Jun Li

Assistant Professor
Department of Mechanical Engineering
University of Colorado Boulder, Boulder, Colorado 80309
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RROFESSIONAL EXPERIENCE

Assistant Professor, Department of Mechanical Engineering **Aug. 2025 – Present**
University of Colorado Boulder, Boulder, CO

Assistant Professor, Biomedical Engineering Program **Aug. 2025 – Present**
University of Colorado Boulder, Boulder, CO

EDUCATION & TRAINING

Postdoctoral Fellow, Department of Chemistry **Feb. 2023 – June. 2025**
Northwestern University, Evanston, IL| Advisor: Chad A. Mirkin

Ph.D. in Materials Science and Engineering & 12-month Postdoctoral Training **Sep. 2016 – Dec. 2022**
University of Wisconsin-Madison, Madison, WI | Advisor: Xudong Wang

B.E. in Materials Science and Engineering **Sep. 2012 – June. 2016**
Zhejiang University, Hangzhou, China

RESEARCH INTERESTS

My research combines functional biomaterials design, advanced manufacturing, and biomedical application at multi-scale aiming for tackling grand challenges in healthcare and sustainability. My research goal is to develop materials innovation platforms for the deliberate design and discovery of biomaterials with exceptional optical and electrical properties and further apply them to create biomimetic battery-free intelligent devices for personalized healthcare and therapeutic applications.
Specifically, my research interests include:

- functional biomolecular crystals and nanoscopic arrays for bioelectronics
- high throughput experimentation accelerating biomaterials discovery
- biomimetic multi-functional implantable system by additive manufacturing

SELECTED HONORS & AWARDS

- *IIN Outstanding Researcher Visionary Award,* Northwestern University (2025)
- *IIN Postdoctoral Fellowship,* International Institute for Nanotechnology, Northwestern University (2024, 2025)
- *Best Presentation Award*, 7th International Conference on Nanogenerators and Piezotronics (2024)
- *Best Reviewer Award,* International Journal of Extreme Manufacturing, IOP Publishing (2024)
- *Outstanding Reviewer*, Nanoscale & Nanoscale Advances, Royal Society of Chemistry (2022)
- *Outstanding Student Researcher Award*, Energy Materials and Systems Division, The American Ceramic Society (2021)
- *Turnbull Award for Best Research Paper*, University of Wisconsin-Madison (2020)
- *Johnson Controls Distinguished Fellowship*, University of Wisconsin-Madison (2018)
- *Outstanding Undergraduate Thesis*, Zhejiang University (2016)
- *National Scholarship of China* (Top 1%), Ministry of Education of the People's Republic of China (2015)

PUBLICATIONS

First-Author/Corresponding-Author Publications in Peer-Reviewed Journals:

[1] Yang F.#, **Li Jun# (Contributed Equally)**, Long Y., Zhang Z., Wang L., Sui J., Dong Y., Wang Y., Taylor R., Ni D., Cai W., Wang P., Hacker T., Wang X. Wafer-Scale Heterostructured Piezoelectric Bio-Organic Thin Films. **Science** 2021, 373, 337-342. **(Notable Media Reports: Science, NIBIB News & Events; ESI Highly Cited Paper)**

[2] **Li Jun**, Beights J., Cai T., Li Y., Olivier C., Xie Y., Yang Y., Mrkin C. High Entropy 1D Halide Perovskite Piezoelectrics Discovered by Megalibrary Synthesis and Rapid Nonlinear Optical Screening. **Science Advances** 2026, Accepted.

[3] **Li Jun,** Li Z., Xie Y., Cai T., Shin D., Chen C., Mirkin C. Non-Centrosymmetric Single Crystalline Biomolecular Nano-Arrays for Responsive Electronics. **Advanced Materials**, 2024, 2408153. **(Editor's Choice)**

[4] **Li Jun**, Carlos C., Zhou H., Sui J., Wang Y., Pedraza Z., Yang F., Dong Y., Zhang Z., Hacker T., Liu B., Mao Y., Wang X. Stretchable Piezoelectric Biocrystal Thin Films. **Nature Communications** 2023, 14, 6562. **(ESI Highly Cited Paper)**

[5] **Li Jun**, Yang F., Long Y., Dong Y., Wang Y., Wang X. Bulk Ferroelectric Metamaterial with Enhanced Piezoelectric and Biomimetic Mechanical Properties from Additive Manufacturing. **ACS Nano** 2021, 15, 14903-14914.

