Associate Professor LIU Jingjing

College	College of Mechanical Engineering
Current Position	Associate Professor
Types of Tutor	Master Tutor
Language	Chinese/English
Education	2010.09~2016.01: studied for doctor's degree in Chemical Engineering at Yanshan University 2016.09~2010.07: studied for bachelor's degree in Biological Engineering at Yanshan University
Research Interests	Hydrogen Storage Materials、Power Batteries
Selected Publications	[1] **Jingjing Liu**, Yongke Yan, Honghui Cheng*, Shumin Han*, Yifei Lv, Kang Li, Chen Lu. Phase transformation and high electrochemical performance of $La_{0.78}Mg_{0.22}Ni_{3.73}$ alloy with $(La,Mg)_5Ni_{19}$ superlattice structure. ***J. Power Sources,*** 2017, 351: 26–34. ***IF: 7.19*** [2] **Jingjing Liu**, Yuan Li, Da Han, Shuqin Yang, Lu Zhang, Shumin Han*. Electrochemical performance and capacity degradation mechanism of single-phase La-Mg-Ni-based hydrogen storage alloys, ***J. Power Sources,*** 2015, 300: 77–86. ***IF: 7.19*** [3] **Jingjing Liu**, Shumin Han*, Da Han, Yuan Li, Shuqin Yang, Lu Zhang, Yumeng Zhao. Enhanced cycling stability and high rate dischargeabiligy of $(La,Mg)_2Ni_7$-type hydrogen storage alloys with $(La,Mg)_5Ni_{19}$ minor phase. ***J. Power Sources,*** 2015, 287: 237–246. ***IF: 7.19*** [4] **Jingjing Liu**, Shumin Han*, Yuan Li, Shuqin Yang, Cong Wu. Effect of Pr on phase structure and cycle stability of La-Mg-Ni-based alloys with A2B7- and A5B19-type superlattice structures.

	Electrochim. Acta, 2015, 184: 257-263. ***IF: 5.26*** [5] **Jingjing Liu**, Shumin Han*, Yuan Li, Yifei Lv, Shuqin Yang, Junling Zhang, Jinding Wang. Phase structure and electrochemical characteristics of high-pressure sintered La–Mg–Ni-based hydrogen storage alloys. ***Electrochim Acta***, 2013, 111: 18–24. ***IF: 5.26*** [6] **Jingjing Liu**, Kang Li, Honghui Cheng*, Kai Yan, Yu Wang, Yi Liu, Huimin Jin, Zhi Zheng. New insights into the hydrogen storage performance degradation and Al functioning mechanism of $LaNi_{5-x}Al_x$ alloys. ***Int. J. Hydrogen Energ.***, 2017, 42: 24904–24914. ***IF: 4.16*** [7] **Jingjing Liu**, Shumin Han*, Yuan Li, Lu Zhang, Yumeng Zhao, Shuqin Yang, Baozhong Liu. Phase structures and electrochemical properties of La–Mg–Ni-based hydrogen storage alloys with superlattice structure. ***Int. J. Hydrogen Energ.***, 2016, 41: 20261–20275. ***IF: 4.16*** [8] **Jingjing Liu**, Shumin Han*, Yuan Li, Xin Zhao, Shuqin Yang, Yumeng Zhao. Cooperative effects of Sm and Mg on electrochemical performance of La–Mg–Ni-based alloys with A_2B_7- and A_5B_{19}-type super-stacking structure. ***Int. J. Hydrogen Energ.***, 2015, 40: 1116–1127. ***IF: 4.16*** **（二区，TOP）** [9] **Jingjing Liu**, Shumin Han*, Yuan Li, Junling Zhang, Yumeng Zhao, Linda Che. Effect of crystal transformation on electrochemical characteristics of La–Mg–Ni-based alloys with A_2B_7-type super-stacking structures. ***Int. J. Hydrogen Energ.,*** 2013, 38: 14903–14911. ***IF: 4.16*** [10] **Jingjing Liu**, Shuai Zhu, Zhi Zheng, Honghui

