个 人 简 历

<table>
<tr><td colspan="4">（一）基本信息</td><td rowspan="5">  </td></tr>
<tr><td>姓 名</td><td>南文光</td><td>个人主页</td><td>https://nan-group-academic.netlify.app/</td></tr>
<tr><td>工作单位</td><td colspan="2">南京工业大学机械与动力工程学院</td><td>职称</td><td>副教授</td></tr>
<tr><td>邮箱</td><td colspan="2">nanwg@njtech.edu.cn</td><td>邮编</td><td>211816</td></tr>
<tr><td>地址</td><td colspan="3">江苏省南京市江北新区浦珠南路 30 号</td></tr>
<tr><td colspan="5">（二）研究内容</td></tr>
<tr><td colspan="5">1. 研究方向：颗粒多相流动力学；数值模拟（DEM\CFD\AIMD 等）；机器/深度学习；粉体测量与表征；气液两相流动与传热
2. 研究领域：先进制造中颗粒/流体的流动与传热；双碳中新能源利用（储能/风电/核电）</td></tr>
<tr><td colspan="5">（三）教育经历</td></tr>
<tr><td colspan="5">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</td></tr>
<tr><td colspan="5">（四）科研与学术工作经历</td></tr>
<tr><td colspan="5">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</td></tr>
<tr><td colspan="5">（五）科研项目（课题）情况</td></tr>
<tr><td colspan="5">1. 国家自然科学基金-青年项目，51806099，颗粒形状对颗粒物质流变特性的影响机制研究，2019-01 至 2021-12，26 万元，主持。
2. 国际合作-利兹大学 Mojtaba 院士：a) HP Consultancy, Single Particle and Bulk Powder Characterisation of Gas-Atomised Metal Powders and Associated Analysis of Roller Spreading by Discrete Element Method，2018-2021, international collaborator；b) EPSRC Future Formulation Programme, Virtual Formulation Laboratory for prediction and optimisation of manufacturability of advanced solids based formulations, EP/N025261/1, 2017-2021, £1.74 Million, participate；c) Engineering Prioritisation Programme, Modelling, Validation and Application of Triboelectrification，EP/X023389/1，2023-2026, £1.45 Million, international collaborator.</td></tr>
</table>

3. 国家自然科学基金-面上项目，32272358，基于玻璃化转变理论的果粉“分子-颗粒-颗粒群”多尺度吸湿机制研究，2023-01 至 2026-12，54 万元，参与（主持单位为中国农业科学院原子能利用研究所），项目组所有人员中排名第 2，承担项目 1/4 的研究内容和研究经费：颗粒吸湿模拟以及水分在颗粒群中的迁移规律。

4. 国家自然科学基金-叶企孙联合基金项目，U2241248，高强铝合金同轴送粉搅拌摩擦固相增材制造宏/微观组织演变与形性协同调控研究，2023-01 至 2026-12，259 万元，参与（主持单位为西北工业大学），项目组所有人员中排名第 5，承担子课题中 1/3 的研究内容：颗粒热塑性流动以及传热传质

（六）期刊论文（独立一作/通讯 SCI 论文（JCR 一区）20+篇）

[1] **Wenguang Nan***, Mehrdad Pasha, Umair Zafar, Sadegh Nadimi, Wei Pin Goh, Mojtaba Ghadiri. Characterisation of gas-atomised metal powders used in binder jet 3D printing. *Powder Technology*, 2024, 436: 119471. URL: https://doi.org/10.1016/j.powtec.2024.119471

[2] **Wenguang Nan***, Lanzhou Ge, Wenbin Xuan, Yiqing Gu. Transient jamming of granular flow by blade spreading. *Powder Technology*, 2024, 431: 119057. URL: https://doi.org/10.1016/j.powtec.2023.119057

[3] Lanzhou Ge, Rui Xu, **Wenguang Nan***. Wear of blade spreader during powder spreading in additive manufacturing. *Tribology International*, 2023, 188: 108818. URL: https://doi.org/10.1016/j.triboint.2023.108818

[4] Rui Xu, **Wenguang Nan***. Analysis of the metrics and mechanism of powder spreadability in powder-based additive manufacturing. *Additive Manufacturing*, 2023, 71: 103596. URL: https://doi.org/10.1016/j.addma.2023.103596

[5] **Wenguang Nan***, Arifur Rahman Md, Lanzhou Ge, Zhonggang Sun. Effect of plastic deformation on the spreadability of cohesive powder in the spreading process. *Powder Technology*, 2023, 425: 118577. URL: https://doi.org/10.1016/j.powtec.2023.118577

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[7] **Wenguang Nan***, Wei Pin Goh, Tarequr Mohammad Rahman. 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

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[11] **Wenguang Nan**, Mehrdad Pasha, Mojtaba Ghadiri*. 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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