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| **Title** | Prof./Dr. | **Name** | Yu JIA |  |
| **Subject** | Physics | **Research Interest** | 1). Metal growth and diffusion on the diamond surfaces;  2). Quantum size effect of ultrathin film; 3). Quantum alloy films;  4). Small molecular adsorption on metal surface;  5). Nano Friction and so on. |
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| **Educational Background** | Ph. D in Physics 1999---2003, Zhengzhou University, Henan, China  M. S. in Physics 1994—1997, Zhengzhou University, Henan, China  B. S. in Physics 1983 —1987, Central China Normal University, Hubei, China | | | |
| **Working Experiences** | Sept. 1987--- Jan. 1991, assistant professor at Yellow River University, China  Jan. 1991 --- Oct. 2000, lecturer at Zhengzhou University, China  Oct. 2000 --- Jul. 2003, associate professor at Zhengzhou University, China  Jul. 2003 --- Jul. 2004, visiting scholar at Oak Ridge National Laboratory, U.S.A (in Prof. Zhenyu Zhang’s group)  Sept. 2005 -- Nov. 2005, visiting scholar at Oak Ridge National Laboratory, U.S.A  Mar. 2007 --- May 2007, visiting professor at Oak Ridge National Laboratory, U.S.A  Oct. 2008 --- Dec. 2009, visiting professor at City University of Hong Kong, Hong Kong  Feb. 2009 --- Mar. 2009, visiting professor at Oak Ridge National Laboratory, U.S. A  Apr. 2013 --- May 2013, visiting professor at University College London, U.K  Jul. 2004 --- Dec. 2009, teaching as professor at Zhengzhou University, China  Oct. 2009 — now, Distinguished Professor, Zhengzhou University, China  Jan. 2012---Jan. 2017, Vice-director of University Fundamental Physics Teaching Steering Committee of Ministry of Education  Jan 2012 --- Jan. 2017 Vice-chief-editor of *Physics and Engineering* (Tsinghua University Press) | | | |
| **Research Projects** |  | | | |
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| **Selected Publications** | Published more than 270 journal articles, including 240 SCI papers; Three books in Chinese language, and one book chapter in English (Springer). More than 50 conference invited talks or oral talks.   1. Dimensionality and Valency Dependent Quantum Growth of Metallic Nano structures: A Unified Perspective，Chenhui Li, Seho Yi, Congxin Xia, Ping Cui, Chunyao Niu, Jun-Hyung Cho, Yu Jia\*, and Zhenyu Zhang，*Nano Letters*，16,6628（2016） 2. Intrinsic spin dependent and ferromagnetic stability on edge saturated zigzag graphene-like carbon-nitride nanoribbons, S. Zhang, Chong Li, S. F. Li, Q. Sun, Z.X. Guo and Yu Jia, *Applied Physics Letters*, **104** (**17),** 172111 (Apr. 2014). 3. Theoretical Study of Superlow Friction Between Two Single-Side Hydrogenated Graphene Sheets, J. J. Wang, F. Wang, J. M. Li, Y. L Song, Q. Sun and Yu Jia, Tribology Letters, 48(2), 255(Nov. 2012). 4. *Ab-inito* study of larger Pbn cluster stabilized by Pb7 units possessing significant covalent bonding, Haisheng Li, Ji Yong, Wang, Fei, Li, S F, Sun, Q, **Yu Jia,** *Physical Review B* **83,** 075429 (Feb. 2011). 5. Strong Quantum Size Effects in Pb(111) Thin Films Mediated by Anomalous Friedel Oscillations, **Yu Jia**, B. A. Wu, C. Li, T. L. Einstein, H. H. Weitering, and Z. Y. Zhang, *Physical Review Letters* **105**, 066101 (Aug. 2010). 6. First-principles study of quantum size effects in ultrathin Pb-Bi metal alloy films, **Yu Jia,** S. Y. Wang, W. G. Chen, Q. Sun, H. H. Weitering, and Z. Y. Zhang, *Physical Review B* **81, 2**45425 (Jun. 2010). 7. Tuning the quantum stability and superconductivity of ultrathin metal alloys, M. M. Özer, **Yu Jia**, James R. Thompson, Zhenyu Zhang, H. H. Weitering, *SCIENCE*, **317**, 1594 (Jun. 2007). 8. Upward self-diffusion of adatoms and small clusters on facets of fcc metal (110) surfaces, Haili Yang, Qiang Sun, Zhenyu Zhang and **Yu Jia,** *Physical Review B* **76,** 115417 (Sep. 2007). 9. Quantum size effects in Pb films from first principles: The role of the substrate，**Yu Jia**, Wu Biao, Hanno H. Weitering, Zhenyu Zhang, *Physical Review B*, **74**, 035433 (Aug. 2006). 10. Initial stages of Ti growth on diamond (100) surfaces: From single adatom diffusion to quantum wire formation, **Yu Jia**, W. G. Zhu, E.G. Wang, *Physical Review Letters* **94**, 086101 (Mar. 2005). | | | |