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核科学与工程学院 院长、教授、博士生导师；清华大学学士、硕士，美国加州大学伯克利分校博士，美国洛斯阿拉莫斯国家实验室博士后；教育部高等学校核工程类专业教学指导委员会委员。

**研究方向：**

① 反应堆热工水力学；

② 液态铅或铅铋合金的固态氧控技术；

③ 小型堆安全壳传热、抑压、氢控及气溶胶过滤技术。

**代表性科研项目：**

① 作为负责人，主持国家重大科研仪器研制项目“液态铅铋合金综合氧控系统的研制”；

② 作为负责人，主持国家自然科学基金重点项目“先进小型堆放射性气溶胶控制及其相关问题研究”；

③ 作为负责人，主持国家自然科学基金重大研究计划项目“乏燃料嬗变系统中液态金属的固态氧控与纯化的实验研究”。

**科研奖励及荣誉：**

① 获2018年河北省科学技术二等奖（排名第一）；

② 入选2009年度教育部新世纪优秀人才；

③国际期刊《Annals of Nuclear Energy》编委。

**代表性学术论文（第一或通讯作者）：**

[1] Fenglei Niu, Xiaochao Du, Houbo Qi, et al., “Modeling analyses of radioactive aerosol flow and collection in mesoscopic impactor filters,” Progress in Nuclear Energy 88 (2016) 147-155.

[2] Fenglei Niu, Weiqian Zhuo, et al., “The studies of mixing and thermal stratification in SMR containments,” Nuclear Engineering and Design 298 (2016) 14–24.

[3] Jun Liu, Fenglei Niu\*, Bilal Ahmad, et al., “Flow characteristics in the containment cooling pools of small modular reactors”, International Journal of Heat and Mass Transfer 133 (2019) 445–460.

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