

Abstract Submitted
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Multiple Andreev Reflection in LAO/STO Heterostructure JIMIN CHUN, JINHEE KIM, University of Science & Technology — Electrical transport properties of LaAlO₃/SrTiO₃ (LAO/STO) oxide bilayer, grown by pulsed-laser deposition, was investigated. Superconducting proximity junction with an Al electrode is fabricated. Pronounced peaks in the differential conductance curve, attributed to the Multiple Andreev Reflection (MAR), was observed. From the MAR peaks, the superconducting energy gap of the LAO/STO bilayer was estimated. Unlike the conventional superconductor, the LAO/STO bilayer showed a very small superconducting gap. Experimental results also with a normal metal Au, instead of a superconductor Al, will be presented.

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