

Curriculum Vitae

General Information:

Name: Wang, Weihua

Date of Birth: Feb. 27, 1980

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Experience:

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| Sep. 1999- July. 2003 | Department of physics, University of Science and Technology of China, BS in Applied Physics. |
| Sep. 2003- Dec. 2008 | Hefei National Laboratory for Physical Sciences at the Micro Scale, University of Science and Technology of China, Ph. D in Condensed Matter Physics |
| Feb. 2009- Jan. 2011 | Department of physics, The Hong Kong University of Science and Technology, Research Assistant |
| Feb. 2011-Dec. 2012 | Department of physics, The Hong Kong University of Science and Technology, Research Associate |
| Jan. 2013-May. 2014 | Department of physics, The Hong Kong University of Science and Technology, Post-doctoral Fellow |
| May. 2014- | State Key Laboratory for Surface Physics, Institute of Physics, Chinese Academy of Sciences, Associate Professor |

Research Interest:

1. Growth and characterization of transition metal oxide surfaces by ultra-high vacuum low temperature scanning tunneling microscope.
2. Physical and chemical properties of single molecules, oligomers and molecular networks on metal, insulating-film/metal and transition metal oxide surfaces.

Representative Publications:

1. Cooperative modulation of electronic structures of aromatic molecules coupled to multiple metal contacts, W. Wang, X. Shi, S. Wang, J. Liu, M. A. Van Hove, P. N. Liu, R.-Q Zhang, N. Lin, *Phys. Rev. Lett.* 110, 046802 (2013).
2. Negative Differential Resistance in a Hybrid Silicon-Molecular System: Resonance between the Intrinsic Surface-States and the Molecular Orbital, W. Wang, Y. Ji, H. Zhang, A. Zhao, B. Wang, Jinlong Yang, and J. G. Hou, *ACS Nano*. 6, 7066 (2012).
3. Single-molecule resolution of an organometallic intermediate in a surface-supported Ullmann coupling reaction, W. Wang, X. Shi, S. Wang, M. Van Hove, N. Lin, *J. Am.*

Chem. Soc. 133, 13264 (2011).

4. Manipulating Localized Molecular Orbitals by Single-Atom Contacts, W. Wang, X. Shi, C. Lin, R. Q. Zhang, C. Minot, M. Van Hove, Y. Hong, B. Z. Tang, N. Lin, *Phys. Rev. Lett.* 105, 126801 (2010).

5. Probing Electronic Superexchange Coupling at Isolated Poly-p-phenylene Molecules, W. Wang, S. Wang, X. Li, J.-P. Collin, J. Liu, P. N. Liu, N. Lin, *J. Am. Chem. Soc.* 132, 8774 (2010).

6. Electron Stimulation of Internal Torsion of a Surface-Mounted Molecular Rotor, W. Wang, X. Shi, M. Jin, C. Minot, M. Van Hove, J-P. Collin, N. Lin, *ACS Nano*, 4, 4929 (2010).

7. Inspecting Metal-Coordination-Induced Perturbation of Molecular Ligand Orbitals at a Submolecular Resolution, W. Wang, Y. Hong, X. Shi, B. Z. Tang, C. Minot, M. Van Hove, N. Lin, *J. Phys. Chem. Lett.* 1, 2295 (2010).

8. Probing negative differential resistance on Si(111)- $\sqrt{3}\times\sqrt{3}$ -Ag surface with scanning tunneling microscopy, W. Wang, A. Zhao, B. Wang and J. G. Hou, *Appl. Phys. Lett.* 94, 262108 (2009).

Full Publication List

<http://www.researcherid.com/rid/K-1297-2012>