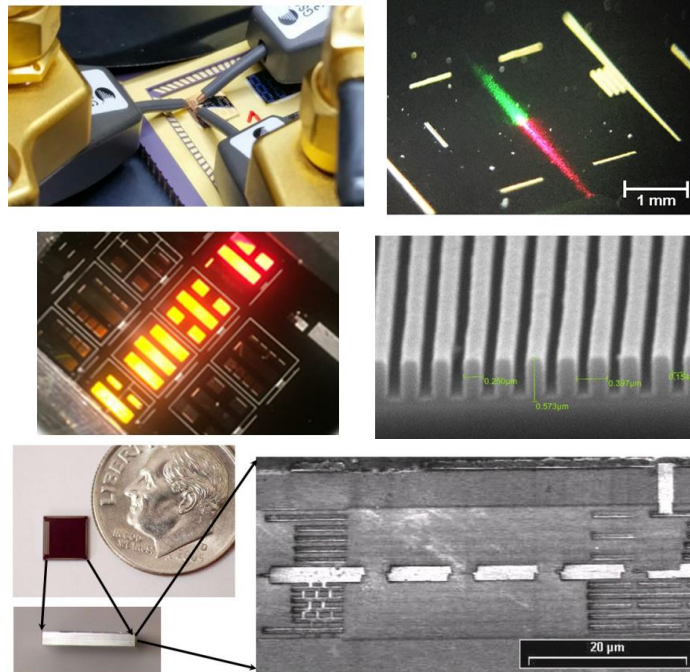


E5: Microelectronics

Microelectronics is a field in electronics that utilizes small components to manufacture electronic circuits. As demand for small and less-expensive devices grows, the field continues to expand. The main areas of focus generally are on pressing issues in high-performance VLSI circuit design and electronic design automation (EDA) in light of the aggressively scaled process geometries in modern MOS technologies. The research in this area includes VLSI circuit design, reconfigurable computing, emerging nanostructure devices, design for manufacturability, fault tolerance systems, three-dimensional integration, opto-electronic devices, embedded systems, and hardware security.



Various microelectronic devices and integrated circuits designed, manufactured, and tested at ECE@UNM and CHEM@UNM

Area Chair: Prof. Payman Zarkesh-Ha (www.unm.edu/~pzarkesh)

Faculty Members:

Prof. Jim Plusquellic (<http://ece-research.unm.edu/jimp/>)

Prof. Ganesh Balakrishnan (<http://www.ece.unm.edu/faculty-staff/electrical-and-computer/ganesh-balakrishnan.html>)

Prof. Tito Busani (<http://ece.unm.edu/faculty-staff/electrical-and-computer/tito-busani.html>)

Prof. Francesca Cavallo (<http://www.ece.unm.edu/faculty-staff/electrical-and-computer/francesca-cavallo.html>)

Prof. Daniel Feezell (<https://www.feezellgroup.com/#!group/cixf>)

Prof. Lei Yang (TBD)

Major core courses:

ECE520 VLSI Design (Spring),

ECE523 Analog Electronics (Fall),

ECE576 Modern VLSI Devices (Spring).