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Hot Electrons, Cold Materials: Building Blocks for Next Generation Semiconductor Devices

Professor Rehan Kapadia, University of Southern California

March 1st, 2021
11:00 AM, Central Time
Zoom Webinar

As Moore's Law ends, the search for approaches enabling faster computing systems and diversification of semiconductor device applications has significantly intensified. In our group we work on challenges through the lens of two questions:

1) Can materials and devices be grown at low-temperatures and non-epitaxial substrates to enable functional diversification of CMOS platforms?
2) Can hot-electrons be used efficiently in electronic and optoelectronic devices?

Click here to attend (Zoom Link)

Professor Kapadia joined the faculty of the University of Southern California in the Ming Hsieh Department of Electrical and Computer Engineering in July 2014. He received his bachelors in electrical engineering from the University of Texas at Austin in 2008, and his Ph.D. in electrical engineering from the University of California, Berkeley in 2013. During his time at Berkeley, he was a National Science Foundation Graduate Research Fellow and winner of the David J. Sakrison Memorial Prize for outstanding research. At USC he has been the recipient of an Air Force Young Investigator Award and the Peter Mark Memorial Award. His interests lie at the intersection of material science and electrical engineering, with a focus on developing next-generation electronic and photonic devices for computing applications beyond CMOS, such as bio-inspired devices and non-von Neumann computing. Additionally, he is the co-director of a recently created Center for Integrated Electronics and Biological Organisms (CIEBOrg) at USC.