Zhenglu Li

Assistant Professor
Mork Family Department of Chemical Engineering and Materials Science
Viterbi School of Engineering ◇ University of Southern California

CONTACT

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EDUCATION HISTORY

Ph.D. in Physics, University of California at Berkeley *August 2013 - August 2019*

- Advisor: Prof. Steven G. Louie
- Thesis: Electron-phonon coupling from GW perturbation theory and electronic and magnetic properties of novel two-dimensional materials (*APS Metropolis Award*)

B.S. in Physics, Fudan University *September 2008 - July 2012*

- Advisors: Prof. Xingao Gong and Prof. Hongjun Xiang
- Thesis: First-principles studies of topological insulators and multiferroics

EMPLOYMENT HISTORY

Assistant Professor *January 2023 - Present*
Mork Family Department of Chemical Engineering and Materials Science
Viterbi School of Engineering, University of Southern California

- Computational Quantum Materials Group (link)

Postdoctoral Researcher *August 2019 - December 2022*
Lawrence Berkeley National Laboratory & University of California at Berkeley
Center for Computational Study of Excited-State Phenomena in Energy Materials (C2SEPEM)

- Advisor: Prof. Steven G. Louie

Research Assistant *July 2012 - July 2013*
Department of Physics, Fudan University

- Advisors: Prof. Xingao Gong and Prof. Hongjun Xiang

HONORS AND AWARDS

- **Viterbi Junior Faculty Research Award**, Viterbi School of Engineering, University of Southern California, 2026.
- **DOE INCITE Award**, **PI** (Co-PI: Mauro Del Ben, LBNL; Felipe da Jornada, Stanford; Steven G. Louie, UC Berkeley/LBNL, Jeffrey B. Neaton, UC Berkeley/LBNL; Diana Y. Qiu, Yale), 1/2026 - 12/2027.
- **ACM Gordon Bell Prize Finalist**, **Team**, Association for Computing Machinery, 2025.
- **NSF CAREER Award**, 2025.
- **DOE INCITE Award**, **PI** (Co-PI: Mauro Del Ben, LBNL), 1/2024 - 12/2025. (link)

- **APS Nicholas Metropolis Award** for Outstanding Doctoral Thesis Work in Computational Physics, American Physical Society, 2021. (link)
  Citation: *"For the development and highly-scalable implementation of novel first-principles GW perturbation theory methods to compute electron-phonon coupling with many-electron correlation effects included, and its applications to phonon-induced phenomena in oxide superconductors."*
- **ACM Gordon Bell Prize Finalist**, **Team**, Association for Computing Machinery, 2020.
- **Allan and Kathleen Rosevear Gateway Fellowship**, International House & Graduate Division, University of California at Berkeley, 2013.
- **Undergraduate Thesis Award**, Department of Physics, Fudan University, 2012.

PUBLICATIONS

- Total **8,200**+ citations and *h*-index of **25** from Google Scholar (Last update: May 20, 2026) (link).
- Publications include **2** Nature, **1** Science, **2** Nature Materials, **10** Phys. Rev. Lett., **5** Nano Lett., **4** Proc. Natl. Acad. Sci., **2** Nature Commun., among others.

(*underline denotes corresponding authors; * denotes students and post-docs from Li group;*
† *denotes equal contributions;* ***SELECTED*** *publications indicated*)

Published / Accepted:

46. N. Pant, S. Tiwari, S. G. Louie, **Z. Li**, and F. Giustino, *First-principles predictions of carrier mobility with record accuracy using GW perturbation theory*, Phys. Rev. Lett., in press (2026). ***SELECTED***

45. X. Gong, **Z. Li**, and S. G. Louie, *Large many-electron effects in the temperature-dependent electron-phonon renormalization of semiconductor band gaps*, Phys. Rev. Lett., in press (2026). ***SELECTED***

44. J.-Y. You*†, C.-E. Hsu*†, Z. Zhu*, B. Zhang*, Z. Ye, M. H. Naik, T. Cao, H.-C. Hsueh, S. G. Louie, M. Del Ben, and **Z. Li**, *Moiré excitons in generalized Wigner crystals*, Proc. Natl. Acad. Sci. **123**, e2531259123 (2026). DOI ***SELECTED***
News: Viterbi

43. C. Wang†, J. Ruan†, S. R. Craig†, **Z. Li**†, Y. Deng, S. G. Louie, and C. Shi, *Layer-resolved flat-band excitations in magic-angle twisted bilayer phononic graphene*, Phys. Rev. B **113**, 024306 (2026). DOI

