

CURRICULUM VITAE



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Work & Teaching Experiences

2016-present Professor: Soongsil University
2011-2016 Associate Professor: Soongsil University
2005-2011 Assistant Professor: Soongsil University
2014-present Editor of Journal of Industrial Engineering and Chemistry (ISSN: 1226-086X)
2004-2005 Postdoctoral Researcher: The Pennsylvania State University, USA
2003-2004 Postdoctoral Researcher: Research Center for Energy Conversion and Storage

Education

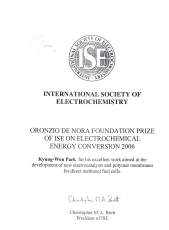
1998 - 2003 Ph. D. Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST), Gwangju, S. Korea
(Thesis title: Design and Characterization of Pt-based Nanostructure Electrocatalysts for Methanol Electrooxidation in Direct Methanol Fuel Cells)
1996 – 1998 M.S. Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST), Gwangju, S. Korea

(Thesis title: Selective Area MOVPE for Photonic Device Integration)

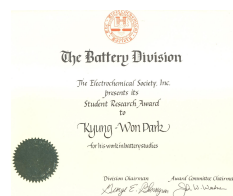
1992 – 1996 B.E. Materials Science and Engineering, Sungkyunkwan University, Suwon, S. Korea

Awards

- 2018 Best Soongsil Fellow Professor Award, Soongsil University
2017 Best Soongsil Fellow Professor Award, Soongsil University
2016 Best Soongsil Fellow Professor Award, Soongsil University
2014 Best Soongsil Fellow Professor Award, Soongsil University
2013 Best Soongsil Fellow Professor Award, Soongsil University
2012 Best Soongsil Fellow Professor Award, Soongsil University
2011 Best Soongsil Fellow Professor Award, Soongsil University
2006 **Oronzio de Nora Foundation Prize on Electrochemical Energy Conversion, International Society of Electrochemistry (ISE)**



- 2003 **Student Research Award of the Battery Division, The Electrochemical Society, USA**



- 2003 Excellent Graduate Student Award, Gwangju Institute of Science and Technology, BK21
2003 Best Presentation Award, Fuel Cell Symposium, The Korean Electrochemical Society
2002 Best Presentation Award, Fuel Cell Symposium, The Korean Electrochemical Society
2001 Best Presentation Award, The Korean Chemical Society
2000 Best Presentation Award, The Korean Electrochemical Society
1996 -2002 Korean Government Scholarship

Professional Activity

- Member of International Society of Electrochemistry (ISE)
Member of Materials Research Society (USA)
Member of The Electrochemical Society (USA)

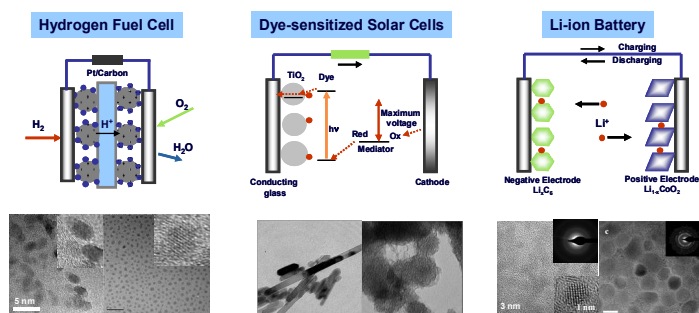
Member of American Chemical Society (ACS)

Member of The Korean Society of Industrial and Engineering Chemistry

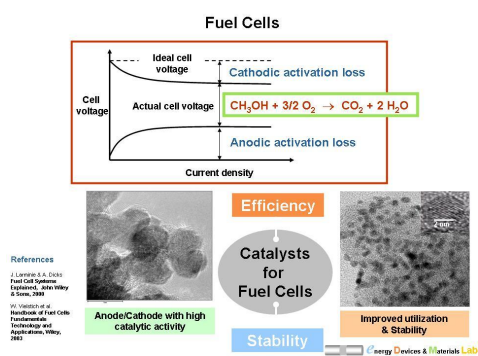
Member of The Korean Electrochemical Society

Research Interests

1. Electrochemical Energy Conversion and Storage



2. Energy-related Nanostructure Materials



3. Electrochemistry-based Applications

- 국내외 특허 60 여건 출원 및 40 여건 등록
- 기술이전 9 건
- SCI(E)-Papers : 총 170 여편, Total citation=7500, h-index=41

SCI Publication List

1. "Doped porous carbon nanostructure materials as non-precious metal cathode catalysts for oxygen reduction reaction in acid and alkaline media", Suk-Hui Kwon, Sang-Beom Han, Da-Hee Kwak, JiHyeon Song, and **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry* 80 (2019) 171-181
2. "Evaluation of antioxidant activity of amaranthus hypochondriacus L. extract using cyclic voltammetry", Hye-Jin Kwon, Na-Seul Jung, Sang-Beom Han, **Kyung-Won Park**, *Electrochemistry*, 87(6) (2019) 336-340
3. "Facile one-pot synthesis of Ge/TiO₂ nanocomposite materials with improved electrochemical performance", Hyeona Kim, Min-Cheol Kim, Sojeong Choi, Sang-Hyun Moon, Yo-Seob Kim, **Kyung-Won Park**, *Nanoscale* 11 (2019) 17415-17424
4. "Organic ligand-free PtIr alloy nanostructures for superior oxygen reduction and evolution reactions", Jin-Young Park, Hyun-Suk Park, Sang-Beom Han, Da-Hee Kwak, Ji-Eun Won, Taeho Lim, **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry*, 77 (2019) 105-110
5. "Surface modified and size-controlled octahedral Cu₂O nanostructured electrodes for lithium-ion batteries", Eun-Soo Kim, Min-Cheol Kim, Sang-Hyun Moon, Yeon-Kyung Shin, Ji-Eun Lee, Sojeong Choi, **Kyung-Won Park**, *Journal of Alloys and Compounds*, 794 (2019) 84-93
6. "Role of polyvinylpyrrolidone in electrochemical performance of Li₂MnO₃ cathode for lithium-ion batteries", Ji-Eun Lee, Min-Cheol Kim, Sang-Hyun Moon, Eun-Soo Kim, Yeon-Kyung Shin, Sojeong Choi, Suk-Hui Kwon, Si-Jin Kim, Hye-Jin Kwon, and **Kyung-Won Park**, *RSC Advances*, 9 (2019) 10297-10304

