

Abstract Submitted  
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**Spectra of Highly Ionized Hf, Ta, W, and Au Observed with an EBIT Light Source**<sup>1</sup> ILIJA N. DRAGANIC, YURI RALCHENKO, JOHN D. GILLASPY, JOSEPH N. TAN, JOSHUA M. POMEROY, JOSEPH READER, NIST — We observed spectra of highly-ionized Hf, Ta, W, and Au in the region 4-20 nm with the NIST EBIT and grazing incidence spectrograph. Stages of ionization were distinguished by varying the beam energy. Ionization stages of 37+ to 56+ were typically observed. The spectra were calibrated by separate spectra of highly ionized iron. Line identifications were carried out with use of collisional-radiative modeling of the EBIT plasma. Many new lines were identified for each element. Good quantitative agreement between simulated spectra and the observations was obtained.

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