

Curriculum Vita

Min, Byoung Koun

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EDUCATION

1. Ph. D. / Chemistry

Texas A&M University, College Station, TX, USA

Aug. 2004 , (Advisor: Prof. D. Wayne Goodman)

Dissertation: Scanning Tunneling Microscopic Studies of SiO₂ Thin Film Supported Metal Nano-Clusters

2. M. S. / Chemistry

Korea University, Seoul, Korea

Feb. 1999, (Advisor: Prof. Young-Sang Choi)

Thesis: Near IR spectroscopic studies on hydrogen bonding between thioamides in CCl₄

3. B. S. /Chemistry

Korea University, Seoul, Korea

Feb. 1996

EXPERIENCE

◆ **2014-09-01 – present: Head of Clean Energy Research Center**

◆ **2011-03-01 – present: Principal Research Scientist**

Clean Energy Center, Korea Institute of Science and Technology (KIST), Seoul, Korea

• Research Interests:

1. Solar-fuel production techniques
2. Printable CIGS thin film solar cells
3. 3-D nanostructured solar cells

◆ **2013-03-01 – present: Professor**

Green School, Korea University, Seoul, Korea

• Research Interests:

Clean energy production through carbon cycles

Solar fuels

◆ **2006-09-01 – 2011-02-28: Senior Research Scientist**

Clean Energy Center, Korea Institute of Science and Technology (KIST), Seoul, Korea

• Research Interests:

1. Hydrogen production using a photoelectrochemical cell
2. Printable CIGS thin film solar cells
3. Photocatalysis

◆ **2004-06-01 – 2006-08-14: Post-Doctoral Fellow**

Department of Chemistry and Chemical Biology, Harvard University, Cambridge, USA

Prof. C. M. Friend Laboratory

• Research Interests

1. Oxidation of propene and acrolein on oxygen covered Au(111): TPD, STM, HREELS, and LEED studies
2. Synthesis of nano-scale TiO_x islands on Au(111) surface: XPS and STM studies
3. CO oxidation on oxygen covered Au(111) surface: XPS, TPRS, and STM studies
4. Atomic oxygen formation on Au(111) surface: TPD, STM, and LEED studies
5. Reaction of NO₂ with hydroxyl and water on Mo(110)-(1x6)-O surface: IRAS and TPD studies

◆ **2004-02-16 – 2006-03-31: Visiting Scientist (National Science Foundation (NSF) Program between Japan and USA)**

Department of Chemistry, Tokyo University, Tokyo, Japan

Prof. Y. Iwasawa Laboratory

Photo-oxidation of formic acid on TiO₂ (001) by visible light irradiation: STM studies

◆ **1999 – 2004: Research Assistant**

Department of Chemistry, Texas A&M University, College Station, USA

Prof. D. W. Goodman Laboratory

• Research Interests

1. Growth mechanism of a Ti₂O₃ thin film: STM studies
2. Synthesis and characterization of sinter-resistant oxide support (TiO_x-SiO₂): STM studies
3. Titration of point defects on SiO₂ thin film with Au clusters: STM studies
4. Thermal stability of Pd clusters on SiO₂ thin film and mechanism of noble metal silicide formation: STM and AES studies
5. Synthesis and characterization of SiO₂ ultra-thin film on Mo(112) single crystal: STM, LEED,

XPS, and AES studies

6. Studies on oxygen induced reconstruction of Mo(112) surface and MoO₂: STM, LEED, XPS, and AES studies
7. Studies on Ammonia Decomposition on Ir(100) single crystal: TPD and XPS studies

◆ **1998 – 1999: Research Assistant**

Center for Mineral Resources Research, Korea University, Seoul, Korea

1. Analysis of rare metals in soil water and sea water using ICP
2. Development of analysis technique for iron in soil water