42. B. Zhang*, D. Weinberg, C.-E. Hsu*, A. R. Altman, Y. Shi, J. B. White III, D. Vigil-Fowler, S. G. Louie, J. R. Deslippe, F. H. da Jornada, **Z. Li**, and M. Del Ben, *Advancing quantum many-body GW calculations on exascale supercomputing platforms*, SC25: The International Conference for High Performance Computing, Networking, Storage, and Analysis **1**, 48 (2025). DOI (**ACM Gordon Bell Prize Finalist**) ***SELECTED***
News: OLCF, ALCF, NERSC, Intel.

41. W. Tang, **Z. Li**, C. Chen, Y. He, and S. G. Louie, *Non-excitonic mechanism for electronic and structural phase transitions in $Ta_2Ni(Se,S)_5$*, Phys. Rev. B **112**, L201106 (2025). DOI

40. X. Du, Y. L. Wang, Y. D. Li, Y. T. Cao, M. X. Zhang, C. Y. Pei, J. M. Yang, W. X. Zhao, K. Y. Zhai, Z. K. Liu, Z. W. Li, J. K. Zhao, Z. T. Liu, D. W. Shen, **Z. Li**, Y. He, Y. L. Chen, Y. P. Qi, H. J. Guo, L. X. Yang, *Dichotomy in low- and high-energy band renormalizations in trilayer nickelate $La_4Ni_3O_{10}$: A comparison with cuprates*, Phys. Rev. Lett. **135**, 146506 (2025). DOI

39. F. Zhao, Y.-H. Chan, **Z. Li**, and S. G. Louie, *Excitonic effects and quasiparticle band renormalization of poly(p-phenylene vinylene) polymer crystals*, Phys. Rev. B, **112**, 125153 (2025). DOI

38. Y.-H. Chan, **Z. Li**, and S. G. Louie, *Excitonic effects on infrared vibrational and Raman spectroscopy from first principles*, Phys. Rev. B **112**, 024308 (2025). DOI

37. E. Kogler, D. Spath, R. Lucrezi, H. Mori, Z. Zhu*, **Z. Li**, E. R. Margine, and C. Heil, *IsoME: Streamlining high-precision Eliashberg calculations*, Comput. Phys. Commun. **315**, 109720 (2025). DOI

36. T.-H. Wu, C.-E. Hsu*, R. K. Ulaganathan, R. Sankar, **Z. Li**, C.-C. Lee, C.-S. Chang, and K.-H. Lin, *Anisotropic screening of excitons in van der Waals materials*, npj 2D Mater. Appl. **9**, 37 (2025). DOI

35. J.-Y. You*, C.-E. Hsu*, M. Del Ben, and **Z. Li**, *Diverse manifestations of electron-phonon coupling in a kagome superconductor*, Phys. Rev. Lett. **134**, 106401 (2025). DOI ***SELECTED***
News: USC Viterbi.

34. J.-Y. You*, Z. Zhu*, M. Del Ben, W. Chen, and **Z. Li**, *Unlikelihood of a phonon mechanism for the high-temperature superconductivity in $La_3Ni_2O_7$*, npj Comput. Mater. **11**, 3 (2025). DOI ***SELECTED***

33. W. Lee, A. M. Alvertis, **Z. Li**, S. G. Louie, M. R. Filip, J. B. Neaton, and E. Kioupakis, *Phonon screening of excitons in atomically thin semiconductors*, Phys. Rev. Lett. **133**, 206901 (2024). DOI

32. **Z. Li** and S. G. Louie, *Two-gap superconductivity and decisive role of rare-earth d electrons in infinite-layer nickelates*, Phys. Rev. Lett. **133**, 126401 (2024). DOI (Editors' Suggestion) ***SELECTED***

31. A. M. Alvertis, J. B. Haber, **Z. Li**, C. J. N. Coveney, S. G. Louie, M. R. Filip, and J. B. Neaton, *Phonon screening and dissociation of excitons at finite temperatures from first principles*, Proc. Natl. Acad. Sci. **121**, e2403434121 (2024). DOI

30. H. Li, Z. Xiang, M. H. Naik, W. Kim, **Z. Li**, R. Sailus, R. Banerjee, T. Taniguchi, K. Watanabe, S. Tongay, A. Zettl, F. H. da Jornada, S. G. Louie, M. F. Crommie, and F. Wang, *Imaging moiré excited states with photocurrent tunneling microscopy*, Nature Mater. **23**, 633 (2024). DOI