7. "TiO₂-coated LiCoO₂ electrodes fabricated by sputtering method for lithium-ion batteries with enhanced electrochemical performance", Sang-Hyun Moon, Min-Cheol Kim, Eun-Soo Kim, Yeon-Kyung Shin, Ji-Eun Lee, Sojeong Choi, **Kyung-Won Park**, *RSC Advances*, 9(14) (2019) 7903-7907
8. "Pore-controlled polymer membrane with Mn(II) ion trapping effect for high-rate performance LiMn₂O₄ cathode", Yeon-Kyung Shin, Min-Cheol Kim, Sang-Hyun Moon, Eun-Soo Kim, Ji-Eun Lee, Sojeong Choi, Hyeona Kim, **Kyung-Won Park**, *Journal of Solid State Electrochemistry* 23(2) (2019) 474-484
9. "Fe nanoparticles encapsulated in doped graphitic shells as a high-performance and stable catalyst for oxygen reduction reaction in an acid medium", Hyun-Suk Park, Sang-Beom Han, Da-Hee Kwak, Jae-Hee Han, and **Kyung-Won Park**, *Journal of Catalysis*, (2019) 370 (2019) 130-137
10. "Systematic design of hierarchical Ni₃S₂/MoO₂ nanostructures grown on 3D conductive substrate for high-performance pseudocapacitors", Young-Woo Lee, Min-Cheol Kim, Quoc Hung Nguyen, Wook Ahn, Jae-Eun Jung, **Kyung-Won Park**, Jung Inn Shon, *Ceramics International*, 45(2) (2019) 2670-2675
11. "Stress-relieved Si anode on a porous Cu current collector for high-performance lithium-ion batteries", Sang-Hyun Moon, Si-Jin Kim, Min-Cheol Kim, Jin-Young So, Ji-Eun Lee, Yeon-Kyung Shin, Sang-Beom Han, Da-Hee Kwak, Won-Gyu Bae, **Kyung-Won Park**, *Materials Chemistry and Physics*, 223 (2019) 152-156
12. "High-performance direct ethanol fuel cells with reduction of nitrate as a liquid cathode catalyst", Kyung-Bae Ma, Da-Hee-Kwak, Sang-Beom Han, Hyun-Suk Park, Suk-Hui Kwon, and **Kyung-Won Park**, *International Journal of Hydrogen Energy*, 43(36) (2018) 17265-17270
13. "Investigation of the durability of Fe/N-doped mesoporous carbon nanostructure as a non-precious metal catalyst for oxygen reduction reaction in acid medium", Da-Hee Kwak, Sang-Beom Han, Do-Hyoung Kim, Jin-Young Park, Kyeng-Bae Ma, Ji-Eun Won, Min-Cheol Kim, Sang-Hyun Moon, **Kyung-Won Park**, *Carbon*, 140 (2018) 189-200
14. "Micro-patterned 3D Si electrodes fabricated using an imprinting process for high-performance lithium ion batteries", Si-Jin Kim, Sang-Hyun Moon, Min-Cheol Kim, Jin-Young So, Sang-Beom Han, Da-Hee Kwak, Won-Gyu Bae, and **Kyung-Won Park***, *Journal of Applied Electrochemistry*, 48(9) (2018) 1057-1068

