material type (hard, soft, and bone) was reduced to a system of classification functions that were constructed based on interrelationships of luminescence band intensities of optically active impurity centers (Fe^{3+} and Mn^{2+}), a molecular center (UO_2^{2+}), and intrinsic defects (O^* , oxygen center). Porcelains with different compositions and calcination conditions had different combinations and intensity ratios of bands of optically active centers.

Ключевые слова:

porcelain; luminescence; luminescence spectrum; luminophore; optically active center