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[209] Quantification of Aligned GNRs Transfer Efficiency Using Raman Spectroscopy

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Graphene nanoribbons (GNRs) synthesized with bottom-up technique allow electronic bandgap tuning, making GNRs an interesting candidate for room temperature switching applications as field-effect transistors (FET). We investigated various densities of aligned GNRs (by scanning tunneling microscopy) followed by transferring them to a target substrate. To investigate GNRs degree of alignment, Raman polarization anisotropy was used, which showed significant change in alignment for low GNR density samples. In this contribution, we will also discuss a modified fitting method for Raman polarization in which additional parameters are introduced to elucidate the effect of GNRs density on the degree of alignment.

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