29. **Z. Li**, G. Antonius, Y.-H. Chan, and S. G. Louie, *Electron-phonon coupling from GW perturbation theory: Practical workflow combining BerkeleyGW, ABINIT, and EPW*, Comput. Phys. Commun. **295**, 109003 (2024). DOI

28. H. Wang, Y. Zhong, W. Jiang, S. Latini, S. Xia, T. Cui, **Z. Li**, T. Low, and F. Liu, *Strain-Tunable Hyperbolic Exciton Polaritons in Monolayer Black Arsenic with Two Exciton Resonances*, Nano Lett. **24**, 2057 (2024). DOI

27. C. Chen, W. Tang, X. Chen, Z. Kang, S. Ding, K. Scott, S. Wang, **Z. Li**, J. P. C. Ruff, M. Hashimoto, D.-H. Lu, C. Jozwiak, A. Bostwick, E. Rotenberg, E. H. Neto, R. J. Birgeneau, Y. Chen, S. G. Louie, Y. Wang, and Y. He, *Anomalous excitonic phase diagram in band-gap-tuned $Ta_2Ni(Se,S)_5$*, Nature Commun. **14**, 7512 (2023). DOI

26. C. Chen, X. Chen, W. Tang, **Z. Li**, S. Wang, C. Jozwiak, A. Bostwick, E. Rotenberg, M. Hashimoto, D. Lu, J. P. C. Ruff, S. G. Louie, R. Birgeneau, Y. Chen, Y. Wang, and Y. He, *Lattice fluctuation induced pseudogap in quasi-one-dimensional Ta_2NiSe_5*, Phys. Rev. Research **5**, 043089 (2023). DOI

25. J. Ruan, **Z. Li**, C. S. Ong, and S. G. Louie, *Two-dimensional single-valley exciton qubit and optical spin magnetization generation*, Proc. Natl. Acad. Sci. **120**, e2307611120 (2023). DOI

24. M. H. Naik, E. C. Regan, Z. Zhang, Y. Chan, **Z. Li**, D. Wang, Y. Yoon, C. S. Ong, W. Zhao, S. Zhao, M. I. B. Utama, B. Gao, X. Wei, M. Sayyad, K. Yumigeta, K. Watanabe, T. Taniguchi, S. Tongay, F. H. da Jornada, F. Wang and S. G. Louie, *Intralayer charge-transfer moiré excitons in van der Waals superlattices*, Nature **609**, 52 (2022). DOI

23. Y. Lin, Y.-H. Chan, W. Lee, L.-S. Lu, **Z. Li**, W.-H. Chang, C.-K. Shih, R. A. Kaindl, S. G. Louie, and A. Lanzara, *Exciton-driven renormalization of quasiparticle band structure in monolayer MoS_2*, Phys. Rev. B **106**, L081117 (2022). DOI

22. F. Tang, **Z. Li**, C. Zhang, S. G. Louie, R. Car, D. Y. Qiu, and X. Wu, *Many-body effects in the X-ray absorption spectra of liquid water*, Proc. Natl. Acad. Sci. **119**, e2201258119 (2022). DOI

21. T. Chagas, O. A. Ashour, G. A. S. Ribeiro, W. S. Silva, **Z. Li**, S. G. Louie, R. Magalhaes-Paniago, and Y. Petroff, *Multiple strong topological gaps and hexagonal warping in Bi_4Te_3*, Phys. Rev. B **105**, L081409 (2022). DOI

20. M. Wu, **Z. Li**, and S. G. Louie, *Optical and magneto-optical properties of ferromagnetic monolayer $CrBr_3$: A first-principles GW and GW plus Bethe-Salpeter equation study*, Phys. Rev. Mater. **6**, 014008 (2022). DOI

19. S. G. Louie, Y.-H. Chan, F. H. da Jornada, **Z. Li**, and D. Y. Qiu, *Discovering and understanding materials through computation*, Nature Materials **20**, 728 (2021). DOI (Invited Perspective for Insight Issue *Computational Materials Design*) ***SELECTED***

18. **Z. Li**, M. Wu, Y.-H. Chan, and S. G. Louie, *Unmasking the origin of kinks in the photoemission spectra of cuprate superconductors*, Phys. Rev. Lett. **126**, 146401 (2021). DOI (Editors' Suggestion) ***SELECTED***
News: OLCF, TACC.