15. "Stress Dispersed Cu Metal Anode by Laser Multiscale Patterning for Lithium-Ion Batteries with High Capacity", Jin-Young So, Sang-Hyun Moon, Min-Cheol Kim, Si-Jin Kim, Sang-Beom Han, Chan-Ho Lee, Ji-Eun Kim, Hyun-Jee Kim, Joonha Jun, Ki-Young Song, **Kyung-Won Park**, and Won-Gyu Bae, *Metals*, 8(6) (2018) 410-420
16. "Amino acid-derived non-precious catalysts with excellent electrocatalytic performance and methanol tolerance in oxygen reduction reaction", Da-Hee Kwak, Sang-Beom Han, Do-Hyoung Kim, Ji-Eun Won, **Kyung-Won Park**, *Applied Catalysis B*, 239 (2018) 93-103
17. "Sea Urchin-like Li₄Ti₅O₁₂ Nanostructure as a Li-Ion Battery Anode with High Energy Density and Improved Ionic Transport", Min-Cheol Kim, Sang-Hyun Moon, Sang-Beom Han, Da-Hee Kwak, Ji-Eun Lee, Eun-Soo Kim, Sojeong Choi, Yeon-Kyung Shin and **Kyung-Won Park**, *Journal of Alloys and Compounds*, 767 (2018) 73-80
18. "Direct ethanol fuel cells with superior methanol-tolerant non-precious metal cathode catalysts for oxygen reduction reaction", Kyung-Bae Ma, Da-Hee-Kwak, Sang-Beom Han, Hyun-Suk Park, Do-Hyoung Kim, Ji-Eun Won, Suk-Hui Kwon, Min-Cheol Kim, Sang-Hyun Moon, and **Kyung-Won Park**, *ACS Sustainable Chemistry & Engineering*, 6(6) (2018) 7609-7618
19. "Nature Inspired Cathodes using High-density Carbon Papers with Eddy Current Effect for High-rate Performance Li-air Batteries", Min-Cheol Kim, Jin-Young So, Sang-Hyun Moon, Sang-Beom Han, Sojeong Choi, Eun-Soo Kim, Yeon-Kyung Shin, Ji-Eun Lee, Da-Hee Kwak, Chanho Lee, Won-Gyu Bae, and **Kyung-Won Park**, *Journal of Materials Chemistry A* 6 (2018) 9550-9560
20. "3D yolk-shell Si@void@CNF nanostructured electrodes with improved electrochemical performance for lithium-ion batteries", Sojung Choi, Min-Cheol Kim, Sang-Hyun Moon, Ji-Eun Lee, Eun-Soo Kim, Yeon-Kyung Shin, and **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry*, 64 (2018) 344-351
21. "A chemically regenerative redox fuel cell using (2,2,6,6-tetramethylpiperidin-1-yl)oxyl redox reaction in acid medium", Sang-Beom Han, Da-Hee Kwak, Hyun Suk Park, Jin-Young Park, Kyeng-Bae Ma, Ji-Eun Won, Do-Hyoung Kim, Min-Cheol Kim, and **Kyung-Won Park**, *Journal of Power Sources*, 393 (2018) 32-36
22. "Nitrogen-doped bi-modal porous carbon nanostructure derived from glycine for supercapacitors", In-Ae Choi, Da-Hee Kwak, Sang-Beom Han, **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry*, 63 (2018) 112-116

23. "Molybdenum carbide embedded in carbon nanofiber as a 3D flexible anode with superior stability and high-rate performance for Li-ion batteries", Gyo-Ho Lee, Sang-Hyun Moon, Min-Cheol Kim, Si-Jin Kim, Sojeong Choi, Eun-Soo Kim, Sang-Beom Han, and **Kyung-Won Park**, *Ceramics International*, 44 (2018) 7972-7977.
24. "MoS₂-TiN nanostructured electrodes fabricated using co-sputtering deposition method for high-performance lithium-ion batteries", Sang-Hyun Moon, Si-Jin Kim, Min-Cheol Kim, Gyu-Ho Lee, Hui-Seon Choe, Sang-Beom Han, Jong-Ho Choi, and **Kyung-Won Park**, *Journal of Alloys and Compounds*, 741 (2018) 1048-1054.
25. "Enhanced oxygen reduction reaction of Pt deposited Fe/N-doped bimodal porous carbon nanostructure catalysts", Jin-Young Park, Da-Hee Kwak, Kyeng-Bae Ma, Sang-Beom Han, Geun Seok Chai, Chang-Soo Kim, Dong-Hyun Peck, Sang-Kyung Kim, Anthony Kucernak, **Kyung-Won Park**, *Journal of Catalysis*, 359 (2018) 46-54.
26. "PtIr/Ti₄O₇ as a bifunctional electrocatalyst for improved oxygen reduction and oxygen evolution reactions", Ji-Eun Won, Da-Hee Kwak, Sang-Beom Han, Hyun-Suk Park, Jin-Young Park, Kyeng-Bae Ma, Do-Hyoung Kim, **Kyung-Won Park**, *Journal of Catalysis*, 358 (2018) 287-294.
27. "The role of arginine as nitrogen doping and carbon source for enhanced oxygen reduction reaction", Do-Hyoung Kim, Da-Hee-Kwak, Sang-Beom Han, Hyun-Suk Park, Jin-Young Park, Ji-Eun Won, Kyeng-Bae Ma, Seok-Hyeon Yun, Suk-Hui Kwon, Moon Hyun Koh, **Kyung-Won Park**, *International Journal of Hydrogen Energy*, 43 (2018) 1479-1488
28. "In-situ synthesis of Ge/Ti₄O₇ composite with enhanced electrochemical properties", Hui-Seon Choe, Min-Cheol Kim, Sang-Hyun Moon, Eun-Soo Kim, Si-Jin Kim, Gyu-Ho Lee, Ji-Eun Won, **Kyung-Won Park**, *Ceramics International*, 44 (2018) 663-668.
29. "Electrochemical catalytic contribution of transition metals at the center of porphyrin macrocycle structures as catalysts for oxygen reduction reaction", Do-Hyoung Kim, Da-Hee-Kwak, Sang-Beom Han, Hyun-Suk Park, Jin-Young Park, Ji-Eun Won, Kyung-Bae Ma, **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry*, 57 (2017) 200-204.
30. "Sulfur-doped porphyrinic carbon nanostructures synthesized by amorphous MoS₂ for oxygen reduction reaction in an acid medium", Hyun-Suk Park, Sang-Beom Han, Da-Hee Kwak, Gyu-Ho Lee, In-Ae Choi, Do-Hyoung Kim, Kyeng-Bae Ma, Min-Cheol Kim, Hye-Jin Kwon, **Kyung-Won Park**, *ChemSusChem*, 10 (2017) 2202-2209.

