# **Curriculum Vitae**

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## **Educational Background:**

B.S., Physics, Seoul National University, Aug. 2003
Ph.D., Physics, Seoul National University (Ph.D. + M.S. united course), Aug. 2011 Thesis Advisor: Prof. Jaejun Yu

## **Professional Experience:**

Teaching Assistant (Computational Sciences: Theory and Practice I) with Dr. Doyup Kim, UIPCS, Seoul National University

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## Scholarship:

Scholarship, Seoul National University

Sep. 2000 - Dec. 2006

#### **Publications:**

Jae-Hyeon Parq, Jaejun Yu, and Gunn Kim, "First-principles study of ultrathin (2×2)
 Gd nanowires encapsulated in carbon nanotubes," Journal of Chemical Physics, v.132, p.054701 (2010)

2. *Jae-Hyeon Parq*, Jaejun Yu, Young-Kyun Kwon, and Gunn Kim, "**Tunable charge** donation and spin polarization of metal adsorbates on graphene using an applied electric field", Physical Review B, v. 82, 193406 (2010)

#### Abstracts:

- Jae-Hyeon Parq, Myung Joon Han, and Jaejun Yu, "LDA+U Study of Electronic and Magnetic Structure of Fe Atoms in Myoglobin Molecules", The 9th Asian Workshop on First-Principles Electronic Structure Calculations, Korea Institute for Advanced Study, Seoul, Korea (Nov. 6-8, 2006).
- Jae-Hyeon Parq, Myung Joon Han, and Jaejun Yu, "GGA+U Electronic and Magnetic Structures of Heme Molecules", The 10th Asian Workshop on First-Principles Electronic Structure Calculations, Hiroshima University, Hiroshima, Japan (Oct. 29-31, 2007).
- Jae-Hyeon Parq, Jaejun Yu, and Gunn Kim, "Geometric and Electronic Structures of Gd Nanowires in Carbon Nanotubes", The 5th Japan-Korea Symposium on Carbon Nanotube, Haeundae Grand Hotel, Busan, Korea (Nov. 9-12, 2008)
- Jae-Hyeon Parq, Jaejun Yu, and Gunn Kim, "Ultrathin (2×2) Gd Nanowires Encapsulated in Carbon Nanotubes: First-Principles Calcualtions", The 5th KIAS Electronic Structure Calculation Workshop, Korea Institute for Advanced Study, Seoul, Korea (June 18-19, 2009)
- Jae-Hyeon Parq, Jaejun Yu, Young-Kyun Kwon, and Gunn Kim, "Robustness of the Dirac Point in Response to Metal Atom Induced Charges and Spin Polarization in Graphene", The 6th KIAS Electronic Structure Calculation Workshop, Korea Institute for Advanced Study, Seoul, Korea (June 21-22, 2010).
- Jae-Hyeon Parq, Jaejun Yu, Young-Kyun Kwon, and Gunn Kim, "Electrically Tunable Charge Transfer and Spin Polarization of Metal Adatom on Graphene by Applied Electric Field", The 13th Asian Workshop on First-Principles Electronic Structure Calculations, POSTECH, Pohang, Korea (Nov. 1-3, 2010).

 Jae-Hyeon Parq and Jaejun Yu, "Effect of Strain on Electronic and Magnetic Structures of Iron Porphyrin Tapes", The 7th KIAS Electronic Structure Calculation Workshop, Korea Institute for Advanced Study, Seoul, Korea (June 23-24, 2011)