Erratum: Excitation-energy dependence of the resonant Auger transitions to the $4p^4(^1D)np$ ($n=5,6$) states across the $3d_{3/2}^{-1}5p$ and $3d_{5/2}^{-1}6p$ resonances in Kr [Phys. Rev. A 76, 022702 (2007)]

A. Sankari, S. Alitalo, S. Fritzsche, J. Nikkinen, A. Kivimäki, S. Aksela, and H. Aksela

(Received 16 November 2007; published 28 December 2007)

DOI: 10.1103/PhysRevA.76.069902 PACS number(s): 32.80.Hd, 32.80.Fb, 99.10.Cd

There was an error in the scaling factors of the relative excitation probabilities ($\langle R|\mathbf{D}|0\rangle$) used in the calculations. As a result of this error, the intensity at the $3d_{5/2}^{-1}6p$ resonance with respect to the $3d_{3/2}^{-1}5p$ resonance was only 70.1% of what it should have been and the contribution of the $3d_{5/2}^{-1}6p$ resonance was underestimated in Figs. 2–5. The revised versions of the figures are shown herein. Refer to Table I of the original article for explanation of curve labels. The changes do not alter the conclusions of the article.

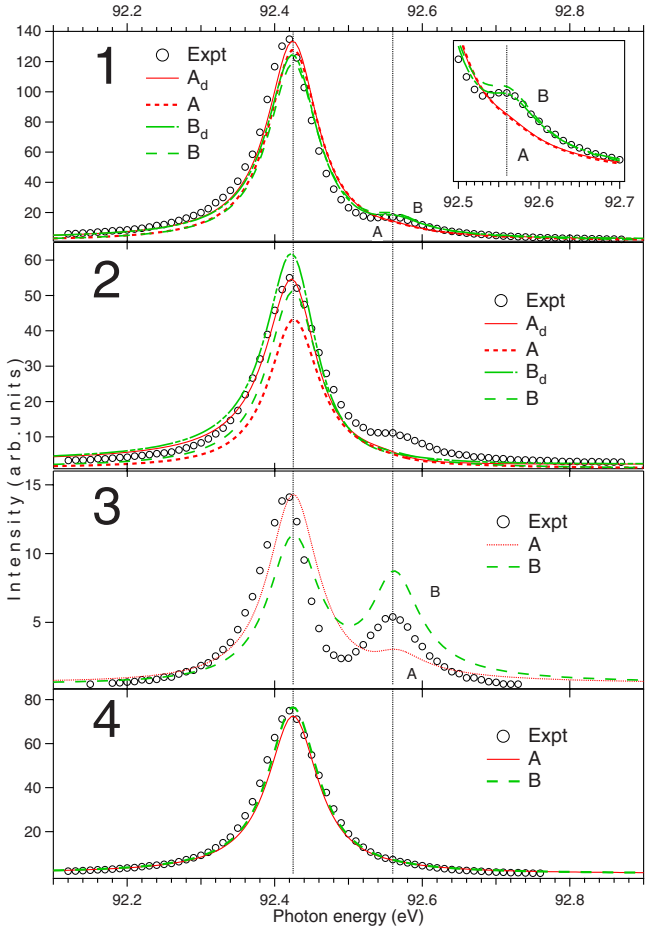

FIG. 2. (Color online) The experimental (dots) and theoretical intensities of the $4p^4(^1D)5p$ lines as a function of exciting photon energy. The experimental curves are from the measurements at 54.7°. The inset in the upper corner shows the magnification of line 1 near the $3d_{5/2}^{-1}6p$ resonance. The positions of the $3d_{3/2}^{-1}5p$ and $3d_{5/2}^{-1}6p$ resonances at 92.425 eV and 92.560 eV, respectively, are marked by vertical lines.

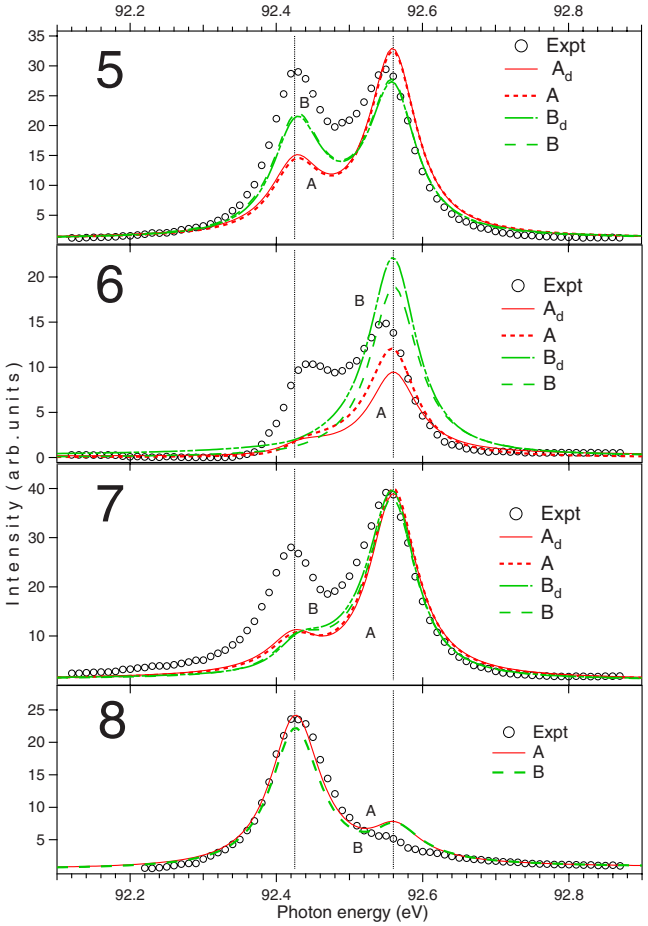

FIG. 3. (Color online) The experimental (dots) and theoretical intensities of the $4p^4(^1D)6p$ lines as a function of exciting photon energy. As in Fig. 2, the experimental results are from measurements at 54.7° and the positions of the $3d_{3/2}^{-1}5p$ and $3d_{5/2}^{-1}6p$ resonances are marked by vertical lines.

