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End and Side Contacts to NiSi nanowires[1] ABDEL F. ISAKOVIC, A. BELKADI, Khalifa University - KUSTAR — NiSi nanowires were nanofabricated with end and side contacts. These contacts are designed to minimize spreading resistance and are tested to check whether they can aid in decreasing the energy cost of current injection and current ejection in nanotransport. It is demonstrated that the end contacts have lower power in 1/f noise spectrum. Transport data (current-voltage, differential resistance) also show quantitative differences from "standard" bottom or top contacts to SiNi nanowires, indicating that the presence of edge- and end-states at the termination points of the nanowires gives rise to different transport conditions. Time-dependent correlation coefficient from noise spectra is determined and it is different for different types of contacts. Structural study of nanowires contacted in this manner is also presented.

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