



Publication notification

including metadata

QUAST

(please try to fill in as much as possible, even if not complete)

Publication:

Title:	Van-Hove tuning of Fermi surface instabilities through compensated metallicity
Journal Reference (URL or DOI):	https://doi.org/10.1103/PhysRevB.111.L121105
arXiv Reference:	https://doi.org/10.48550/arXiv.2312.07653

Contact for data requests:

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Academic position / Role in data storage:	PhD student

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Academic position / Role in data storage:	PhD student

Type of data produced: (Please check the corresponding box)

- QUAST-funded authors were not directly involved in creating or storing data.
- Work is purely analytic. Figures are visualizations of analytic expressions given in the paper.
- For original data, please refer to the cited publications.
- All data and code shown in the paper are available in [provide link]
- Data is available on reasonable request [fill out the missing information below]
- Other [please provide an alternative description below]

Dataset 1: (Collection of data published/archived together)

Short description of data:

The dataset contains all relevant RPA calculations and post-processed results like the bare susceptibility and superconducting gap functions.

Origin of data (institution):

University of Würzburg

(3rd party) Software used:

additional information included as README with data

Data availability:

published at (DOI)

on reasonable request, to corresponding author. Data is archived:

according to local policy at institution (as provided).

other (Please provide details: location, accessible by, ...)

All scripts to produce the published data and the presented plots are stored at the local git repository of the university of Würzburg.

data included in publication or as supplemental online material at the publishers website

Source availability: (own software or scripts, used to generate/process data)

published at (link)

archived/published with data

archived according to local policy at institution (as provided)

other (Please provide details: location, accessible by, ...)

The employed RPA code is archived at the local git repository of the university of Würzburg.
The numerica scheme is detailed in <https://doi.org/10.1140/epjb/s10051-022-00371-4>

Dataset 2: (Collection of data published/archived together)

Short description of data:

The density functional theory calculations conducted for Xenene materials under various strain values are exemplarily provided for one value of strain, such that the calculations can be reproduced by everyone.

Origin of data (institution):

University of Würzburg

(3rd party) Software used:

VASP

additional information included as README with data

Data availability:

published at (DOI)

<https://dx.doi.org/10.17172/NOMAD/2024.12.19-2>

on reasonable request, to corresponding author. Data is archived:

according to local policy at institution (as provided).

other (Please provide details: location, accessible by, ...)

data included in publication or as supplemental online material at the publishers website

Source availability: (own software or scripts, used to generate/process data)

published at (link)

archived/published with data

archived according to local policy at institution (as provided)

other (Please provide details: location, accessible by, ...)