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Education

1999-2003 B.S. in Department of Physics and Astronomy, Seoul National University
2003-2012 Ph.D. in Department of Physics and Astronomy, Seoul National University
(Thesis Adviser: Professor Jisoon Ihm)

Current Position

Postdoc Research Associate, Oak Ridge Associated Universities

Honors & Awards

Awarded as an excellent poster, fall meeting, Korean Physical Society (2011)

Awarded as an Kawazoe prize (poster), ACCMS-6 (2011)

Awarded as an excellent paper, 21th winter meeting, Optical Society of Korea (2010)

Publications

17. "Electronic Properties of Bilayer Graphene Strongly Coupled to Interlayer Stacking and an External Electric Field"
Park, C., Ryou, J., Hong, S., Sumpter, B., Kim, G., Yoon, M.
Physical Review Lett. **115**, 015502 (2015)
16. "Controlled growth of metal phthalocyanine on deactivated semiconducting surfaces by selective orbital coupling"
Wagner, S., Huang, B., **Park, C.**, Feng, J., Yoon, M., Zhang, P.
Physical Review Lett. **115**, 096101 (2015)
15. "Binding and Diffusion of Lithium in Graphite: Quantum Monte Carlo Benchmarks and Validation of van der Waals Density Functional Methods"
Ganesh, P., Kim, J., **Park, C.**, Yoon, M., Reboredo, F., Kent, P.
Journal of Chemical Theory and Computation **10**, 5318–5323 (2014)
14. "Spatially resolved one-dimensional boundary states in graphene–hexagonal boron nitride planar heterostructures"
Park, J., Lee, J., Liu, L., Clark, K., Durand, C., **Park, C.**, Sumpter, B., Baddorf, A., Mohsin, A., Yoon, M., Gu, G., Li, A.-P., Nature Communications **5**, 5403 (2014)

13. "Weak competing interactions control assembly of strongly bonded TCNQ ionic acceptor molecules on silver surfaces"
Park, C., Rojas, G., Jeon, S., Kelly, S., Smith, S., Sumpter, B., Yoon, M., Maksymovych, P.
Physical Review B **90**, 125432 (2014)
12. "Interlayer coupling enhancement in graphene/hexagonal boron nitride heterostructures by intercalated defects or vacancies"
Park, S., **Park, C.**, Kim, G.
The Journal of chemical physics **140**, 134706 (2014)
11. "Decay behavior of localized states at reconstructed armchair graphene edges"
Park, C., Ihm, J., Kim, G.
Physical Review B **88**, 045403 (2013)
10. "Hydrogen storage enhancement via transition metal decoration on metal organic frameworks: A first-principles study"
Hwang, J., **Park C.**, Choi, K., Cha, M.-H., Ahuja, R., Kim, D., Kim, D., Sagong, K., Joung, U., Jeong, H., Ihm, J.
NANO **07**, 1250044 (2012)
9. "Formation of unconventional standing waves at graphene edges by valley mixing and pseudospin rotation"
Park, C., Yang, H., Mayne, A.J., Dujardin, G., Seo, S., Kuk, Y., Ihm, J., Kim, G.
Proceedings of National Academy of Sciences **108**, 18622-18625 (2011)
8. "Tunneling-induced spectral broadening of a single atom in a three-dimensional optical lattice"
Kim, W., **Park, C.**, Kim, J.-R., Choi, Y., Kang, S., Lim, S., Lee, Y.-L., Ihm, J., An, K.
Nano Letters **11**, 729 (2011)
7. "Dissociation of single-Strand DNA: Single-walled carbon nanotube hybrids by Watson-crick base-pairing"
Jung, S., Cha, M., Park, J., Jeong, N., Kim, G., **Park, C.**, Ihm, J., Lee, J.
Journal of the American Chemical Society **132**, 10964 (2010)
6. "Atomic and electronic structures of amorphous Ge₂Sb₂Te₅; Melt-quenched versus ideal glasses"
Cho, E., Im, J., **Park, C.**, Son, W.J., Kim, D.H., Horii, H., Ihm, J., Han, S.
Journal of Physics Condensed Matter **22**, 205504 (2010)
5. "Controlling half-metallicity of graphene nanoribbons by using a ferroelectric polymer"
Lee, Y.-L., Kim, S., **Park, C.**, Ihm, J., Son, Y.-W.
ACS Nano **4**, 1345 (2010)
4. "Electron emission originated from free-electron-like states of alkali-doped boron-nitride nanotubes"
Yan, B., **Park, C.**, Ihm, J., Zhou, G., Duan, W., Park, N.
Journal of the American Chemical Society **130**, 17012 (2008)
3. "Hierarchical structure and phase transition of (GeTe)_n(Sb₂Te₃)_m used for phase-change memory"
Im, J., Eom, J.-H., **Park, C.**, Park, K., Suh, D.-S., Kim, K., Kang, Y.-S., Kim, C., Lee, T.-Y., Khang, Y., Yoon, Y.-G., Ihm, J.
Physical Review B **78**, 205205 (2008)
2. "Global and local structures of the Ge-Sb-Te ternary alloy system for a phase-change memory device"

Eom, J.-H., Yoon, Y.-G., **Park, C.**, Lee, H., Im, J., Suh, D.-S., Noh, J.-S., Khang, Y., Ihm, J.
Physical Review B **73**, 214202 (2006)

1. "Electronic structure of defects and quantum transport in carbon nanotubes"

Eom, J.-H., Lee, H., Im, J., **Park, C.**, Wook Jeong, B., Kim, S., Ihm, J.
Physica B: Condensed Matter **376-377**, 7 (2006)

Conference Presentation (Oral)

- "Electronic properties of bilayer graphenes strongly coupled to interlayer stacking and the external field", American Physical Society March meeting, San Antonio, Texas, 3.2-6, 2015
- "Electronic properties of bilayer graphenes strongly coupled to interlayer stacking and the external field", Electronic Materials and Applications 2015, Orlando, Florida, 1.21-23, 2015 (invited)
- "Understanding the charge-transfer phenomena between prototypical electron-donors and acceptors: TTF-TCNQ as an example", American Physical Society March meeting, Denver, Colorado, 3.18-22, 2014
- " Evolution of Electronic structures of Bilayer-graphenes from the Bernal Stacking to the Unconventional Orthorhombic Stacking", Materials Research Society March meeting, Boston, Massachusetts, 12.1-6, 2013
- "Formation of unconventional standing waves at graphene edges", American Physical Society March meeting, Boston, Massachusetts, 2.27-3.2, 2012

References

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