

Hema C. P. Movva

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Austin, TX, USA

Education	Ph.D., Electrical Engineering, The University of Texas at Austin M.S.E., Electrical Engineering, The University of Texas at Austin B.Tech., Electrical Engineering, Indian Institute of Technology Bombay	Ongoing May '12 May '09
Select Publications	HCP Movva et al., Density-Dependent Quantum Hall States and Zeeman Splitting in Monolayer and Bilayer WSe ₂ , Phys. Rev. Lett. 118, 247701 (2017) HCP Movva et al., High-Mobility Holes in Dual-Gated WSe ₂ Field-Effect Transistors, ACS Nano 9, 10402 (2015) HCP Movva et al., Self-Aligned Graphene Field-Effect Transistors with Polyethyleneimine Doped Source/Drain Access Regions, Appl. Phys. Lett. 101, 183113 (2012)	
Experience	Research Assistant , The University of Texas at Austin <ul style="list-style-type: none">• Ph.D. advisors: Emanuel Tutuc, Sanjay Banerjee• Electrical transport in transition metal dichalcogenide (TMD) heterostructures• Fabrication of FETs using atomically thin TMDs such as WSe₂, MoS₂, etc.• Magnetotransport measurements in high-mobility TMD FETs• Tunneling phenomena in TMD heterostructure FETs Research Assistant , The University of Texas at Austin <ul style="list-style-type: none">• M.S.E. advisor: Sanjay Banerjee• Surface charge transfer doping of graphene for use in self-aligned FETs• Fabricated graphene FETs with chemically doped source/drain access regions Engineer R&D , Solar Semiconductor Inc., Hyderabad, India <ul style="list-style-type: none">• Modeled wattage losses in c-Si photovoltaic modules• Developed distributed circuit models for c-Si solar cells and modules Circuit Design Intern , Texas Instruments, Bangalore, India <ul style="list-style-type: none">• Designed a high-speed dynamic latch based voltage comparator• Designed a 250 MSPS 6-bit SAR analog-to-digital convertor	Ongoing Aug '10 - May '12 Jun '09 - Aug '10 May '08 - Aug '08
Honors	Best Paper Award, 74 th IEEE Device Research Conference Best Poster Award, 73 rd IEEE Device Research Conference Silver Medal, 37 th International Physics Olympiad National Talent Search scholarship, India	2016 2015 2005 2003
Service	Reviewer , IEEE Trans. Electron Dev., ACS Appl. Mater. Interfaces President , Japan Karate Association of Austin	 May '13 - May '15
Skills	<u>Fabrication</u> : Electron-beam lithography, standard cleanroom processing <u>Electrical</u> : Semiconductor parameter analyzers, probe stations, He cryostats <u>Metrology</u> : Atomic force microscopy, scanning electron microscopy <u>Software</u> : MATLAB, LabVIEW, C	