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- 2013.11~
 - a) 2015.08~2016.08 University of Michigan
- 2012.07~2013.10
- 2007.09~2012.06
 - a) 2010.07~2010.10 Trinity College Dublin
 - b) 2011.07~2012.01 University of Michigan
- 2003.09~2007.07

NiAu NiPt
HR-TEM STEM EELS
in/ex situ

Nano Lett. Appl. Phys. Lett.

Nanoscale Chem. Commun. J. Hazard. Mater. Sci. Rep.

(Progress in Nanoscale Characterization and Manipulation Peking University Press)

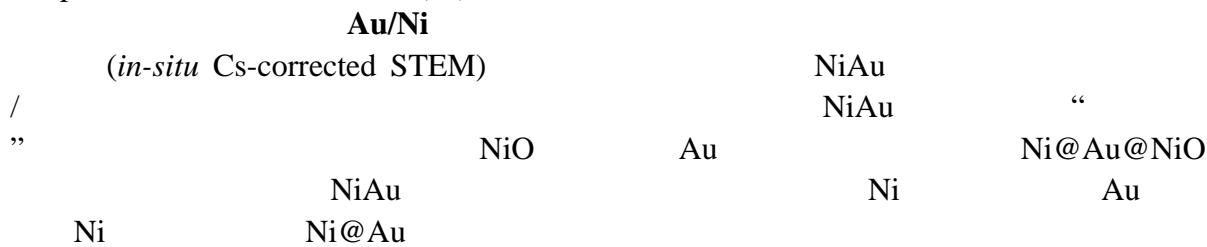
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1. Yan Z., Zhang C., Liu W.*, et al., *Ultraviolet Laser-induced ignition of RDX single crystal* *Scientific Reports*, (2016) **6** 20251.
2. Yan Z., Liu W.*, Zhang C., et al., *Quantitative correlation between facets defects of RDX crystals and their laser sensitivity* *J. Hazard. Mater.*, (2016) **313** 103.
3. Han S., Liu W.*, Sun K., et al., *Experimental evidence of ZnS precursor anisotropy activated by ethylenediamine for constructing nanowires and single-atomic layered hybrid structures* *Crystengcomm*, (2016) **18**(15) 2626. (Front Cover)
4. Xiang X., Nie J.L., Sun K., Liu W.* et al., *Structural evolution of NiAu nanoparticles under ambient conditions directly revealed by atom-resolved imaging combined with DFT simulation* *Nanoscale*, (2014) **6**(21) 12898.
5. Liu J.L., Liu W., Sun Q., et al., *In situ tracing of atom migration in Pt/NiPt hollow spheres during catalysis of CO oxidation* *Chem. Commun.*, (2014) **50**(15) 1804.
6. Liu W., Lu T.C., Chen Q.Y., et al., *Uniform fabrication of Ge nanocrystals embedded into SiO₂ film via neutron transmutation doping* *Prog. Nat. Sci.*, (2014) **24**(3) 226.

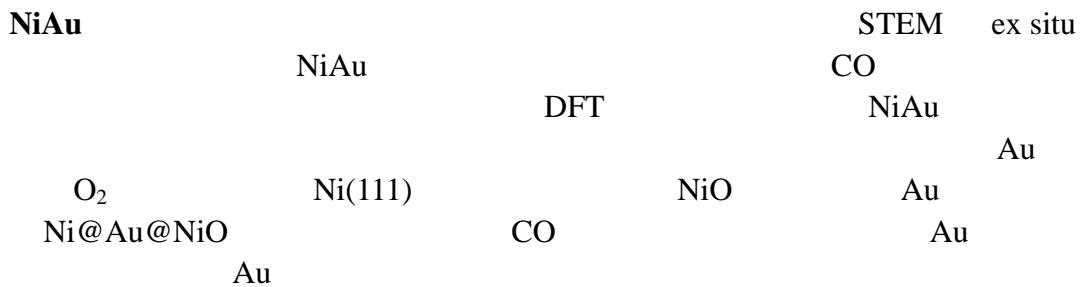
7. **Liu W.**, Sun K., and Wang R.M., *In-situ Atom-resolved Tracing of Element Diffusion in NiAu Nanospindles* ***Nanoscale***, (2013) **5**(11) 5067.
 8. **Liu W.**, Zhang Y.P., and Wang R.M., *From ZnS nanoparticles, nanobelts, to nanotetrapods: the ethylenediamine modulated anisotropic growth of ZnS nanostructures* ***Nanoscale***, (2012) **4**(7) 2394.
 9. **Liu W.**, Wang N., Wang R.M., et al., *Atom-Resolved Evidence of Anisotropic Growth in ZnS Nanotetrapods* ***Nano Lett.***, (2011) **11**(7) 2983.
 10. **Liu W.**, Wang R.M., and Wang N., *From ZnS nanobelts to ZnO/ZnS heterostructures: Microscopy analysis and their tunable optical property* ***Appl. Phys. Lett.***, (2010) **97**(4) 041916.

