Valeria SHEINA, PhD in Physics
Russian and French citizen, 27 years

Post-doc in QNS, IBS

Ewha Womans University

Education

2018 – 2022 **Ph.D. in physics, STM team C2N, Paris-Saclay University, France**
Title of thesis: *« Spin and Valleys in layered materials. »*
2016 - 2018 **Master degree in Solid state physics and Nanomaterials, UPMC, Paris, France**
2013 - 2016 **Bachelor degree in Physics and Chemistry, UPMC, Paris, France**

Experience

2022-present **Post-doctoral position in Quantum Nanoscience(QNS), Institute for Basic Science(IBS), Ewha Womans University, Seoul, Korea**
2018 **Internship in LPEM-ESPCI, Paris, France**
Title: *« Electrical detection of Spin-Resonance in magnetic-doped layered material. »*
2017 **Internship in INSP-UPMC, Paris, France**
Title: *« Reactivity of the LuPc2 surface. »*
2016 **Internship in LPA-UPMC**, Paris, France
Title: *« Spectroscopy of optical absorption of single carbon nanotubes in cryogenic conditions. »*

Skills

- STM, STS (Unisoku, JT-STM, Omicron)
- UHV and cryogenic methods
- ESR (Electron spin resonance), Brucker spectrometer
- Transport measurements
- PPMS and VSM-SQUIQ
- EDMR (Electrical Detection of Magnetic Resonance through transport measurements)
- bases of XPS and MOKE

Languages
Computing skills

Russian/French – native language/advanced
English – upper intermediate
Python – good level of data treatment
Microsoft office, Tex, Igor, Matlab, Origin – bases

Publications

(Submitted) **Sheina V. A.**, Stolyarov V. S., Lang G., Marchenkov V., …. and Aubin H. "Spin-Valley state in bromine doped 2H-$MoTe_2$" (2023)

(In preparation) **Sheina V. A.**, Aprili M., Esteve J., Roullau P., Assouline A., … and Aubin H. "Electrical detection of spin resonance in hBN/Gr/hBN" (2023)

Stolyarov V. S., **Sheina V. A.** ~Aubin H., et al. *"Disorder-Promoted Splitting in Quasiparticle Interference at Nesting Vectors",* J. Phys. Chem. Lett., **12,** 12, 3127-31-34 (2021)