31. "Doped porous carbon nanostructures as non-precious metal catalysts prepared by amino acid glycine for oxygen reduction reaction", In-Ae Choi, Da-Hee Kwak, Sang-Beom Han, Jin-Young Park, Hyun-Suk Park, Kyeng-Bae Ma, Do-Hyoung Kim, Ji-Eun Won, **Kyung-Won Park**, *Applied Catalysis B: Environmental*, 211 (2017) 235-244.
32. "3-dimensional Si/carbon nanofiber as a binder/current collector-free anode for lithium-ion batteries", Si-Jin Kim, Min-Cheol Kim, Sang-Beom Han, Gyu-Ho Lee, Hui-Seon Choe, Sang-Hyun Moon, Da-Hee Kwak, Seongho Hong, **Kyung-Won Park**, *Journal of Industrial Engineering Chemistry*, 49 (2017) 105-111.
33. "High-Performance Chemically Regenerative Redox Fuel Cells using a NO₃⁻/NO Regeneration Reaction", Sang-Beom Han, Da-Hee Kwak, Hyun Suk Park, In-Ae Choi, Jin-Young Park, Si-Jin Kim, Min-Cheol Kim, Seongho Hong, and Kyung-Won Park, *Angewandte Chemie International Edition*, 56 (2017) 2893-2897.
34. "A comprehensive review on unitized regenerative fuel cells: crucial challenge and developments", T. Sadhasivam, K. Dhanabalan, Sung-Hee Roh, Tae-Ho Kim, **Kyung-Won Park**, Seunghun Jung, Mahaveer D. Kurkuri, Ho-Young Jung, *International Journal of Hydrogen Energy*, 42 (2017) 4415-4433.
35. "Fe/N/S-doped mesoporous carbon nanostructures as electrocatalyst for oxygen reduction reaction in acid medium", Da-Hee Kwak, Sang-Beom Han, Y.-W. Lee, Hyun-Suk Park, In-Ae Choi, Min-Cheol Kim, Si-Jin Kim, Do-Hyoung Kim, Jung Inn Sohn, **Kyung-Won Park**, *Applied Catalysis B*, 203 (2017) 889-898.
36. "In situ formation of MoS₂/C nanocomposite as an anode for high-performance lithium-ion batteries", Gyu-Ho Lee, Si-Jin Kim, Min-Cheol Kim, Hui-Seon Choe, Da-Mi Kim, Sang-Beom Han, Da-Hee Kwak, Jae Hyun Jeong, **Kyung-Won Park**, *RSC Advances*, 6 (2016) 92259-92266.
37. "Porous Cu-rich@Cu₃Pt alloy catalyst with a low Pt loading for enhanced electrocatalytic reactions", Jin-Yeon Lee, Sang-Beom Han, Da-Hee Kwak, Min-Cheol Kim, Seul Lee, Jin-Young Park, In-Ae Choi, Hyun-Suk Park, **Kyung-Won Park**, *Journal of Alloys and Compounds*, 691 (2017) 26-33
38. "Porous Metal-Nitrogen Doped Carbon Nanostructures as a Non-Precious Electrocatalyst for Oxygen Reduction Reaction", Seul Lee, Young-Woo Lee, Da-Hee Kwak, Jin-Yeon Lee, Sang-Beom Han, Jung Inn Sohn, and **Kyung-Won Park**, *Journal of Industrial and Engineering Chemistry*, 43 (2016) 170-176.

39. "Graphitized carbon as an efficient mesoporous layer for unitized regenerative fuel cells", T Sadhasivam, Sung-Hee Roh, Tae-Ho Kim, **Kyung-Won Park**, Ho-Young Jung, *International Journal of Hydrogen Energy*, 41(2016) 18226-18230.
40. "3D flexible Si based-composite(Si@Si₃N₄)/CNF electrode with enhanced cyclability and high rate capability for lithium-ion batteries", Si-Jin Kim, Min-Cheol Kim, Sang-Beom Han, Gyu-Ho Lee, Hui-Seon Choe, Da-Hee Kwak, Sun-Yong Choi, Byung-Goo Son, Myoung-Sun Shin, **Kyung-Won Park**, *Nano Energy*, 27 (2016) 545-553.
41. "Synthesis of Ge/C composites as anodes using glucose as a reductant and carbon source for lithium-ion batteries", Hui-Seon Choe, Si-Jin Kim, Min-Cheol Kim, Da-Mi Kim, Gyu-Ho Lee, Sand-Beom Han, Da-Hee Kwak, and **Kyung-Won Park**, *RSC Advances* 6 (2016) 72926-72932.
42. "Chemically regenerative redox fuel cells using iron redox couple as a liquid catalyst with co-catalysts", Sang-Beom Han, Da-Hee Kwak, Hyun Suk Park, In-Ae Choi, Jin-Young Park, Kyeng-Bae Ma, Ji-Eun Won, Do-Hyoung Kim, Si-Jin Kim, Min-Cheol Kim, and **Kyung-Won Park**, *ACS Catalysis*, 6 (2016) 5302-5306.
43. "Bimodal porous iron-nitrogen doped highly crystalline carbon nanostructure as a cathode catalyst for oxygen reduction reaction in an acid medium", Seul Lee, Da-Hee Kwak, Sang-Beom Han, Young-Woo Lee, Jin-Yeon Lee, In-Ae Choi, Hyun-Suk Park, Jin-Young Park, and **Kyung-Won Park**, *ACS Catalysis*, 6 (2016) 5095-5102.
44. "Electrospun Sn Embedded in Carbon Nanofibers as an Anode for High-Performance Lithium-Ion Batteries", Da-Mi Kim, Young-Woo Lee, Si-Jin Kim, Min-Cheol Kim, Gyu-Ho Lee, Hui-Seon Choe, Wansoo Huh, and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 11 (2016) 3591-3603.
45. "Electrodeposited nanoporous PtY alloy electrodes with an enhanced activity for oxygen reduction reaction", Sang-Beom Han, Da-Hee Kwak, Eui-Tak Hwang, Young-Woo Lee, Si-Jin Kim, Jin-Yeon Lee, Seul Lee, Hye-Jin Kwon, and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 11 (2016) 3803-3814.
46. "In-Situ Synthesis and Characterization of Ge Embedded Electrospun Carbon Nanostructures as High Performance Anode Material for Lithium-Ion Batteries", Young-Woo Lee, Da-Mi Kim, Si-Jin Kim, Min-Cheol Kim, Hui-Seon Choe, Gyu-Ho Lee, Jung Inn Sohn, Seung Nam Cha, Jong Min Kim, **Kyung-Won Park**, *ACS-Applied Materials & Interfaces*, 8(11) (2016) 7022-7029.

