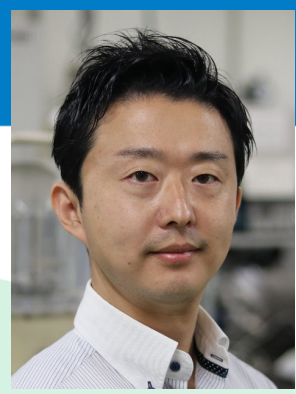


# 界面を制御する ～革新二次電池に向けて～

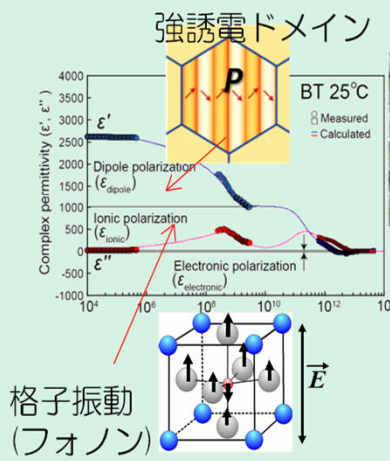
環境生命自然科学学域 応用化学専攻  
寺西貴志



## 誘電性材料：分極を操る Dielectric materials

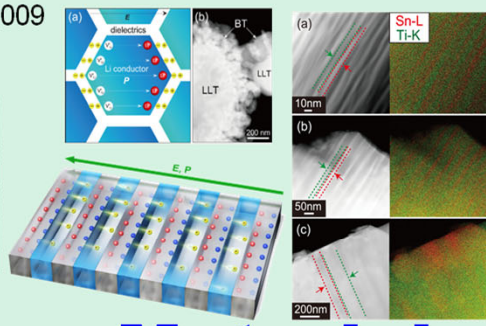
### 誘電体物性

J. Chem. Phys. 2020 JJAP 2023 J. Am. Ceram. Soc. 2017, 2017, 2018 APL 2010, 2012 JAP 2009, 2009



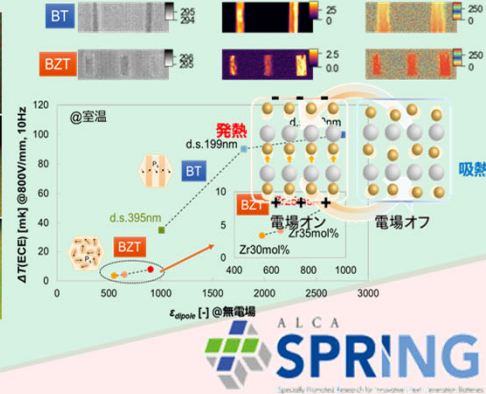
### 巨大誘電率材料

JJAP 2021 JAP 2023



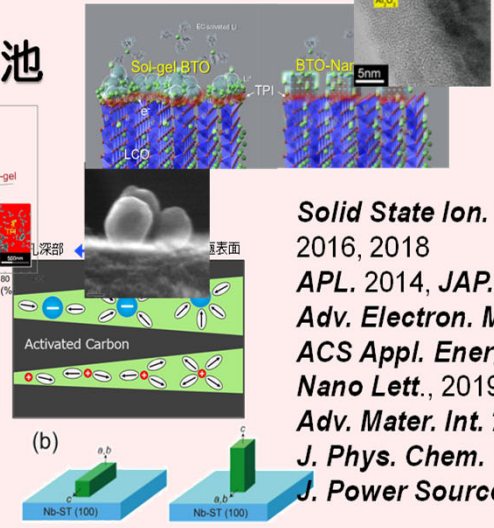
### 電気熱量効果

APL 2023

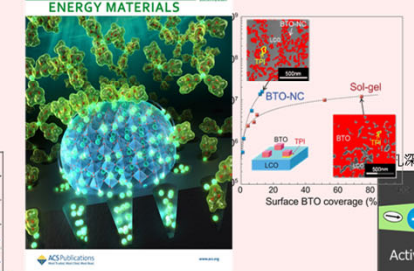


## Energy Materials

### 全固体電池

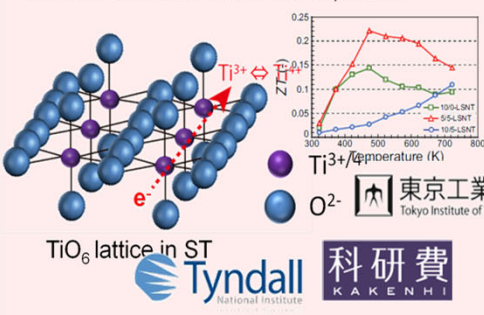


### リチウムイオン電池



### 熱電変換材料

J. Am. Ceram. Soc. 2012, 2013



Solid State Ion. 2013, 2014, 2016, 2018  
APL. 2014, JAP. 2022  
Adv. Electron. Mater. 2018  
ACS Appl. Energy Mater. 2018, 2024  
Nano Lett., 2019  
Adv. Mater. Int. 2021  
J. Phys. Chem. Solids 2022  
J. Power Source 2021