◆ **1996 - 1998: Research Assistant**

Department of Chemistry, Korea University, Seoul, Korea

Studies on hydrogen bonding between thioamide in CCl₄ using Near IR spectroscopy

PUBLICATIONS

1. Eduardus Budi Nursanto, Hyo Sang Jeon, Cheonghee Kim, Michael Shincheon Jee, Jai Hyun Koh, Yun Jeong Hwang, **Byoung Koun Min***, *Gold catalyst reactivity for CO₂ electro-reduction: from nano particle to layer*, submitted (2015).
2. Se Jin Park, Hyo Sang Jeon, Jin Woo Cho, Yun Jeong Hwang, Kyung Su Park, Hyeong Seop Shim, Jae Kyu Song, Yunae Cho, Dong-Wook Kim, Jihyun Kim, **Byoung Koun Min***, *Chalcogenization derived band-gap grading in solution processed CuIn_xGa_{1-x}(Se,S)₂ thin film solar cells*, submitted (2015)
3. Hee Sang An, Ji Eun Kim, Se Jin Park, Hyo Sang Jeon, Yun Jeong Hwang, Dong-Wook Kim,* and **Byoung Koun Min***, *Graded band-gap of CuInGaS₂ film by multi-stage paste coating for enhanced solar cell performance*, submitted (2015).
4. Michael Shincheon Jee, Hyo Sang Jeon, Cheonghee Kim, Hangil Lee, Jai Hyun Koh, Jinhan Cho, **Byoung Koun Min***, and Yun Jeong Hwang*, *Enhancement in Carbon Dioxide Reduction Activity and Stability on Nanostructured Silver Electrode and the Role of Oxygen*, submitted (2015)
5. Sung Hwan Moon, Se Jin Park, Sang Hoon Kim, Min Woo Lee, Jin Young Kim, Honggon Kim, Yun Jeong Hwang, Doh-Kwon Lee and **Byoung Koun Min***, *Monolithic DSSC/CIGS tandem solar cell fabricated by a low-cost solution process*, **Scientific Reports**, in press (2015).
6. Hyo Sang Jeon, Jai Hyun Koh, Se Jin Park, Michael Shincheon Jee, Doo-Hyun Ko, Yun Jeong Hwang* and **Byoung Koun Min***, *A monolithic and standalone solar-fuel device having comparable efficiency to photosynthesis in nature*, **Journal of Materials Chemistry A**, 3, 5835–5842 (2015),
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7. Jai Hyun Koh, Hyo Sang Jeon, Michael Shincheon Jee, Eduardus Budi Nursanto, Hyunjoo Lee, Yun Jeong Hwang,* and **Byoung Koun Min***, *Oxygen Plasma Induced Hierarchically Structured Gold Electrocatalyst for Selective Reduction of Carbon Dioxide to Carbon Monoxide*, **Journal of Physical Chemistry C**, 119, 883–889 (2015).
8. Noh Soo Han, So Hyeong Sohn, Seung Min Park, Hee Sang An, Dong-Wook Kim, **Byoung Koun Min,*** and Jae Kyu Song,*, *Band gap grading and photovoltaic performance of solution-processed Cu(In,Ga)S₂ thin-film solar cells*, **Physical Chemistry Chemical Physic**, 16, 27112-27118 (2014).
