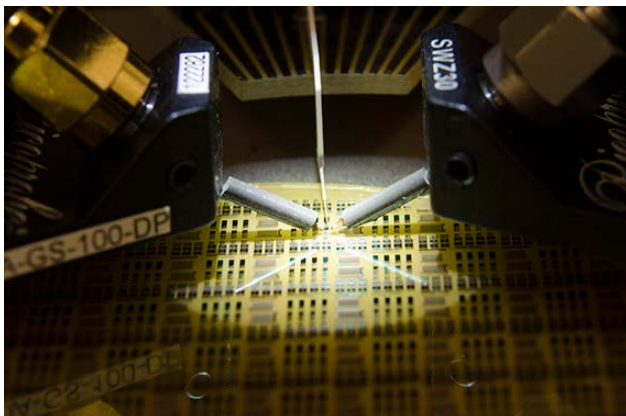




BUENAVENTURA ELECTRON DEVICES SOCIETY CHAPTER



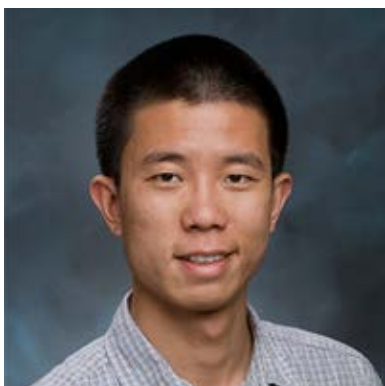
GaN Electronics: From HEMT to CMOS

Speaker: Dr. Rongming Chu, HRL

June 15, 2016 at 6:30 PM

Location: Skyworks Solutions, Newbury Park, CA

Since the 1st demonstration of a GaN HEMT in 1993, tremendous progress has been made in the area of GaN electronics. Improvements of epitaxial structure and HEMT process have enabled record device performance from DC to millimeter wave. More recently, advancement of insulating gate and field-management technologies based on the GaN HEMT structure has resulted in 600-V class power switching transistors. As the GaN discrete devices are demonstrating proved performance advantage in both microwave/millimeter wave and power electronics application areas, ability of making GaN IC becomes an important topic. If successful, the GaN IC can improve the performance advantage by orders magnitude, at reduced cost. This talk will overview lessons we learned during the development of the GaN HEMT technology, and discuss opportunities/challenges of the GaN CMOS technology.



Dr. Rongming Chu received his PhD from UC Santa Barbara, working on Gallium Nitride microwave transistors. After finishing his degree in 2008, he spent two year at Transphorm Inc., a start-up company commercializing GaN power switch technology. He joined HRL Laboratories LLC in 2010. Since joining HRL, Dr. Chu worked on GaN-on-Si lateral power switch, GaN-on-GaN vertical power switch, and more recently on GaN CMOS IC technology.

Location

Skyworks Solutions

649 Lawrence Drive, Newbury Park, CA 91320

Intersection of West Hillcrest Drive and Lawrence Drive

(not the main building, please use link below to arrow that pinpoints building)

<http://maps.google.com/maps?q=34.187542,-118.930994&num=1&t=h&vpsrc=0&ie=UTF8&z=18&iwloc=A>

Directions

From Los Angeles

Highway 101 North

Take exit 47A for Rancho Conejo Blvd

Use the left lane to turn right onto Rancho Conejo Blvd

Turn left onto W Hillcrest Dr.

Destination will be on the right

From Ventura

Highway 101 South

Take exit 47B for Wendy Dr. toward Newbury Park

Turn right onto N Wendy Drive

Continue onto Camino Dos Rios

Turn right onto W Hillcrest Drive

Destination will be on the left.

