



申文凯 硕士生导师

职 称：副教授

职 务：无

研究方向：土木工程材料

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个人简介

主要从事水泥基材料流变调控、混凝土泵送、混凝土 3D 打印等方面的研究，主要承担《建筑材料》的教学任务。主持省部级课题、省重点实验室开放课题、教育部协同育人、企业研发等项目 6 项，作为项目骨干参与国家重大研发计划 2 项。在《Cement & concrete composite》《Construction and building materials》《Cement and concrete research》等主流期刊发表 SCI、中文核心论文 10 余篇。曾多次担任 Cement & concrete composite、Construction and building materials、Journal of Sustainable Cement-Based Materials 期刊审稿人。

学习经历

- 2011.09-2015.07，青岛理工大学土木工程学院，土木工程专业，工学学士
- 2015.09-2017.07，湖南大学土木工程学院，土木工程专业，工学硕士
- 2017.09-2021.12，湖南大学土木工程学院，土木工程专业，工学博士

工作经历

- 2022.03-至今，青岛理工大学滨海人居环境学术创新中心，副教授

学术兼职

教科研项目

- 2024.01-2026.12, 3D 打印海水混凝土流变特性与可打印性调控原理, 山东省自然科学基金青年项目, 主持
- 2023.11-2026.09, 盾构法海底隧道低碳长寿命混凝土制备与应用关键技术, 参与

学术成果

代表性著作、论文:

- [1] **W. Shen**, Z. Jin, Q. Yuan, Y. Ji, R. Zeng, Y. Wu, L. Lao, C. Shi*, Comparative study on the performance of fresh concrete comprising manufactured sand vs. river sand during full-scale long-distance pumping, *Construction and Building Materials* 452 (2024) 138953.
- [2] M. Zhang, **W. Shen***, Jin Z, et al. Understanding the time-dependent rheological behavior of seawater mixed cement paste with fly ash[J]. *Construction and Building Materials*, 2024, 451: 138910.
- [3] **W. Shen**, H. Cui, D. Jiao, Experimental observations on factors influencing shear-thickening characteristics of cement-based materials, *J. Build. Eng.* 86 (2024) 108620.
- [4] F. Li, **W. Shen**, Q. Yuan, Z. Chen, S. Zhang, Y. Ji, R. Zeng, Y. Wu, L. Lao, C. Shi, Hardened property changes due to the pumping process of self-consolidating concrete, *Cement and Concrete Composites* (2024) 105481. <https://doi.org/10.1016/j.cemconcomp.2024.105481>. (IF=10.9)
- [5] F. Li, **W. Shen**, Y. Ji, R. Zeng, Y. Wu, L. Lao, C. Shi, Q. Yuan, Prediction of nonlinear pumping pressure loss of concrete induced by rheological property changes, *Cement and Concrete Research* 169 (2023)
- [6] **W. Shen**, Q. Yuan, C. Shi, Y. Ji, R. Zeng, W. Li, Y. Wu, L. Lao, Z. Chen, F. Li, How do discharge rate and pipeline length influence the rheological properties of self-consolidating concrete after pumping ?, *Cement and Concrete Composites* 124 (2021) 104231107182.
- [7] **W. Shen**, C. Shi, K. Khayat, Q. Yuan, Y. Ji, R. Zeng, Change in fresh properties of high-strength concrete due to pumping, *Construction and Building Materials* 300 (2021) 1–32.
- [8] **W. Shen**, Q. Yuan, C. Shi, Y. Ji, R. Zeng, Z. Chen, Influence of pumping on early hydration of binders and its relation to the rheology of high-strength concrete, *Construction and Building Materials* 302 (2021) 124095.

- [9] 申文凯,元强,纪友红,曾荣,李巍,李富民,史才军.剪切速率和温度对低水胶比水泥浆流变性能的影响[J].硅酸盐通报,2023,42(01):48-56+65. (F5000 论文)
- [10] 申文凯,元强,纪友红,曾荣,李巍,李富民,史才军.搅拌程序对高性能混凝土泵送性能的影响[J].硅酸盐通报,2023,42(03):878-887

 荣誉奖励
