SESSION IX

Reliability of Heterojunction Devices

Chair: Walter Bloss, Aerospace

The focus of this session will be on techniques to evaluate and enhance the reliability of heterojunction devices. New measurement techniques enabling rapid non-destructive evaluation of reliability will be presented. The first paper in this session is an invited paper that addresses how to minimize the reliability degradation due to fluoride incorporation in HEMT devices. The second paper discusses a new degradation mode of PHEMTs under RF overdrive. The next three papers describe new measurement techniques for reliability characterization, using spectrally resolved carrier recombination imaging, on-wafer transmission line pulse measurements, and photoluminescence monitoring.