9. Jong-Gun Lee, Do-Yeon Kim, Jung-Jae Park, You-Hong Cha, Joshua Y. Yoon, Hyo Sang Jeon, **Byoung Koun Min**, Mark T. Swihart, Sungho Jin, Salem S. Al-Deyab, and Sam S. Yoon, *Graphene–Titania Hybrid Photoanodes by Supersonic Kinetic Spraying for Solar Water Splitting*, **Journal of the American Ceramic Society**, 97, 3660–3668 (2014).
10. Hyung-Kyu Lim, Hyeyoung Shin, William A. Goddard III, Yun Jeong Hwang, **Byoung Koun Min**, and Hyungjun Kim*, *Embedding covalency into metal catalysts for efficient electrochemical conversion of CO₂*, **Journal of the American Chemical Society**, 136, 11355-11361 (2014).
11. Sang Youn Chae, Hyejin Jung, **Byoung Koun Min**, Yun Jeong Hwang, and Oh-Shim Joo, *Morphology control of one-dimensional heterojunctions for highly efficient photoanodes used for solar water splitting*, **Journal of Materials Chemistry A**, 2, 11408-11416 (2014)
12. Hyun Yoon, Seung-Heon Na, Jae-Young Choi, Min Woo Kim, Hayong Kim, Hee Sang An, **Byoung Koun Min**, SeJin Ahn, Jae Ho Yun, Jihye Gwak, KyungHoon Yoon, Sanjay Kolekar, Maikel F.A.M van Hest, Salem Al-Deyab, Mark Swihart, Sam Yoon, Carbon-free, Oxygen-free Cu(InGa)(SSe)₂ Solar Cell with 4.63% Conversion Efficiency by Electrostatic Spray Deposition, **ACS Applied Materials & Interfaces**, 6, 8369-8377 (2014)
13. Eduardus Budi Nursanto, Se Jin Park, Yun Jeong Hwang, Jaehoon Kim, **Byoung Koun Min***, *Uniform Deposition of Ternary Chalcogenide Nanoparticles onto Mesoporous TiO₂ Film using Liquid Carbon Dioxide-based Coating*, *Thin Solid Films*, 565, 122-127 (2014)
14. Agus Ismail, Jin Woo Cho, Se Jin Park, Yun Jeong Hwang, **Byoung Koun Min***, *Synthesis of solution-processed Cu₂ZnSnSe₄ thin films on transparent conducting oxide glass substrates*, **Bulletin of the Korean Chemical Society**, 35, 1985-1988 (2014)
15. Yeon Soo Lee, Ji-Hyun Cha, **Byoung Koun Min**, Duk-Young Jung*, *Electrophoretic Deposition of Ga-Cu Core-shell Nanocomposites for CuGaS₂ Thin Films*, **Solar Energy Materials and Solar cells**, 125, 138-144 (2014)
16. Van Ben Chu, Jin Woo Cho, Se Jin Park, Yun Jung Hwang, Hoo Keun Park, Young Rag Do, **Byoung Koun Min***, *Fabrication of solution processed 3-D nanostructured CuInGaS₂ thin film solar cells*, **Nanotechnology**, 25, 125401-6 (2014).
17. Seon-Jin Jang, Bong-Hoon Choi, Seo-Jin Lee, **Byoung Koun Min**, Avner Rothschild, Il-Doo Kim*, *Selective detection of acetone and hydrogen sulfide for the diagnosis of diabetes and halitosis using*