[6] **Li Jun**, Hacker T.A., Wei H., Lon, Y., Yang F., Ni D., Rodgers A., Cai W., Wang X. Long-Term In Vivo Operation of Implanted Cardiac Nanogenerators in Swine. **Nano Energy** 2021, 90, 106507.

[7] **Li Jun**, Wang X. Materials Perspectives for Self-Powered Cardiac Implantable Electronic Devices towards Clinical Translation. **Accounts of Materials Research** 2021, 2, 739-750.

[8] **Li Jun**, Long Y., Yang F., Wei H., Zhang Z., Wang Y., Wang J., Li C., Carlos C., Dong Y., Wu Y., Cai W., Wang X. Multifunctional Artificial Artery from Direct 3D Printing with Built-In Ferroelectricity and Tissue-Matching Modulus for Real-Time Sensing and Occlusion Monitoring. **Advanced Functional Materials** 2020, 30, 2002868.

[9] **Li Jun**, Long Y., Yang F., Wang X. Degradable Piezoelectric Biomaterials for Wearable and Implantable Bioelectronics. **Current Opinion in Solid State and Materials Science** 2020, 24, 100806.

[10] **Li Jun**, Long Y., Yang F., Wang X. Respiration‐Driven Triboelectric Nanogenerators for Biomedical Applications. **EcoMat** 2020, 2, e12045.

[11] **Li Jun**, Long Y., Wang X. Polymer-based Nanogenerator for Biomedical Applications. **Chemical Research in Chinese Universities** 2020, 36, 41-54.

[12] **Li Jun**, Kang L., Yu Y., Long Y., Jeffery J. J., Cai W., Wang X. Study of Long-Term Biocompatibility and Bio-safety of Implantable Nanogenerators. **Nano Energy** 2018, 51, 728-735.

[13] **Li Jun#**, Kang L.#, Long Y., Wei H., Yu Y., Wang Y., Ferreira C., Yao G., Zhang Z., Carlos C., German L.,Lan X., Cai W., Wang X. Implanted Battery-Free Direct-Current Micro-Power Supply from in Vivo Breath Energy Harvesting. **ACS Applied Materials & Interfaces** 2018, 10, 42030-42038.

[14] **Li Jun**, Wang X. Research Update: Materials Design of Implantable Nanogenerators for Biomechanical Energy Harvesting. **APL Materials** 2017, 5, 073801.

[15] Dong L., Ke Y., Liao Y., Wang J., Gao M., Yang Y., **Li Jun*(Corresponding Author),** Yang F.* Rational Modeling and Design of Piezoelectric Biomolecular Thin Films Toward Enhanced Energy Harvesting and Sensing. **Advanced Functional Materials** 2024, 2410566.

[16] Zhang J., Li R., Dong L., Ke Y., Liu C., Pei M., Hu K., Ruan J., **Li Jun*,** and Yang F.*, Ultrasensitive biodegradable piezoelectric sensors with localized stress concentration strategy for real-time physiological monitoring. **Chemical Engineering Journal** 2025,160521.

[17] Zhang J.#, Liu C.#, **Li Jun#,** Yu T., Ruan J., Yang F., X Wang. Advanced Piezoelectric Materials, Devices and Systems for Orthopedic Medicine. **Advanced Science** 2024, 2410400.

[18] Ke Y.#, Li T.#, **Li Jun#,** Pei M., Wang X., Xie W., Zhuang S., Ye X., Li Z., Wang Z., and Yang F., Heartbeat electro-language: Exploring piezoelectric technologies for cardiovascular health monitoring. **eScience** 2025, 100436.

