

## CV of Krisztián Szász

### Personal data

Name	Krisztián Szász
Position	Scientific coworker
Current institution	Department of Physics, Budapest University of Technology and Economics H-1111 Budapest, Budafoki út 8, Hungary
e-mail	szasz.krisztian@mail.bme.hu
Phone	+36 1 463 19 59
Date of birth	1985

### Education

2010	MSc in Physics, Eötvös University Budapest
2015	PhD in Physics ("Identification of Point Defects in Semiconductors by Calculating the Hyperfine Tensor") Eötvös University Budapest

### Employment

2016-	Scientific coworker	Dept. of Physics, BME, Hungary
2015-2016	Postdoctoral researcher	Wigner RCP, Hungary
2009-2015	Research assistant	Wigner RCP, Hungary

### Research interest

- Condensed matter physics, material science, multiferroic materials
- Teaching of physics, physics competition

### Teaching activity

- Problem solving seminar in experimental physics (for physicists and for IT engineers)
- Physics Laboratory (for physicists and civil engineers)

### Memberships and professional service

- Member of ELFT
- Trainer of the Hungarian Physics Olympiad Team
- Member of the Editorial Board of KöMaL (<http://komal.hu>)

- Referee of Physical Review B, Journal of Applied Physics

## Languages

English (intermediate), German (intermediate)

## Scientific impact (as of 15/05/2020)

16 papers in refereed journals

Total number of citations: 312

H-index: 8

Complete list of publications:

<https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=10018446&view=simpleList>

## Five selected publications

1. A. L. Falk, P. V. Klimov, V. Ivády, K. Szász, D. J. Christle, W. F. Koehl, A. Gali, D. D. Awschalom, *Optical polarization of nuclear spins in silicon carbide*, PRL **114**, 247603 (2015).
2. D. J. Christle, P. V. Klimov, F. Charles, K. Szász, V. Ivády, V. Jokubavicius, J. Ul Hassan, M. I. Syväjärvi, W. F. Koehl, T. Ohshima, N. T. Son, E. Janzén, A. Gali, D. D. Awschalom, *Isolated spin qubits in SiC with a high-fidelity infrared spin-to-photon interface*, PRX **7**, 021046 (2017).
3. K. Szász, T. Hornos, M. Marsman, A. Gali, *Hyperfine coupling of point defects in semiconductors by hybrid density functional calculations: The role of core spin polarization*, PRB **88**, 075202 (2013).
4. V. Ivády, K. Szász, A. L. Falk, P. V. Klimov, D. J. Christle, E. Janzén, I. A. Abrikosov, D. D. Awschalom, A. Gali, *Theoretical model of dynamic spin polarization of nuclei coupled to paramagnetic point defects in diamond and silicon carbide*, PRB **92**, 115206 (2015).
5. X. T. Trinh, K. Szász, T. Hornos, K. Kawahara, J. Suda, T. Kimoto, A. Gali, E. Janzén, N. T. Son, *Negative-U carbon vacancy in 4 H-SiC: Assessment of charge correction schemes and identification of the negative carbon vacancy at the quasicubic site*, PRB **88**, 235209 (2013).