## 導電性材料：電流を操る

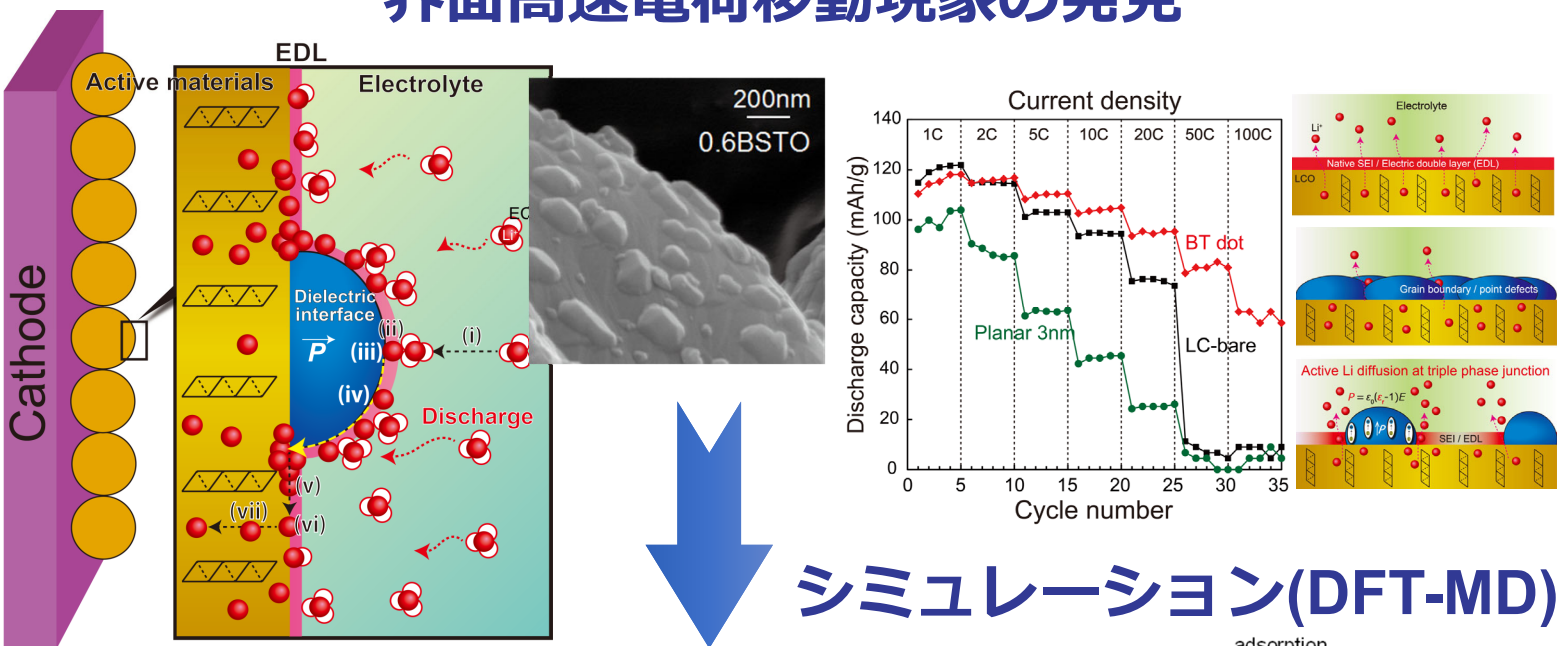
## Conductive materials

お気軽にご相談ください  
E-mail: terani-t@cc.okayama-u.ac.jp  
TEL: 086-251-8070



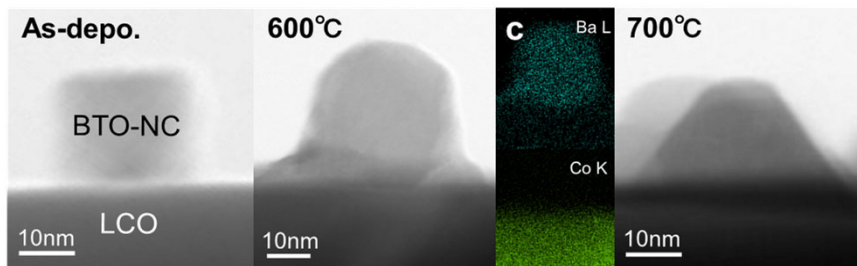
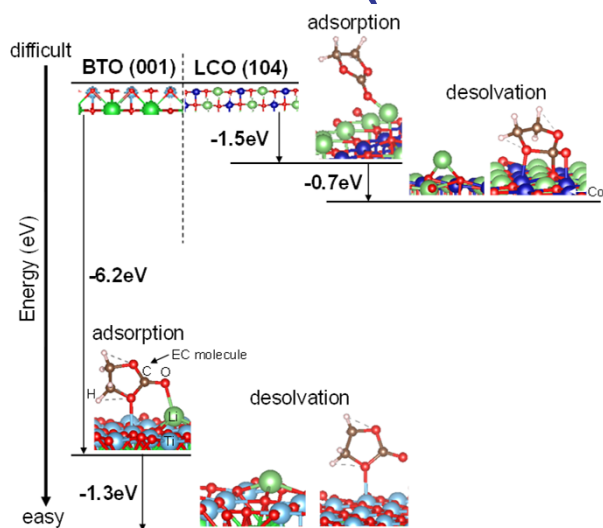
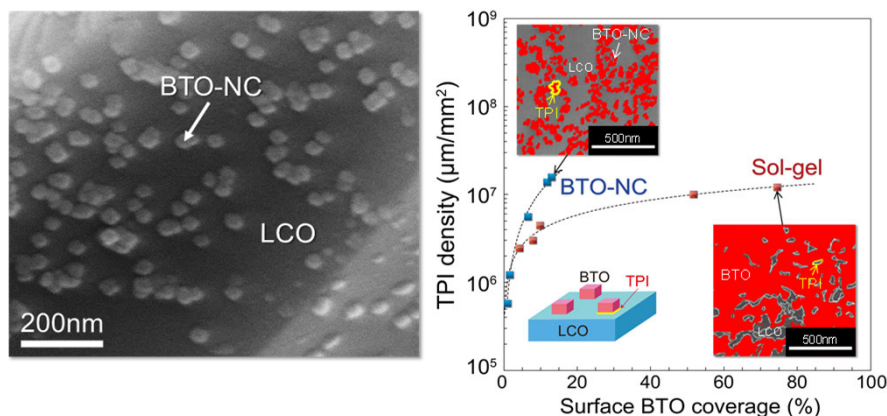
# 超急速充放電リチウムイオン電池

## 界面高速電荷移動現象の発見

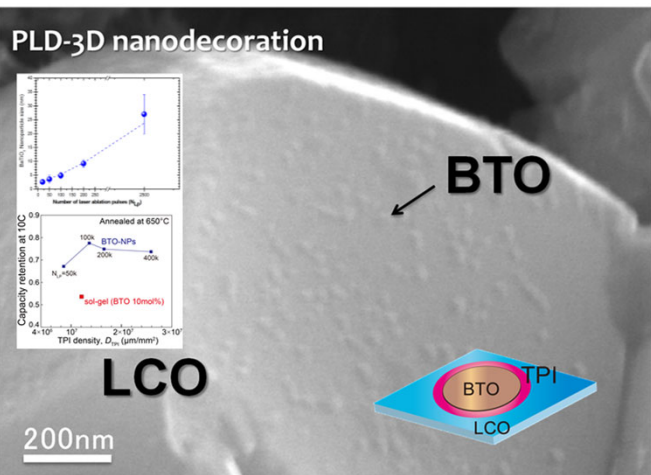