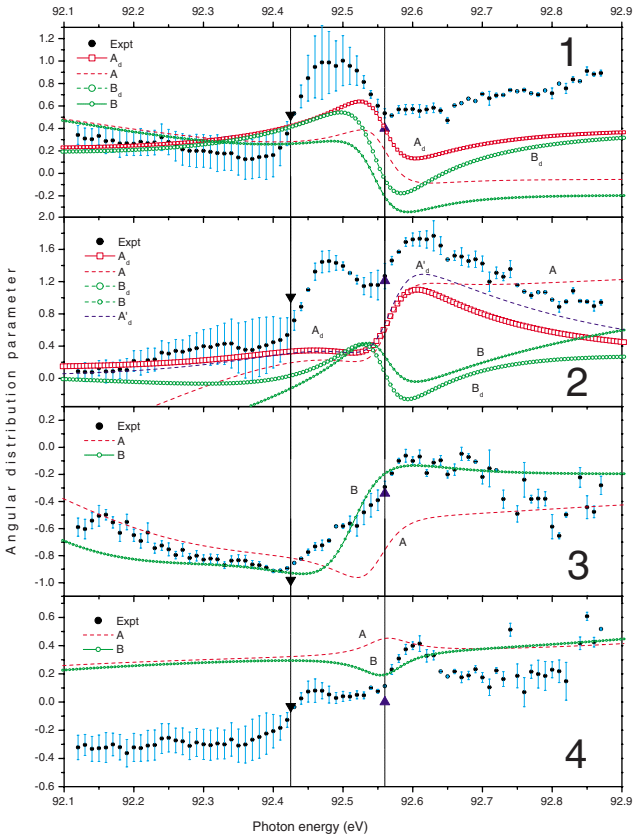

FIG. 4. (Color online) The experimental (dots) and theoretical angular distribution parameters β of the $4p^4(^1D)5p$ lines as a function of exciting photon energy. The previously published values are from Refs. [1] (downward triangles) and [2] (upward triangles). For line 2 the direct channel calculation in length gauge (A'_d) is also shown.

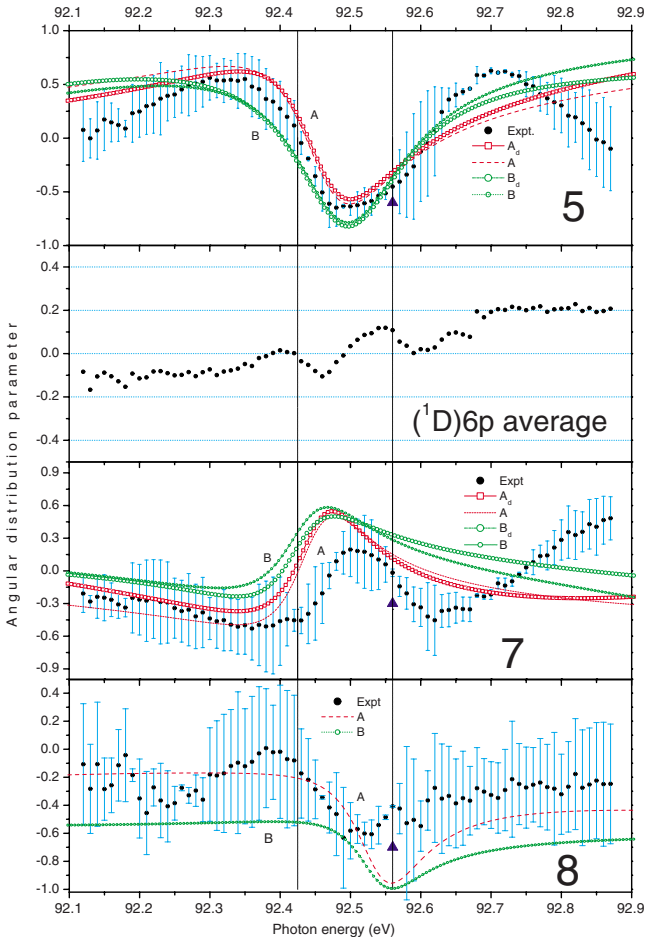

FIG. 5. (Color online) The experimental (dots) and theoretical angular distribution parameters β of the $4p^4(^1D)6p$ lines as in Fig. 4. The previously published values are from Ref. [2] (upward triangles). Instead of results for β parameter of line 6, the intensity-weighted average for all $4p^4(^1D)6p$ lines is shown.

[1] H. Aksela, J. Jauhiainen, E. Nõmmiste, S. Aksela, S. Sundin, A. Ausmees, and S. Svensson, Phys. Rev. A **54**, 605 (1996).

[2] S.-M. Huttula, S. Alitalo, H. Aksela, S. Heinäsmäki, A. Kivimäki, J. Tulkki, M. Jurvansuu, E. Nõmmiste, and S. Aksela, Chem. Phys. **289**, 81 (2003).