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Education

Ph.D. (Materials Physics) Institute of Metal Research, Chinese Academy of Sciences, 1996

M.S. (Materials Physics) Institute of Metal Research, Chinese Academy of Sciences, 1993

B.S. (Physics) Xiangtan University, Xiangtan, China, 1990

Appointments

06-present Sandia National Laboratories, CINT, Albuquerque: Staff Scientist
05-06 Department of Physics, Boston College: Research Associate Professor
03-04 Department of Physics, Boston College: Research Assistant Professor
99-02 Los Alamos National Laboratory: Postdoc Fellow
98-99 Osaka University, Osaka, Japan: JSPS (Japanese Science Promotion Society) Fellow
96-98 National Institute for Research in Inorganic Materials, Japan: Center-Of-Excellence Fellow

Publications

1. J.Y. Huang, F. Ding, B.I. Yakobson, P. Lu, Q. Liang, and J. Li, "In-situ Observation of Graphene Sublimation and Multi-Layer Edge Reconstructions", PNAS 106, 10103 (2009).
2. Ji Feng, Liang Qi, Jian Yu Huang and Ju Li, "Geometric and electronic structure of graphene bilayer edges", Phys. Rev. B 80, 165407 (2009).
3. Jian Yu Huang, Liang Qi, Ju Li, "In-situ imaging layer-by-layer sublimation of suspended graphene", Nano. Res. 2009 (accepted).
4. J.Y. Huang, S. Chen, Z. Wang, K. Kempa, Y.M. Wang, S.H. Jo, G. Chen, M.S. Dresselhaus, and Z.F. Ren, "Superplastic carbon nanotubes", Nature 439, 281 (2006).
5. J.Y. Huang, F. Ding, and B.I. Yakobson, "Dislocation dynamics in multiwalled carbon nanotubes at high temperatures", Phys. Rev. Lett. 100, 035503 (2008).
6. J.Y. Huang, F. Ding, J. Kun, B.I. Yakobson, "Real time microscopy, kinetics, and mechanism of giant fullerene evaporation", Phys. Rev. Lett. 99,175503 (2007).
7. J.Y. Huang, S. Chen, Z.F. Ren, Z. Wang, K. Kempa, M.J. Naughton, G. Chen, and M. S. Dresselhaus, "Enhanced ductile behavior of tensile-elongated individual double- and triple-walled carbon nanotubes at high temperatures", Phys. Rev. Lett. 98, 185501 (2007).
8. J.Y. Huang, S. Chen, Z.F. Ren, Z.Q. Wang, D.Z. Wang, M. Vaziri, G. Chen, and M.S. Dresselhaus, "Kink formation and motion in carbon nanotubes", Phys. Rev. Lett. 97, 075501 (2006).
9. J.Y. Huang, S. Chen, S.H. Jo, Z. Wang, D.X. Han, G. Chen, M.S. Dresselhaus, and Z.F. Ren, "Atomic scale imaging of wall-by-wall breakdown and concurrent transport measurements in multiwall carbon nanotubes", Phys. Rev. Lett. 94, 236802 (2005).

10. Huisheng Peng, Daoyong Chen, Jian Yu Huang, S. B. Chikkannanavar, J. Hanisch, Menka Jain, D. E. Peterson, S. K. Doorn, Yunfeng Lu, Y. T. Zhu, and Q. X. Jia, “Strong and ductile colossal carbon tubes with walls of rectangular macropores”, Phys. Rev. Lett. 101, 145501 (2008).

Collaborators: M. S. Dresselhaus, Gang Chen (Massachusetts Institute of Technology); E. J. Lavernia (University of California, Davis); B. I. Yakobson (Rice University); Z. F. Ren, Z. Q. Wang, K. Kempa, M. Naughton (Boston College); S. Mao (University of Pittsburg); Y. T. Zhu (University of South Carolina)

Graduate Advisor: H. Q. Ye, Y.Q. Wu (Institute of Metal Research, Chinese Academy of Sciences)