

FTIR Analysis Results



Roman Coin (Denarius)

The SciArt Project
2024

Results Report

Point of Interest 1: Main body of the coin, collected from the edge

Here is the FTIR spectrum of the main body of the coin. The FTIR method does not provide results for the metal used. Maybe this method is not suitable to study this kind of material.



Point of Interest 2: Relief

Here is the FTIR spectrum of the red trace found on the coin's relief.

The FTIR method fully identifies the unknown substance as the pigment called Tyrian purple. The chemical formula of Tyrian purple is $C_{16}H_8Br_2N_2O_2$, which explains the bromine detected through elemental analysis.

