

SESSION 9b: GaAs PROCESSING

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The GaAs processing session this year has five regular papers, all having practical and relevant information for process engineers. The first paper from TriQuint Semiconductor discusses adhesion characterization of photo definable epoxies used in the back end of the line on structures with high aspect ratios. The second paper, also from TriQuint Semiconductor, details the best coating method for achieving a uniform, 80- μm thick film in such photo definable epoxies. The third paper from Skyworks shows that having a metal layer on the back of the GaAs wafer during front side processing, and especially during the dry etch steps, can actually improve yield and uniformity of fabricated devices. The fourth paper from Plasma-Therm addresses solutions for high throughput and low cost of ownership for widely used PECVD SiN films through optimized automated cleaning processes. The fifth paper from University of Hyderabad in India provides interesting insight to the behavior of Ni in the well-established AuGe/Ni/Au ohmic contact to GaAs and the suitability of this alloy system to high sensitivity Hall magnetic field sensors with integrated FET circuits that use GaAs/AlGaAs 2DEG structures.