**陈 哲**

# 华北电力大学 环境科学与工程学院 副教授 应用化学教研室党支部书记

**联系方式：15901289414**

**科研方向：**

* **环境修复纳米材料，包括吸附材料、高级催化氧化材料、光催化材料等；**
* **能源转化和存储材料，包括锂离子电池、钠离子电池、金属电池、固态电池。**

**所获奖励：**  **2020 年获华北电力大学创新人才支持计划 “青年英才计划”支持**

* + **2020 年获华北电力大学优秀共产党员**
	+ **2017 年、2018 年、2020 年华北电力大学年度考核优秀教职工**
	+ **2019 年华北电力大学教学基本功比赛 三等奖**
	+ **2020 年环境学院 课程思政组织优秀个人奖**

**承担主要科研项目：**

* **国家自然科学基金青年项目，《类石墨烯碳材料在层状硅酸盐受限空间内的可控制备与性能研究》**

**2015.10-2018.12，23.7 万。**

* **国家自然科学基金面上项目，《杂原子掺杂的类石墨烯碳材料对关键放射性核素的快速高效去除及机研究》，2019.10-2023.12，65 万。**
* **国家电网公司，《高比容量、高稳定性的二维扩层钠离子电池电极材料研究和器件研制》，2019.11-2022.1 300 万。**
* **国家电网公司，《高安全固态电池电解质设计及固态电池性能验证》，2020.11-2023.12，470 万。**
* **国家重点研发计划课题，《用于土壤有机污染阻控与高效修复的纳米材料与技术》，1051 万，研究骨干排名第三**

## 教育背景：

**2015.05-至今**

**2013.10-2015.04**

**2008.9-2013.07**

**2004.9-2008.07**

**华北电力大学 环境科学与工程学院 教师**

**日本東北大学原子分子科学高等研究机构 博士后导师：万立骏 教授（中国科学院院士） 阿尻雅文 教授**

**北京大学 化学学院 硕博连续 硕博连读导师：严纯华 教授 （中国科学院院士）**

**中国科学院化学研究所 联合培养**

**导师：宋卫国 研究员（杰青，973 首席科学家）**

**北京师范大学 化学学院 学士**

**加入华北电力大学后发表论文（第一作者和通讯作者）：**

1. Chen, Z.; Liang, Y.; Hao, J.; Cui, Z. M., Noncontact Synergistic Effect between Au Nanoparticles and the Fe2O3 Spindle Inside a Mesoporous Silica Shell as Studied by the Fenton-like Reaction. *Langmuir* **2016,** *32*, (48), 12774-12780.

2. Chen, Z.; Lu, J. F.; Ai, Y. J.; Ji, Y. F.; Adschiri, T.; Wan, L. J., Ruthenium/Graphene-like Layered Carbon Composite as an Efficient Hydrogen Evolution Reaction Electrocatalyst. *Acs Applied Materials & Interfaces* **2016,** *8*, (51), 35132-35137.

3. Chen, Z.; Liang, Y.; Jia, D. S.; Chen, W. Y.; Cui, Z. M.; Wang, X. K., Layered silicate RUB-15 for efficient removal of UO22+ and heavy metal ions by ion-exchange. *Environmental Science-Nano* **2017,** *4*, (9), 1851-1858.

4. Chen, Z.; Liang, Y.; Jia, D. S.; Cui, Z. M.; Song, W. G., Simple synthesis of sub-nanometer Pd clusters: High catalytic activity of Pd/PEG-PNIPAM in Suzuki reaction. *Chinese Journal of Catalysis* **2017,** *38*, (4), 651-657.

5. Chen, Z.; Jia, D. S.; Zhou, Y.; Hao, J.; Liang, Y.; Cui, Z. M.; Song, W. G., In situ generation of highly dispersed metal nanoparticles on two-dimensional layered SiO2 by topotactic structure conversion and their superior catalytic activity. *Applied Surface Science* **2018,** *434*, 1137-1143.

