

2018 年度实验室发表的 SCI 论文一览表

论文名称	作者	发表刊物名称	年卷期
N-doped porous molybdenum carbide nanobelts as efficient catalysts for hydrogen evolution reaction	Shengyu Jing, Lishang Zhang, Lin Luo*, Jiajia Lu, Shibin Yin*, Pei Kang Shen, Panagiotis Tsiakaras*	Applied Catalysis B: Environmental	2018, 224: 533-540
One-pot synthesized boron -doped RhFe alloy with enhanced catalytic performance for hydrogen evolution reaction	Lishang Zhang, Jiajia Lu, Shibin Yin*, Lin Luo, Shengyu Jing, Angeliki Brouzgou, Jianhua Chen, Peikang Shen, Panagiotis Tsiakaras	Applied Catalysis B-Environmental	2018, 230: 58-64
Carbon-Encapsulated WO <sub>x</sub> Hybrids as Efficient Catalysts for Hydrogen Evolution	Jing Shengyu, Lu Jiajia, Yu Guangtao, Yin Shibin, Luo Lin, Zhang Zengsong, Ma Yanfeng, Chen Wei, Shen Pei Kang	Advanced Material	2018, 30(28): 1705979
Low temperature synthesis of polyhedral hollow porous carbon with high rate capability and long-term cycling stability as Li-ion and Na-ion battery anode material	Waipeng Shi, Yingmeng Zhang, Zhi Qun Tian, Zhiyi Pan, Julian Key*, Pei Kang Shen**	Journal of Power Sources	2018, 398: 149-158
One-step growth of nitrogen-decorated iron–nickel sulfide nanosheets for the oxygen evolution reaction	Yanshuo Jin, Xin Yue, Hongyu Du, Kai Wang, Shangli Huang, Pei Kang Shen	Journal of Materials Chemistry A	2018, 6: 5592-5597
Simultaneous formation of trimetallic Pt-Ni-Cu excavated rhombic dodecahedrons with enhanced catalytic performance for the methanol oxidation reaction	Min Tang, Shuiping Luo, Kai Wang, Hongyu Du, Rinrada Sriphathoorat, Peikang Shen*	Nano Research	2018, 11(9): 4786-4795
Three-dimensional graphene sheets with NiO nanobelt outgrowths for enhanced capacity and long term high rate cycling Li-ion battery anode material	Waipeng Shi, Yingmeng Zhang, Julian Key, Pei Kang Shen*	Journal of Power Sources	2018, 379: 362-370
Ultrathin porous Bi <sub>5</sub> O <sub>7</sub> X (X = Cl, Br, I) nanotubes for effective solar desalination	Yang Liu, Zheng Jiang, Xinyi Zhang and Pei Kang Shen*	Journal of Materials Chemistry A	2018, 6: 20037-20043
Asymmetric 3d Electronic Structure for Enhanced	Yang Liu, Shibin Yin, Pei Kang Shen*	ACS Applied Materials & Interfaces	2018, 10(27):

Oxygen Evolution Catalysis			23131-23139
Critical role of iron carbide nanodots on 3D graphene based nonprecious metal catalysts for enhancing oxygen reduction reaction	Xiaoran Zhang, Dandan Lyu, Yaser Bahari Mollamahale, Feng Yu, Ming Qing, Shibin Yin, Xinyi Zhang, Zhi Qun Tian*, Pei Kang Shen**	Electrochimica Acta	2018, 281: 502-509
Fe <sub>2</sub> P as a novel efficient catalyst promoter in Pd/C system for formic acid electro-oxidation in fuel cells reaction	FulongWang, HuaiguoXue, ZhiquanTian, WeiXing, LigangFeng*	Journal of Power Sources	2018, 375: 37-42
Preparation and performances of electrically conductive Nb-doped TiO <sub>2</sub> coatings for 316 stainless steel bipolar plates of proton-exchange membrane fuel cells	Yanli Wang, Shenghua Zhang*, Zhaoxia Lu, Lisheng Wang, Weihua Li	Corrosion Science	2018, 142: 249-257
