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LabVIEW for Admittance Spectroscopy Automation ROBERT J. BRODRICK, MO AHOUJJA, REX L. BERNEY, Department of Physics, University of Dayton — Admittance spectroscopy (AS) and capacitance-voltage (C-V) measurements have long been characterization tools used to study properties of deep level defects in semiconductor devices. Measurements of conductance and capacitance of semiconductor devices are made typically as a function of temperature, voltage, and voltage signal frequency. To fully automate the system for data acquisition, LabVIEW, a virtual graphical programming language developed by National Instruments, is used to interface a computer with the measurement instruments. In this paper, the LabVIEW modules used and highlights of data from wide bandgap semiconductor devices will be presented.

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