47. "Synergistic Incorporation of Hybrid Heterobimetal-Nitrogen Atoms into Carbon Nanostructures for Superior Oxygen Electroreduction Performances", Young-Woo Lee, Geon-Hyoung An, Seul Lee, John Hong, Byung Sung Kim, Juwon Lee, Da-Hee Kwak, Hyo-Jin Ahn, Wansoo Huh, Jung Inn Sohn, Seung Nam Cha, and **Kyung-Won Park**, Jong Min Kim, *Catalysis Science & Technology*, 6 (2016) 2085-2091.
48. "Enhancing the flame-retardant performance of wood-based materials using carbon-based materials", Hyun Jeong Seo, Sumin Kim, Wansoo Huh, **Kyung-Won Park**, Dong Ryeol Lee, Dong Won Son, Yong-Shik Kim, *Journal of Thermal Analysis and Calorimetry*, 123 (2016) 1935-1942.
49. "Synthesis of hollow carbon nanostructures as a non-precious catalyst for oxygen reduction reaction", Seul Lee, Da-Hee Kwak, Sang-Beom Han, Eui-Tak Hwang, Min-Cheol Kim, Jin-Yeon Lee, Young-Woo Lee, **Kyung-Won Park***, *Electrochimica Acta*, 191 (2016) 805-812
50. "Highly stable TiO₂ coated Li₂MnO₃ cathode materials for lithium-ion batteries", Si-Jin Kim, Min-Cheol Kim, Da-Hee Kwak, Da-Mi Kim, Gyu-Ho Lee, Hui-Seon Choe, and **Kyung-Won Park**, *Journal of Power Sources*, 304 (2016) 119-127.
51. "Preparation and Characterization of PtIr Alloy Dendritic Nanostructures for Superior Electrochemical Activity and Stability in Oxygen Reduction and Ethanol Oxidation Reactions", Y.-W. Lee, E.-T. Hwang, D.-H. Kwak, **Kyung-Won Park**, *Catalysis Science & Technology* 6 (2016) 569-576.
52. "Tungsten nitride nanoplates as an anode material for lithium ion batteries", H-C Park, Si-Jin Kim, Min-Cheol Kim, Da-Mi Kim, and **Kyung-Won Park**, *Ceramics International* 42(1) (2016) 1933-1942.
53. "Cubic and octahedral Cu₂O nanostructures as anodes for lithium-ion batteries", Min-Cheol Kim, Si-Jin Kim, Sang-Beom Han, Da-Hee Kwak, Eui-Tak Hwang, Da-Mi Kim, Gyu-Ho Lee, Hui-Seon Choe, and **Kyung-Won Park**, *Journal of Materials Chemistry A* 3 (2015) 23003-23010.
54. "High Volumetric Energy Density Lithium Ion Battery with Titania@Carbon Nanostructure Electrode", M.-C. Kim, Y.-W. Lee, S.-J. Kim, D.-H. Kwak, H.-C. Park, D.-M. Kim, and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 10 (2015) 8993-9005
55. "Electrochemical oxidation reactions of Pt hexapod nanoparticles", Da-Hee Kwak, Young-Woo Lee, S.-B. Han, J.-Y. Lee, Choon-Koo Zhoh, **Kyung-Won Park**, *Electrochimica Acta*, 176 (2015) 790-796

56. "Carbon nanotube web-based current collectors for high-performance lithium ion batteries", Si-Jin Kim, A-Young Lee, Han-Chul Park, So-Young Kim, Min-Cheol Kim, Jong-Min Lee, Seong-Bae Kim, Woo-Seong Kim, Young-Jin Jeong, **Kyung-Won Park**, *Materials Today Communications*, 4 (2015) 149-155.
57. "Effect of Pt coverage in Pt-deposited Pd nanostructure electrodes on electrochemical properties", A.-R. Park, Y.-W. Lee, D.-H. Kwak, and **Kyung-Won Park**, *The Korean Journal of Chemical Engineering*, 32(6) (2015) 1075-1080.
58. "Pd@Pt core-shell nanostructures for improved electrocatalytic activity in methanol oxidation reaction", Y.-W. Lee, J.-Y. Lee, D.-H. Kwak, E.-T. Hwang, Jung Inn Sohn, **Kyung-Won Park**, *Applied Catalysis B: Environmental*, 179 (2015) 178-184.
59. "Truncated octahedral LiMn₂O₄ cathode for high-performance lithium-ion batteries", Bo-Mi Hwang, S.-J. Kim, Y.-W. Lee, H.C. Park, D.-M. Kim, **Kyung-Won Park**, *Materials Chemistry and Physics*, 158 (2015) 138-143.
60. "MoO₃ Nanostructured Electrodes Prepared via Hydrothermal Process for Lithium Ion Batteries", Biao Han, Kyung-Hoon Lee, Young-Woo Lee, Si-Jin Kim, Han-Chul Park, Bo-Mi Hwang, Da-Hee Kwak, **Kyung-Won Park***, *International Journal of Electrochemical Science*, 10 (2015) 4232-4240.
61. "Synthesis of cubic PtPd alloy nanoparticles as an anode electrocatalyst for methanol and formic acid oxidation reactions", J.-Y. Lee, D.-H. Kwak, Y.-W. Lee, S. Lee, and **Kyung-Won Park**, *Physical Chemistry Chemical Physics*, 17 (2015) 8642-8648.
62. "Two-dimensional nanocomposites based on tungsten oxide nanoplates and graphene nanosheets for high-performance lithium ion batteries", Da-Mi Kim, Si-Jin Kim, Young-Woo Lee, Da-Hee Kwak, Han-Chul Park, Min-Cheol Kim, Bo-Mi Hwang, Seul Lee, Jong-Ho Choi, Seongho Hong, **Kyung-Won Park***, *Electrochimica Acta*, 163 (2015) 132-139.
63. "Carbon nanotube film anodes for flexible lithium ion batteries", Sora Yoon, Sehyun Lee, Soyoung Kim, **Kyung-Won Park**, Daehwan Cho, Youngjin Jeong, *Journal of Power Sources*, 279 (2015) 495-501
64. "Well-defined WO_{3-x} nanoplates for improved pseudocapacitive performance", Seul Lee Young-Woo Lee, Da-Hee Kwak, Min-Cheol Kim, Jin-Yeon Lee, Da-Mi Kim, **Kyung-Won Park**, *Ceramics International*, 41 (2015) 4989-4995

