

Strain engineering of optical properties in transparent VO₂/muscovite heterostructures

Hsiao-Wen Chen¹, Chien-I Li², Chun-Hao Ma², Ying-Hao Chu², and Hsiang-Lin Liu^{1*}

¹Department of Physics, National Taiwan Normal University, Taipei 11677, Taiwan

²Department of Materials Science Engineering, National Chiao Tung University,
Hsinchu 30010, Taiwan.

*Corresponding author: hliu@ntnu.edu.tw

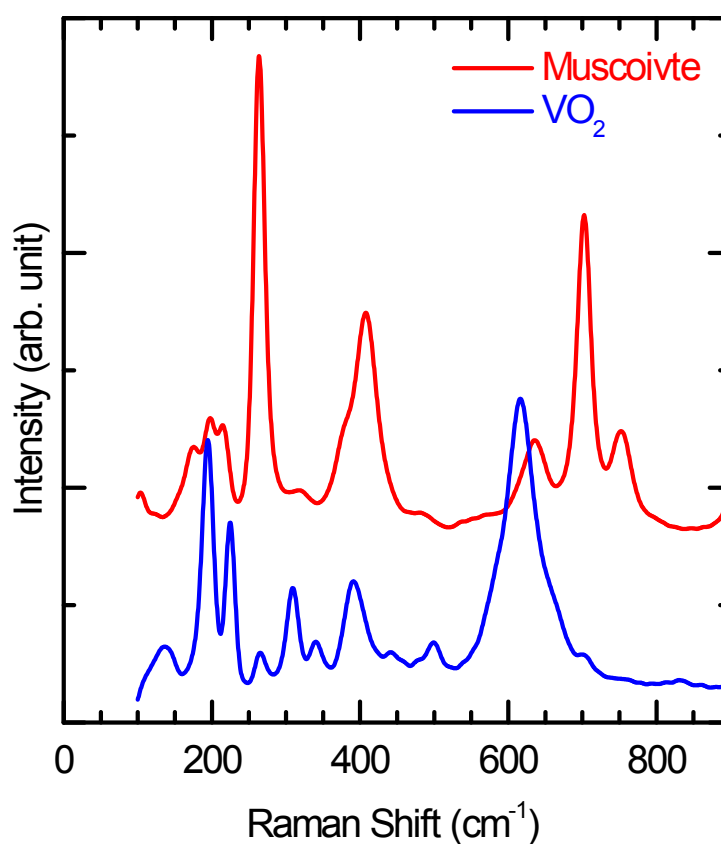


Figure S1 Unpolarized room-temperature Raman scattering spectra of VO₂/muscovite heterostructures and pure muscovite substrate.

