

研究室名	棚本研究室 学会発表
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【発表者について】 アンダーラインは本学教員、研究員および技術職員、○は発表者、※は大学院生、卒研究生または卒業生

発表時期	2024年1月16日
学会名	International conference on Quantum Information Processing (QIP) 2024
演題名	Measurement of qubits by using quantum dots via mediated electron system
発表者	○Tetsufumi Tanamoto
内容	We theoretically formulate the transport properties of both three and five QDs based on the Green function method. The effects of the energy difference of two side-QDs on the measurement current are calculated. The trade-off between the strength of the measurement and the back-action induced by the measurement is discussed. It is found that the medium coupling strength of the three QDs is appropriate for reading out the difference of the two energy-levels.