- SnO₂ nanofibers functionalized with reduced graphene oxide nanosheets*, **ACS Applied Materials & Interfaces**, 6, 2588 (2014).
18. Hee Sang An, Yunae Cho, Se Jin Park, Hyo Sang Jeon, Yun Jung Hwang, Dong-Wook Kim, **Byoung Koun Min***, *Cocktails of Paste Coatings for Performance Enhancement of CuInGaS₂ Thin-Film Solar Cell*, **ACS Applied Materials & Interfaces**, 6, 888-893 (2014).
 19. Sung Hwan Moon, Se Jin Park, Hyo Sang Jeon, Jin Woo Cho, Doh-Kwon Lee, Yunae Cho, Dong-Wook Kim, **Byoung Koun Min***, *Printable, wide band-gap chalcopyrite thin films for power generating window applications*, **Scientific Reports**, 4, 4408 (2014).
 20. Se Jin Park, Yunae Cho, Sung Hwan Moon, Ji Eun Kim, Ji Hyun Kim, Dong-Wook Kim, and **Byoung Koun Min***, *A Comparative Study of Solution-Processed Low- and High-Band-Gap Chalcopyrite Thin-Film Solar Cells*, **Journal of Physics D**, 47, 135105 (2014).
 21. Antonius Dimas Chandra Permana, Agung Nugroho, Hong-Shik Lee, Seong-Min Bak, Kyung Yoon Chung, **Byoung Koun Min**, Jaehoon Kim, *Synthesis of Hydrrous Ruthenium Oxide Nanoparticles in Sub- and Supercritical Water and Their Capacitive Properties*, **Chemical Engineering Communications**, 201, 1259-1269 (2014).
 22. Van Ben Chu, Jin Woo Cho, Se Jin Park, Hoo Keun Park, Young Rag Do, **Byoung Koun Min***, *Gap filling of indium tin oxide nanorods by a precursor solution for three-dimensional CuInGaS₂ thin film solar cells*, **Research on Chemical Intermediates**, 40, 49-56 (2014).
 23. Se Jin Park, Jin Woo Cho, Joong-Kee Lee, Keeshik Shin, Ji-Hyun Kim and **Byoung Koun Min***, *Solution processed high band-gap CuInGaS₂ thin film for solar cell applications*, **Progress in Photovoltaics: Research and Applications**, 22, 122-128 (2014).
 24. Jihye Lee, Seon Hee Kim, Kang-Bong Lee, **Byoung Koun Min**, Yeonhee Lee*, *Improved Quantitative Analysis of Cu(In,Ga)Se₂ Thin Film Using MCs+-SIMS Depth Profiling*, **Applied Physics A**, 115, 1355-1364 (2014).
 25. Jin Woo Cho, Se Jin Park, Woong Kim, Sungho Yoon, and **Byoung Koun Min***, *Synthesis of Cu₂ZnSnS₄ thin films by a precursor solution paste for thin film solar cell applications*, **ACS Applied Materials & Interfaces**, 5, 4162-4165 (2013).
 26. Hoo Keun Park, Seong Woong Yoon, Won Woo Chung, **Byoung Koun Min** and Young Rag Do*, *Fabrication and characterization of large-scale multifunctional transparent ITO nanorod films*, **Journal of Materials Chemistry A**, 1, 5860-5867 (2013).
 27. Justyn Jaworski, Sunghwa Cho, Yeoungyong Kim, Jong Hwa Jung, Hyo Sang Jeon, **Byoung Koun Min***, Ki-Young Kwon*, *Hydroxyapatite Supported Cobalt Catalysts for Hydrogen Generation*, **Journal of Colloid and Interface Science**, 394, 401-408 (2013).
 28. Jianwei Jiang, Byungjoon Chae, Soon Kwan Jeong, **Byoung Koun Min**, Sang-Ho Kim, Longhai Piao, Sungho Yoon*, *Assembling Ag nanoparticles into morphology controlled secondary structures on loosely packed self-assembled monolayers*, **Journal of Colloid and Interface Science**, 394, 639-642 (2013).

