

# Calculation of absorption and secondary scattering of X-rays by spherical amorphous materials in an asymmetric transmission geometry. Corrigendum

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Received 16 July 2018

Accepted 16 July 2018

**Keywords:** X-ray scattering; attenuation correction factors; secondary scattering

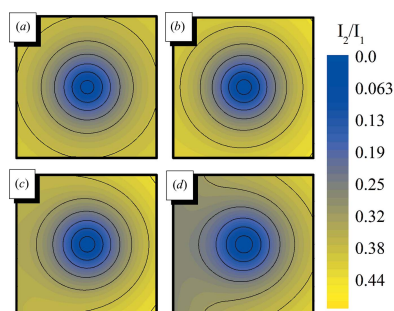
A revised version of Table 2 of Bendert *et al.* [*Acta Cryst.* (2013). **A69**, 131–139] is provided.

The expressions for  $A_i$  for  $i = 3$  and 4 reported in Table 2 of Bendert *et al.* (2013) should be negative. The correct values are given in the table shown below.

**Table 2**

Coefficients for small-angle expansion of the off-axis spherical absorption.

$i$	$A_i$
0	+1
1	$+\cos(\phi)\mu_r x_s$
2	$\frac{+\mu_r}{6(x_s^2 - 1)} [2\mu_r \cos(\phi)^2 x_s^4 - x_s^2(1 - x_s^2)^{1/2} - 2\mu_r \cos(\phi)^2 x_s^2 + (1 - x_s^2)^{1/2} - 2x_s^2 \cos(\phi)^2(1 - x_s^2)^{1/2}]$
3	$\frac{-x_s \cos(\phi)\mu_r}{6(x_s^2 - 1)} [2\mu_r \cos(\phi)^2 x_s^2(1 - x_s^2)^{1/2} + x_s^2 - 1]$
4	$\frac{-\mu_r}{360(x_s^2 - 1)} [8(\mu_r)^3 x_s^6 \cos(\phi)^4 + 40\mu_r x_s^4 \cos(\phi)^4 - 14\mu_r x_s^4 + 32(\mu_r)^2 x_s^4 \cos(\phi)^4(1 - x_s^2)^{1/2} - 8(\mu_r)^3 x_s^4 \cos(\phi)^4 - 32(\mu_r)^2 x_s^4 \cos(\phi)^2(1 - x_s^2)^{1/2} + 44\mu_r x_s^4 \cos(\phi)^2 - 11(1 - x_s^2)^{1/2} x_s^2 - 4x^2 \cos(\phi)^2(1 - x_s^2)^{1/2} - 44\mu_r x_s^2 \cos(\phi)^2 + 32(\mu_r)^2 x_s^2 \cos(\phi)^2(1 - x_s^2)^{1/2} + 11(1 - x_s^2)^{1/2} - 14\mu_r + 28\mu_r x_s^2]$
5	$\frac{+\mu_r x_s \cos(\phi)}{360(x_s^2 - 1)} [8(\mu_r)^3 x_s^4 \cos(\phi)^4(1 - x_s^2)^{1/2} + 16(\mu_r)^2 x_s^4 - 40(\mu_r)^2 x_s^4 \cos(\phi)^4 + 8(\mu_r)^3 x_s^4 \cos(\phi)^2(1 - x_s^2)^{1/2} + 24(\mu_r)^2 x_s^4 \cos(\phi)^2 + 3x_s^2 - 6\mu_r x_s^2(1 - x_s^2)^{1/2} - 3 + 16(\mu_r)^2 - 8(\mu_r)^3 x_s^2 \cos(\phi)^2(1 - x_s^2)^{1/2} + 6\mu_r(1 - x_s^2)^{1/2} - 32(\mu_r)^2 x_s^2 + 36\mu_r x_s^2 \cos(\phi)^2(1 - x_s^2)^{1/2} - 24(\mu_r)^2 x_s^2 \cos(\phi)^2]$



## References

Bendert, J. C., Blodgett, M. E. & Kelton, K. F. (2013). *Acta Cryst.* **A69**, 131–139.