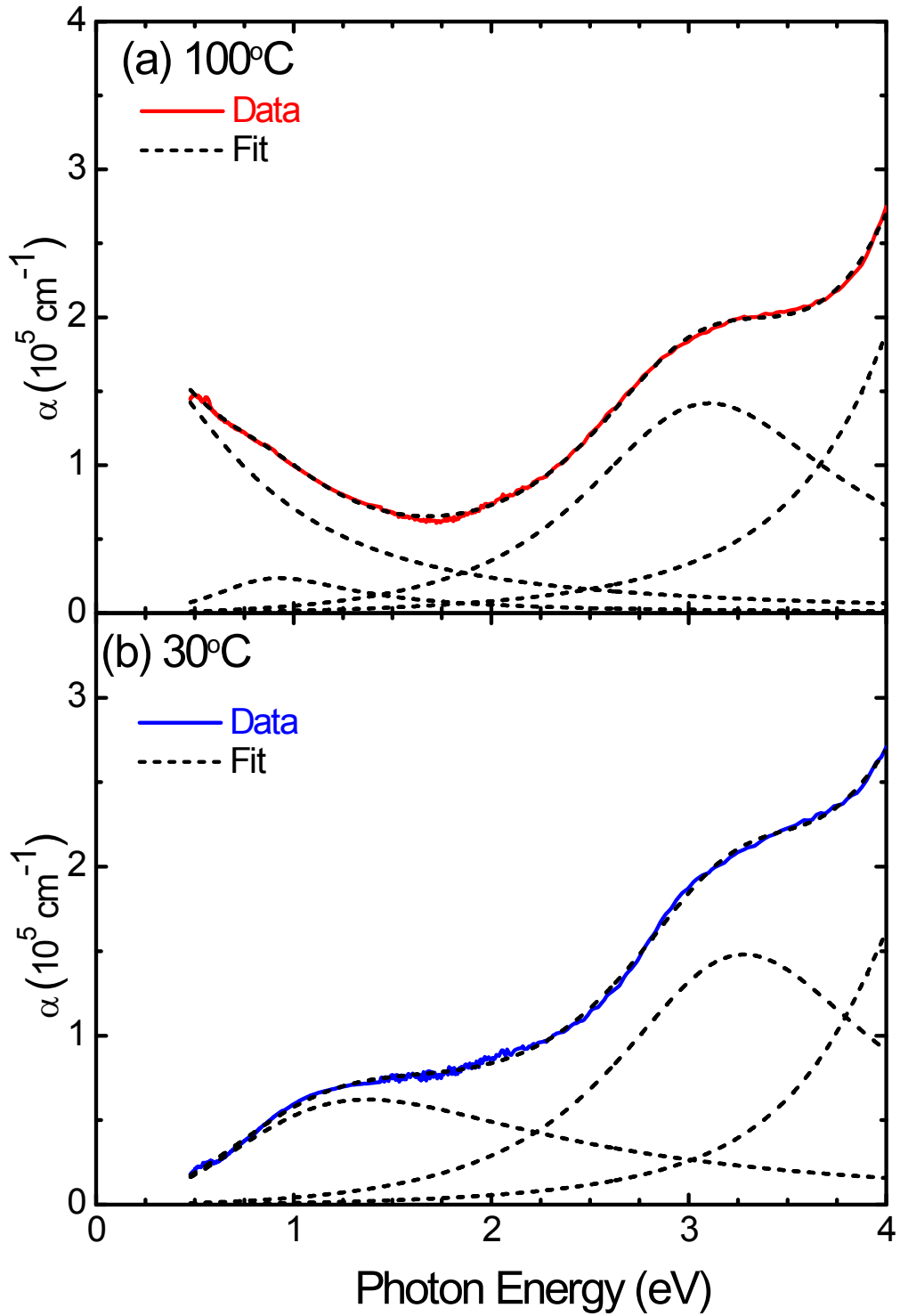


Figure S2 Optical absorption spectra of VO₂ at (a) 100°C and (b) 30°C. The dashed lines illustrate the best fit using the Drude and Lorentzian functions.

