Curriculum Vitae

Personal Information

- 1. Name: CHUN, DONG HYUN
- 2. Profession: Researcher (Materials Science and Catalysis)
- 3. Affiliation: Korea Institute of Energy Research, Republic of Korea University of Science and Technology, Republic of Korea

Details of Education

- 1. **Doctor of Philosophy:** Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (Republic of Korea), **2003–2007.**
- 2. Master of Science: Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (Republic of Korea), 2001–2003.
- 3. **Bachelor of Science:** Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (Republic of Korea), **1997–2001.**

Carrier to Date

- 1. **Professor**: Energy Engineering, University of Science and Technology (Republic of Korea), 2018-Now.
- 2. **Principal Researcher/Chief**: Carbon Conversion Research Laboratory, Korea Institute of Energy Research (Republic of Korea), **2017–Now/2022-Now.**
- 3. Associate Professor: Advanced Energy and System Engineering, University of Science and Technology (Republic of Korea), 2014-2018.
- 4. Senior Researcher: Clean Fuel Laboratory, Korea Institute of Energy Research (Republic of Korea), 2007–2017.
- 5. Guest Scientist: Fuel Cell Materials Center, National Institute for Materials Science (Japan), 2004–2006.

Honors and Awards – Selected

- 1. **Ministerial Citation**, **Ministry of Science and ICT**, "Excellent Outcome of 2019 National Research and Development Program", Republic of Korea (2019).
- 2. TechConnect Global Innovation Award, <u>TechConnect World Innovation Conference &</u> <u>Expo 2018</u> "Fischer-Tropsch Synthesis using KIER SponCat Technology for Flexible Production of Liquid Fuels and Chemicals from Syngas", Anaheim, CA, USA (2018).
- TechConnect Innovation Award, <u>TechConnect World Innovation Conference & Expo</u> <u>2017</u> "Fischer-Tropsch Synthesis using Spontaneously Activatable Catalysts", Washington D.C., USA (2017).
- Ph.D. Thesis Award, <u>Korea Advanced Institute of Science and Technology</u>, 2007
 "Development of New Catalytic Foils of Intermetallic Compounds for Highly Efficient Hydrogen Generators in the Fuel Cell System", Ph.D. Thesis, Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (2007).
- Article of the Year Award, <u>Korean Institute of Metals and Materials</u>, 2006
 "Catalytic Properties of Cold-Rolled Ni₃Al Thin Foils for Methanol Decomposition", Journal of the Korean Institute of Metals and Materials 43(2005) 801-809.
- Recipient of Grant, <u>Korea Research Foundation</u>, 2005
 "Development of catalytic micro-reactor for hydrogen production from Ni₃Al thin foils", International Research Collaboration Program, 1,783,752 JPY (2005).



Social and Academic Activity

- 1. Councilor, Korean Institute of Chemical Engineers (Republic of Korea), 2020–2021.
- 2. Secretary General Affairs: Division of Energy and Environment,

Korean Institute of Chemical Engineers (Republic of Korea), 2014–2015.

 A Member of an Editorial Committee: Division of Catalysis and Reaction Engineering, Korean Institute of Chemical Engineers (Republic of Korea), 2010–2011.

Original Papers: Thesis

- Dong Hyun Chun, "Development of New Catalytic Foils of Intermetallic Compounds for Highly Efficient Hydrogen Generators in the Fuel Cell System",
 Ph.D. Thesis, Department of Materials Science and Engineering,
 Korea Advanced Institute of Science and Technology (2006) November.
- Dong Hyun Chun, "Effects of Zr addition on the phase stability of L1₂-based Al-Ti-Cr alloys", M.S. Thesis, Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (2002) December.

