

SHORT BIO

I mainly uses the first principles to calculate the mineral generation conditions and the generation of minerals in meteorites. It including energy band calculations on physical properties, density of states, phonon spectra, Fermi surfaces, transition state search on magnetic analysis or synthesis, adsorption, etc.

In terms of experiments, I mainly interested in phase determination and physical property measurement, such as XRD structure determination, XRD Rietveld, atomic force microscope measurement, dielectric constant measurement and electron microscope with EDS, electron probe, energy spectrometer and Raman spectroscopy, etc.

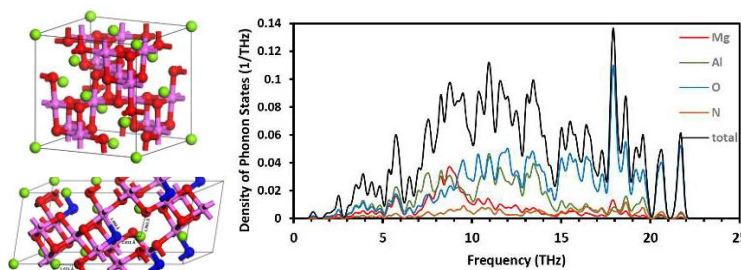
Asst. Prof.

Chi Pui
Tang



PhD: Condensed Physics - Nanjing University (2014)

B.Sc. : Physics – Nanjing University (2009)



Phonon density of states of MgAl₂O_{3.5}N_{0.5}

KEY PUBLICATIONS

Leong, P. K., Sekine, T., Tam, K. V., Tam, S. I., & **Tang, C. P***. First-Principles Calculations with Six Structures of Alkaline Earth Metal Cyanide A (CN)₂ (A= Be, Mg, Ca, Sr, and Ba): Structural, Electrical, and Phonon Properties. *ACS Omega* (2023).

Chi Pui Tang, P. K. Leong and T. Sekine, 2019.

The first-principle study of electronic structure and thermoelectric properties of N doping spinel. JPGU

Chi Pui Tang, et al., 2016.

The structure and electronic properties of hexagonal Fe₂Si. AIP Advances

PROFESSIONAL EXPERIENCE

Ongoing – 2016 – Macau University of Science and Technology, Macao (China) – Asst. Prof.

2017 (Sept. – Dec.) – University of California, Los Angeles (UCLA), Earth, Planetary, and Space Sciences – Vis. Asst. Res.

2014 – 2016 – Macau University of Science and Technology, Macao (China) – Post Doctoral

GRANTS

FDCT – 2021-2022 – Principal Investigator

The cause and mechanism to accommodate certain elements in meteoritic silicates

FDCT – 2017-2020

Geochemical studies of Chang'e-5 lunar samples