Geng Niu

www.niugens.com ⋄ gengniu0712@gmail.com ⋄ Google Scholar

3D printed concrete, Low-density Concrete, Zero-net

EDUCATION

Southeast University

- M.S. in Material Science and Engineering   2021 - present
  (Advisor: Prof. Yamei Zhang) (Average Score: 89.35)
- B.S. in Material Science and Engineering   2017 - 2021
  (GPA: 3.7/4.0, Average Score: 88.55)

RESEARCH EXPERIENCES

Jiangsu Key Laboratory of Construction Materials, Southeast University   12/2018 – present

Advisor: Prof. Yamei Zhang

Research Topics: 3D printed concrete[2] [4], Low-density Concrete[1] [3]

Prof. Peigen Zhang's Lab, Southeast University   12/2019 – 10/2020

Advisor: Prof. Peigen Zhang

Research Topics: MAX-Diamond Complex

PUBLICATIONS ⓘ

Journal Articles ([†] indicates co-first author, * indicates correspondent author)

1. Liu, Chao, Yuning Chen, Zedi Zhang, **Geng Niu**, Yuanliang Xiong, Lei Ma, Qi Fu, Chun Chen, Nemkumar Banthia, & Yamei Zhang*. (2022). Study of the Influence of Sand on Rheological Properties, Bubble Features and Buildability of Fresh Foamed Concrete for 3D Printing. *Construction and Building Materials*, 356, 129292.

2. Ma, Lei, Qing Zhang, Hélène Lombois-Burger, Zijian Jia, Zedi Zhang, **Geng Niu**, & Yamei Zhang*. (2022). Pore Structure, Internal Relative Humidity, and Fiber Orientation of 3D Printed Concrete with Polypropylene Fiber and Their Relation with Shrinkage. Journal of Building Engineering, 61, 105250.

Manuscripts Drafted and Under Preparation

3. **Geng Niu**, Liu Chao, & Yamei Zhang*. (manuscript drafted). Excess Paste Thickness, Rheology and EPS Distribution of 3D-Printed EPS Lightweight Concretes with Varying Densities.

4. **Geng Niu**, & Yamei Zhang*. (in prep). Influencing Factors and Analysis of Excess Paste Layer.

HONORS & AWARDS

- Changwen Miao Scholarship, Southeast University   2019 – 2020
- Excellent League Member, Southeast University   2018

PROFESSIONAL EXPERIENCES

Teaching Assistant

- Cement Chemistry   2022

Equipment Operator & Data Analyst

- Y.CT precision, X-ray tomography scanner, Southeast University   2022 - present
- Zeiss Xradia 510 Versa, 3D X-ray microscope, Southeast University   2022 - present

Additional Information

GRE Overall Score: 330 (March 2023)

- Verbal: 160, Quantitative: 170, Analytical Writing: 3.5

TOEFL Overall Score: 94 (July 2023)

- Reading: 28, Listening: 23, Speaking: 19, Writing: 24