Original Papers: Articles

- Kyoung-Jin Kim, Kwang Young Kim, Geun Bae Rhim, Min Hye Youn, Yeol-Lim Lee, <u>Dong</u> <u>Hyun Chun</u>*, Hyun-Seog Roh*, "Nano-catalysts for gas to liquids: A concise review", Chemical Engineering Journal 468 (2023) July 143632.
- Young-eun Kim, Unho Jung, Dahye Song, Hyo Been Im, Tae Ho Lee, <u>Dong Hyun Chun</u>, Min Hye Youn, Ki Bong Lee*, Kee Young Koo*, "Dual-bed catalytic system comprising Al₂O₃ and Ba/Al₂O₃ with enhanced 1-octene productivity in 1-octanol dehydration for linear a-olefin production", **Journal of Industrial and Engineering Chemistry** 119 (2023) March 376-385.
- Ji Hee Kim, Geun Bae Rhim, Naeun Choi, Min Hye Youn, <u>Dong Hyun Chun</u>*, Seongmin Heo*, "A hybrid modeling framework for efficient development of Fischer-Tropsch kinetic models", Journal of Industrial and Engineering Chemistry 118 (2023) February 318-329.
- 4. Dong-Wook Lee*, Min-Ho Jin, Ju-Hyoung Park, Young-Joo Lee, Young-Chan Choi, Young-Eun Kim, Kee Young Koo, Ji Chan Park, Min Hye Youn, <u>Dong Hyun Chun</u>*, "Production of linear alpha olefin 1-octene through 1-octanol dehydration in packed-bed membrane reactors with large mesoporous membranes (PMRL) for remarkable improvement in 1-octanol conversion and 1-octene yield", **Fuel** 333 (2023) February 117397.

- Deviana Deviana, Geun Bae Rhim, Young-eun Kim, Hyeon Song Lee, Gyoung Woo Lee, Min Hye Youn, Kwang Young Kim, Kee Young Koo*, Jinwon Park*, <u>Dong Hyun Chun</u>*, "Unravelling acidity–selectivity relationship in the bifunctional process of Fischer-Tropsch synthesis and catalytic cracking", **Chemical Engineering Journal** 455 (2023) January 140646.
- II-Ho Choi, Hye-Jin Lee, Geun-Bae Rhim, <u>Dong Hyun Chun</u>, Kyong-Hwan Lee*, Kyung-Ran Hwang*, "Catalytic hydrocracking of heavy wax from pyrolysis of plastic wastes using Pd/Hβ for naphtha-ranged hydrocarbon production", **Journal of Analytical and Applied Pyrolysis** 161 (2022) January 105424.
- Dea Hyun Moon, Sang Shin Park, Seong-Pil Kang, Wonhee Lee, Ki Tae Park, <u>Dong Hyun</u> <u>Chun</u>, Geun Bae Rhim, Sun-Mi Hwang, Min Hye Youn*, Soon Kwan Jeong*, "Determination of kinetic factors of CO₂ mineralization reaction for reducing CO₂ emissions in cement industry and verification using CFD modeling", **Chemical Engineering Journal** 420 (2021) September 129420.
- Ho Won Ra, Tae-Young Mun, Sung Jun Hong, <u>Dong Hyun Chun</u>, Ho Tae Lee, Sung Min Yoon, Ji Hong Moon, Sung Jin Park, Seok Hyeong Lee, Jung Hoon Yang, Jae-Kon Kim, Heon Jung*, Myung Won Seo*, "Indirect coal liquefaction by integrated entrained flow gasification and Rectisol/Fischer–Tropsch processes for producing automobile diesel substitutes", Energy 219 (2021) March 119597.
- Jin Hee Lee, Hack-Keun Lee, Kwangsoo Kim, Geun Bae Rhim, Min Hye Youn, Heondo Jeong, Jong Hyeok Park, <u>Dong Hyun Chun</u>*, Byung-Hyun Kim*, Ji Chan Park*, "Unravelling the Kpromotion effect in highly active and stable Fe₅C₂ nanoparticles for catalytic linear a-olefin production", **Materials Advances** 2 (2021) February 1050-1058.
- <u>Dong Hyun Chun</u>*, Geun Bae Rhim, Min Hye Youn, Deviana Deviana, Ji Eun Lee, Ji Chan Park, Heondo Jeong, "Brief review of precipitated iron-based catalysts for low-temperature Fischer–Tropsch synthesis", **Topics in Catalysis** 63 (2020) July 793-809.
- 11. Young-eun Kim, Unho Jung, Dahye Song, Hyo Been Im, Ji Chan Park, Min Hye Youn, Heon-Do Jeong, Geun Bae Rhim, <u>Dong Hyun Chun</u>*, Dong-Wook Lee, Ki Bong Lee*, Kee Young Koo*, "Effect of Ba impregnation on Al₂O₃ catalyst for 1-octene production by 1-octanol dehydration", **Fuel** 281 (2020) December 118791.
- 12. Ji Eun Lee, <u>Dong Hyun Chun</u>, Geun Bae Rhim, Deviana Deviana, Heon Do Jeong, Ji Chan Park, Kee Young Koo, Soon Kwan Jeong*, Chang Seop Hong*, Min Hye Youn*, "Catalytic upgrading of long-chain 1-alkene in synthetic fuels over shape-controlled cobalt oxide nanocrystals", **Fuel** 269 (2020) June 117397.