The oxidation of four oxide dispersion strengthened Ni-5Al-xSi-0.2Y <sub>2</sub> O <sub>3</sub> (x = 1, 3, 5, 7 wt.%) alloys in air at 1100 °C	Duanjun Sun, Chunyuan Liang, Erpeng Wang, Haifei Liu, Xiuhai Zhang*	Corrosion Science	2018, 133: 336-348
In situ carbon nanotube clusters grown from three-dimensional porous graphene networks as efficient sulfur hosts for high-rate ultra-stable Li-S batteries	Shizhi Huang, Lingli Zhang, Jingyan Wang, Jinliang Zhu, Pei Kang Shen*	Nano Research	2018, 11(3): 1731-1743
Interactions of Oxygen and Water Molecules with Pyrite Surface: A New Insight	Li Yuqiong, Chen Jianhua; Chen Ye; Zhao Cuihua, Zhang Yibing, Ke Baolin	LANGMUIR	2018, 34(5): 1941-1952
A density functional based tight binding (DFTB plus ) study on the sulfidization-amine flotation mechanism of smithsonite	Ye Chen, Meng Liu, Jianhua Chen, Yuqiong Li, Cuihua Zhao, Xiao Mu	Applied Surface Science	2018, 458: 454-463
Unique CoS architectures for high-performance lithium ion batteries	Weijuan Lin, Yingheng Huang, Guoqiang He*	Crystengcomm	2018, 20(420): 6727-6732
Effects of ionic radius on phase evolution in Ln-Al co-doped Ca <sub>1-x</sub> Ln <sub>x</sub> ZrTi <sub>2-x</sub> Al <sub>x</sub> O <sub>7</sub> (Ln = La, Nd, Gd, Ho, Yb) solid solutions	Shengshou Ma, Shiyin Ji, Changzhong Liao, Chengshuai Liu, Kaimin Shih, Wei He*	Ceramics International	2018, 44(13): 15124-15132
Experimental investigation of the isothermal section of the Mg-Ni-Y system with LPSO phases at 400 °C	Kai Xu, Shuhong Liu*, Dandan Huang, Yong Du	Journal of Materials Science	2018, 53: 9243-9257

Catalytic effects of V and V <sub>2</sub> O <sub>5</sub> on hydrogen storage property of Mg <sub>17</sub> Al <sub>12</sub> alloy	Huajian Wu, Jiaqi Du, Fangfang Cai, Fan Xu, Wenlou Wei, Jin Guo, Zhiqiang Lan*	International Journal of Hydrogen Energy	2018, 43: 14578-14583
Facile synthesis of iron-doped SnO <sub>2</sub> /reduced graphene oxide composite as high-performance anode material for lithium-ion batteries	Junjie Wang, Luyang Wang, Siyu Zhang, Shuiying Liang, Xianqing Liang*, Haifu Huang, Wenzheng Zhou, Jin Guo**	Journal of Alloys and Compounds	2018, 748: 1013-1021
Remarkably improved electrical conductivity of ZnO ceramics by cold sintering and post-heat-treatment	Yang Jing, Nengneng Luo*, Shaohai Wu, Kai Han, Xinpeng Wang, Lei Miao, Yuezhou Wei	Ceramics International	2018, 44(16): 20570-20574
Recovery of scandium from sulfuric acid solution with a macro porous TRPO/SiO <sub>2</sub> -P adsorbent	Qing Yu, Shunyan Ning*, Wei Zhang, Xinpeng Wang, Yuezhou Wei	Hydrometallurgy	2018, 181: 74-81
Zn-matrix syntactic foams: Effect of heat treatment on microstructure and compressive properties	Liwen Pan, Yi Yang, Muhammad Usman Ahsan, Dung Dinh Luong, Nikhil Gupta*, Ajay Kumar, Pradeep K. Rohatgi	Materials Science & Engineering A	2018, 731(25): 413-422
Atomic structure, stability and electronic properties of S(Al <sub>2</sub> CuMg)/Al interface: A first-principles study.	Xingzhi Pang, Wenchao Yang, Jianbing Yang, Mingjun Pang, Yongzhong Zhan*	Intermetallics	2018, 93: 329-337
Metal-free mesoporous carbon with higher contents of active N and S codoping by template method for superior ORR efficiency to Pt/C	Zaoxue Yan*, Lina Gao, Chengjing Dai, Mingmei Zhang, Xiaomeng Lv, Pei Kang Shen**	International Journal of Hydrogen Energy	2018, 43: 3705-3715