Published Book Chapter:

[19] **Li Jun,** Wang X. Triboelectric Nanogenerator as Implantable Devices for Biological Sensing. Handbook of Triboelectric Nanogenerators. Springer International Publishing, 2023, 1-48.

Other Publications in Peer Reviewed Journals:

[20] Mirkin C. A., Petrosko S.H., …, **Li Jun** et al., 33 Unresolved Questions in Nanoscience and Nanotechnology. **ACS Nano** (2025): 31933-31968.

[21] Shin D., Shin Y., Xu D. D., Utama M., Cai T., Ye Z., Oh E., **Li Jun**, Choi D., Hersam M., Rondinelli J., Mirkin C., A-Cation-Dependent Structure–Optical Property Relationships of Halide Perovskite Heterostructures with Complex Interfaces. **Journal of the American Chemical Society** (2025).

[22] Feng Y., Ke Y., Zhang S., **Li Jun**, Dong L., Gao M., Liu J., and Yang F., Hierarchical piezoelectric metasurface for acoustic energy harvesting and noise mitigation. **Device** 2025.

[23] Cai T.#, Shin D.#, **Li Jun**, Xu D.D., Pietryga J., Zhang Y., and Mirkin C.A., Creating chromaticity palettes and identifying white light emitters through nanocrystal megalibraries. **Science Advances** 2025, 11(3): p.eads4453.

[24] Ghosh S.K., Matino F., Favrin F.L., Tonazzini I., D'Orsi R., de la Ossa J.G., Camposeo A., **Li Jun**, Liu W., Hacker T.A., and Pisignano D., Fully biodegradable hierarchically designed high-performance nanocellulose piezo-arrays. **Science Advances** 2025, 11(3): eads0778.

[25] Li T., Yuan Y., Gu L, **Li Jun**, Shao Y., Yan S., Zhao Y., Carlos C., Dong Y., Qian H., Wang X. Ultrastable piezoelectric biomaterial nanofibers and fabrics as an implantable and conformal electromechanical sensor patch. **Science Advances.** 2024, 10(29):eadn8706.

[26] Silva Pedraza Z., Wang Y., Carlos C., Tang Z., **Li Jun**, Cai W., Wang X. Development of Ferroelectric P (VDF-TrFE) Microparticles for Ultrasound-Driven Cancer Cell Killing. **ACS Applied Materials & Interfaces** 2024, 15, 54304-54311.

[27] Dong Y., Liu W., Carlos C., Zhang Z., **Li Jun,** Pan F., Sui J., Wang X. Active Dendrite Suppression by Ferroelectric Membrane Separators in Rechargeable Batteries. **Nano Letters** 2024, 24, 4785-4792

[28] Dong L., **Li Jun**, Zhang H., Gao M., Yang Y., Yang F. Adaptive energy harvesting approach for smart wearables towards human-induced stochastic oscillation, **Journal of Cleaner Production** 2023, 418, 138094.

[29] Liao R., Du X., Zhai Z., Wang Y., **Li Jun.**, Long Y., Jiang Y., Zheng H. Screen-Printed, Biocompatible and Ultrasensitive Sensor for Real-Time Reactive Oxygen Species Detection in Human Sweat. **Talanta** 2024, 126774.

[30] Carlos C., **Li Jun**, Zhang Z., Berg K. J., Wang Y., Wang X. Strain-correlated Piezoelectricity in Quasi-two-dimensional Zinc-oxide Nanosheets. **Nano Letters** 2023, 23, 6148-6155.

[31] Dong Y., Abbasi M., Meng J., German L., Carlos C., **Li Jun**, Zhang Z., Morgan D., Hwang J., Wang X. Substantial lifetime enhancement for Si-based photoanodes enabled by amorphous TiO_2 coating with improved stoichiometry. **Nature Communications** 2023,14,1865.

[32] Sui J., **Li Jun**, Gu L., Schmidt C., Zhang Z., Shao Y., Gazit E., Gilbert P., Wang X. Orientation-Controlled Crystallization of γ-Glycine Films with Enhanced Piezoelectricity. **Journal of Materials Chemistry B** 2022, 10, 6958-6964.