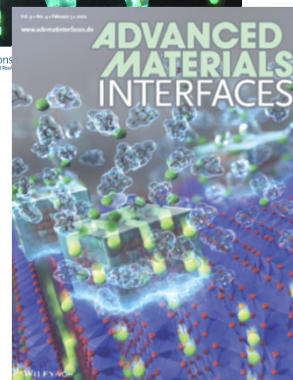
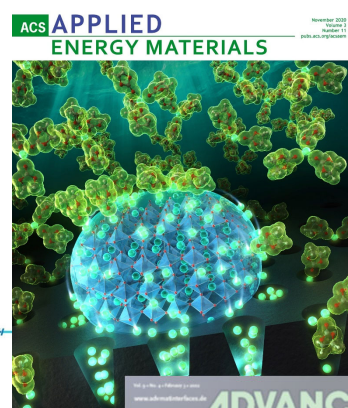


## シミュレーション(DFT-MD)

## ナノ構造制御



国内特許出願 10件  
外国特許出願 12件



INRS Institut national de la recherche scientifique

工学院大学 KOGAKUIN UNIVERSITY

三重大学 MIE UNIVERSITY

産総研 NICT

Tyndall

ALCA SPRING

TOKYO TECH

2017.10.30  
日本経済新聞

2022.3.5  
山陽新聞