Pt-Ni alloy hyperbranched nanostructures with enhanced catalytic performance towards oxygen reduction reaction	Wenhao Gong, Zheng Jiang, Lei Huang, Pei Kang Shen*	International Journal of Hydrogen Energy	2018, 43(39): 18436-18443
Highly stable and efficient non-precious metal electrocatalysts of Mo-doped NiOOH nanosheets for oxygen evolution reaction	Yanshuo Jin, Shangli Huang, Xin Yue, Chang Shu, Pei Kang Shen*	International Journal of Hydrogen Energy	2018, 43(27): 12140-12145
Efficient and rapid adsorption of iodide ion from aqueous solution by porous silica spheres loaded with calcined Mg-Al layered double hydroxide	Chunmin Li, Yuezhou Wei, Xinpeng Wang*, Xiangbiao Yin	Journal of the Taiwan Institute of Chemical Engineers	2018, 85: 193-200
The interaction between HCHO and TiO <sub>2</sub> (101) surface without and with water and oxygen molecules	Guofei Wu, Cuihua Zhao, Xi Zhou, Jianhua Chen, Yuqiong Li, Ye Chen	Applied Surface Science	2018, 455: 410-417
DFT study on the electronic structure and optical	Xi Zhou, Cuihua Zhao*, Guofei Wu, Jianhua Chen,	Applied Surface Science	2018, 459: 354-362

properties of N, Al, and N-Al doped graphene	Yuqiong Li		
Effect of tempering on microstructure and mechanical properties of 3Mn-Si-Ni martensitic steel	Yan-jun Zhao*, Xue-ping Ren, Zhi-liu Hu, Zhi-ping Xiong**, Jian-min Zeng, Bao-yu Hou	Materials Science and Engineering: A	2018, 711: 397-404
Synthesis of bentonite-supported Fe(II) and heteropolyacid (HPW) composite through a mechanochemical processing	Guangtao Wei, Yunshang Li, Linye Zhang*, Shuya Cai, Tong Zhu, Zhongmin Li, Jihua Mo	Applied Clay Science	2018, 152: 342-351
Preparation of Ni <sub>3</sub> Al bonded diamond core drill with Ni-Cr alloy and its performance on glass-ceramic	Wei Liu, Feng-Lin Zhang*, Jia-feng Lu, Jia-hong Chen, Hui-ping Huang, Yu-mei Zhou, Hong-qun Tang	Ceramics International	2018, 44: 23080-23087
Theoretical Design of the Absorber for Intermediate Band Solar Cells from Group-IV (Si, Ge, and Sn)-Doped AgAlSe <sub>2</sub>	Jingwen Jiang, Xiaoxia Cen, Wenquan Dong, Wenzheng Zhou, Xianqing Liang, Yixin Liu, Jin Guo, Dan Huang	Physica Status Solidi B-Basic Solid State Physics	2018, 225(7): 1800031
Oxidation resistance of iron-based coatings by supersonic arc spraying at high temperature	Yujie Li, Tianquan Liang*, Run Ao, Hang Zhao, Xiyong Chen, Jianmin Zeng	Surface and Coatings Technology	2018, 347: 99-112
Hierarchical NiO nanobelt film array as an anode for lithium-ion batteries with enhanced electrochemical performance	Ning Hu, Zheng Tang, Pei Kang Shen*	RSC Advances	2018, 8: 26589-26595
Laser repeat drilling of alumina ceramics in static water	Guangliang Li, Shanshan Hu, Hongqun Tang, Bo Chen	International Journal of Advanced Manufacturing Technology	2018, 96(5-8): 2885-2891
Synthesis and characterization of a dual-cation organomontmorillonite nanocomposite	Guifang Wang, Huizhen Xiao, Shuai Zhang, Jun Qiu, Hengjun Li, Meijin Yang, Shaojian Ma, Sridhar Komarneni	Materials	2018, 11(11): 2320