[33] Dong L, Zuo J, Wang T, Xue W, Wang P, **Li Jun**, Yang F. Enhanced piezoelectric harvester for track vibration based on tunable broadband resonant methodology. **Energy** 2022, 124274.

[34] Shao Y., Yan S., **Li Jun**, Silva-Pedraza Z., Zhou T., Hsieh M., Liu B., Li T., Gu L., Zhao Y., Dong Y., Yin B., Wang X. Stretchable Encapsulation Materials with High Dynamic Water Resistivity and Tissue-Matching Elasticity. **ACS Applied Materials & Interfaces** 2022, 14, 18935–18943

[35] Zhao Y., Wang Y., Dong Y., Corey C., **Li Jun**, Zhang Z., Li T., Shao Y., Yan S., Gu L., Wang J., Wang X. Quasi-Two-Dimensional Earth-Abundant Bimetallic Nanomaterials as High-Performance Electrocatalysts for Oxygen Evolution Reactions. **ACS Energy Letters** 2021, 6, 3367-3375.

[36] Liu A.#, Long Y.#, **Li Jun**, Karim A., Wang X., Gibson A.L.F. Accelerated Complete Human Skin Architecture Restoration after Wounding by Nanogenerator-Driven Electrostimulation. **Journal of Nanobiotechnology** 2021, 19, 1-14.

[37] Yang D., Li J., Yang F., **Li Jun**, He L., Zhao H., Wei L., Wang Y., Wang X., Wei Y. A Rigid-Flexible Protecting Film with Surface Pits Structure for Dendrite-Free and High-Performance Lithium Metal Anode. **Nano Letters** 2021, 21, 7063-7069.

[38] Yao, G.#, Kang L.#, Li C., Chen S., Wang Q., Yang J., Long Y., **Li Jun**, Zhao K., Xu W., Cai W., Wang X. A Self-Powered Implantable and Bioresorbable Electrostimulation Device for Biofeedback Bone Fracture Healing. **Proceedings of the National Academy of Sciences of the United States of America** 2021, 118, e2100772118.

[39] Long Y., **Li Jun**, Yang F.; Wang J., Wang X. Wearable and Implantable Electroceuticals for Therapeutic Electrostimulations. **Advanced Science** 2021, 8, 2004023.

[40] Gu L., German L., Li T., **Li Jun,** Shao Y., Long Y., Wang J., Wang X. Energy Harvesting Floor from Commercial Cellulosic Materials for a Self-Powered Wireless Transmission Sensor System. **ACS Applied Materials & Interfaces** 2021, 13, 5133-5141.

[41] Dong Y., **Li Jun,** Yang F., Wang Y., Zhang Z., Wang J., Long Y., Wang X. Bioresorbable Primary Battery Anodes Built on Core-Double-Shell Zinc Microparticle Networks. **ACS Applied Materials & Interfaces** 2021, 13, 14275-14282.

[42] Carlos C., Wang Y., Wang J., **Li Jun,** Wang X. Thickness-Dependent Piezoelectric Property from Quasi-Two-Dimensional Zinc Oxide Nanosheets with Unit Cell Resolution. **Research** 2021.

[43] Ying Z. H., Long Y., Yang, F., Dong Y. T., **Li Jun,** Zhang Z. Y., Wang X. Self-powered liquid chemical sensors based on solid-liquid contact electrification. **Analyst** 2021, 146, 1656-1662.

[44] Zhang Z., Ni D., Wang F., Yin X., Goel S., German L. N., Wang Y., **Li Jun,** Cai W., Wang X. In vitro study of enhanced photodynamic cancer cell killing effect by nanometer-thick gold nanosheets. **Nano Research** 13, 3217-3223.

[45] Long Y.#, Wei H.#, **Li Jun,** Li M. T., Wang Y. Z., Zhang Z. Y., Cao T. Y., Carlos C., German L. G., Jiang D. W., Sun T. W., Engle J. W., Lan X. L., Jiang Y. D., Cai W. B., Wang X. Prevention of Hepatic Ischemia-Reperfusion Injury by Carbohydrate-Derived Nanoantioxidants. **Nano Letters** 2020, 20, 6510-6519.