29. S. H. Choi, S. J. Choi, **B. K. Min**, W. Y. Lee, J. S. Park, I. D. Kim*, *Facile Synthesis of p-type Perovskite $\text{SrTi}_{0.65}\text{Fe}_{0.35}\text{O}_3$ Nanofibers Prepared by Electrospinning and Their Oxygen Sensing Properties*, **Macromolecular Materials and Engineering**, 298, 521-527 (2013).
30. Hyo Sang Jeon, Antonius Dimas Chandra Permana, Jaehoon Kim, and **Byoung Koun Min***, *Water splitting for hydrogen production using a high surface area RuO_2 electrocatalyst synthesized in supercritical water*, **International Journal of Hydrogen Energy** 38, 6092-6096 (2013).
31. Hyesun Song, Senkuttuvan Rajendiran, Eunhae Koo, **Byoung Koun Min**, Soon Kwan Jeong, T. Daniel Thangadurai, Sungho Yoon*, *Fluorescence enhancement of N_2O_2 -type dipyrin ligand in two step responding to zinc(II) ion*, **Journal of Luminescence**, 132, 3089-3092 (2012).
32. Wonho Jang, Eduardus Budi Nursanto, Jaehoon Kim,* Se Jin Park, **Byoung Koun Min,***, Ki-pung Yoo, *Liquid carbon dioxide coating of CdS quantum-dots on mesoporous TiO_2 film for sensitized solar cell applications*, **J. Supercritical Fluids** 70, 40– 47 (2012).
33. Jin Woo Cho, Se Jin Park, Woong Kim, and **Byoung Koun Min***, *Fabrication of nanocrystal ink based superstrate-type CuInS_2 thin film solar cells*, **Nanotechnology**, 23, 265401-265406 (2012).
34. Hyo Sang Jeon, Jaehoon Kim, Honggon Kim, Sang Deuk Lee, and **Byoung Koun Min***, *Design of an electrolytic cell for a monolithic photovoltaic-electrolytic hydrogen generation system: the electrode aspects*, **Chemical Engineering Communications**, 199, 1063-1071 (2012).
35. Bonsik Joo, Yeojin Jun, **Byoung Koun Min**, Eunhae Koo, Young Rag Do, and Sungho Yoon*, *Silver Nanoparticles Are Assembled Only on the Two Facets of the Rod Template*, **J. Nanosci. Nanotechnol.** 12, 1638-1640 (2012).
36. Ah-Reum Hwang, Won-Sik Han, Kyung-Ryang Wee, Hyun Young Kim, Dae Won Cho, **Byoung Koun Min**, Suk Woo Nam, Chyongjin Pac,* and Sang Ook Kang*, *Photodynamic Behavior of Heteroleptic Ir(III) Complexes with Carbazole-Functionalized Dendrons Associated with Efficient Electron Transfer Processes*, **J. Physical Chemistry C**, 116, 1973-1986 (2012).
37. Jin Woo Cho, Se Jin Park, Jaehoon Kim, Woong Kim, Hoo Keun Park, Young Rag Do, **Byoung Koun Min***, *Bulk heterojunction formation between indium tin oxide nanorods and CuInS_2 nanoparticles for inorganic thin film solar cell applications*, **ACS Applied Materials & Interfaces**, 4, 849-853 (2012).
38. Se Jin Park, Eunjoo Lee, Hyo Sang Jeon, Jihye Gwak, Min-Kyu Oh, and **Byoung Koun Min***, *Oxidation effects on CIGS thin film growth by solution processes*, **Thin Solid Films**, 520, 3048-3053 (2012).
39. Se Jin Park, Eunjoo Lee, Sejin Ahn, Min-Kyu Oh, **Byoung Koun Min***, *A comparative study solution based CIGS thin film growth on different glass substrates*, **Applied Surface Science**, 258, 120-125 (2011).
40. Hyo Sang Jeon, Agung Nugroho, Jaehoon Kim, Hongon Kim, and **Byoung Koun Min***, *Size-dependent electrocatalytic activities of printed Co_3O_4 films for a monolithic photovoltaic-electrolytic hydrogen generation system*, **International Journal of Hydrogen Energy**, 36, 15087-10592 (2011).

