Yuji Go

School of Engineering, University of Warwick, Coventry, CV4 7AL, United Kingdom.
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Education

PhD: Modelling of heterogenous systems, University of Warwick Sep. 2023 – Sep. 2027 (exp.)

- Supervised by Prof. N. Neophytou and Prof. G. Bell under project:
  - *Complex electronic structures in thermoelectric materials*

MSci: Physics, Imperial College London (1st Class Honors) Sep. 2019 – Jul. 2023

- BSc Project: Simulation of the detection of evanescent scattering of gold nanoparticles.
- MSci Project: Single-shot volumetric photopolymerization of optical nanostructures
- Modules: Computational physics, Solid state physics, Laser technology, Quantum theory of matter, etc.

Publications

1. Quinn, R.J., **Go, Y.**, **…** Neophytou, N. and Bos, J.-W.G. (2025), *Impurity Band Formation as a Route to Thermoelectric Power Factor Enhancement in n-type XNiSn Half-Heuslers*. Adv. Phys. Res. 2400179. https://doi.org/10.1002/apxr.202400179
2. **Go, Y.**, Dutt, R., & Neophytou, N. (2025). *Theory of quasistatically screened electron-polar optical phonon scattering.* Physical Review B, 111(19). https://doi.org/10.1103/physrevb.111.195211

Research Experience

Research Intern, National Institute of Materials Sciences (Japan) Aug. 2022 – Sep. 2022

- Supervised by Dr. Takagiwa Yoshiki in the Thermoelectric Materials Group
- Fabricated and evaluated the thermoelectric properties of Chimney-Ladder Phase $Ru(Al,Ge)_y$ alloys

Leadership Experience

Language Director, Imperial College London Japanese Society Aug. 2020 – Jul. 2021

- Organized and ran the largest language teaching society in the UK.

Secretary/President, Imperial College Table Tennis Society Aug. 2020 – Jul. 2022

- Created a new automated booking system amidst COVID-19 restrictions.

Competitions officer, Warwick University Table Tennis Society Aug. 2025 – Present

Skills

Computational:	Experience with Python, Fortran and MATLAB for physics modelling and machine learning
	Focus on electronic structure calculation (DFT) and electron transport calculations
Experimental:	Synthesis and analysis of thermoelectric materials (Arc melting, SPS, ZEM-3, etc.)
	Constructing laser systems for microscale optical lithography

Interests / Other Skills

Table Tennis: Top 4 in national university championships (Team)
Top 32 in national university championships (Individual)
Participated in European university games in 2022 and 2023

Bilingual with Japanese and English. Speaks conversational Chinese as well.