

Abstract Submitted
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Thermoelectric Power in Dual-Gated Bilayer Graphene CHANG-RAN WANG, VINCENT LU, WEI-LI LEE, Institute of Physics, Academia Sinica, INSTITUTE OF PHYSICS, ACADEMIA SINICA TEAM — We have performed thermoelectric transport measurements of dual-gated bilayer graphene device. The thermopower reached a maximum value of $|S_m|$ when tuning its carrier density by gates. The $|S_m|$ was found to monotonically increase with displacement field D introduced through the top and bottom gates. At 100K, $|S_m|$ attains a value of ~ 110 $\mu\text{V}/\text{K}$ at $D \sim 1\text{V}/\text{nm}$, which is nearly two-fold larger than that at $D = 0$. The detailed temperature-dependence of S_m and comparison to the resistivity data will be presented.

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