41. Eunjoo Lee , Se Jin Park, Jin Woo Cho, Jihye Gwak, Min-Kyu Oh, **Byoung Koun Min***, *Nearly carbon-free printable CIGS thin films for solar cell applications*, **Solar Energy Materials & Solar Cells**, 95, 2928-2932 (2011).
42. Justyn Wayne Jaworski, Daehyun Kim, Kyeongmun Jung, Sohue Kim, Jong Ok Jeong , Hyo Sang Jeon, **Byoung Koun Min***, and Ki-Young Kwon*, *Surface modification of hydroxyapatite for hydrogen generation*, **Journal of Colloid and Interface Science**, 385, 598-603 (2011).
43. Noh Soo Han , Hyeong Seop Shim, Joo Hee Seo, Seung Min Park, **Byoung Koun Min**, Jaehoon Kim, Jae Kyu Song, *Optical properties and lasing of ZnO nanoparticles synthesized continuously in supercritical fluids*, **Chemical Physics Letters**, 505, 51-56 (2011).
44. Jae Hyoung Park, Hoo Keun Park, Jinhoo Jeong, Woong Kim, **Byoung Koun Min**, and Young Rag Do, *Wafer-Scale Growth of ITO Nanorods by Radio Frequency Magnetron Sputtering Deposition*, **Journal of The Electrochemical Society**, 158, K131-K135 (2011).
45. Sethuraman Kannan, Galmari Venkatachalam, Ha-Jin Lee, **Byoung Koun Min**, Woong Kim, Eunhae Koo, Young Rag Do, Sungho Yoon*, *Mononuclear transition metal complexes with sterically hindered carboxylate ligands: Synthesis, structural and spectral properties*, **Polyhedron**, 30, 340-346 (2011).
46. Longhai Piao, Kyung Hoon Lee, **Byoung Koun Min**, Woong Kim, Young Rag Do, and Sungho Yoon*, *A Facile Synthetic Method of Silver Nanoparticles with a Continuous Size Range from sub-10 nm to 40 nm*, **Bull. Korean Chem. Soc.** 32, 117-121 (2011).
47. Hyo Sang Jeon, Wonil Park, Jaehoon Kim, Honggon Kim, Woong Kim, and **Byoung Koun Min***, *Printed Co₃O₄ film as an electrocatalyst for hydrogen production by a monolithic photovoltaic-electrolysis system*, **International Journal of Hydrogen Energy**, 36, 1924-1926 (2011).
48. Bambang Veriansyah, Ratna F. Susanti, Agung Nugroho, **Byoung Koun Min**, Jaehoon Kim*, *Continuous synthesis of high-surface-area aluminum hydroxide methoxide nano-and microparticles in supercritical methanol and their conversion into gamma-Al₂O₃*, **Materials Letters**, 65, 772-774 (2011).
49. Byungwoo Kim, Haegeun Chung, **Byoung Koun Min**, Honggon Kim, and Woong Kim*, *Electrochemical Capacitors Based on Aligned Carbon Nanotubes Directly Synthesized on Tantalum Substrates*, **Bull. Korean Chem. Soc.** 31, 3697-3702 (2010).
50. Bambang Veriansyah, Jae-Duck Kim, **Byoung Koun Min**, Jaehoon Kim*, *Continuous Synthesis of Magnetite Nanoparticles in Supercritical Methanol*, **Materials Letters**, 64, 2197-2200 (2010).
51. Eunjoo Lee, Jin Woo Cho, Jaehoon Kim, Jaeho Yun, Jong Hak Kim, **Byoung Koun Min***, *Synthesis of CIGS powders: transition from binary to quaternary crystalline structure*, **J. Alloys and Compounds**, 506, 969-972 (2010).
52. Wonho Jang, Daejin Kim, Jaehoon Kim*, **Byoung Koun Min***, Jae-Duck Kim and Kipoong Yoo, *Uniform decoration of linker-free quantum dots onto mesoporous TiO₂ using liquid carbon dioxide*, **Chemistry of Materials**, 22, 4350-4352 (2010).

