

Lin-Ding Yuan

Postdoctoral associate
Renewable and Sustainable Energy Institute
University of Colorado, Boulder, CO 80309-0027

Telephone: 720-207-4640
Fax: 720-207-4640
Email: lin-ding.yuan@colorado.edu

PROFESSIONAL PREPARATION

Nankai University	Electronic Engineer	B.Sc. 2013
UCAS	Condensed Matter Physics	Ph.D. 2019
Uni. of Colorado, Boulder	Boulder, US	2019-2022

APPOINTMENTS

2019 - present Postdoctoral Associate University of Colorado, Boulder, US

PUBLICATIONS

1. Yuan, L. D., Deng, H. X., Li, S. S., Wei, S. H., & Luo, J. W. (2018). Unified theory of direct or indirect band-gap nature of conventional semiconductors. *Physical Review B*, 98(24), 245203. DOI: 10.1103/PhysRevB.98.245203
2. Yuan, L. D., Liu, Q., Zhang, X., Luo, J. W., Li, S. S., & Zunger, A. (2019). Uncovering and tailoring hidden Rashba spin-orbit splitting in centrosymmetric crystals. *Nature communications*, 10(1), (2019): 906. DOI: 10.1038/s41467-019-08836-4
3. Yuan, L. D., Wang, Z., Luo, J. W., Rashba, E. I., & Zunger, A. (2020). Giant momentum-dependent spin splitting in centrosymmetric low-Z antiferromagnets. *Physical Review B*, 102(1), 014422. DOI:10.1103/PhysRevB.102.014422
4. Yuan, L. D., Wang, Z., Luo, J. W., & Zunger, A. (2020). Prediction of low-Z collinear and noncollinear antiferromagnetic compounds having momentum-dependent spin splitting even without spin-orbit coupling. *Phys. Rev. Materials* 5, 014409 DOI:10.1103/PhysRevMaterials.5.014409

Collaborators and Other Affiliations (within the last 48 months):

Collaborators and Co-Editors:

Emmanuel I. Rashba, Department of Physics, Harvard University
Alex Zunger, University of Colorado, Boulder
Jun-Wei Luo, Institute of Semiconductors, Chinese Academy of Science
Zhi Wang, Institute of Semiconductors, Chinese Academy of Science
Shu-Shen Li, University of Chinese Academy of Science
Qi-Hang Liu, Shenzhen University
Xiu-Wen Zhang, Department of Physics, South University of Science and Technology

Graduate Advisor: Jun-Wei Luo, Institute of Semiconductors, Chinese Academy of Science

Postdoctoral Sponsor: Alex Zunger, University of Colorado, Boulder

Thesis Advisor: Jun-Wei Luo, Institute of Semiconductors, Chinese Academy of Science

Total graduate students advised: #30

Postgraduate-scholar sponsor: Alex Zunger, University of Colorado, Boulder

Total postdoctoral students sponsored: #80

Lin-Ding Yuan
University of Colorado Boulder