- 13. Young-Eun Kim, Hyo Been Im, Un Ho Jung, Ji Chan Park, Min Hye Youn, Heon-Do Jeong, Dong-Wook Lee, Geun Bae Rhim, <u>Dong Hyun Chun</u>*, Ki Bong Lee*, Kee Young Koo*,
 "Production of linear α-olefin 1-octene via dehydration of 1-octanol over Al₂O₃ catalyst", Fuel 256 (2019) November 115957.
- 14. Jin Hee Lee, Hack-Keun Lee, <u>Dong Hyun Chun</u>, Hyunkyung Choi, Geun Bae Rhim, Min Hye Youn, Heondo Jeong, Shin Wook Kang, Jung-Il Yang, Heon Jung, Chul Sung Kim*, Ji Chan Park*, "Phase-controlled synthesis of thermally stable nitrogen-doped carbon supported iron catalysts for highly efficient Fischer-Tropsch synthesis", **Nano Research** 12 (2019) October 2568-2575.
- 15. Hack-Keun Lee, Jin Hee Lee, Jong Hyuk Seo, <u>Dong Hyun Chun</u>, Shin Wook Kang, Dong Wook Lee, Jung-Il Yang, Geun Bae Rhim, Min Hye Youn, Heon-Do Jeong, Heon Jung, Ji Chan Park*, "Extremely productive iron-carbide nanoparticles on graphene flakes for CO hydrogenation reactions under harsh conditions", **Journal of Catalysis** 378 (2019) October 289-297.
- 16. Jae-Sung Bae, Seok Yong Hong, Ji Chan Park, Geun Bae Rhim, Min Hye Youn, Heondo Jeong, Shin Wook Kang, Jung-Il Yang, Heon Jung, <u>Dong Hyun Chun</u>*, "Eco-friendly prepared ironore-based catalysts for Fischer-Tropsch synthesis", **Applied Catalysis B: Environmental** 244 (2019) May 576-582.
- 17. Hyung Ju Park, Seok Yong Hong, <u>Dong Hyun Chun</u>, Shin Wook Kang, Ji Chan Park*, Dae-Sik Lee*, "A highly susceptive mesoporous hematite microcube architecture for sustainable P-type formaldehyde gas sensors", **Sensors and Actuators B: Chemical** 287 (2019) May 437-444.
- 18. Dong-Wook Lee*, Min-Ho Jin, Ju-Hyoung Park, Young-Joo Lee, Young-Chan Choi, Ji Chan Park, <u>Dong Hyun Chun</u>, "Alcohol and water free synthesis of mesoporous silica using deep eutectic solvent as a template and solvent and its application as a catalyst support for formic acid dehydrogenation", ACS Sustainable Chemistry & Engineering 6 (2018) August 12241-12250.
- 19. Ji Chan Park*, Sanha Jang, Geun Bae Rhim, Jin Hee Lee, Hyunkyoung Choi, Heon-Do Jeong, Min Hye Youn, Dong-Wook Lee, Kee Young Koo, Shin Wook Kang, Jung-Il Yang, Ho-Tae Lee, Heon Jung, Chul Sung Kim, <u>Dong Hyun Chun</u>*, "A durable nanocatalyst of potassiumdoped iron-carbide/alumina for significant production of linear alpha olefins via Fischer-Tropsch synthesis", **Applied Catalysis A, General** 564 (2018) August 190-198.
- 20. Beum Jin Park, Sanha Jang, Jin Hee Lee, <u>Dong Hyun Chun</u>, Ji Chan Park*, Ho Seok Park*, "Hyperactive iron carbide@N-doped reduced graphene oxide/carbon nanotube hybrid architecture for rapid CO hydrogenation", **Journal of Materials Chemistry A** 6 (2018) June