17. X. Jiang, C. Shi, **Z. Li**, S. Wang, Y. Wang, S. Yang, S. G. Louie, and X. Zhang, *Direct observation of Klein tunneling in phononic crystals*, Science **370**, 1447 (2020). DOI

16. M. Del Ben, C. Yang, **Z. Li**, F. H. da Jornada, S. G. Louie, and J. Deslippe, *Accelerating large-scale excited-state GW calculations on leadership HPC systems*, SC20: The International Conference for High Performance Computing, Networking, Storage, and Analysis **1**, 36 (2020). DOI (**ACM Gordon Bell Prize Finalist**) ***SELECTED***
News: OLCF.

15. E. Gaufrès, F. Fossard, V. Gosselin, L. Sponza, F. Ducastelle, **Z. Li**, S. G. Louie, R. Martel, M. Côté, and A. Loiseau, *Momentum-resolved dielectric response of free-standing mono-, bi-, and trilayer black phosphorus*, Nano Lett. **19**, 8303 (2019). DOI

14. M. Wu, **Z. Li**, T. Cao, and S. G. Louie, *Physical origin of giant excitonic and magneto-optical responses in two-dimensional ferromagnetic insulators*, Nature Commun. **10**, 2371 (2019). DOI

13. **Z. Li**, G. Antonius, M. Wu, F. H. da Jornada, and S. G. Louie, *Electron-phonon coupling from ab initio linear-response theory within the GW method: Correlation-enhanced interactions and superconductivity in $Ba_{1-x}K_xBiO_3$*, Phys. Rev. Lett. **122**, 186402 (2019). DOI ***SELECTED***

12. **Z. Li**, T. Cao, and S. G. Louie, *Two-dimensional ferromagnetism in few-layer van der Waals crystals: Renormalized spin-wave theory and calculations*, J. Mag. Mag. Mat. **463**, 28 (2018). DOI (Invited contribution to *Special Issue in Memory of A. J. Freeman*)

11. K. Gotlieb†, **Z. Li**†, C.-Y. Lin, C. Jozwiak, J. H. Ryoo, C.-H. Park, Z. Hussain, S. G. Louie, and A. Lanzara, *Symmetry rules shaping spin-orbital textures in surface states*, Phys. Rev. B **95**, 245142 (2017). DOI

10. C. Gong†, L. Li†, **Z. Li**†, H. Ji, A. Stern, Y. Xia, T. Cao, W. Bao, C. Wang, Y. Wang, Z. Q. Qiu, R. J. Cava, S. G. Louie, J. Xia, and X. Zhang, *Discovery of intrinsic ferromagnetism in two-dimensional van der Waals crystals*, Nature **546**, 265 (2017). DOI ***SELECTED***
News: Nature News, Physics Today, LBNL News.

9. **Z. Li**, T. Cao, M. Wu, and S. G. Louie, *Generation of anisotropic massless Dirac fermions and asymmetric Klein tunneling in few-layer black phosphorus superlattices*, Nano Lett. **17**, 2280 (2017). DOI ***SELECTED***

8. T. Helm, F. Flicker, R. Kealhofer, P. J. W. Moll, I. M. Hayes, N. P. Breznay, **Z. Li**, S. G. Louie, Q. R. Zhang, L. Balicas, J. E. Moore, and J. G. Analytis, *Thermodynamic anomaly above the superconducting critical temperature in the quasi-one-dimensional superconductor $Ta_4Pd_3Te_{16}$*, Phys. Rev. B **95**, 075121 (2017). DOI

7. T. Pham, A. L. Gibb, **Z. Li**, S. M. Gilbert, C. Song, S. G. Louie, and A. Zettl, *Formation and dynamics of electron-irradiation-induced defects in hexagonal boron nitride at elevated temperatures*, Nano Lett. **16**, 7142 (2016). DOI

6. T. Cao, **Z. Li**, D. Y. Qiu, and S. G. Louie, *Gate switchable transport and optical anisotropy in 90° twisted bilayer black phosphorus*, Nano Lett. **16**, 5542 (2016). DOI

5. T. Cao, **Z. Li**, and S. G. Louie, *Tunable magnetism and half-metallicity in hole-doped monolayer GaSe*, Phys. Rev. Lett. **114**, 236602 (2015). DOI

4. **Z. Li**†, Z.-M. Li†, H.-Y. Cao, J.-H. Yang, Q. Shu, Y.-Y. Zhang, H. J. Xiang, and X. G. Gong, *What are grain boundary structures in graphene?*, Nanoscale **6**, 4309 (2014). DOI