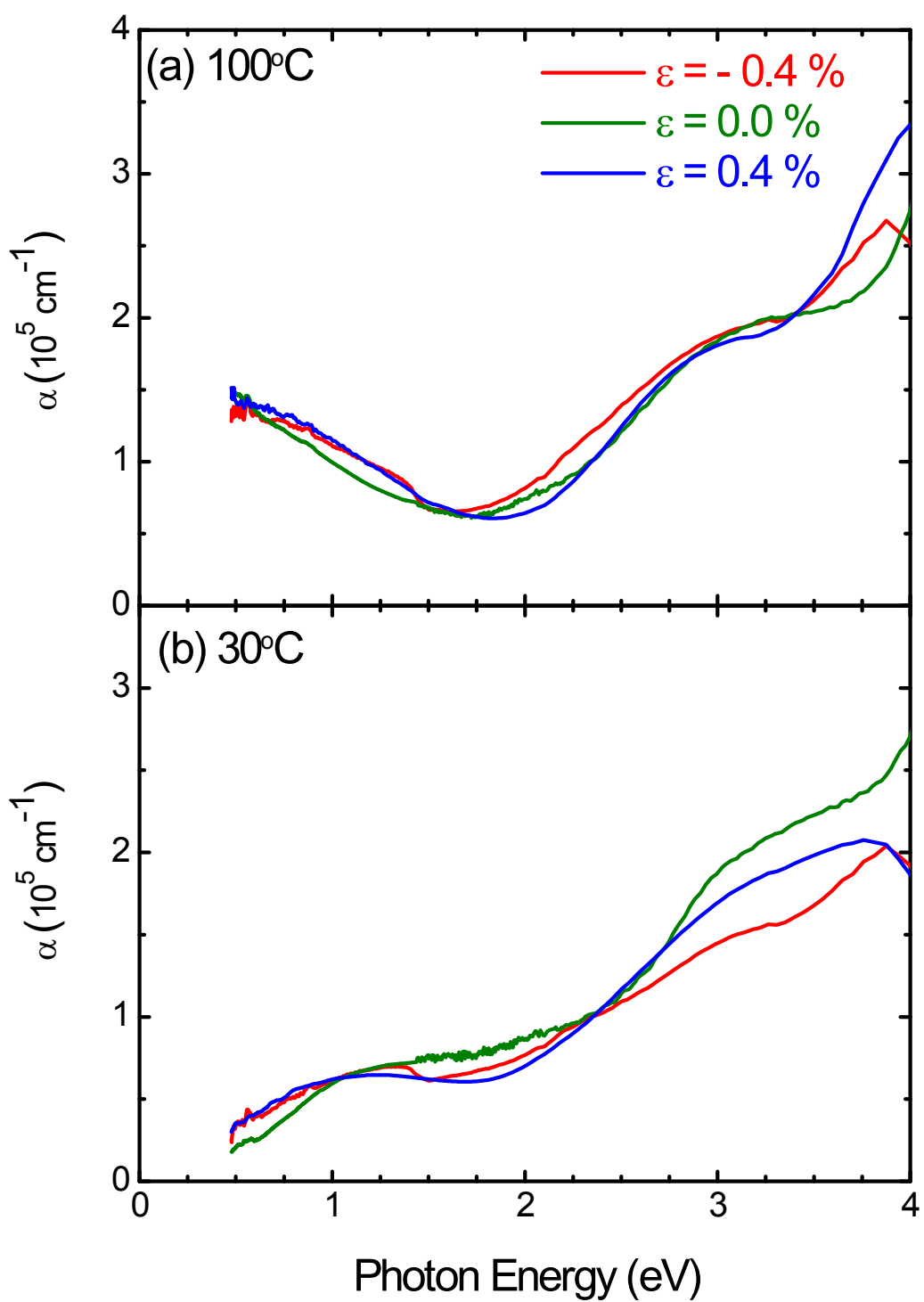


Figure S3 Strain dependence of optical absorption spectra of VO_2 at (a) 100°C and (b) 30°C .

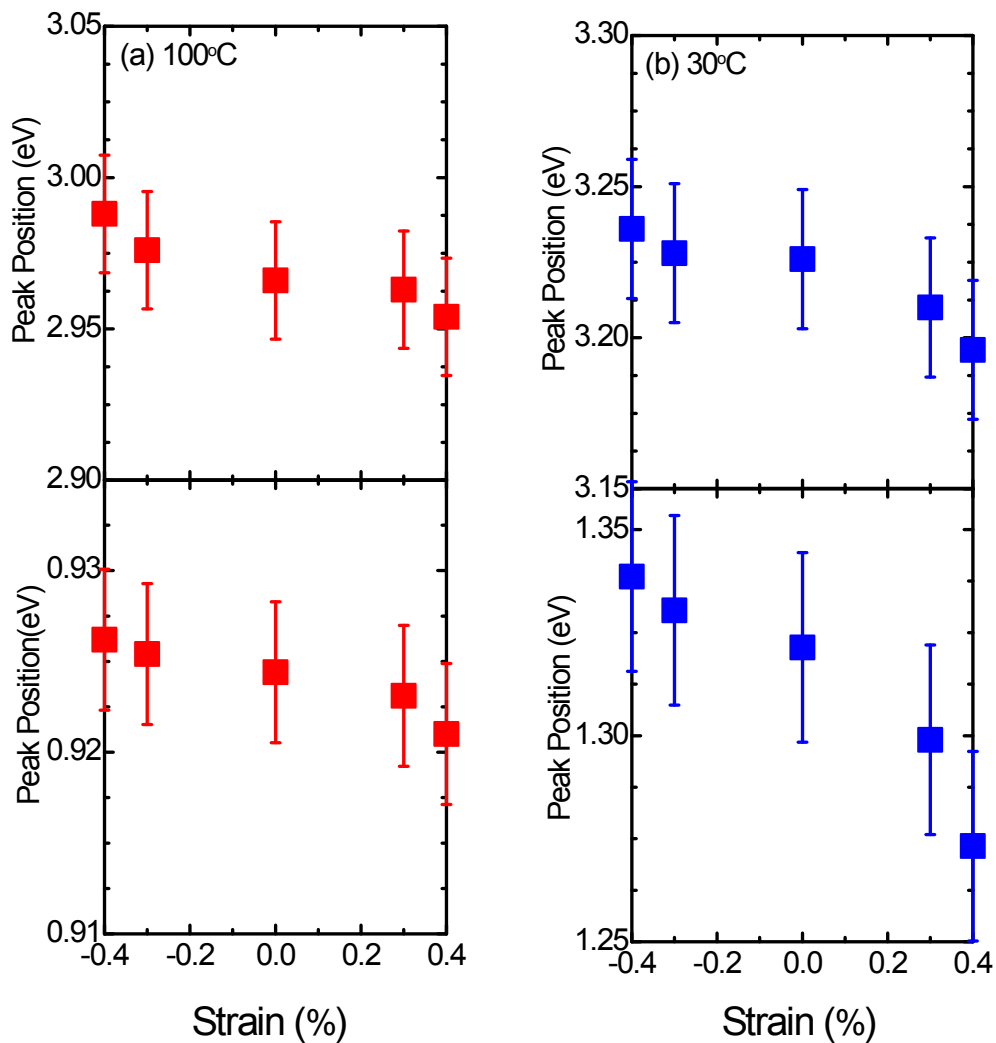


Figure S4 Strain-dependent peak positions of electronic excitations in VO₂ at (a) 100°C and (b) 30°C.