11134-11139.

- 21. Shin Wook Kang, Kyeounghak Kim, <u>Dong Hyun Chun</u>, Jung-Il Yang, Ho-Tae Lee, Heon Jung, Jung Tae Lim, Sanha Jang, Chul Sung Kim, Chan-Woo Lee, Sang Hoon Joo, Jeong Woo Han, Ji Chan Park*, "High-performance Fe₅C₂@CMK-3 nanocatalyst for selective and high-yield production of gasoline-range hydrocarbons", **Journal of Catalysis** 349 (2017) May 66-74.
- 22. Sanha Jang, Shin Wook Kang, <u>Dong Hyun Chun</u>, Ho-Tae Lee, Jung-Il Yang, Heon Jung, Heon-Do Jeong, Ki Min Nam, Ji Chan Park*, "Robust iron-carbide nanoparticles supported on alumina for sustainable production of gasoline-range hydrocarbons", **New Journal of Chemistry** 41 (2017) April 2756-2763.
- 23. Ji Chan Park, Shin Wook Kang, Jeong-Chul Kim, Jae In Kwon, Sanha Jang, Geun Bae Rhim, Mijong Kim, <u>Dong Hyun Chun</u>, Ho-Tae Lee, Heon Jung, Hyunjoon Song, Jung-Il Yang*, "Synthesis of Co/SiO₂ hybrid nanocatalyst via twisted Co₃Si₂O₅(OH)₄ nanosheets for high-temperature Fischer–Tropsch reaction", Nano Research 10 (2017) March 1044-1055.
- 24. Ji Chan Park, Jae In Kwon, Shin Wook Kang, <u>Dong Hyun Chun</u>, Ho-Tae Lee, Heon Jung, Jung-Il Yang*, "Large-scale synthesis of uniformly loaded cobalt nanoparticles on alumina for efficient clean fuel production" **RSC Advances** 7 (2017) January 8852-8857.
- 25. Ji Chan Park, Jae In Kwon, Shin Wook Kang, <u>Dong Hyun Chun</u>, Heon Jung, Ho-Tae Lee, Jung-Il Yang*, "Highly productive cobalt nanoparticles supported on mesocellular silica foam for the Fischer–Tropsch reaction", **New Journal of Chemistry** 40 (2016) November 9586-9592.
- 26. Jung-Il Yang*, Tae Wan Kim, Ji Chan Park, Tak-Hyoung Lim, Heon Jung, <u>Dong Hyun Chun</u>,
 "Development of a stand-alone steam methane reformer for on-site hydrogen production",
 International Journal of Hydrogen Energy 41 (2016) May 8176-8183.
- 27. Seok Yong Hong, Ji Chan Park, Ho-Tae Lee, Jung-Il Yang, SungJun Hong, Heon Jung, <u>Dong</u> <u>Hyun Chun</u>*, "Nanocrystalline iron-ore-based catalysts for Fischer-Tropsch synthesis", **Journal** of Nanoscience and Nanotechnology 16 (2016) February 2014-2018.
- 28. Geun Bae Rhim, Seok Yong Hong, Ji Chan Park, Heon Jung, Young Woo Rhee, <u>Dong Hyun</u> <u>Chun</u>*, "Nanocrystalline ferrihydrite-based catalysts for Fischer-Tropsch synthesis: Part II. effects of activation gases on the catalytic performance", **Journal of Nanoscience and Nanotechnology** 16 (2016) February 1793-1797.
- 29. <u>Dong Hyun Chun</u>*. Ji Chan Park, Geun Bae Rhim, Ho-Tae Lee, Jung-Il Yang, SungJun Hong, Heon Jung, "Nanocrystalline ferrihydrite-based catalysts for Fischer-Tropsch synthesis: Part I. reduction and carburization behavior", **Journal of Nanoscience and Nanotechnology** 16 (2016) February 1660-1664.

