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教育背景

博士 (PhD) —2020.09 —2024.09 杜克大学 (Duke University), 达勒姆, 美国

- 专业: 机械工程, 导师: John Dolbow

硕士 (MS) —2017.09 —2020.03 上海交通大学, 上海, 中国

- 专业: 机械工程, 导师: 沈泳星

学士 (BE) —2013.09 —2017.07 吉林大学, 长春, 中国

- 专业：材料科学与工程

工作经历

博士后研究员—2024.10 —2025.10 约翰霍普金斯大学 (Johns Hopkins University), 巴尔的摩, 美国

研究助理—2023.05 —2023.08 阿贡国家实验室 (Argonne National Lab), 莱蒙特, 美国

助教—2020.08 —2021.05 昆山杜克大学, 昆山, 中国

发表论文

Kumar, A., **Liu, Y.**, Dolbow, J. E., & Lopez-Pamies, O. (2024). The strength of the brazilian fracture test. *Journal of the Mechanics and Physics of Solids*, *182*, 105473. https://doi.org/10.1016/j.jmps.2023.105473

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Xiang, G., Chen, J., Ho, D., Sankin, G., Zhao, X., **Liu, Y.**, Wang, K., Dolbow, J., Yao, J., & Zhong, P. (2023). Shock waves generated by toroidal bubble collapse are imperative for kidney stone dusting during holmium:YAG laser lithotripsy. *Ultrasonics Sonochemistry*, *101*, 106649. https://doi.org/10.1016/j.ultsonch.2023.106649

Chen, C., **Liu, Y.**, He, X., Li, H., Chen, Y., Wei, Y., Zhao, Y., Ma, Y., Chen, Z., Zheng, X., & Liu, H. (2021). Multiresponse shape-memory nanocomposite with a reversible cycle for powerful artificial muscles. *Chem. Mater.*, *33*(3), 987–997. https://doi.org/10.1021/acs.chemmater.0c04170

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Liu, Y., Weng, K., & Shen, Y. (2020). A manifold learning approach to accelerate phase field fracture simulations in the representative volume element. *SN Applied Sciences*, *2*(10), 1682. https://doi.org/10.1007/s42452-020-03468-6

学术会议报告

Kumar, A., Liu, C., **Liu, Y.**, Dolbow, J., & Lopez-Pamies, O. (2023). *The revisited phase-field approach to brittle fracture: Application to the diametral compression and wing-crack problems.* The 16th world congress on computational mechanics (WCCM16).

Liu, Y., Lopez-Pamies, O., & Dolbow, J. E. (2023). *A phase-field approach for the nucleation and propagation of dynamic cracks.* The 16th world congress on computational mechanics (WCCM16).

Liu, Y., Zhong, P., Lopez-Pamies, O., & Dolbow, J. E. (2023). *A model-based simulation framework for coupled acoustics, elastodynamics, and damage with application to nano-pulse lithotripsy.* The 17th united states national congress on computational mechanics (USNCCM17).

Liu, Y., Claus, S., Kerfriden, P., Chen, J., Zhong, P., & Dolbow, J. E. (2022). *Model-based simulations of pulsed laser ablation using a CutFEM method.* The 15th world congress on computational mechanics (WCCM15).

Liu, Y., Cheng, C., & Shen, Y. (2019). *A homogenization-based phase field approach to fracture.* The 15th united states national congress on computational mechanics (USNCCM15).

Liu, Y., Cheng, C., & Shen, Y. (2019). *A micromechanics-based phase field approach to fracture.* The 2nd international conference of mechanics of advanced materials and structures.

Liu, Y., Weng, K., & Shen, Y. (2019). *A manifold learning approach for multiscale phase field evolution for fracture.* The international conference on data driven computing and machine learning in engineering.