

Division of Energy Materials Science

1. To promote energy materials science (EMS) that combines material, measurement, and calculation
2. To realize energy innovation originated in EMS

Collaboration with other divisions

1. EMS approach in molecular and semiconductor materials
2. Energy innovation in molecular and semiconductor materials

Members



Amemiya

Y. Moritomo, W. Kobayashi, H. Yanagihara (Material exploration)
E. Nishibori, H. Kasai, H. Nwa (Material visualization)
S. Okada, Y. Hatsugai, Y. Tokura (Material design)



Di-Jing



Kamiyama

T. Suemasu (inorganic solar cell) **K. Tokou** (inorganic film)
R. Ito (carbon) , **K. Marumoto** (ESR)
A. Kanda (graphen) , **Y. Shigeta** (ab initio simulation)



Iversen



Shigeta



Takeguchi, Mitsuishi,
Sakata, Umezawa, Han,
Islam



Yamamoto,
Zu, Otani



Oishi



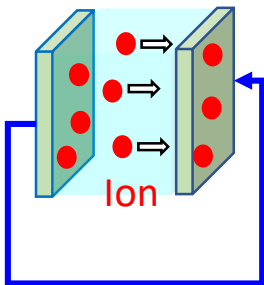
UMR6508

Pralong



Self-charged mobile electronics

New thermo-electric conversion

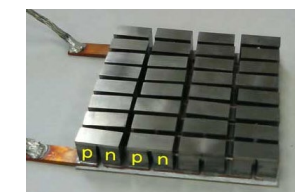


TIA Kakehashi



High-performance secondary battery

High-performance thermoelectric conversion



SPring-8



Device

Science

material

measurement calculation



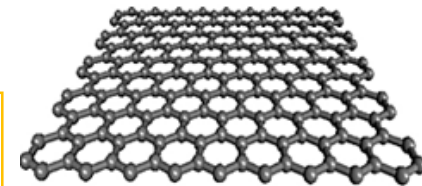
New structural analysis method

Low-voltage device

Quantum device

Next-generation magnet

Mechanism of solar cell



Post-Si electronics



High-performance solar cell