- 30. Jung Tae Lim, Chul Sung Kim*, <u>Dong Hyun Chun</u>, Ji Chan Park, "Mössbauer studies of ferrihydrite for Fischer-Tropsch catalysts", **Journal of the Korean Physical Society** 68 (2016) January 302-305.
- 31. Seok Yong Hong, <u>Dong Hyun Chun</u>, Jung-Il Yang, Heon Jung, Ho-Tae Lee, Sungjun Hong, Sanha Jang, Jung Tae Lim, Chul Sung Kim, Ji Chan Park*, "A new synthesis of carbon encapsulated Fe₅C₂ nanoparticles for high-temperature Fischer–Tropsch synthesis", Nanoscale 7 (2015) October 16616-16620.
- 32. Ji Chan Park, <u>Dong Hyun Chun</u>, Jung-Il Yang, Ho-Tae Lee, Sungjun Hong, Geun Bae Rhim, Sanha Jang, Heong Jung*, "Cs promoted Fe₅C₂/charcoal nanocatalysts for sustainable liquid fuel production", **RSC Advances** 5 (2015) May 44211-44217.
- 33. Tae Wan Kim, Ji Chan Park, Tak-Hyoung Lim, Heon Jung, <u>Dong Hyun Chun</u>, Ho Tae Lee, Sungjun Hong, Jung-Il Yang*, "The kinetics of steam methane reforming over a Ni/γ-Al₂O₃ catalyst for the development of small stationary reformers", **International Journal of Hydrogen Energy** 40 (2015) April 4512-4518.
- 34. S. H. Oh, C. -W. Lee, <u>D. H. Chun</u>, J. -D. Jeon, J. Shim, K. H. Shin, J. H. Yang*, "A metal-free and all-organic redox flow battery with polythiophene as the electroactive species", **Journal of** Materials Chemistry A 2 (2014) December 19994-19998.
- 35. Jung Tae Lim, Chul Sung Kim*, <u>Dong Hyun Chun</u>, Ji Chan Park, "Magnetic properties of ironbased catalysts activated by various CO₂ concentrations", **Journal of the Korean Physical** Society 65 (2014) December 1961-1964.
- 36. Ji Chan Park, Sang Chul Yeo, <u>Dong Hyun Chun</u>, Jung Tae Lim, Jung-Il Yang, Ho-Tae Lee, SungJun Hong, Hyuck Mo Lee, Chul Sung Kim, Heon Jung*, "Highly activated K-doped iron carbide nanocatalysts designed by computational simulation for Fischer–Tropsch synthesis", Journal of Materials Chemistry A 2 (2014) August 14371-14379.
- 37. Dong Hyun Chun, Ji Chan Park, Seok Yong Hong, Jung Tae Lim, Chul Sung Kim, Ho-Tae Lee, Jung-Il Yang, SungJun Hong, Heon Jung*, "Highly selective iron-based Fischer–Tropsch catalysts activated by CO₂-containing syngas", Journal of Catalysis 317 (2014) August 135-143.
- 38. Ji Chan Park, Nam Sun Roh, <u>Dong Hyun Chun</u>, Heon Jung, Jung-II Yang*, "Cobalt catalyst coated metallic foam and heat-exchanger type reactor for Fischer-Tropsch synthesis", Fuel Process Technology 119 (2014) March 60-66.
- 39. <u>Dong Hyun Chun</u>, Ji Chan Park, Ho-Tae Lee, Jung-Il Yang, SungJun Hong, Heon Jung*,
 "Effects of SiO₂ incorporation sequence on the catalytic properties of iron-based Fischer-

Tropsch catalysts containing residual sodium", **Catalysis Letters** 143 (2013) October 1035-1042.