[46] Yin X.#, Wang Y. Z.#, Chang T. H., Zhang P., **Li Jun,** Xue P. P., Long Y., Shohet J. L., Voyles P. M., Ma Z. Q., Wang X. Memristive Behavior Enabled by Amorphous-Crystalline 2D Oxide Heterostructure. **Advanced Materials** 2020, 32, 2000801.

[47] Wang J., Carlos C., Zhang Z., **Li Jun,** Long Y., Yang F., Dong Y., Qiu X., Qian Y., Wang X. Piezoelectric Nanocellulose Thin Film with Large-Scale Vertical Crystal Alignment. **ACS Applied Materials & Interfaces** 2020, 12, 26399-26404.

[48] Cao S., Kang Z., Yu Y., Du J., German L., **Li Jun,** Yan X., Wang X., Zhang Y. Tailored TiO_2 Protection Layer Enabled Efficient and Stable Microdome Structured p-GaAs Photoelectrochemical Cathodes. **Advanced Energy Materials** 2020, 10, 1902985.

[49] Zhang N., Qin C., Feng T., **Li Jun,** Yang Z., Sun X., Liang E., Mao Y., Wang X. Non-contact cylindrical rotating triboelectric nanogenerator for harvesting kinetic energy from hydraulics. **Nano Research** 2020, 13, 1903–1907.

[50] Li Y., **Li Jun,** Yang W., Wang X., Implementation of ferroelectric materials in photocatalytic and photoelectrochemical water splitting. **Nanoscale Horizons** 2020, 5, 1174-1187.

[51] Yan G., Wang Y., Zhang Z., **Li Jun,** Carlos C., German L. N., Zhang C., Wang J., Voyles P. M., Wang X. Enhanced Ferromagnetism from Organic–Cerium Oxide Hybrid Ultrathin Nanosheets. **ACS Applied Materials & Interfaces** 2019, 11, 44601-44608.

[52] Wang Y. Z., Shi Y. Q., Zhang Z. Y., Carlos C., Zhang C. Y., Bhawnani K., **Li Jun,** Wang J. Y., Voyles P. M., Szlufarska I., Wang X. Bioinspired Synthesis of Quasi-Two-Dimensional Monocrystalline Oxides. **Chemistry of Materials** 2019, 31, 9040-9048.

[53] Yao G.#, Jiang D. W.#, **Li Jun,** Kang L., Chen S. H., Long Y., Wang Y. Z., Huang P., Lin Y., Cai W. B., Wang X. Self-Activated Electrical Stimulation for Effective Hair Regeneration via a Wearable Omnidirectional Pulse Generator. **ACS Nano** 2019, 13, 12345-12356.

[54] Long Y., Yu Y., Yin X., **Li Jun,** Carlos C., Du X., Jian Y., Wang X. Effective anti-biofouling enabled by surface electric disturbance from water wave-driven nanogenerator. **Nano Energy** 2019, 57, 558-565.

[55] Long Y., Wang Y., Cheng Y., Yang X., Yu K., **Li Jun,** Du X., Tang X., Jiang Y. Detection of volatile organosulfur compounds by hydrogen-bond acidic polymer: A combined experimental and theoretical study. **Materials Letters** 2019, 237, 282-285.

[56] Yao G.#, Kang L.#, **Li Jun,** Long Y., Wei H., Ferreira C. A., Jeffery J. J., Lin Y., Cai W., Wang X. Effective weight control via an implanted self-powered vagus nerve stimulation device. **Nature Communications** 2018, 9, 5349.

[57] Long Y.#, Wei H.#, **Li Jun,** Yao G., Yu B., Ni D. L., Gibson A. L. F., Lan X. L., Jiang Y. D., Cai W. B., Wang X. Effective Wound Healing Enabled by Discrete Alternative Electric Fields from Wearable Nanogenerators. **ACS Nano** 2018, 12 , 12533-12540.