3. **Z. Li**, M.-H. Whangbo, X. G. Gong, and H. J. Xiang, *Helicoidal magnetic structure and ferroelectric polarization in $Cu_3Nb_2O_8$*, Phys. Rev. B **86**, 174401 (2012). DOI

2. J.-H. Yang, **Z. Li**, X. Z. Lu, M.-H. Whangbo, S.-H. Wei, X. G. Gong, and H. J. Xiang, *Strong Dzyaloshinskii-Moriya interaction and origin of ferroelectricity in Cu_2OSeO_3*, Phys. Rev. Lett. **109**, 107203 (2012). DOI

1. **Z. Li**, J. H. Yang, G. H. Chen, M.-H. Whangbo, H. J. Xiang, and X. G. Gong, *Strong single-ion anisotropy and anisotropic interactions of magnetic adatoms induced by topological surface states*, Phys. Rev. B **85**, 054426 (2012). DOI

Submitted / To Be Submitted

7. Z. Zhu*, C.-E. Hsu*, B. Zhang*, Z. Zheng*, M. Del Ben, A. M. Alvertis, H.-C. Hsueh, and **Z. Li**, *Many-body correlation effects in Fröhlich electron-phonon coupling*, submitted, arXiv:2512.12479 (2025). DOI ***SELECTED***

6. Z. Zheng*, B. Zhang*, J. Ruan, C.-E. Hsu*, Z. Zhu*, S. Pokawanvit, F. H. da Jornada, T. Cao, H.-C. Hsueh, M. Del Ben, Y.-H. Chan, S. G. Louie, and **Z. Li**, *Ab initio time-dependent GW approach for nonequilibrium exciton-phonon coupled dynamics across momentum space*, in preparation (2026). ***SELECTED***

5. K. Zhang, M.-R. Cai, T. Bhagde, L. Lam, B. Zhang*, C.-E. Hsu*, Z. Zhu*, M. Iwai, S. Takahashi, Q. Li, S.-J. Yang, **Z. Li**, and G. R. Fleming, *Vibrational modulation of exciton dynamics in a minimal pigment-protein complex*, submitted (2025).

4. J. Zhou, B. Zhou, C.-E. Hsu*, K. Pettersen*, J. Zhou, Z. Wan, X. Yan, H. Ren, Q. Qian, A. Zhang, B. Peng, R. Tang, X. Pan, Z. Sofer, H.-C. Hsueh, **Z. Li**, Y. Huang, and X. Duan, *Molecular engineering of room-temperature commensurate charge-density-wave phase in 1T-TaS_2/arginine hybrid superlattices*, submitted (2025).

3. D. Yang, J. Liang, H. Hu, N. Kaushal, C.-E. Hsu*, K. Watanabe, T. Taniguchi, J. I. Dadap, **Z. Li**, M. Franz, and Z. Ye, *Correlated insulating states in slow Dirac fermions on a honeycomb moiré superlattice*, submitted, arXiv:2504.17970 (2025). DOI

2. N. M. Tubman, C. J. N. Coveney, C.-E. Hsu*, A. Montoya-Castillo, M. R. Filip, J. B. Neaton, **Z. Li**, V. Vlcek, and A. M. Alvertis, *Theory of ab initio downfolding with arbitrary range electron-phonon coupling*, submitted, arXiv:2502.00103 (2025). DOI

1. C. J. N. Coveney, N. M. Tubman, C.-E. Hsu*, A. Montoya-Castillo, M. R. Filip, J. B. Neaton, **Z. Li**, V. Vlcek, and A. M. Alvertis, *Phonon-mediated electron attraction in $SrTiO_3$ via the generalized Fröhlich and deformation potential mechanisms*, submitted, arXiv:2501.17230 (2025). DOI

INVITED TALKS

- Ultrafast phenomena and light-matter interaction in quantum materials, Zadar, Croatia, September 2026 (upcoming).
- APS Global Physics Summit, Denver, March 2026.
- Seminar, Department of Materials Science and Energy Sciences Institute, Yale University, New Haven, January 2026.
- PQI Workshop, Scalable Analog Quantum Simulations Using 2D Moiré Superlattices, Pittsburgh Quantum Institute and Carnegie Mellon University, Pittsburgh, December 2025.
- CECAM Workshop - Recent advances in first-principles modeling of electron-phonon interactions, Lausanne, Switzerland, December 2025.
- Colloquium, Department of Physics, University at Buffalo, Buffalo, October 2025.
- Seminar, Department of Physics, Sogang University, Seoul, South Korea, June 2025.