- 40. Jung Hoon Yang, Young Gul Hur, <u>Dong Hyun Chun</u>, Hak-Joo Kim, Ho-Tae Lee, Heon Jung*, Seung Bin Park*, "Hydrodynamic effect of oxygenated byproduct during Fischer-Tropsch synthesis in slurry bubble column" Chemical Engineering and Processing: Process Intensification 66 (2013) April 27-35.
- 41. Jung Hoon Yang, Young Gul Hur, Ho-Tae Lee, Jung-Il Yang, Hak-Joo Kim, <u>Dong Hyun Chun</u>, Ji Chan Park, Heon Jung*, Seung Bin Park*, "Interaction between partitioning porous plate and rising bubbles in a trayed bubble column" **Chemical Engineering Research and Design** 90 (2012) October 1457-1466.
- 42. Jung Hoon Yang, Young Gul Hur, Ho-Tae Lee, Jung-Il Yang, Hak-Joo Kim, <u>Dong Hyun Chun</u>, Ji Chan Park, Heon Jung*, "The effect of partitioning porous plate on bubble behavior and gas hold-up in a bench scale (0.36 m × 22 m) trayed bubble column" Korean Chemical Engineering Research 50 (2012) June 505-510.
- 43. <u>Dong Hyun Chun</u>, Ho-Tae Lee, Jung-Il Yang, Hak-Joo Kim, Jung Hoon Yang, Ji Chan Park, Byeong-Kwon Kim, Heon Jung*, "Negative effects of CO₂ in the feed stream on the catalytic performance of precipitated iron-based catalysts for Fischer-Tropsch synthesis" Catalysis Letters 142 (2012) April 452-459.
- 44. Jung-Il Yang, <u>Dong Hyun Chun</u>, Ji Chan Park, Heon Jung*, "Kinetic study of the Fischer-Tropsch synthesis and water gas shift reactions over a precipitated iron catalyst" Korean Chemical Engineering Research 50 (2012) April 358-364.
- 45. Jung-Il Yang*, Jae-Hong Ryu, Kwan-Young Lee, Nam-Jo Jung, Ji Chan Park, <u>Dong Hyun</u> <u>Chun</u>, Hak-Joo Kim, Jung Hoon Yang, Ho-Tae Lee, Inho Cho, Heon Jung, "Combined prereformer/reformer system utilizing monolith catalysts for hydrogen production" **International Journal of Hydrogen Energy** 36 (2011) July 8850-8856.
- 46. Jung Hoon Yang, Jung-Il Yang, <u>Dong Hyun Chun</u>, Hak-Joo Kim, Ho-Tae Lee, Heon Jung*,
 "Catalytic process for decolorizing yellow plume" Korean Journal of Chemical Engineering 28 (2011) February 418-423.
- 47. Heon Jung, Jung-Il Yang*, Jung Hoon Yang, Ho-Tae Lee, <u>Dong Hyun Chun</u>, Hak-Joo Kim, "Investigation of Fischer-Tropsch synthesis performance and its intrinsic reaction behavior in a bench scale slurry bubble column reactor" **Fuel Processing Technology** 91 (2010) December 1839-1844.
- 48. Sun-Taek Hyun, Dong Hyun Chun, Hak-Joo Kim, Jung Hoon Yang, Jung-Il Yang, Ho-Tae Lee,

Kwan-Young Lee*, Heon Jung*, "Effects of SiO₂ incorporation on catalytic performance and physico-chemical properties of iron-based catalysts for the Fischer-Tropsch synthesis" **Korean Chemical Engineering Research** June 48 (2010) 304-310.