[58] Yu Y., Sun C., Yin X., **Li Jun,** Cao S., Zhang C., Voyles P. M., Wang X. Metastable intermediates in amorphous titanium oxide: A hidden role leading to ultra-stable photoanode protection. **Nano Letters** 2018, 18, 5335-5342.

[59] Wu H., Yang Y., Ou Y., Lu B., **Li Jun,** Yuan W., Wang Y., Zhang Z. Early stage growth of rutile titania mesocrystals. **Crystal Growth & Design** 2018, 18, 4209-4214.

[60] Wang M., Zhang J., Tang Y., **Li Jun,** Zhang B., Liang E., Mao Y., Wang X. Air-flow-driven triboelectric nanogenerators for self-powered real-time respiratory monitoring. **ACS Nano** 2018, 12, 6156-6162.

[61] Kim M., Yi S., Kim J. D., Yin X., **Li Jun,** Bong J., Liu D., Liu S. C., Kvit A., Zhou W. D., Wang X. D., Yu Z. F., Ma Z. Q., Li X. L., Enhanced Performance of Ge Photodiodes via Monolithic Antireflection Texturing and alpha-Ge Self-Passivation by Inverse Metal-Assisted Chemical Etching. **ACS Nano** 2018, 12, 6748-6755.

[62] Wu H.#, Li H.#, **Li Jun,** Lu B., Yang Y., Yuan W., Wang Y., Zhang Z. Controllable synthesis of rutile titania with novel curved surfaces. **CrystEngComm** 2015, 17, 7254-7257**.**

[63] Kim M., Yi S., Kim J.D., Yin X., **Li Jun,** Bong J., Liu D., Liu S.C., Kvit A., Zhou W. and Wang X. 2019, May. Germanium photodiodes on pyramidal textured surface by Metal-Assisted Chemical Etching. In CLEO: Applications and Technology (pp. JTh2A-31). Optical Society of America.

PATENTS

Granted

[1] Wang X., **Li Jun**, inventors, Wisconsin Alumni Research Foundation, assignee. 3D Printed and In-situ Poled Flexible Piezoelectric Pressure Sensor. US11849642B2

[2] Wang X., **Li Jun**, inventors, Wisconsin Alumni Research Foundation, assignee. Electric Pulse Generator Harvesting Body Movement Energy. US20210109480A1

[3] Wang X., **Li Jun**, inventors, Wisconsin Alumni Research Foundation, assignee. 3D-Printed Ferroelectric Metamaterial with Giant Piezoelectricity and Biomimetic Mechanical Toughness. US20220254985A1

[4] Wang X., Yang F., **Li Jun**, inventors, Wisconsin Alumni Research Foundation, assignee. Wafer-Scale Piezoelectric Bio-organic Thin Films. US20220231218A1

[5] Wang X., **Li Jun**, inventors, Wisconsin Alumni Research Foundation, assignee. Stretchable Piezoelectric Biocrystal Thin Films. US P230250US01

Filed

[6] Mirkin C., **Li Jun**, Zhang Y., Cai T., inventors, Northwestern University, assignee. High Throughput Second Harmonic Generation Microscopy Accelerating Non-Centrosymmetric Material Discovery.

[7] Mirkin C., Beights J., **Li Jun**, inventors, Northwestern University, assignee. Controlling Entropy-Stabilized High-Entropy 1D Halide Perovskites Structures through Compositional Tuning.

[8] Mirkin C., Han Z., **Li Jun**, inventors, Northwestern University, assignee. Design of Multifunctional Protein Crystals by DNA-Mediated Symmetry Breaking.

