

Data Description

(1) Folder “Fig_1” contains calculated in “Matlab” software (according to analytical formula (1) of the article) data for images:

- Fig.1b (files in archive “Fig_1b.zip”)
- Fig.1c (files in archive “Fig_1c.zip”)
- Fig.1d (files in archive “Fig_1d.zip”)

The images can be regenerated by loading corresponding data into Matlab's workspace by the standard "load" function and then plot using "imagesc" function. The data were visualized using Matlab; the resulting images were assembled into the final article-version figures using “Inkscape” vector graphic editor.

(2) Folder “Fig_2-experiment” contains raw data in “.dump” format (recorded by Neaspec s-SNOM software (Linux version)) for MoS₂-SiC structures of different number of MoS₂ layers (the number is indicated in names of corresponding subfolders). In subfolders we also included partly processed data files used for extraction of the polariton wavelength and thickness of MoS₂ (files in “.gwy” and “.txt” formats).

Processing guidelines:

- Data were processed by “Gwyddion (v. 2.31.win64)” software.
- [x,y] dimensions were multiplied by a factor of 0.975 to take into account s-SNOM scanner calibration.
- Topography data were plane-corrected using 3-points Gwyddion levelling tool. The minimum data value was shifted to zero.
- Built-in cross-sections of the “.gwy” data, used for analysis, could be seen by clicking on “Extract profiles” Gwyddion tool. The number of adjacent lines (“Thickness” textbox in “Profiles” window), where used more than one, is given in names of corresponding “.txt” files (each “.txt” file is the resulting exported data along these cross-section using corresponding “Thickness” settings).

(3) Folder “Fig_2-theory” contains calculated in Matlab (according to the analytical formula (1)) and exported in “Origin” software data for theoretical graphs in:

- Fig.2i (“Fig_2i_calculatinos_.opj”). “X”-columns correspond to horizontal axis data points (confinement) for different number of MoS₂ layers (indicated in the column name). Corresponding “Y”-axis (frequency) data points are the same for all “X”-columns.
- Fig.2j (“Fig_2j_calculatinos_.opj”). “X”-column correspond to MoS₂ thickness data points. “Y”-columns correspond to the corresponding polariton wavelength data, calculated for different frequencies (which are indicated in columns names).

(4) The data of Fig. 2,3 were visualized using Gwyddion/Origin software. The resulting images were assembled into the final article-version figures using “Inkscape” vector graphic editor.