**Personal Information**

Name: **Woo Seok Choi**

Affiliation: Department of Physics,

Sungkyunkwan University

Suwon, Republic of Korea

Phone: +1 (865) 438-7006

E-mail: [choiws@skku.edu](mailto:choiws@skku.edu), [choiws.skku@gmail.com](mailto:choiws.skku@gmail.com)

Web: <https://sites.google.com/site/epicoxide/>

**Research Interests**

Discovering and understanding novel physical phenomena by fabricating and characterizing complex transition metal oxide heterostructures for opto-electronic, energy, and environmental applications.

**Education**

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| Feb. 2010 | **Ph. D.**, Department of Physics and Astronomy, Seoul National University (Seoul, Korea) Thesis: “*Optical Spectroscopic Investigations on Charge/Spin/Lattice Couplings in Oxide Thin Films and Superlattices*”  Supervised by Prof. Tae Won Noh |
| Feb. 2004 | **B. S.**, Department of Physics and Astronomy, Seoul National University (Seoul, Korea) |

**Professional Experience**

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| Mar. 2013~ present  Mar. 2013 ~ Aug. 2013  Oct. 2010 ~ Feb. 2013  Mar. 2010~ Sep. 2010 | Assistant Professor, Department of Physics, Sungkyunkwan University (Suwon, Korea)  Visiting Scholar, Material Science & Technology Division,  Oak Ridge National Laboratory (Oak Ridge, USA)  Postdoctoral research associate, Material Science & Technology Division,  Oak Ridge National Laboratory (Oak Ridge, USA), Advised by Dr. Ho Nyung Lee  Postdoctoral researcher, Frontier Physics Research Division, Department of Physics and Astronomy, Seoul National University (Seoul, Korea), Advised by Prof. Tae Won Noh |

**Awards and Honors**

* TJ Park Science Fellowship by POSCO TJ Park Foundation (September 18, 2015)
* Bombi Award by The Korean Physical Society (April 24, 2014)
* 2012 ORNL Award for Outstanding Accomplishment in Scientific Research by UT-Battelle at 2012 Awards Night Achievement (November 16, 2012)
* Prize for outstanding papers for graduate students, Korean Synchrotron Radiation User’s Association (KOSUA) (November 22, 2009)
* Springer Prize for the Best Presentation, The 10th Asia Pacific Physics Conference (August 21-24, 2007, Pohang, Korea)
* Three Best Poster Awards, Korean Physical Society Annual Meetings (Spring 2005, Fall 2006, and Spring 2009)
* Two Best Poster Awards, The 2nd and 5th Joint Symposium on Ferroelectricity (February 2006 and February 2009, Muju, Korea)
* Best Poster Award, The 10th. Anniversary Workshop of APCTP "Strongly Correlated Electron Systems". (November 2-7, 2006, Pohang, Korea)
* Seoul Science Fellowship, 2005-2006 (Seoul Metropolitan Government)
* Brain Korea 21 Scholarship for Graduate Students, 2004-2009
* Scholarship for excellent record for graduate students, 2004

**Publications**

57 published, **22** as a **lead** (1st or corresponding) **author**, 19 articles in journals with impact factor > 7.

total citation (JCR): > 800, *h*-index (JCR): 16, total impact factor (JCR) > 350.

**Representative publications**

“Resonant tunnelling in a quantum oxide superlattice” **Woo Seok Choi**, Sang A Lee, Jeong Ho You, Suyoun Lee, and Ho Nyung Lee, *Nat. Commun.* **6**, 7424 (2015).

“Thermopower enhancement by fractional layer control in 2D oxide superlattices” **Woo Seok Choi**, Hiromichi Ohta, and Ho Nyung Lee, *Adv. Mater.* **26**, 6701 (2014).

“Reversible redox reactions in an epitaxially stabilized SrCoO*x* oxygen sponge” H. Jeen, W. S. Choi, M. D. Biegalski, C. M. Folkman, I. C. Tung, D. D. Fong, J. W. Freeland, D. Shin, H. Ohta, M. F. Chisholm, and H. N. Lee, *Nat. Mater.* **12**, 1057 (2013).

“Strain-Induced Spin States in Atomically Ordered Cobaltites” **Woo Seok Choi**, Ji-Hwan Kwon, Hyoungjeen Jeen, Jorge E. Hamann-Borrero, Abdullah Radi, Sebastian Macke, Ronny Sutarto, Feizhou He, George A. Sawatzky, Vladimir Hinkov, Miyoung Kim, and Ho Nyung Lee, *Nano Lett.* **12**, 4966 (2012).

“Wide bandgap tunability in complex transition metal oxides by site-specific substitution” **Woo Seok Choi**, Matthew F. Chisholm, David J. Singh, Taekjib Choi, Gerald E. Jellison Jr. and Ho Nyung Lee, *Nat. Commun.* **3**, 689 (2012).