INVITED TALKS

[1] **(Invited) Li Jun** Design and Discovery of Unusual Piezoelectric Materials through Unconventional 2D and 3D Printing; Materials Science and Engineering Seminars; 2025; **Rensselaer Polytechnic Institute**

[2] **(Invited) Li Jun** Stretchable piezoelectric biocrystal thin films. Presented at the 5th International Conference on Vibration and Energy Harvesting Applications (**VEH 2024**); June; 2024; Virtual; New Zealand

[3] **(Invited) Li Jun** Long-term in vivo operation of implanted cardiac nanogenerator in swine. Presented at 2022 Swine in Biomedical Research Conference (**SBR**); June; 2022; Madison; WI; USA

[4] **(Invited) Li Jun** Implanted Battery-Free Direct-Current Micro-Power Supply from in vivo Breath Energy Harvesting. Presented at Energy Symposium; 2021 The Materials Science & Technology (**MS&T**) technical meeting and exhibition; October; 2021; Columbus; Ohio; USA **(Outstanding Student Researcher lecture)**

[5] **(Invited) Li Jun,** Wang X. Renewable energy at your feet: exploring potential opportunities for energy harvesting polymeric flooring. Presented at Applied Market Information (**AMI**)'s Polymers in Flooring US Conference; September; 2019; The Westin Buckhead Atlanta; Atlanta; GA; USA

[6] **(Invited) Li Jun**, Yu Y., Wang X. Stability, biocompatibility and in vivo performance of implantable nanogenerators. Presented at Proceedings of the American Society of Mechanical Engineers (**ASME**) 2017 International Design Engineering

Technical Conferences & Computers and Information in Engineering Conference; August; 2017; Cleveland; Ohio; USA

[7] **(Invited) Li Jun** Advanced Electromechanical Biomaterials for Biomedical Applications. Presented at Tang Group; **University of Michigan**; May; 2024; Virtual; USA

[8] **(Invited) Li Jun** Synthesis, Manufacturing, and Application of Electromechanically Responsive Materials Across Multiscale. Presented at Center of Electron Microscopy; **Zhejiang University**; September; 2024; Virtual; China

[9] **(Invited) Li Jun** Advanced Electromechanical Biomaterials for Smart Tissue-Mimetic Bioelectronics. Presented at the Computational Design & Fabrication Group (CDFG); **Massachusetts Institute of Technology**; June; 2022; Virtual; USA

TEACHING

Instructor of Electromechanical Biomaterials (CU Boulder, MCEN 4228-5228 & BMEN 4519) 2026 Spring

- Taught undergraduate and graduate students electromechanical materials, manufacturing, and biomedical applications

Instructor of Materials Composition and Structure (CU Boulder, MSEN 5470) 2025 Fall

- Taught graduate students materials structures, materials growth, and general materials.

American Chemical Society (ACS) Science Coaches 2022

- Virtually supported a teacher at Granada Huntley East Chain Middle/High School to advance science education.

SERVICE

Internal Grant Reviewer for Research & Innovation Seed Grants of CU Boulder 2025

- Reviewed full proposals submitted to the "Biomedical-Life Sciences" category

Session Chair of 7th International Conference of Nanogenerator and Piezotronics 2024

- Organized and facilitated talks and led discussions on piezotronics and applications.

Guest Editors of *Nano Trends*, *MedMat, Frontiers in Chemistry,* and *Micromachines* 2021-Present

- Handled manuscripts and proposed special research issues related to piezoelectric biomaterials and soft electronics

Reviewer 2020-Present

- Served as a reviewer for ***30*** journals including:
  Nature Communications, Advanced Functional Materials, ACS Nano, Nano Letters, ACS Applied Materials & Interfaces, 3D Printing and Additive Manufacturing, ACS Sustainable Chemistry & Engineering, ACS Applied Nano Materials, Crystal Growth & Design, ACS Biomaterials Science & Engineering, ACS Applied Bio Materials, Journal of Nanobiotechnology, International Journal of Extreme Manufacturing, Materials Research Letters, Renewable Energy, APL Materials, Systems, Nanomaterials, Applied Nanoscience, Journal of Applied Physics, Applied Sciences, Bioengineering, Smart Materials and Structures, Journal of Materials Chemistry A, Nanoscale, Journal of Materials Chemistry C, Nanoscale Advances, Materials Today Energy, Nano Trends, IEEE Transactions on Intelligent Transportation, IEEE Sensors Journal