- 49. Jung Hoon Yang, Hak-Joo Kim, <u>Dong Hyun Chun</u>, Ho-Tae Lee, Jai-Chang Hong, Heon Jung, Jung-Il Yang*, "Mass transfer limitations on fixed-bed reactor for Fischer-Tropsch synthesis" Fuel Processing Technology 91 (2010) March 285-289.
- 50. Jun Hyuk Jang, Ya Xu, <u>Dong Hyun Chun</u>, Masahiko Demura. Dang Moon Wee*, Toshiyuki Hirano*, "Catalytic activity of pre-activated Ni₃Al foil catalysts for hydrogen production from methanol under steam addition" Catalysis Letters 134 (2010) February 258-263.
- 51. Jung-Il Yang*, Jung Hoon Yang, Hak-Joo Kim, Heon Jung, <u>Dong Hyun Chun</u>, Ho-Tae Lee, "Highly effective cobalt catalyst for wax production in Fischer.Tropsch synthesis" Fuel 89 (2010) January 237-243.
- 52. Ya Xu*, <u>Dong Hyun Chun</u>, Jun Hyuk Jang, Masahiko Demura, Dang Moon Wee, Toshiyuki Hirano, "Catalytic activity of oxidation-reduction pre-treated Ni₃Al for methane steam reforming" Advaned Materials Research 89-91 (2010) January 645-650.
- 53. Jun Hyuk Jang, Ya Xu, <u>Dong Hyun Chun</u>, Masahiko Demura, Dang MoonWee*, Toshiyuki Hirano*, "Effects of steam addition on the spontaneous activation in Ni₃Al foil catalysts during methanol decomposition" **Journal of Molecular Catalysis A: Chemical** 307 (2009) July 21-28.
- 54. Seok-Hyun Lee, Jeong-Heon Kim, Min-Chul Kim, <u>Dong Hyun Chun</u>, Dang-Moon Wee*, "Effects of Nb and Ti addition and surface treatments on the electrical conductivity of 316 stainless steel as bipolar plates for PEMFC" **Journal of Korean Institute of Metals and Materials** 45 (2007) January 44-50.
- 55. Yan Ma, Ya Xu, Masahiko Demura, <u>Dong Hyun Chun</u>, Guoqiang Xie, Toshiyuki Hirano*,
 "Catalytic activity of atomized Ni₃Al powder for hydrogen generation by methane steam reforming" Catalysis Letters 112 (2006) November 31-36.
- 56. <u>Dong Hyun Chun</u>, Ya Xu, Masahiko Demura, Kyosuke Kishida, Dang Moon Wee*, Toshiyuki Hirano*, "Spontaneous catalytic activation of Ni₃Al thin foils in methanol decomposition" Journal of Catalysis 243 (2006) October 99-107.
- 57. <u>Dong Hyun Chun</u>, Ya Xu, Masahiko Demura, Kyosuke Kishida, Myung Hoon Oh, Toshiyuki Hirano*, Dang Moon Wee*, "Catalytic properties of Ni₃Al foils for methanol decomposition" Catalysis Letters 106 (2006) January 71-75.
- 58. Dong Hyun Chun, Ya Xu, Masahiko Demura, Kyosuke Kishida, Min-Chul Kim, Myung-Hoon

Oh, Toshiyuki Hirano*, Dang-Moon Wee*, "Catalytic properties of cold-rolled Ni₃Al thin foils for methanol decomposition" **Journal of Korean Institute of Metals and Materials** 43 (2005) December 801-809.

- 59. <u>Dong Hyun Chun</u>, Jae-Kyeong Lee, Myung-Hoon Oh, Dang-Moon Wee*, "Effects of Zr addition on the phase stability of L1₂-based Al-Ti-Cr alloys" Materials Letters 59 (2005) October 2923-2927.
- 60. <u>Dong Hyun Chun</u>, Jae-Kyeong Lee, Myung-Hoon Oh, Dang-Moon Wee*, "Effects of Zr addition on the phase stability of L1₂-based Al-Ti-Cr alloys" Journal of Korean Institute of Metals and Materials 42 (2004) January 14-20.