	Cheng*, Kai Yan, Zhida Zhu. Long-term hydrogen absorption/desorption properties and structural changes of LaNi4Co alloy with double desorption plateaus. ***J. Alloy. Compd.***, 2019, 778: 681–690. ***IF: 4.12***
	[11] **Jingjing Liu**, Shuai Zhu, Honghui Cheng*, Zhi Zheng, Zhida Zhu, Kai Yan, Shumin Han*. Enhanced cycling stability and high rate dischargeability of A_2B_7-type La-Mg-Ni-based alloys by in-situ formed $(La,Mg)_5Ni_{19}$ superlattice phase. ***J. Alloy. Compd.***, 2019, 731:1087–1097. ***IF: 4.12***
	[12] **Jingjing Liu,** Zhi Zheng, Honghui Cheng, Kang Li, Kai Yan, Xingbo Han,Yu Wang, Yi Liu. Long-term hydrogen storage performance and structural evolution of $LaNi_4Al$ alloy. ***J. Alloy. Compd.***, 2018, 731:172–180. ***IF: 4.12***
	[13] **Jingjing Liu**, Shumin Han*, Yuan Li, Shuqin Yang, Lu Zhang, Yumeng Zhao. Effect of Al incorporation on the degradation in discharge capacity and electrochemical kinetics of La–Mg–Ni-based alloys with A_2B_7-type super-stacking structure. ***J. Alloy. Compd.***, 2015, 619: 778–787. ***IF: 4.12***
	[14] **Jingjing Liu**, Shumin Han*, Yuan Li, Shuqin Yang, Wenzhuo Shen, Lu Zhang, Yu Zhou. An investigation on phase transformation and electrochemical properties of as-cast and annealed $La_{0.75}Mg_{0.25}Ni_x$ (x = 3.0, 3.3, 3.5, 3.8) alloys. ***J. Alloy. Compd.***, 2013, 552:119–126. ***IF: 4.12***
	[15] **Jingjing Liu**, Shumin Han*, Yuan Li, Shuqin Yang, Wenzhuo Shen, Xiaocui Chen, Yumeng Zhao. Microstructure and Electrochemical Characteristics of Step-Wise Annealed $La_{0.75}Mg_{0.25}Ni_{3.5}$ Alloy with A_2B_7- and A_5B_{19}-type Super-Stacking Structure. ***J. Electrochem. Soc.***, 2013, 160: A1139–A1145.

	IF: 3.34 [16] **Jingjing Liu**, Yujun Chai, Ning Wang*. Phase transformation, hydrogen absorption/desorption and electrochemical properties of a novel $AB_{4.5}$-type $La_{0.8}Mg_{0.2}Ni_{4.0}Co_{0.5}$ Alloy. ***Int. J. Electrochem. Sci.***, 2019, 14: 402–413. ***IF: 1.36*** [17] Zhida Zhu, Shuai Zhu, Haoqi Lu, Jie Wu, Kai Yan, Honghui Cheng*, **Jingjing Liu***. Stability of $LaNi_{5-x}Co_x$ alloys cycled in hydrogen - Part 1 evolution in gaseous hydrogen storage performance. ***Int. J. Hydrogen Energ.***, 2019, 44: 15159–15172. ***IF: 4.16*** [18] Zhida Zhu, Shuai Zhu, Xin Zhao, Honghui Cheng*, Kai Yan, **Jingjing Liu***. Effects of Ce/Y on the cycle stability and anti-plateau splitting of $La_{5-x}Ce_xNi_4Co$ (x = 0.4, 0.5) and $La_{5-y}Y_yNi_4Co$ (y = 0.1, 0.2) hydrogen storage alloys. ***Mater. Chem. Phys.*** 2019, 236: 121725–121734. ***IF: 4.16***
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