

[電気システム工学]

32-24 Nano-fabricated CDW by ion-beam irradiation

電子システム工学科

T. Sumita

T. Nagai

H. Kubota

T. Matsukawa

I. Ohdomari

We propose a new technique of nano size CDW formation by applying two types of accurately controlled ion-beams to one dimensional bulk conductor. The CDW sample has 400 thickness and 1000 width. As a result of our investigation, we have found that the nano-fabricated CDW shows collective sliding and negative resistance above some threshold electric field in low temperature region.

(Synthetic Metals 103, pp. 2234-2237)