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Atomic layer deposition — Terminology Vocabulary

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Foreword

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This document was prepared by Technical Committee ISO/TC 107, Metallic and other inorganic coatings.

A list of all parts can be found on the ISO website.

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Field Code Changed

Introduction

Atomic layer deposition (ALD) is a thin film deposition technique based on the sequential and self-limiting surface reactions of gas phase precursors on substrate. ALD is able to meet the needs for precise thickness control by changing the deposition cycles. ALD films are uniform and remain extremely conformal to the original substrate since the chemical adsorption and reaction of precursors on substrate is self-limiting during each ALD cycle. ALD can also be extendible to large substrates, flexible substrates and large amounts of micro-nano particles. Therefore, the applications of ALD have covered microelectronics, photovoltaics and displays, as well as many emerging fields, including renewable energy, catalysis, and biomedicine.

The aim of this document is to provide the systematic terminologies about ALD technique. This enables global professional communications in both industry and academia.

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