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受教育经历：（从大学本科开始，按时间倒排序）

2006/09–2009/12，吉林大学，材料科学与工程学院，博士

2004/09–2006/06，吉林大学，材料科学与工程学院，硕士

2000/09–2004/06，吉林大学，材料科学与工程学院，学士

研究工作经历：（按时间倒排序）

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2012/3–2018/9，吉林大学，材料科学与工程学院，副教授

2009/12–2012/3，香港科技大学，机械与航空工程系，博士后

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研究方向

超级电容器和锂离子电池；自清洁表面与油水分离；金属材料力学性能

主持项目情况

1. 国家自然科学基金青年基金，51401083，纳米晶金属室温自回复性研究，2015/01-2017/12，25万元，已结题，主持
2. 吉林省科技计划项目自然科学基金，20180101071JC，高能量密度、高功率密度氧化钴基储能电极材料的研究，2018/01-2020/12，15万元，在研，主持
3. 国家自然科学基金国际(地区)合作与交流项目，51761135110，仿蜘蛛丝结构的油水分离中微油滴聚集效应，2018/01-2020/12，180万元，在研，骨干
4. 西安交通大学金属材料强度国家重点实验室开放课题，20141609，纳米晶金属的微观塑性变形机制及力学性能的研究，2014/05-2016/05，5万元，已结题，主持
5. 吉林大学汽车材料教育部重点实验室开放课题，14-450060501456，纳米晶粒在应力和热场作用下的稳定性，2014/03-2014/12，5万元，已结题，主持

6. 吉林大学引进人才(学术骨干), 2012年, 44万元, 在研, 主持
7. 吉林大学优青培育, 2015年, 10万元, 在研, 主持
8. 温州市龙湾科技发展计划项目, 2014YG09, 基于高效半导体激光器的模具激光强化及修复技术开发, 2013/05-2015/03, 20万元, 已结题, 主持
9. 国家自然科学基金面上项目, 51371089, 纳米晶金属卸载塑性变形行为及其机制的研究, 2014/01-2017/12, 80万元, 已结题, 骨干

论文发表情况

共发表第一/通讯作者论文**24**篇, 一篇论文曾入选**ESI**高被引论文。**IF>8**的文章**5**篇 (2篇*Journal of Materials Chemistry A*, 3篇*ACS Applied Materials & Interfaces*), **8>IF>3**的**7**篇 (2篇*Scientific Reports*, 1篇*Journal of Colloid and Interface Science*, 1篇*Electrochimica Acta*, 2篇*Materials Science and Engineering A*, 1篇*RSC Advances*), **3>IF>1**的**9**篇 (3篇*Journal of Applied Physics*, 1篇*ChemPlusChem*, 3篇*Journal of Materials Research*, 1篇*Advanced Engineering Materials*, 1篇*Journal of Materials Engineering and Performance*)。合作文章9篇, 分别发表于*Acta Materialia*、*Journal of the Mechanics and Physics of Solids*、*Chemical Engineering Journal*等杂志上。论文共获得包括**Reviews on Advanced Materrials Science**总编辑, **Materials Physics and Mechanics**主编**Ilya Ovid'ko**和英国皇家工程院院士, 欧洲科学院院士, 俄罗斯科学院外籍院士**T.G. Langdon**等SCI正面引用400余次, H因子12。详细列表如下:

