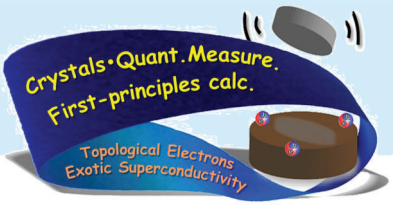
Sasagawa Lab.

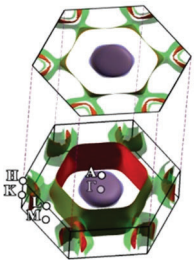


Seeking for Electronic Super-functions in Solids

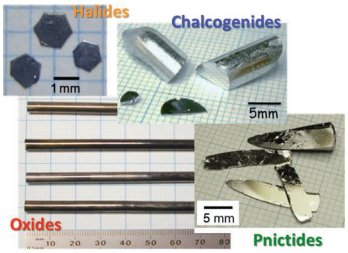
- from Topological Insulators to Exotic Superconductors -

Laboratory for Materials and Structures

http://www.msl.titech.ac.jp/~sasagawa/

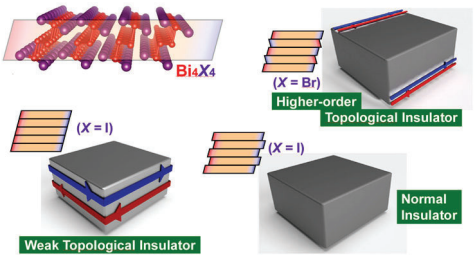


- Computational Materials Explorations
- Growth of High-quality Crystals
- Physical Property Measurements under Extreme Conditions
- Direct Observation of Electronic States



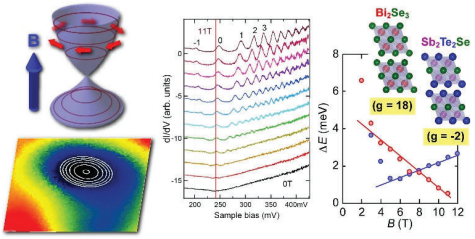
Aiming at innovations in electronics, we are exploring and discovering super-functions of electrons in solids.

Topological Insulator



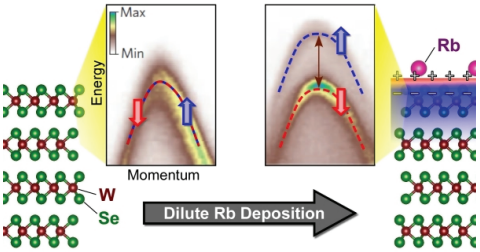
Nature 566, 518 (2019).
Nature Materials, 102, 473 (2021).

Topological Insulator



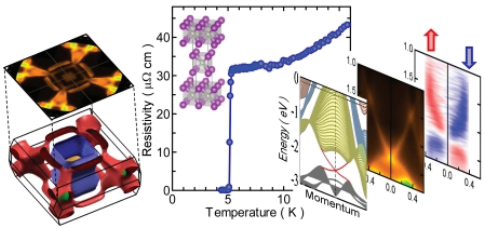
Nature Commun. 7, 10829 (2016).

Surface States / Nano-electronics



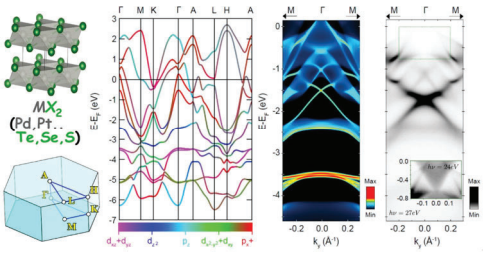
Nature Nanotech. 10, 1043 (2015).

Topo./Exotic Superconductor



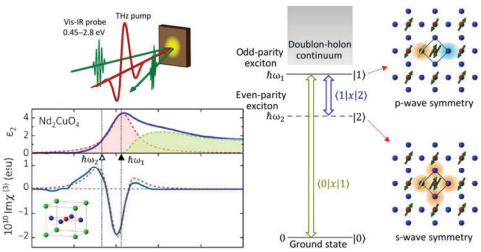
Nature Commun. 6, 8595 (2015).
Nature Commun. 8, 976 (2017).
Nature Commun. 13, 1659 (2022).

Topological Semimetal



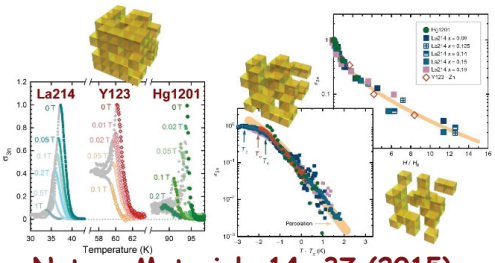
Nature Materials 17, 21 (2018).

Strongly Correlated Electron Systems



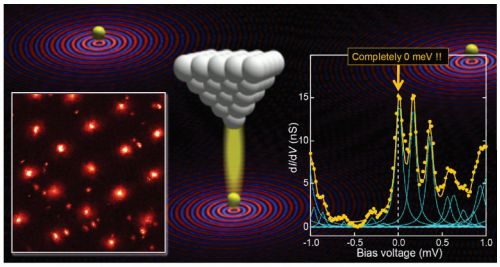
Nature Commun. 6, 8519 (2015).
Science Adv. 3, e1600735 (2017).
Science Adv. 5, eaav2187 (2019).

High-Tc Superconductor



Nature Materials 14, 37 (2015).
Nature Commun. 11, 3323 (2020).
Nature Commun. 12, 3724 (2021).

Topological Superconductor



Nature Materials 18, 811 (2019).