- 2025 CBE International Joint Symposium, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea, May 2025.
- Seminar, National Center for Theoretical Sciences, Academia Sinica, Taiwan, May 2025.
- Colloquium, Department of Physics, Tamkang University, Taiwan, May 2025.
- Seminar, Department of Electrical and Computer Engineering, University of California at Riverside, Riverside, May 2025.
- Materials Science and Engineering Colloquium, Department of Applied Physics and Applied Mathematics, Columbia University, New York, November 2024.
- CECAM and Psi-k Workshop - Frontiers in many-body excited-state dynamics from first principles, Lausanne, Switzerland, July 2024.
- CIMTEC 2024 - Global Conference "Materials in an Explosively Growing Informatics World", Montecatini Terme, Italy, June 2024.
- Seminar, Department of Physics, University of California at Santa Cruz, Santa Cruz, May 2024.
- APS March Meeting, Minneapolis, March 2024.
- Solid State Seminar, Department of Applied Physics, Yale University, New Haven, November 2023.
- Condensed Matter Physics Seminar, Department of Physics, University of Texas at Austin, Austin, October 2023.
- Seminar, Oden Institute, University of Texas at Austin, Austin, October 2023.
- 9th International Conference on Energy, Materials, and Photonics (EMP23), National University of Singapore, Singapore, August 2023.
- Conference of Condensed Matter Physics, Liyang, China, August 2023.
- Joint USA-European Symposium on Extreme-Scale Simulations, Machine Learning, and Neutron & X-Ray Scattering for Quantum Materials, Spetses, Greece, July 2023.
- TMS Annual Meeting & Exhibition, Computational Thermodynamics and Kinetics Symposium, San Diego, March 2023.
- Condensed Matter Seminar (290K), Department of Physics, University of California at Berkeley, Berkeley, October 2022.
- Seminar (online), Department of Materials Science and Engineering, University of Wisconsin-Madison, Madison, February 2022.
- Seminar, Department of Mechanical Engineering, University of Rochester, Rochester, February 2022.
- Excited States Mini-Workshop (online), National Center for Theoretical Sciences, Physics Division, Taiwan, February 2022.
- Seminar, Mork Family Department of Chemical Engineering and Materials Science, University of Southern California, Los Angeles, February 2022.
- Condensed Matter Seminar, Department of Physics, University of California at Davis, Davis, October 2021.
- Workshop on Recent Developments in Electronic Structure Methods (online), Flatiron Institute, New York, July 2021.
- APS March Meeting (online), APS Nicholas Metropolis Award talk, March 2021.
- Condensed Matter Physics Seminar (online), Department of Physics, Washington University in St. Louis, November 2020.
- ABC Physics Seminar, Department of Physics, University of Washington, Seattle, February 2020.
- Berkeley Excited States Conference, Oakland, June 2019.

COMMUNITY SERVICE

- Organizer, Workshop on computational materials science and high-performance computing, University of Southern California, 2025 - Present.
- Co-organizer, Scalable Analog Quantum Simulations Using 2D Moiré Superlattices, Pittsburgh, Pennsylvania, December 2025.

- Co-organizer and instructor of *School on Electron-Phonon Physics, Many-Body Perturbation Theory, and Computational Workflows*, 2022 - Present. (link)
- Co-organizer of *Berkeley Excited States Conference (BESC)*, 2021 - Present. (link)
- Co-organizer and instructor of the *Annual BerkeleyGW Tutorial Workshop*, 2015 - Present. (link)
- Main developer of the open-source BerkeleyGW software package, 2015 - Present.
- Co-chair for *Frontiers in Condensed Matter and Materials Physics: A Symposium in Honor of the 75th Birthday of Steven G. Louie*, Berkeley, 2024. (link)
- Member of the Selection Committee for the *APS Nicholas Metropolis Award*, 2022. (link)
- Organizing committee member of *Frontiers in Condensed Matter and Materials Physics: A Scientific Symposium in Honor of the 70th Birthday of Steven G. Louie*, 2019. (link)
- Reviewer for *PRL*, *Nat. Rev. Phys.*, *Nat. Commun.*, *Nano Lett.*, *npj Comput. Mater.*, *Adv. Mater.*, *PRB*, among others.