- [1] W. Zhou, S. Li, Y. Liu, Z. Xu, S. Wei, **G.Y. Wang***, J. Lian, Q. Jiang, A Dual Superlyophobic Copper Foam with Good Durability and Recyclability for High-flux, High-efficiency and Continuous Oil-Water Separation, *ACS Applied Materials & Interfaces* 10 (2018) 9841-9848.
- [2] L. Wu, X. Leng, Y. Liu, S. Wei, C. Li, **G. Wang***, J. Lian, Q. Jiang, A. Nie, T.-Y. Zhang, A Strategy for Synthesis of Nanosheets Consisting of Alternating Spinel Li₄Ti₅O₁₂ and Rutile TiO₂ Lamellas for High-Rate Anodes of Lithium-Ion Batteries, *ACS Applied Materials & Interfaces* 9(5) (2017) 4649-4657.
- [3] **G. Wang***, X. Leng, S. Han, Y. Shao, S. Wei, Y. Liu*, J. Lian, Q. Jiang, How to improve the stability and rate performance of lithium-ion batteries with transition metal oxide anodes, *Journal of Materials Research* 32(1) (2017) 16-36.
- [4] X.-S. Yang, Y.-J. Wang, H.-R. Zhai, **G.-Y. Wang**, Y.-J. Su, L.H. Dai, S. Ogata, T.-Y. Zhang*, Time-, stress-, and temperature-dependent deformation in nanostructured copper: Creep tests and simulations, *Journal of the Mechanics and Physics of Solids* 94 (2016) 191-206.
- [5] X.-S. Yang, Y.-J. Wang, **G.-Y. Wang**, H.-R. Zhai, L.H. Dai, T.-Y. Zhang*, Time, stress, and temperature-dependent deformation in nanostructured copper: Stress relaxation tests and simulations, *Acta Materialia* 108 (2016) 252-263.
- [6] **G. Wang**, S. Liu, S. Wei, Y. Liu, J. Lian, Q. Jiang, Robust superhydrophobic surface on Al substrate with durability, corrosion resistance and ice-phobicity, *Scientific Reports* 6 (2016) 20933.
- [7] Y. Liu, W. Yao, **G. Wang**, Y. Wang, A.S. Moita, Z. Han, L. Ren, Reversibly switchable wettability on aluminum alloy substrate corresponding to different pH droplet and its corrosion resistance, *Chemical Engineering Journal* 303 (2016) 565-574.
- [8] X. Leng, L. Wu, Y. Liu, C. Li, S. Wei, Z. Jiang, **G. Wang***, J. Lian, Q. Jiang, A novel open architecture built by ultra-fine single-crystal Co₂(CO₃)(OH)₂ nanowires and reduced graphene oxide for asymmetric supercapacitors, *Journal of Materials Chemistry A* 4(43) (2016) 17171-17179.

