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Thermoelectric Measurements on InAs/GaSb double Quantum Well FAN YU, University of Michigan, TINGXIN LI, RUIYUAN LIU, Rice University, GANG LI, ZIJI XIANG, COLIN TINSMAN, University of Michigan, RUIRUI DU, Rice University, LU LI, University of Michigan, UNIVERSITY OF MICHIGAN TEAM, RICE UNIVERSITY TEAM — We performed thermoelectric measurement on InAs/GaSb double quantum well, in an attempt to observe thermal power and Nernst effect contributed by the helical edge channels. A new "Semi-AC" method was developed to conduct thermoelectric measurements for Hall bars with a size of $\sim$20 μm, which is more reliable in terms of determining charge carrier type compared with the 2-ω method. Furthermore, we will discuss thermoelectric signals under perpendicular magnetic field, in particular under Landau level quantization.

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