

Erratum: “History of atomic layer deposition and its relationship with the American Vacuum Society” [J. Vac. Sci. Technol. A 31, 050818 (2013)]

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The authors of this review article published in 2013¹ would like to correct some text and references relating to the first observations and publications on molecular layering.

In Sec. II, “Early Years of Atomic Layer Processes” in the original article,¹ the first two sentences of the fourth paragraph should instead say “The ALD principle, where surface reactions follow a binary sequence of self-limiting half-reactions, was reported under the name ‘molecular layering’ in the 1960s by S. I. Kol’tsov from Leningrad Technological Institute.^{2–6} These experiments were conducted under the scientific supervision of V. B. Aleskovskii. The ‘framework hypothesis,’ an antecedent to molecular layering, was proposed by V. B. Aleskovskii in 1952.^{6”}

In addition, again in this same section and paragraph, the last two sentences should instead say “In the 1969 article,³ the authors report that the initial reaction between TiCl₄ and Si–OH tends to involve 3 Si–OH, forming one Ti–Cl, whereas after the first water step, the second TiCl₄ exposure reacts with 2 Ti–OH, forming

Ti–Cl₂ groups. In the 1969 paper,³ a planar thin film was not produced or evaluated, although nanolayers were prepared by molecular layering at that time.^{6”}

These corrections do not affect other sections or the conclusions drawn in the article.

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