# 个人简历

## (一) 基本信息

姓名	南文光	性别	男	民族	汉
工作单位	南京工业大学机械与动力工程学院			职称	副教授
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### (二) 研究方向

- 1. 颗粒流动力学:揭示颗粒形状和黏附性对颗粒流变特性的影响机制,完善不同流态中颗粒物质动力学本构方程,并发展基于该本构方程的颗粒流动的连续介质模拟方法;
- 2. 增材制造:探究狭窄通道、高剪切应变率、高黏附性和气流卷吸复杂条件下的颗粒动力学机理;发展以超薄粉层为研究对象的粉体铺粉性测试和表征技术;探究超薄粉层在狭窄间隙区的颗粒动态堵塞问题,并推进新的高效铺粉技术。

## (三)教育经历

- 1. 2015/10-2016/10, 英国利兹大学, 颗粒科学与技术研究所, 博士, 导师: Mojtaba Ghadiri 院士 (FREng, CEng, FIChemE, https://ghadiri-group.leeds.ac.uk/)
- 2. 2011/09-2017/06, 西安交通大学, 动力工程及多相流国家重点实验室, 博士, 导师: 王跃 社教授(郭烈锦院士团队)
- 3. 2007/09-2011/06, 河海大学, 热能与动力工程, 学士

#### (四)科研与学术工作经历

- 1. 2021/01-至今, 英国利兹大学, Virtual Visiting Researcher, Mojtaba Ghadiri 院士
- 2. 2017/09-至今,南京工业大学,机械与动力工程学院,助理教授/副教授
- 3. 2018/06-2018/09, 利兹大学, 化学过程工程学院, 访问学者, Mojtaba Ghadiri 院士

#### (五)科研项目(课题)情况

- 1. 国家自然科学基金,51806099,颗粒形状对颗粒物质流变特性的影响机制研究,2019/01-2021/12,完成
- 2. 国际合作: 参与利兹大学 Mojtaba Ghadiri 院士主持的 HP 3D 打印粉体技术项目以及 EPSRC Future Formulation Programme (EP/N025261/1)

#### (六)期刊论文(一作SCI论文14篇,中科院2区Top)

[1] **Nan Wenguang**, Goh Wei Pin, Rahman Mohammad Tarequr. Elasto-plastic and adhesive contact: An improved linear model and its application. *Powder Technology*, 2022, 407: 117634. URL: https://doi.org/10.1016/j.powtec.2022.117634

- [2] **Nan Wenguang**, Gu Yiqing. Experimental investigation on the spreadability of cohesive and frictional powder. *Advanced Powder Technology*, 2022, 33:103466. URL: https://doi.org/10.1016/j.apt.2022.103466
- [3] **Nan Wenguang**, Pasha Mehrdad, Ghadiri Mojtaba. Rheology of a dense granular bed penetrated by a rotating impeller. *Powder Technology*, 2021, 386: 60-69. URL: https://doi.org/10.1016/j.powtec.2021.03.029
- [4] **Nan Wenguang**, Gu Yiqing. Stress analysis of blade rheometry by DEM simulations. *Powder Technology*, 2020, 376: 332-341. URL: https://doi.org/10.1016/j.powtec.2020.08.026
- [5] **Nan Wenguang**, Pasha Mehrdad, Ghadiri Mojtaba. Effect of gas-particle interaction on roller spreading process in additive manufacturing. *Powder Technology*, 2020, 372: 466-476.
  - URL: https://doi.org/10.1016/j.powtec.2020.05.119
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  - URL: https://doi.org/10.1016/j.powtec.2020.04.033
- [7] **Nan Wenguang**, Pasha Mehrdad, Ghadiri Mojtaba. Numerical simulation of particle flow and segregation during roller spreading process in additive manufacturing. *Powder Technology*, 2020, 364: 811-821. URL: https://doi.org/10.1016/j.powtec.2019.12.023
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  URL: https://doi.org/10.14356/kona.2020018
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- [11] **Nan Wenguang**, Pasha Mehrdad, Bonakdar Tina, Lopez Alejandro, Zafar Umair, Nadimi Sadegh, Ghadiri Mojtaba. Jamming during particle spreading in additive manufacturing. *Powder Technology*, 2018, 338: 253-262. Google Scholar 被引次数超过 100. URL: https://doi.org/10.1016/j.powtec.2018.07.030
- [12] **Nan Wenguang**, Ghadiri Mojtaba, Wang Yueshe. Analysis of powder rheometry of FT4: Effect of particle shape. *Chemical Engineering Science*, 2017, 173: 374-383. URL: https://doi.org/10.1016/j.ces.2017.08.004
- [13] Nan Wenguang, Ghadiri Mojtaba, Wang Yueshe. Analysis of powder rheometry of FT4: Effect of air flow. *Chemical Engineering Science*, 2017, 162: 141-151. URL: https://doi.org/10.1016/j.ces.2017.01.002
- [14] **Nan Wenguang**, Vivacqua Vincenzino, Ghadiri Mojtaba, Wang Yueshe. Numerical analysis of air effect on the powder flow dynamics in the FT4 powder rheometer. *EPJ Web of Conferences*, 2017, 140: 03036. URL: https://doi.org/10.1051/epjconf/201714003036
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- [19] **南文光**,顾益青. 基于离散元方法的金属粉末铺粉动力学研究. *过程工程学报*, 2020, 20(11): 1313-1320.
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