Separation of Palladium along with Minor Actinides by isoBu-BTP/SiO <sub>2</sub> -P Adsorbent from High-Level Liquid Waste	Qing Zou, Yan Wu, Qiding Shu, Shunyan Ning, Xinpeng Wang, Yuezhou Wei, Fangdong Tang	Journal of Chemical And Engineering Data	2018, 63(8): 2931-2939
Effect of multi-directional forging and annealing on abrasive wear behavior in a medium carbon low alloy steel	Xiaohong Liu, Li Xiao, Chunhua Wei, Xiuxia Xu, Minghuan Luo, Weilin Yan	Tribology International	2018, 119: 608-613
Preparation and performance of electrically conductive Nb-doped TiO <sub>2</sub> /polyaniline bilayer coating for 316L	Yanli Wang, Shenghua Zhang, Zhaoxia Lu, Ping Wang, Xiaohong Ji, Weihua Li	RSC Advances	2018, 8(35): 19426-19431

stainless steel bipolar plates of proton-exchange membrane fuel cells			
Structural and Magnetic Properties of Soft/Hard Mn <sub>0.6</sub> Zn <sub>0.4</sub> Fe <sub>2</sub> O <sub>4</sub> @Sr <sub>0.85</sub> Ba <sub>0.15</sub> Fe <sub>12</sub> O <sub>19</sub> Core/Shell Composite Synthesized by the Ball-Milling-Assisted Ceramic Process	Jiuyang Xia, Yanling Shen, Chengyue Xiao, Wen Chen, Xuehang Wu, Wenwei Wu, Qiangshuai Wang, Jintao Li	Journal of Electronic Materials	2018, 47(11): 6811-6820
Structural and magnetic properties of soft/hard NiFe <sub>2</sub> O <sub>4</sub> @SrCo <sub>0.2</sub> Fe <sub>11.8</sub> O <sub>19</sub> core/shell composite prepared by the ball-milling-assisted ceramic process	Jiuyang Xia, Yu Ning, Yanghua Luo, Wen Chen, Xuehang Wu, Wenwei Wu, Qingzhao Li, Kuntao Li	Journal of Materials Science-Materials In Electronics	2018, 29(16): 13903-13913
Experimental determination of phase equilibria at 900 °C and liquidus surface in the Cu-Ni-Ti system	B. Jin, X. Lu, S. Liu*, D. Huang, Y. Du	Journal of Mining and Metallurgy Section B-Metallurgy	2018, 54(2): 209-223
Phase Equilibria of the Ternary Al-Cu-Zn Alloys on Al-Zn Rich Side	Yuhui Zhang, Fan Zhang, Shuhong Liu*, Dandan Huang, Yong Du	Journal of Phase Equilibria and Diffusion	2018, 39: 356-365
The effect of welded joint properties on the surface characteristics of laser-welded 2205 duplex stainless steel	Shanshan Hu, Dongrui Zheng, Guolin Zhao, Guangliang Li, Hongqun Tang	Advances in Mechanical Engineering	2018, 10(1): 1-11
6061 铝合金表面 ZnAl-LDHs 层的制备及其耐腐蚀性能	张玉圣, 王友彬, 李纯民, 周秉涛, 程珂珂, 韦悦周	金属学报	2018, 54: 1417-1427
Ternary Al-Mo-Y phase diagram and the new phase Al <sub>4</sub> Mo <sub>2</sub> Y	Xiaoxian Chen, Yongzhong Zhan, Feng Han, Fuda Guo, Chengxia Wei	International Journal of Materials Research	2018, 109(1)
Solid State Phase Equilibria and Solid Solution of the Si-Y-Zr Ternary System at 1173 K	Feng Han, Yongzhong Zhan	Journal of Phase Equilibria And Diffusion	2018, 39(4): 401-411
Effect of Si and Y <sub>2</sub> O <sub>3</sub> Additions on the Oxidation Behavior of Ni-xAl (x = 5 or 10 wt%) Alloys at 1150 °C	Weizhou Li, Ke Han, Rongmei Niu, Tianquan Liang, Canwei Lai, Xiuhai Zhang*	Oxidation of Metals	2018, 89(5-6): 731-753
A novel boron and nitrogen co-doped three-dimensional porous graphene sheet framework as high performance Li-ion battery anode material	Lingli Zhang, Qiuchen He, Shizhi Huang, Jinliang Zhu, Julian Key, Pei Kang Shen*	Inorganic Chemistry Communications	2018, 96: 159-164