Erratum: Surface-plasmon-assisted electron-capture mechanism in low-energy He⁺(1s)-Al(111) collisions [Phys. Rev. A 63, 052901 (2001)]

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The Pure Surface Plasmon (PSP) transition rate presented in this paper is in error by a factor of two. Thus, the PSP transition rate displayed in Fig. 4 and Fig. 8(b) must be divided by 2. For the angular distributions the error affects only the curves "PSP" and "AN and PSP" presented in Fig. 6. Consequently, Fig. 6 should be replaced by the one given here.

When the PSP process alone is included (dotted line) the corresponding neutralized fraction is 72.8% while it is 97.4% when both the PSP process and the AN process are simultaneously taken into account (solid line).

From this figure, it is clear that our conclusion concerning the important role of the PSP process in the reaction under study still holds. However, this mechanism alone cannot explain completely the experimental results.



FIG. 6. Normalized angular distributions of neutral He atoms as a function of the scattering angle $(\phi_{in} + \varphi)$. Calculations without inclusion of the triplet state population mechanism (see text); dashed line: only the AN process is included (transition rates of Lorente *et al.* [16]; dotted line: only the PSP process is included (transition rates calculated in this work); full line: both the AN and PSP processes are taken into account; \blacksquare : experimental result of Hecht *et al.* [17].