

OBJECT RESEARCH



Alfred Stieglitz (American, 1864–1946)

## Georgia O'Keeffe—Hands

1920/22

Palladium print

Alfred Stieglitz Collection

**AIC accession number:** 1949.752

**Stieglitz Estate number:** OK 12C

**Inscriptions:** Inscribed recto, on hinged mat, lower left, in graphite: "Treated by Steichen - 2/1950"; inscribed verso of print, lower center, in graphite: "Ch / OK 12C"; verso of print, lower left, in graphite: "X"

**Dimensions:** 19.3 x 24.5 cm (image); 20.1 x 25.3 cm (paper); 52 x 39.7 cm (hinged mat)

**Print thickness:** 0.287 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

Mount: Ca, Ti, Mn, Fe, Ni, Cu, Zn, Sr, Pb

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.