65. "Synthesis of Pt-Rich@Pt-Ni alloy core-shell nanoparticles using halides", Eui-Tak Hwang, Young-Woo Lee, Han-Chul Park, Da-Hee Kwak, Da-Mi Kim, Si-Jin Kim, Min-Cheol Kim, Jin-Yeon Lee, Seul Lee, and **Kyung-Won Park**, *RSC Advances*, 5 (2015) 8301-8306
66. "Ultrasmall PtSn alloy catalyst for ethanol electro-oxidation reaction", Da-Hee Kwak, Young-Woo Lee, Sang-Beom Han, Eui-Tak Hwang, Han-Chul Park, Min-Cheol Kim, **Kyung-Won Park**, *Journal of Power Sources*, 275 (2015) 557-562
67. "Sputtered amorphous thin film nanocomposites as an anode for lithium-ion batteries", Si-Jin Kim, Han-Chul Park, Min-Cheol Kim, Da-Mi Kim, Young-Woo Lee, and **Kyung-Won Park**, *Journal of Power Sources*, 273 (2015) 707-715.
68. "Improved Lithium Ion Behavior Properties of TiO₂@Graphitic-like Carbon Core@Shell Nanostructure", Min-Cheol Kim, Young-Woo Lee, Si-Jin Kim, Bo-Mi Hwang, Han-Chul Park, Eui-Tak Hwang, Guozhong Cao, and **Kyung-Won Park**, *Electrochimica Acta*, 147 (2014) 241-249.
69. "Enhanced electrocatalytic activity and stability of PdCo@Pt core-shell nanoparticles for oxygen reduction reaction", A.-R. Park, Y.-W. Lee, D.-H. Kwak, B. Noh, I.-C. Hwang, and **Kyung-Won Park**, *Journal of Applied Electrochemistry*, 44(11) (2014) 1219-1223.
70. "Mesoporous molybdenum nitride nanobelts as an anode with improved electrochemical properties in lithium ion batteries", H-C Park, K.-H. Lee, Young-Woo Lee, Si-Jin Kim, Da-Mi Kim, Min-Cheol Kim, **Kyung-Won Park**, *Journal of Power Sources*, 269 (2014) 534-541.
71. "Pt-Rh alloy nanodendrites for improved electrocatalytic activity and stability in methanol electrooxidation reaction", Young-Woo Lee, **Kyung-Won Park**, *Catalysis Communications* 55 (2014) 24-28.
72. "Iron-nitrogen-doped mesoporous tungsten carbide nanostructures as an oxygen reduction electrocatalyst", J.-S. Moon, Young-Woo Lee, Da-Hee Kwak, Sang-Beom Han, Kyung-Hoon Lee, Ah-Reum Park, Jung Inn Sohn, Seung Nam Cha, **Kyung-Won Park**, *Physical Chemistry Chemical Physics*, 16(28) (2014) 14644–14650.
73. "Pd nanoparticles on mesoporous tungsten carbide as a non-Pt electrocatalyst for methanol electrooxidation reaction in alkaline solution ", J.-S. Moon, Y.-W. Lee, S.-B. Han, **Kyung-Won Park**, *International Journal of Hydrogen Energy*, 39 (2014) 7798-7804.

