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学位职称：博士后/副教授

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主讲课程：新能源材料，大学物理实验

科研方向：新能源材料与器件，光电催化与新能源材料



### 教育工作简历：

本科 2009.09-2013.06 沈阳师范大学 物理学专业

博士 2013.09-2018.06 吉林大学 凝聚态物理专业

博士后 2018.07-2020.11 南方科技大学 材料科学与工程

### 学术成果：

#### 【获奖】

鞍山市优秀青年岗位工作能手，2022-2023 年度考核优秀

#### 【代表性学术论文】

1、Yaowei Liu, Yuchen Cao, Shisheng Sun, Chunling Lu<sup>\*</sup>, Biao Wang, Gaobin Liu, Shoushan Gao, **Bingbing Niu<sup>\*</sup>**, Novel CO<sub>2</sub>-tolerant Co-based double perovskite cathode for intermediate temperature solid oxide fuel cells, Journal of the European Ceramic Society 43 (2023) 1028-1038.

2、Dong Guo, **Bingbing Niu<sup>\*</sup>**, Biao Wang<sup>\*</sup>, et al. Preparation and characterization of highly active and stable NdBaCo<sub>0.8</sub>Fe<sub>0.8</sub>Ni<sub>0.4</sub>O<sub>5+δ</sub> oxygen electrode for solid oxide fuel cells, Electrochimica Acta 439 (2023) 141601.

3、Wendi Yi, Shoushan Gao<sup>\*</sup>, **Bingbing Niu<sup>\*</sup>**, et al. Highly active and stable BaCo<sub>0.8</sub>Zr<sub>0.1</sub>Y<sub>0.1</sub>O<sub>3-δ</sub> cathode for intermediate temperature solid oxide fuel cells, Journal of the European Ceramic Society 42 (2022) 2860-2869.

4、Jie Kang, **Bingbing Niu<sup>\*</sup>**, Biao Wang<sup>\*</sup>, et al. Performance optimization of Ca and Y co-doped CeO<sub>2</sub>-based electrolyte for intermediate-temperature solid oxide fuel cells, Journal of Alloys and Compounds 913 (2022) 165317.

5、Chengyi Wen, Kai Chen, Dong Guo, Wen Yang, Shoushan Gao, Chunling Lu, **Bingbing Niu<sup>\*</sup>**, Biao Wang<sup>\*</sup>, High performance and stability of PrBa<sub>0.5</sub>Sr<sub>0.5</sub>Fe<sub>2</sub>O<sub>5+δ</sub> symmetrical electrode for intermediate temperature solid oxide fuel cells, Solid State Ionics 386 (2022) 116048.

6、**Bingbing Niu**, Baomin Xu<sup>\*</sup>, et al. Polybenzimidazole and ionic liquid composite membranes for high temperature polymer electrolyte fuel cells, *Solid State Ionics* 361 (2021) 115569.

7、**Bingbing Niu**, Baomin Xu<sup>\*</sup>, et al. In-situ growth of nanoparticles-decorated double perovskite electrode materials for symmetrical solid oxide cells, *Applied Catalysis B: Environmental* 270 (2020) 118842.

8、**Bingbing Niu**, Fangjun Jin, Jincheng Liu, Tao Feng, Tianmin He<sup>\*</sup>, Highly carbone- and sulfur- tolerant Sr<sub>2</sub>TiMoO<sub>6</sub> double perovskite anode for solid oxide fuel cells, *International Journal of Hydrogen Energy*, 44 (2019) 20404 – 20415. ISSN: 0360-3199.

9、**Bingbing Niu**, Fangjun Jin, Xin Yang, Tao Feng, Tianmin He<sup>\*</sup>, Resisting coking and sulfur poisoning of double perovskite Sr<sub>2</sub>TiFe<sub>0.5</sub>Mo<sub>0.5</sub>O<sub>6-δ</sub> anode material for solid oxide fuel cells. *International Journal of Hydrogen Energy*, 43 (2018) 3280-3290. ISSN: 0360-3199.

10、**Bingbing Niu**, Fangjun Jin, Tao Feng, Yu Shen, Jincheng Liu, Tianmin He<sup>\*</sup>, Pd-impregnated Sr<sub>1.9</sub>VMoO<sub>6-δ</sub> double perovskite as an efficient and stable anode for solid-oxide fuel cells operating on sulfur-containing syngas, *Electrochimica Acta*, 274 (2018) 91–102. ISSN: 0013-4686.

11、**Bingbing Niu\***, Fangjun Jin, Tao Feng, Leilei Zhang, Ying Zhang, Tianmin He<sup>\*</sup>, A-site deficient (La<sub>0.6</sub>Sr<sub>0.4</sub>)<sub>1-x</sub>Co<sub>0.2</sub>Fe<sub>0.6</sub>Nb<sub>0.2</sub>O<sub>3-δ</sub> symmetrical electrode materials for solid oxide fuel cells, *Electrochimica Acta*, 270 (2018) 174–182. ISSN: 0013-4686.

12、**Bingbing Niu\***, Fangjun Jin, Leilei Zhang, Pengfei Zhang, Tianmin He<sup>\*</sup>, Performance of double perovskite symmetrical electrode materials Sr<sub>2</sub>TiFe<sub>1-x</sub>Mo<sub>x</sub>O<sub>6-δ</sub> (x = 0.1, 0.2) for solid oxide fuel cells, *Electrochimica Acta*, 263 (2018) 217–227. ISSN: 0013-4686.

### 【主要科研项目】

1、激光辅助制备高性能对称固体氧化物电池电极材料及影响机制研究，项目编号：52202249，国家自然科学基金，2023.01-2025.12，主持

2、低成本高活性多功能固体氧化物电解池催化剂材料的设计及其催化机理研究，项目编号：LJKZ0297，辽宁省教育厅面上项目，2021.07-2023.06，主持