



スタートアップ研究費利用内容について 多元物質科学研究所・朱慧娥

・研究内容紹介など

自己紹介

朱 慧娥

東北大学多元物質科学研究所、助教

出身: 中国・河南省

最終学歴: 博士(工学)

専門分野: 応用化学、超誘電高分子
超薄膜、有機電子デバイス

受賞歴: 第9回多元物質科学研究奨励賞、国際会議ポスター賞(ADMD2014、M&BE7など)

本経費の用途

平成27年度(1年目): 35.8万円

消耗品: 30万900円

論文掲載料: 2万円

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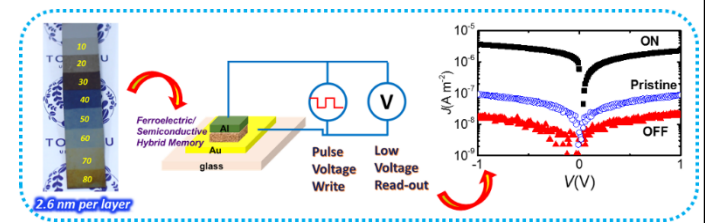
平成28年度(2年目): 40万円

進行中

研究内容

Resistive Switching Non-Volatile Memories Based on Ferroelectric Polymer/Conjugated Polymer Hybrid Nanosheets

Using bi-stable ferroelectric polarization to reversibly tune charge transfer properties in organic ferroelectric-semiconductive hybrid Langmuir-Blodgett nanosheets gave rise to switchable resistance of the semiconductive component at on- (dipole polarization up) and off-state (dipole polarization down) of the ferroelectric component.



・本制度を利用することにより可能となった学会・論文発表、受賞歴

国際学会:

1. **Huie Zhu**, Shunsuke Yamamoto, Jun Matsui, Tokuji Miyashita, Masaya Mitsuishi. KJF International Conference on Organic Materials for Electronics and Photonics 2016 (KJF-ICOMEF 2016), Fukuoka, Japan, **Sep. 14-16, 2016. (Young Scientist Oral)**

論文:

1. **Huie Zhu**, Shunsuke Yamamoto, Jun Matsui, Tokuji Miyashita, Masaya Mitsuishi. **RSC Advances**, vol. 6, 32007-32012, **2016.**

2. **Huie Zhu**, Yu Gao, Shunsuke Yamamoto, Tokuji Miyashita, Masaya Mitsuishi. **Japanese Journal of Applied Physics**, Vol. 55, 03DD11, **2016.**

・本制度を利用することにより得られた効果

The start-up grant from TUMUG provided great help for beginner researchers like me and other younger researchers. At the starting stage, it was difficult to obtain enough financial supports to ensure smooth development of researches. This grant not only helped me accelerate my research achievements but also broaden my views on the cutting edges of the research field.

Thanks to the achievements, I was selected with Grant-in-Aids for Young Scientists (B) from the Japan Society for the Promotion of Science (JSPS). In a word, this grant is a indispensable supporting to me for further improvement and contribution to my own research field and scientific progress. I am very grateful for the supporting.