74. "Single-crystalline mesoporous Mo₂N nanobelts with an enhanced electrocatalytic activity for oxygen reduction reaction", Kyung-Hoon Lee, Young-Woo Lee, Da-Hee Kwak, Je-Suk Moon, Ah-Reum Park, Eui-Tak Hwang, **Kyung-Won Park**, *Materials Letters*, 124 (2014) 231-234.
75. "Improvement of window thermal performance using aerogel insulation film for building energy saving", Junghoon Cha, Sughwan Kim, Kyung-Won Park, Dong Ryeol Lee, Jae-Hun Jo, Sumin Kim, *Journal of Thermal Analysis and Calorimetry*, 116(1) (2014) 219-224
76. "Ordered mesoporous tungsten carbide nanoplates as non-Pt catalysts for oxygen reduction reaction", A-Ra Ko, Young-Woo Lee, Je-Suk Moon, Sang-Beom Han, Guozhong Cao and **Kyung-Won Park**, *Applied Catalysis-A*, 477(5) (2014) 102-108.
77. "Composites of Carbon Nanofibers and Nanophase Pt-SnO₂ for Lithium-Ion Batteries", Geon-Hyoung An, Si-Jin Kim, Kyung-Won Park, and Hyo-Jin Ahn, *ECS Solid State Letters*, 3(3) (2014) M21-M23.
78. "Mesoporous Composite Cathode Materials Prepared from Inverse Micelle Structure for High Performance Lithium Ion Batteries", S.-J. Kim, Y.-W. Lee, B.-M. Hwang, S.-B. Kim, W.-S. Kim, G. Cao, and **Kyung-Won Park**, *RSC-Advances*, 4(23) (2014) 11598-11604.
79. "Roles of renewable energy technologies in improving the rural energy situation in Nepal: Gaps and opportunities", Anup Gurung, Rahul Karki, Ju Sik Cho, Kyung-Won Park, Sang-Eun Oh, *Energy Policy*, 62 (2013) 1104-1109.
80. "Evaluation of Formaldehyde Emissions and Combustion Behaviors of Wood-Based Composites Subjected to Different Surface Finishing Methods", Chang-Young park, Chan-Ho Choi, Jeong-Hun Lee, Sumin Kim, Kyung-Won Park, and Jeong Ho Cho, *BioResources*, 8(4) (2013) 5515-5523.
81. "Facile and Catalytic Synthesis of Conductive Titanium Suboxides for Enhanced Oxygen Reduction Activity and Stability in Proton Exchange Membrane Fuel Cells", Young-Woo Lee, D.-H. Kwak, A.-R. Park, Bumwook Roh, Inchul Hwang, G. Cao, **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 9499-9507
82. "Mesoporous Spinel LiMn₂O₄ Nanomaterial as a Cathode for High-Performance Lithium Ion Batteries", Bo-Mi Hwang, S.-B. Kim, Y.-W. Lee, S.-B. Kim, W.-S. Kim, and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 9449-9458

83. "Improved photo-catalytic activity of single-crystalline TiO₂ nanowires surrounded by Pt cube nanoparticles", Jae-Kyung Oh, Young-Woo Lee, and **Kyung-Won Park**, *Journal of Industrial and Engineering Chemistry*, 19 (2013) 1391-1394.
84. "Enhanced electrochemical properties of size-controlled rutile TiO₂ nanowire electrodes for lithium-ion batteries", B. Han, Young-Woo Lee, Si-Jin Kim, Bo-Mi Hwang, S.-B. Kim, W.-S. Kim, **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 8264-8271.
85. "Improved electrocatalytic activity of size-controlled single-crystalline WO₃ nanoplates under visible-light illumination", J.-S. Moon, Y.-W. Lee, S.-B. Han, C.-G. Zhoh and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 6656-6663.
86. "One-Step Synthesis of Hexapod Pt Nanoparticles for Improved Electrocatalytic Properties in Methanol Electrooxidation", Da-Hee Kwak, Young-Woo Lee, Kyung-Hoon Lee, Ah-Reum Park, Je-Suk Moon, **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 5102-5107.
87. "Highly improved electrochemical reactions of mesoporous carbon electrodes in electrochemical energy storage and conversion", S.-J. Kim, Y.-W. Lee, S.-B. Han, S.-B. Kim, W.-S. Kim, **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 3825-3833.
88. "Synthesis of Monodispersed Pt-Ni Alloy Nanodendrites and Their Electrochemical Properties", Young-Woo Lee, Bo-Young Kim, Kyung-Hoon Lee, Woo-Jin Song, Guozhong Cao, and **Kyung-Won Park**, *International Journal of Electrochemical Science*, 8 (2013) 2305-2312.
89. "Nanostructured Metal/Carbon Hybrids by Direct Carbonization of Inverse Micelle Multilayers", Yu Jin Jang, Yoon Hee Jang, Sang Beom Han, Dibyendu Khatua, Hyungju Ahn, Du Yeol Ryu, Kwanwoo Shin, Kyung-Won Park, Martin Steinhart, Dong Ha Kim*, *ACS Nano*, 7(2) (2013) 1573-1582.
90. "Single-Crystalline Mesoporous Molybdenum Nitride Nanowires with Improved Electrochemical Properties", Kyung-Hoon Lee, Young-Woo Lee, Guozhong Cao and **Kyung-Won Park***, *Journal of American Ceramic Society*, 96 (1) (2013) 37-39.
91. "One-dimensional TiO₂ nanostructures with improved UV-blocking properties, Hye-Jin Kwon, Young-Woo Lee, Hyun-Su Kim, Choon-Koo Zhoh*, **Kyung-Won Park***, *Materials Letters*, 93 (2013) 175-178.