- [9] X. Leng, Y. Shao, L. Wu, S. Wei, Z. Jiang, **G. Wang***, Q. Jiang, J. Lian, A unique porous architecture built by ultrathin wrinkled NiCoO₂/rGO/NiCoO₂ sandwich nanosheets for pseudocapacitance and Li ion storage, *Journal of Materials Chemistry A* 4(26) (2016) 10304-10313.
- [10] X. Leng, X. Ding, J. Hu, S. Wei, Z. Jiang, J. Lian, **G. Wang***, Q. Jiang, J. Liu, In situ prepared reduced graphene oxide/CoO nanowires mutually-supporting porous structure with enhanced lithium storage performance, *Electrochimica Acta* 190 (2016) 276-284.
- [11] X. Wang, J. Hu, W. Liu, **G. Wang**, J. An, J. Lian*, Ni-Zn binary system hydroxide, oxide and sulfide materials: synthesis and high supercapacitor performance, *Journal of Materials Chemistry A* 3(46) (2015) 23333-23344.
- [12] J.A. Liu, F.J. Si, D. Li, Y. Liu, Z. Cao, **G.Y. Wang**, EFFECT OF BATH pH ON ELECTROLESS Ni-P COATING DEPOSITED ON OPEN-CELL ALUMINUM FOAMS, *Surface Review and Letters* 22(6) (2015) 12.
- [13] X.N. Leng, S.F. Wei, Z.H. Jiang, J.S. Lian, **G.Y. Wang***, Q. Jiang, Carbon-Encapsulated Co₃O₄ Nanoparticles as Anode Materials with Super Lithium Storage Performance, *Scientific Reports* 5 (2015) 11.
- [14] X. Leng, Y. Shao, S. Wei, Z. Jiang, J. Lian, **G. Wang***, Q. Jiang, Ultrathin Mesoporous NiCo₂O₄ Nanosheet Networks as High-Performance Anodes for Lithium Storage, *ChemPlusChem* 80(12) (2015) 1725-1731.
- [15] J.J. Hu, X.P. Zhang, G.X. Sun, **G.Y. Wang***, Deformation mechanism of an electric brush-plated nanocrystalline Cu investigated by tensile testing and nanoindentation creep, *Materials Research Innovations* 19 (2015) S181-S186.
- [16] J. Hu, G. Sun, X. Zhang, **G. Wang**, Z. Jiang, S. Han, J. Zhang, J. Lian, Effects of loading strain rate and stacking fault energy on nanoindentation creep behaviors of nanocrystalline Cu, Ni-20 wt.%Fe and Ni, *Journal of Alloys and Compounds* 647 (2015) 670-680.
- [17] **G. Wang**, J. Lian, Q. Jiang, S. Sun, T.-Y. Zhang, High resolution transmission electron microscopic in-situ observations of plastic deformation of compressed nanocrystalline gold, *Journal of Applied Physics* 116(10) (2014) 103518.
- [18] **G. Wang**, J. Lian, Dislocation Evolution in Nanograins during Successive Stress Relaxation, *Advanced Engineering Materials* 16(4) (2014) 413-420.
- [19] S. Sun, S. Wei*, **G. Wang***, Z. Jiang, J. Lian, C. Ji, The Synthesis and Electrochemical Behavior of High-Nitrogen Nickel-Free Austenitic Stainless Steel, *J. of Materi Eng and Perform* 23(11) (2014) 3957-3962.
- [20] J. Jiang, G. Bi, **G. Wang**, Q. Jiang, J. Lian, Z. Jiang, Strain-hardening and warm deformation behaviors of extruded Mg-Sn-Yb alloy sheet, *Journal of Magnesium and Alloys* 2(2) (2014) 116-123.
- [21] J. Hu, S. Han, G. Sun, S. Sun, Z. Jiang, **G. Wang***, J. Lian, Effect of strain rate on tensile properties of electric brush-plated nanocrystalline copper, *Materials Science and Engineering: A* 618(0) (2014) 621-628.
- [22] S. Han, L. Zhao, **G. Wang**, J. Lian, Revealing the intrinsic dislocation storage capability in nanocrystalline nickel, *Materials Letters* 127(0) (2014) 20-23.
- [23] **G.Y. Wang**, J.S. Lian, T.Y. Zhang, High resolution transmission electron microscopy in situ investigation into the spontaneous coalescence of gold nanoparticles at room temperature, *Rsc Advances* 3(46) (2013) 24017-24020.
- [24] **G.Y. Wang**, T.Y. Zhang, Easy Route to the Wettability Cycling of Copper Surface between Superhydrophobicity and Superhydrophilicity, *Acs Applied Materials & Interfaces* 4(1) (2012) 273-279.
- [25] **G.Y. Wang**, T.Y. Zhang, Oxygen adsorption induced superhydrophilic-to-superhydrophobic transition on hierarchical nanostructured CuO surface, *Journal of Colloid and Interface Science* 377 (2012) 438-441.
- [26] **G.Y. Wang**, G.Y. Li, L. Zhao, J.S. Lian, Z.H. Jiang, Q. Jiang, The origin of the ultrahigh strength and good ductility in nanotwinned copper, *Materials Science and Engineering a-Structural Materials Properties Microstructure and Processing* 527(16-17) (2010) 4270-4274.
- [27] **G.Y. Wang**, Z.H. Jiang, J.S. Lian, ENHANCED TENSILE DUCTILITY IN AN ELECTRODEPOSITED CU WITH NANO-SIZED GROWTH TWINS, *International Journal of Modern Physics B* 24(15-16) (2010) 2537-2542.
- [28] **G. Wang**, J. Lian, Q. Jiang, The effect of grain size and strain rate on the tensile ductility of bulk nanostructured metals and alloys, *Materials Science Forum* 633-634 (2010) 393-410.
- [29] L.Y. Qin, J.S. Lian, Z.H. Jiang, **G.Y. Wang**, Q. Jiang, Dual-phase nanocrystalline Ni-Co alloy with high strength and enhanced ductility, *Journal of Materials Research* 25(2) (2010) 401-405.
- [30] **G.Y. Wang**, J.S. Lian, Z.H. Jiang, L.Y. Qin, Q. Jiang, Compressive creep behavior of an electric brush-plated nanocrystalline Cu at room temperature, *Journal of Applied Physics* 106(8) (2009) 086105.

[31] **G.Y. Wang**, Z.H. Jiang, J.S. Lian, Q. Jiang, The grain refinement mechanism of electrodeposited copper, Journal of Materials Research 24(10) (2009) 3226-3236.

[32] **G.Y. Wang**, Z.H. Jiang, H.Z. Zhang, J.S. Lian, Enhanced tensile ductility in an electrodeposited nanocrystalline copper, Journal of Materials Research 23(8) (2008) 2238-2244.

[33] **G.Y. Wang**, Z.H. Jiang, Q. Jiang, J.S. Lian, Mechanical behavior of an electrodeposited nanostructured Cu with a mixture of nanocrystalline grains and nanoscale growth twins in submicrometer grains, Journal of Applied Physics 104(8) (2008) 084305.

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下一篇：徐德生

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