6. Liang, Y.; Chen, Z.; Yao, W.; Wang, P. Y.; Yu, S. J.; Wang, X. K., Decorating of Ag and CuO on Cu Nanoparticles for Enhanced High Catalytic Activity to the Degradation of Organic Pollutants. *Langmuir* **2017,** *33*, (31), 7606-7614.

7. Chen, Z.; Chen, W.; Jia, D.; Liu, Y.; Zhang, A.; Wen, T.; Liu, J.; Ai, Y.; Song, W.; Wang, X., N, P, and S codoped graphene-like carbon nanosheets for ultrafast uranium (VI) capture with high capacity. *Adv. Sci.* **2018**, 1800235

8. Wang W.; Chen, Z.; Zhou H.; Zhang Y.; Wang, X. Two-dimensional lamellar magnesium silicate with large spacing as an excellent adsorbent for uranium immobilization. *Environ. Sci.: Nano*, **2018,** 5, 2406–2414

9. Chen, Z.; Wang, W. X.; Zhang, Y. F.; Liang, Y.; Cui, Z. M.; Wang, X. K., Pd Nanoparticles Confined in the Porous Graphene-like Carbon Nanosheets for Olefin Hydrogenation. Langmuir 2018, 34, (43), 12809-12814.

10. Wang, W. X.; Wang, X. X.; Xing, J. L.; Gong, Q. B.; Wang, H. H.; Wang, J. J.; Chen, Z.; Ai, Y. J.; Wang, X. K., Multi-heteroatom doped graphene-like carbon nanospheres with 3D inverse opal structure: a promising bisphenol-A remediation material. Environmental Science-Nano 2019, 6, (3), 809-819.

11. Wang, W. X.; Gong, Q. B.; Chen, Z.; Wang, W. D.; Huang, Q.; Song, S.; Chen, J. R.; Wang, X. K., Adsorption and competition investigation of phenolic compounds on the solid-liquid interface of three-dimensional foam-like graphene oxide. Chemical Engineering Journal 2019, 378.

12. Chen, Z.; Huang, Q.; Zhang, Y. F.; Sheng, P.; Cui, Z. M., Confined Generation of Homogeneously Dispersed Au and SnO2 Nanoparticles in Layered Silicate as Synergistic Catalysts. *Langmuir* **2021,** *37*, (7), 2341-2348.

13. Chen, L. Z.; Gong, Q. B.; Chen, Z., Preparation and Application of Ultra-Thin Two Dimensional MOF Nanomaterials. Progress in Chemistry 2021, 33, (8), 1280-1292.

14.Wang, W. X.; Liu, Y.; Yue, Y. F.; Wang, H. H.; Cheng, G.; Gao, C. Y.; Chen, C. L.; Ai, Y. J.; Chen, Z.; Wang, X. K., The Confined Interlayer Growth of Ultrathin Two-Dimensional Fe3O4 Nanosheets with Enriched Oxygen Vacancies for Peroxymonosulfate Activation. Acs Catalysis 2021, 11, (17), 11256-11265.

15. Li, H. J.; Li, J. J.; Chen, Z.; Wang, Z. Z.; Qu, J.; Chen, Y. Q.; Zhu, L. J.; Jiang, F., Blocky Sb/C Anodes with Enhanced Diffusion Kinetics for High-Rate and Ultra-Long Cyclability Sodium Dual-Ion Batteries. Chemelectrochem 2021, 8, (18), 3512-3518.

1. Li, H. J.; Shen, S. P.; Tang, G.; Li, J. J.; Lyu, X. F.; Zhu, L. J.; Jiang, F.; Chen, Y. Q.; Yue, J. P.; Chen, Z., Nanocasting construction of few-graphene-layers carbon with tunable layer spacing as ultra-stable anode for sodium-ion batteries. Electrochimica Acta 2022, 419.
2. Huang, Q.; Jin, S.; Song, S.; Chen, Z., The nitrogen-doped graphene-like carbon nanosheets: Confined construction and oxygen-limited oxidation for higher removal efficiency toward organic contaminants. Journal of Cleaner Production 2022, 363.