Integral measurements of plural and multiple scattering of electrons with energies between 10 and 100 keV for $13 \leq Z \leq 79$: II. Thick targets

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SUPPLEMENTAL MATERIAL
POLYNOMIAL FITS

Published in Radiation Physics and Chemistry

The coefficients of the polynomial

$$y(x) = \sum_{i=0}^{n} a_i \, x^i \tag{1}$$

that have been fitted to the charge fraction measured in the Faraday cup and aluminium ring, see paper for more details, are given in the following tables. The values for the thick Al, Cu, Sn, and Au targets are reported in Tables 1, 2, 3, and 4, respectively.

Table 1: Parameters fitted for the charge fraction in the Faraday cup and aluminium ring for the thick Al target.

Al		
Coefficients	Faraday cup	Ring
a_0	$+0.050$	$+0.132$
a_1	-0.017	-0.043
a_2	$+2.20 \cdot 10^{-3}$	$+5.66 \cdot 10^{-3}$
a_3	$-1.49 \cdot 10^{-4}$	$-3.80 \cdot 10^{-4}$
a_4	$+5.54 \cdot 10^{-6}$	$+1.41 \cdot 10^{-5}$
a_5	$-1.16 \cdot 10^{-7}$	$-2.95 \cdot 10^{-7}$
a_6	$+1.35 \cdot 10^{-9}$	$+3.48 \cdot 10^{-9}$
a_7	$-8.23 \cdot 10^{-12}$	$-2.14 \cdot 10^{-11}$
a_8	$+2.04 \cdot 10^{-14}$	$+5.36 \cdot 10^{-14}$

Table 2: Parameters fitted for the charge fraction in the Faraday cup and aluminium ring for the thick Cu target.

Cu		
Coefficients	Faraday cup	Ring
a_0	$-1.22 \cdot 10^{-1}$	-0.285
a_1	$+4.11 \cdot 10^{-2}$	$+9.68 \cdot 10^{-2}$
a_2	$-5.83 \cdot 10^{-3}$	$-1.40 \cdot 10^{-2}$
a_3	$+4.60 \cdot 10^{-4}$	$+1.12 \cdot 10^{-3}$
a_4	$-2.23 \cdot 10^{-5}$	$-5.56 \cdot 10^{-5}$
a_5	$+6.90 \cdot 10^{-7}$	$+1.76 \cdot 10^{-6}$
a_6	$-1.38 \cdot 10^{-8}$	$-3.58 \cdot 10^{-8}$
a_7	$+1.76 \cdot 10^{-10}$	$+4.69 \cdot 10^{-10}$
a_8	$-1.39 \cdot 10^{-12}$	$-3.80 \cdot 10^{-12}$
a_9	$+6.15 \cdot 10^{-15}$	$+1.73 \cdot 10^{-14}$
a_{10}	$-1.17 \cdot 10^{-17}$	$-3.38 \cdot 10^{-17}$

Table 3: Parameters fitted for the charge fraction in the Faraday cup and aluminium ring for the thick Sn target.

Sn		
Coefficients	Faraday cup	Ring
a_0	$+0.013$	$+0.028$
a_1	$-3.26 \cdot 10^{-3}$	$-7.47 \cdot 10^{-3}$
a_2	$+3.30 \cdot 10^{-4}$	$+7.76 \cdot 10^{-4}$
a_3	$-1.69 \cdot 10^{-5}$	$-3.97 \cdot 10^{-5}$
a_4	$+4.57 \cdot 10^{-7}$	$+1.07 \cdot 10^{-6}$
a_5	$-6.42 \cdot 10^{-9}$	$-1.50 \cdot 10^{-8}$
a_6	$+4.46 \cdot 10^{-11}$	$+1.03 \cdot 10^{-10}$
a_7	$-1.21 \cdot 10^{-13}$	$-2.80 \cdot 10^{-13}$

Table 4: Parameters fitted for the charge fraction in the Faraday cup and aluminium ring for the thick Au target.

Au		
Coefficients	Faraday cup	Ring
a_0	$+7.67 \cdot 10^{-3}$	$+2.73 \cdot 10^{-3}$
a_1	$-1.43 \cdot 10^{-3}$	$+5.16 \cdot 10^{-5}$
a_2	$+1.18 \cdot 10^{-4}$	$-6.00 \cdot 10^{-5}$
a_3	$-6.50 \cdot 10^{-6}$	$+4.92 \cdot 10^{-6}$
a_4	$+2.28 \cdot 10^{-7}$	$-1.70 \cdot 10^{-7}$
a_5	$-4.99 \cdot 10^{-9}$	$+2.90 \cdot 10^{-9}$
a_6	$+6.46 \cdot 10^{-11}$	$-2.35 \cdot 10^{-11}$
a_7	$-4.45 \cdot 10^{-13}$	$+7.22 \cdot 10^{-14}$
a_8	$+1.24 \cdot 10^{-15}$	-