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# Atomic Layer Deposition for More-than-Moore Devices in a Perspective of the Wafer Fab Equipment Market



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# Abstract

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#### Biography

Taguhi Yeghoyan, Ph.D., is a Senior Technology & Market Analyst at Yole Intelligence, part of Yole Group. Her mission is to follow daily the semiconductor industry and its evolution. Based on her expertise in this field, especially on the semiconductor supply chain (processes, materials, equipment, and related applications), Taguhi performs technology & market reports and is engaged in relevant custom projects. Prior to Yole, she worked in world-class European research centers and laboratories, including imec (Belgium), LMI (Lyon, France) and LTM at CEA Leti (Grenoble, France). All along her past experiences, Taguhi has authored or co-authored two patents and more than ten papers.

## Case Study of ALD dielectrics for GaN Power Electronics



N. Posthuma Principal Engineer GaN Power Electronics imec, Leuven, Belgium



#### Abstract

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#### Biography

Niels Posthuma, Ph.D., is the principal engineer and team leader of the GaN power process integration team at the Interuniversity Microelectronics Center (imec). Niels has enjoyed a long career with imec, having begun his Ph.D. research with them at their Leuven, Belgium headquarters in 2000, going on to receive his doctorate on germanium photovoltaic devices from the Catholic University of Leuven in 2006. Since then, Niels' work has spanned the breadth of the field, covering the development of high-efficiency silicon solar cells and the development of GaN-based power transistors – with a specific focus on p-GaN gate HEMTs for various voltage range applications.

# ALD Applications for More-than-Moore: Overview and Case Example from SiC



A. Perros Semiconductor ALD Beneq, Paris, France



Abstract

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#### Biography

Alexander Perros, Ph.D., has been the Head of Process Development for the company's Semiconductor Business since 2021. He joined Beneq as Technical Sales Manager in 2020. With over 10 years of industry and academic experience, he has expertise in semiconductor R&D, device manufacturing, equipment, and materials. Alexander possesses extensive knowledge of atomic layer deposition, equipment, process integration, and technologies.

Prior to joining Beneq, he held several roles, including Principle Engineer for the semiconductor contract manufacturer Summa Semiconductor; General Manager and co-Founder of Nanovate, which offers specialized cleanroom semiconductor R&D services; and other positions in academia centered around the commercialization of research results.