

OBJECT RESEARCH



**Frank Eugene (American, 1865–1936)**

## Portrait of a Woman

c. 1900

Platinum print

Alfred Stieglitz Collection

**AIC accession number:** 1949.677

**Stieglitz Estate number:** N/A

**Inscriptions:** Signed recto, in negative, lower left, in white: "Eugene"; unmarked verso

**Dimensions:** 16.1 x 11.7 cm (image/paper)

**Print thickness:** 0.191 mm

**Mount:** Original

**X-ray fluorescence (XRF) spectrometry:**  
See below

**X-RAY FLUORESCENCE (XRF) SPECTROMETRY**

XRF spectral readings were taken from the recto of the work and from the mount when available. The elements listed below have been positively identified in the work; elements in bold have been attributed to the processing of the print.

Print: **Fe, Pt**, Hg, Pb

Mount: Ca, Fe, Zn

The graph below shows XRF spectra for three distinct measurement areas on the print: the darkest, maximum-density image area (Dmax, purple); the lightest, minimum-density image area (Dmin, green); and the mount, when available (orange). The background spectrum (gray) represents the characteristic contribution of the instrument itself as measured on a Teflon reference and is included in order to discount irrelevant elements from the print's signature. Elements were identified based on the presence of their characteristic peaks. Analysis was performed with a Bruker ARTAX air-path portable micro-XRF system equipped with a laser pointer, an integrated camera system, a Mo 12.5µm filter, and a Mo tube. Measurements were taken for 250 LT at 50 kV and 800 µA. The spectrum below illustrates the significant peaks for this print in the energy range from 3 to 15 keV.

Figure 1. (right)  
Locations of XRF measurements

Figure 2. (below)  
XRF spectra from the Dmax, Dmin, mount,  
and background signal produced by the  
analyzer.