53. Bambang Veriansyah Jae-Duck Kim, **Byoung Koun Min**, Young Ho Shin, Youn-Woo Lee, and Jaehoon Kim*, *Continuous synthesis of surface-modified zinc oxide nanoparticles in supercritical methanol*, **J. Supercritical Fluids** 52, 76–83 (2010).
54. Na Kyoung Youn, Jung Eun Heo, Oh Shim Joo, Hyunjoo Lee, Jaehoon Kim, **Byoung Koun Min***, *The effect of dissolved oxygen on the 1,4-dioxane degradation with TiO₂ and Au-TiO₂ photocatalysts*, **Journal of Hazardous Materials**, 177, 216-221 (2010).
55. Hiroko Ariga, Toshiaki Taniike, Harumo Morikawa, Mizuki Tada, **Byoung Koun Min**, Kazuya Watanabe, Yoshiyasu Matsumoto, Susumu Ikeda, Koichiro Saiki, and Yashhiro Iwasawa*, *Surface-Mediated Visible Light Photo-oxidation on Pure TiO₂(001)*, **Journal of the American Chemical Society** 131, 14670-14672 (2009).
56. Jelliarko Palgunadi, Je Eun Kang, Dinh Quan Nguyen, Jin Hyung Kim, **Byoung Koun Min**, Sang Deuk Lee, Honggon Kim, Hoon Sik Kim, *Solubility of CO₂ in dialkylimidazolium dialkylphosphaste ionic liquids*, **Thermochimica Acta** 494, 94-98 (2009).
57. Bambang Veriansyah, Hyunchoe Park, Jae-Duck Kim, **Byoung Koun Min**, Young Ho Shin, Youn-Woo Lee, and Jaehoon Kim*, *Characterization of surface-modified ceria oxide nanoparticles synthesized continuously in supercritical methanol*, **J. Supercritical Fluids** 50, 283–291 (2009).
58. **Byoung Koun Min**, Xingyi Deng, Xiaoying Liu, Cynthia M. Friend,* and Ali Reza Alemozafar, *Tuning Reactivity and Selectivity for Olefin Oxidation through Local O bonding on Au*, **ChemCatChem** 1, 116-121 (2009).
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60. **Byoung Koun Min**,* Jung Eun Heo, Na Kyoung Youn, Oh Shim Joo, Hyunjo Lee, Jin Hyung Kim, and Hoon Sik Kim, *Tuning of the photocatalytic 1,4-dioxane degradation with surface Plasmon resonance of gold nanoparticles on titania*, **Catal. Comm.** 10, 712-715 (2009).
61. R. G. Quiller, T. A. Baker, X. Deng, M. E. Colling, **B. K. Min**, and C. M. Friend, *Transient hydroxyl formation from water on oxygen-covered Au(111)*, **J. Chem. Phys** 129, 064702-1 – 9 (2008).
62. A. V. Shaikh, R. Mane, H. Pathan, **B. K. Min**, O. S. Joo, and S.-H. Han, *CdSe Thin Film Growth: Primarily Amorphous Nanograins to Self-assembled Nanowires*, **J. Electroanalytical Chem.** 615, 175-179 (2008).
63. **B. K. Min** and C. M. Friend, *Gold-based Catalysis for Green Chemistry:Low temperature CO oxidation and propene oxidation*, **Chemical Reviews**. 107, 2709-2724 (2007).
64. **B. K. Min**, A. R. Alemozafar, X. Deng, D. Pinnaduwaage, and C. M. Friend, *Efficient CO oxidation at low temperature on Au(111)*, **J. Phys. Chem. B**, 110, 19833 (2006).
65. X. Deng, **B. K. Min**, X. Liu, and C. M. Friend, *Partial Oxidation of Propene on an Oxygen-covered Au(111)*, **J. Phys. Chem. B**, 110, 15982 (2006).
66. **B. K. Min**, W. T. Wallace, and D. W. Goodman, *Support Effects on the Nucleation, Growth, and Morphology of Gold Nano-clusters*, **Surf. Sci.**, 600, L7 (2006).

67. **B. K. Min**, R. G. Quiller, L. J. Deiner, and C. M. Friend, *Water Dissociation Associated with NO₂ Coadsorption on Mo(110)-(1x6)-O: The Effect of Coverage and Electronic Properties of Oxygen*, **J. Phys. Chem. B**, 109, 20463 (2005).
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69. **B. K. Min**, A. R. Alemozafar, M. M. Biener, J. Biener, and C. M. Friend, *Reaction of Au(111) with Sulfur and Oxygen: Scanning Tunneling Microscopic Study*, **Topics Catal.**, 36, 77 (2005).
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73. **B. K. Min**, W. T. Wallace, and D. W. Goodman, *The Role of Defects in the Nucleation and Growth of Au Nano-Clusters on SiO₂ Thin Films*, **J. Phys. Chem. B** 108, 16339 (2004).
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85. X. Lai, Q. Guo, **B. K. Min**, and D. W. Goodman, *Synthesis and characterization of titania films on Mo(110)*, **Surf. Sci.** 487, 1 (2001).
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