**邓丽军**



**性别：男 导师类型：无**

**职称：讲师 学科方向：微纳米力学**

**学历：博士研究生 电子邮件：lijun\_deng@ncu.edu.cn**

**个人简介：**

本人一直致力于固液界面微纳米力学的前沿科学问题展开研究，擅长力学与材料科学交叉的多尺度模拟计算。已发表SCI论文十余篇，其中包括综合类顶级期刊Advance Materials；表界面顶级期刊Applied Surface Science；力学、物理、化学交叉Top期刊Physical Chemistry Chemical Physics等，参与多项国家自然科学基金面上项目，主持江西省自然科学基金青年项目一项。

**讲授课程：**

理论力学、材料力学、弹性力学等

**科研项目/课题（限5项选填）**：

(1)国家自然科学基金面上项目(22278308)，基于面内应力调控锂沉积的力学-电化学耦合机制研究及相应锂电极构筑，2023-01-01至2026-12-31，在研，参与

(2)江西省自然科学基金青年项目(20232BAB211016)，基于应变和键合特性耦合调控氟化石墨烯-水界面摩擦的机理研究，2024-01-01至2026-12-31，在研，主持

**论文专著（限10项选填）：**

(1) Chun Li, Lijun Deng\*. Solving inverse problems with sparse noisy data, operator splitting and physics-constrained machine learning, Nonlinear Dynamics, 2024, 112: 2021-2036. SCI

(2) Lijun Deng\*, Hai Qiu, Ben Wang, Zaoyang Guo\*. Adjustable high-speed and directional diffusion of water nanodroplets confined by graphene sheets, Physical Chemistry Chemical Physics, 2023, 25: 4266-4275. SCI

(3) Lijun Deng, Jingyi Li, Shan Tang\*, Zaoyang Guo\*. Diffusion of water nanodroplets on graphene with double-vacancy: the constraining effects of defect. Applied Surface Science. 2022. 151235. SCI

(4) Lijun Deng, Ling Wan, Nian Zhou, Shan Tang\*, Ying Li\*. Anisotropy diffusion of water nanodroplets on phosphorene: effects of pre-compressive deformation and temperature. Computational Materials Science, 2020, 109623. SCI

(5) Lijun Deng, Nian Zhou, Shan Tang\*, Ying Li\*. Improved Dreiding force field for single layer black phosphorus. Physical Chemistry Chemical Physics. 2019, 21, 16804-16817. SCI

(6) Shan Liu#, Lijun Deng#, Wenqing Guo, Chanyuan Zhang, Xingjiang Liu, Jiayan Luo\*. Bulk Nanostructured Materials Design for Fracture-Resistant Lithium Metal Anodes. Advanced Materials, 2019, 30, 1807585. (共同一作) SCI

(7) Wenjing Tang, Lijun Deng, Longyuan Guo, Shoubin Zhou, Qinhai Jiang, Jianyan Luo\*. Reversible aqueous aluminum metal batteries enabled by a water-in-salt electrolyte. Green Energy & Environment, 2023. SCI

(8) Fei He, Wenjing Tang, Xinyue Zhang, Lijun Deng, Jiayan Luo\*. High Energy Density Solid State Lithium Metal Batteries Enabled by Sub-5 μm Solid Polymer Electrolytes. Advanced Materials, 2021, 2105329. SCI

(9) Haoqing Tian, Shan Liu\*, Lijun Deng, Ling Wang, Lei Dai\*. New-type Hf-based NASICON electrolyte for solid-state Na-ion batteries with superior long-cycling stability and rate capability. Energy Storage Materials, 2021, 39, 232-238. SCI

(10) Aoxuan Wang, Qibo Deng, Lijun Deng, Xuze Guan, Jiayan Luo\*. Eliminating Tip Dendrite Growth by Lorentz Force for Stable Lithium Metal Anodes. Advanced Functional Materials. 2019, 29, 1902630. SCI