

OBJECT RESEARCH



**Alfred Stieglitz (American, 1864–1946)**

## Katharine Dudley

1922

Palladium print

Alfred Stieglitz Collection

**AIC accession number:** 1949.723

**Stieglitz Estate number:** 38B

**Inscriptions:** Inscribed recto, on hinged mat, lower right, in graphite: "Treated by / Steichen / 2/50"; inscribed verso of print, center, in graphite: "R / \*"; inscribed verso of print, lower center, in graphite: "Ch 38B"

**Dimensions:** 19.3 x 24.2 cm (image); 20.1 x 25.3 cm (paper); 55.8 x 45.9 cm (hinged mat)

**Print thickness:** 0.283 mm

**Mount:** Original; with original presentation window mat

**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, Pd, Pb**

Mount: Ca, Ti, Mn, Fe, Zn, Sr

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.

