Special Issue

Technical Advances in Semiconductor Process

Message from the Guest Editors

The development of nanoscale semiconductor processing has been driven by the structural innovation of devices and application of new materials for the last two decades. Especially, in the era of sub-3 nm gate-all-around field-effect-transistor (GAAFET) devices, as the contact poly pitch (CPP) is reduced to less than 45 nm, research on the advanced technologies, such as EUV-based nanopatterning processes, novel metal processes with low resistance, and inventive scheme processes (i.e., BSPDN: Back Side Power Delivery Network), have garnered notable attention in realizing next-generation semiconductor devices. This Special Issue will cover recent advances and comprehensive strategies in our fundamental understanding, advanced technologies, and new material development, with a focus on semiconductor processing for next-generation technology nodes. This will bring together a diverse set of leading researchers and engineers from academia to industry who focus on new materials, advances in materials characterization, material design, process modeling, and fundamental science in the semiconductor manufacturing field.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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