

Erratum

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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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Gregory N. Parsons , Jeffrey W. Elam, Steven M. George , Suvi Haukka, Hyeongtag Jeon , W. M. M. (Erwin) Kessels , Markku Leskelä , Paul Poodt, Mikko Ritala , and Steven M. Rossnagel



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Gregory N. Parsons,^{1,a)} Jeffrey W. Elam,² Steven M. George,³ Suvi Haukka,⁴ Hyeongtag Jeon,⁵ W. M. M. (Erwin) Kessels,⁶ Markku Leskelä,⁷ Paul Poodt,⁸ Mikko Ritala,⁷ and Steven M. Rossnagle⁹

AFFILIATIONS

¹Department of Chemical and Biomolecular Engineering, North Carolina State University, Raleigh, North Carolina 27695

²Argonne National Laboratory, Argonne, Illinois 60439

³Department of Chemistry and Biochemistry and Department of Chemical and Biological Engineering, University of Colorado, Boulder, Colorado 80309

⁴ASM Microchemistry Ltd., FI-00560 Helsinki, Finland

⁵Division of Materials Science & Engineering, Hanyang University, Seoul 133-791, South Korea

⁶Department of Applied Physics, Eindhoven University of Technology, NL-5600 MB Eindhoven, The Netherlands

⁷Department of Chemistry, University of Helsinki, FI-00014 Helsinki, Finland

⁸Holst Centre/TNO, P. O. Box 6235, 5600 HE Eindhoven, The Netherlands

⁹IBM TJ Watson Research Center, Yorktown Heights, New York 10598

^{a)}Electronic mail: gnp@ncsu.edu

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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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