2015~2016	JEOL 3100R5 (ARM300 prototype) TEM/STEM Double Corrector	HR-STEM Dual-EELS Atomic EELS Mapping ex-situ gas cell in situ indentor+EELS plasma 80kV on RDX Graphene
2012~2015	FEI Tecnai F30 FEG	TEM STEM HR-TEM
2011~2012	JEOL 2100F Cs-corrected STEM JEOL 2010F FEG	STEM EELS in situ Hot-Stage TEM STEM HR-TEM EELS
2010~2011	FEI Titan 80-300 FEG+GIF	TEM SEAD HRTEM EELS FTEM
2009~2012	JEOL 2100F FEG with EDS detector Hitachi S-4800 C-FEG	TEM SEAD HRTEM EDS Mapping SEM EDS Mapping

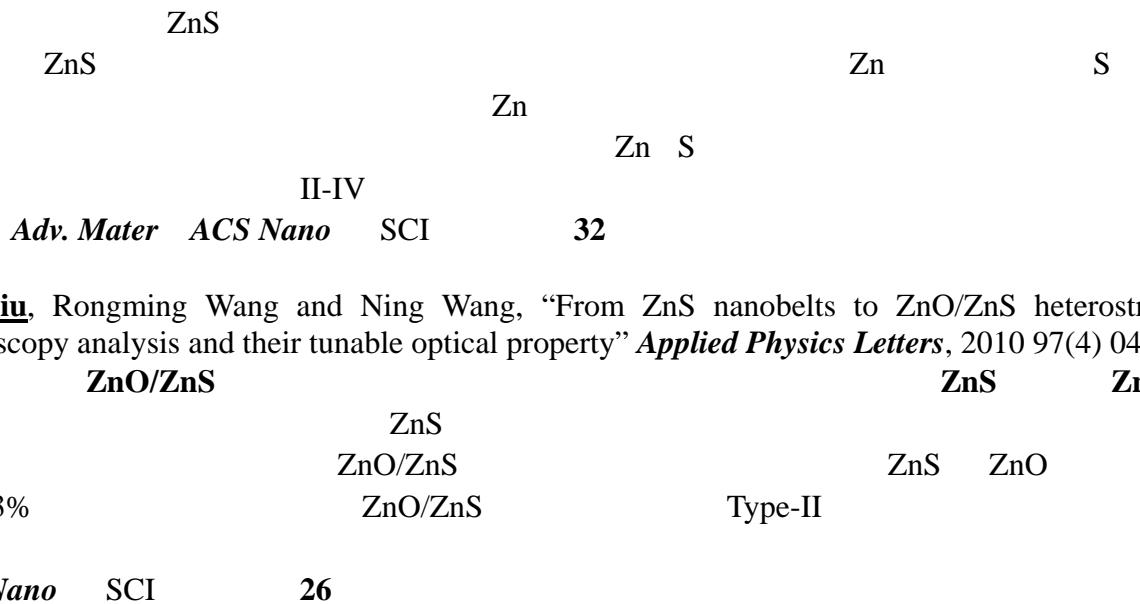
1. **Wei Liu**, Kai Sun, and Rongming Wang, “In-situ Atom-resolved Tracing of Element Diffusion in NiAu Nanospindles” *Nanoscale*, 2013 5(11) 5067.



2. Xia **Xiang**, Jinlan Nie, **Wei Liu**,* et al., Structural evolution of NiAu nanoparticles under ambient conditions directly revealed by atom-resolved imaging combined with DFT simulation, *Nanoscale*, 2014 6(21) 12898.



3. **Wei Liu**, Rongming Wang, Kai Sun et al., “Atom-Resolved Evidence of Anisotropic Growth in ZnS Nanotetrapods” *Nano Letters*, 2011 11(7) 2983.



1. NiAu
 2. 2nm Au
 3. Ni@Graphene
 - 4.
 5. TEM/STEM