

# Stanford

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## Jonathan Sobota

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### Bio

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#### INSTITUTE AFFILIATIONS

- Principal Investigator, Stanford Institute for Materials and Energy Sciences

#### Publications

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##### PUBLICATIONS

- **Development of deflector mode for spin-resolved time-of-flight photoemission spectroscopy.** *The Review of scientific instruments*  
Han, X., Qu, J., Sakamoto, S., Liu, D., Guan, D., Liu, J., Li, H., Rotundu, C. R., Andresen, N., Jozwiak, C., Hussain, Z., Shen, Z. X., Sobota, et al  
2023; 94 (10)
- **Reversal of spin-polarization near the Fermi level of the Rashba semiconductor BiTeCl** *NPJ QUANTUM MATERIALS*  
Qu, J., Han, X., Sakamoto, S., Jia, C. J., Liu, J., Li, H., Guan, D., Zeng, Y., Schuler, M., Kirchmann, P. S., Moritz, B., Hussain, Z., Devvereaux, et al  
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- **Signatures of the exciton gas phase and its condensation in monolayer 1T-ZrTe2.** *Nature communications*  
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2023; 14 (1): 1116
- **Influence of local symmetry on lattice dynamics coupled to topological surface states** *PHYSICAL REVIEW B*  
Sobota, J. A., Teitelbaum, S. W., Huang, Y., Querales-Flores, J. D., Power, R., Allen, M., Rotundu, C. R., Bailey, T. P., Uher, C., Henighan, T., Jiang, M., Zhu, D., Chollet, et al  
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- **Probing topological phase transitions using high-harmonic generation** *NATURE PHOTONICS*  
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- **Expanding the momentum field of view in angle-resolved photoemission systems with hemispherical analyzers.** *The Review of scientific instruments*  
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- **Expanding the momentum field of view in angle-resolved photoemission systems with hemispherical analyzers** *REVIEW OF SCIENTIFIC INSTRUMENTS*  
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2021; 92 (12)
- **All-Optical Probe of Three-Dimensional Topological Insulators Based on High-Harmonic Generation by Circularly Polarized Laser Fields.** *Nano letters*  
Baykusheva, D., Chacon, A., Lu, J., Bailey, T. P., Sobota, J. A., Soifer, H., Kirchmann, P. S., Rotundu, C., Uher, C., Heinz, T. F., Reis, D. A., Ghimire, S.

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- **Angle-resolved photoemission studies of quantum materials** *REVIEWS OF MODERN PHYSICS*  
Sobeck, J. A., He, Y., Shen, Z.  
2021; 93 (2)
- **Quantum-well states in fractured crystals of the heavy-fermion material CeCoIn5** *PHYSICAL REVIEW B*  
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- **Classification of collective modes in a charge density wave by momentum-dependent modulation of the electronic band structure** *PHYSICAL REVIEW B*  
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- **Distinguishing Bulk and Surface Electron-Phonon Coupling in the Topological Insulator Bi2Se3 Using Time-Resolved Photoemission Spectroscopy** *PHYSICAL REVIEW LETTERS*  
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