92. "Nanostructure Catalysts Prepared by Multi-Sputtering Deposition Process for Enhanced Methanol Electrooxidation Reaction", **Kyung-Won Park***, Young-Woo Lee and Yung-Eun Sung*, *Applied Catalysis B: Environmental*, 132-133 (2013) 237-244.
93. "Core-Shell Nanostructure Supported Pt Catalyst with Improved Electrocatalytic Stability in Oxygen Reduction Reaction", Do-Young Kim, Sang-Beom Han, Young-Woo Lee, and **Kyung-Won Park***, *Materials Chemistry and Physics*, 137 (2013) 704-708.
94. "Single crystalline rutile TiO₂ nanowires for improved lithium ion intercalation properties", Biao Han, Si-Jin Kim, Seong-Bae Kim, and **Kyung-Won Park***, *Journal of Power Sources*, 222 (2013) 225-229.
95. "Reduction of NO with Fe(II) and subsequent regeneration of Fe(II) in fuel cell", Sang-Beom Han, Young-Woo Lee, Si-Jin Kim, Do-Young Kim, A-Ra Ko and **Kyung-Won Park***, *RSC Advances*, 2(33) (2012) 12628-12630.
96. "Pd Nanotube Electrodes with Improved Electrocatalytic Stability for Formic Acid Electrooxidation", You-Jung Song, Young-Woo Lee, Sang-Beom Han, and **Kyung-Won Park***, *Materials Chemistry and Physics*, 134 (2012) 567-570.
97. "TiO₂ Rutile Nanowire Electrodes for Dye-sensitized Solar Cells", Jae-Kyung Oh, Jin-Kyu Lee, Biao Han Si-Jin Kim and **Kyung-Won Park***, *Materials Letters*, 68 (2012) 4-7.
98. "Core-Shell Nanostructure Electrodes for Improved Electrocatalytic Properties in Methanol Electrooxidation", Jong-Min Lee, Seong-Bae Kim, Do-Young Kim, Hyun-Su Kim, Sang-Beom Han, Young-Woo Lee, A-Ra Ko, Bumwook Roh, Inchul Hwang, and **Kyung-Won Park***, *Applied Catalysis B: Environmental*, 111-112 (2012) 200-207.
99. "Octahedral Pt-Pd Alloy Catalysts with Enhanced Oxygen Reduction Activity and Stability in Proton Exchange Membrane Fuel Cells", Young-Woo Lee, A-Ra Ko, Do-Young Kim, Sang-Beom Han, and **Kyung-Won Park***, *RSC Advances*, 2 (2012) 1119–1125.
100. "Pd Nanotube Electrodes with Improved Electrocatalytic Stability for Formic Acid Electrooxidation", You-Jung Song, Young-Woo Lee, Sang-Beom Han, and **Kyung-Won Park***, *Materials Chemistry and Physics*, 134 (2012) 567-570.
101. "Application of Co-naphthalocyanine(CoNPc) as alternative cathode catalyst and support structure for microbial fuel cells", Jung Rae Kim, Jy-Yeon Kim, Sang-Beom Han, **Kyung-Won Park***, G. D. Saratale, and **Sang-Eun Oh***, *Bioresource Technology* 106 (2011) 342-347.

102. "High-performance hydrogen fuel cells using nitrate reduction reaction on a non-precious catalyst", Sang-Beom Han, You-Jung Song, Young-Woo Lee, A-Ra Ko, Jae-Kyung Oh, **Kyung-Won Park***, *Chemical Communications* 47(12) (2011) 3496-3498.
103. "Synthesis of octahedral Pt-Pd alloy nanoparticles for improved catalytic activity and stability in methanol electrooxidation", Young-Woo Lee, A-Ra Ko, Sang-Beom Han, Hyun-Su Kim, **Kyung-Won Park***, *Physical Chemistry Chemical Physics* 13(13) (2011) 5569-5572.
104. "Monodispersed Pt nanocubes for enhanced electrocatalytic properties in alcohol electrooxidation", Young-Woo Lee, Sang-Beom Han, Do-Young Kim, **Kyung-Won Park***, *Chemical Communications* 47 (2011) 6296-6298.
105. "3-Dimensional TiO₂ Nanostructure Supports and Their Improved Electrochemical Properties in Methanol Electrooxidation", Jae-Kyung Oh, Young-Woo Lee, Sang-Beom Han, A-Ra Ko, Do-Young Kim, Hyun-Su Kim, Si-Jin Kim, Bumwook Roh, Inchul Hwang, and **Kyung-Won Park***, *Catalysis Science and Technology* 1(2011) 394-396.
106. "Template-Free Synthesis and Characterizations of Mesoporous Tungsten Nitride Nanoplates", A-Ra Ko, Sang-Beom Han, Young-Woo Lee, and **Kyung-Won Park***, *Physical Chemistry Chemical Physics* 13(28) (2011) 12705-12707.
107. "Characterizations of tungsten carbide as a non-Pt counter electrode in dye-sensitized solar cells", A-Ra Ko, Jae-Kyung Oh, Young-Woo Lee, Sang-Beom Han, and **Kyung-Won Park***, *Materials Letters* 65(14) (2011) 2220-2223.
108. "Application of Plywood with Water-Based Phenol-Formaldehyde Resin Impregnated Linerboards as Formwork for Concrete Structure", Ki-Wook Kim, Hyun-Joong Kim, Sumin Kim, Yoon-Ki Choi, **Kyung-Won Park**, Jeong Ho Cho and Jin Chul Park, *Journal of Adhesion Science and Technology* 25 (2011) 169-178.
109. "Characterizations of nanostructure cathode materials prepared by high-energy ball milling method", Seong-Bae Kim, Si-Jin Kim, Chang-Ha Kim, Woo-Seong Kim*, **Kyung-Won Park***, *Materials Letters*, 65 (21-22) (2011) 3313-3316.
110. "Highly Active Pt-Pd Alloy Catalyst for Oxygen Reduction Reaction in Microbial Fuel Cells", Young-Woo Lee, Sang-Eun Oh*, and **Kyung-Won Park***, *Electrochemistry Communications*, 13(2011) 1300-1303.

111. "TiO₂-based Nanowire Supported Catalysts for Methanol Electrooxidation in Direct Methanol Fuel Cells" **Kyung-Won Park***, *Journal of Industrial & Engineering Chemistry*, 17 (2011) 696-699.
112. "Glycerol-Mediated Synthesis of Pd Nanostructures with Dominant {111} Facets for Enhanced Electrocatalytic Activity", Young-Woo Lee, Sang-Beom Han, A-Ra Ko, Hyun-Su Kim and **Kyung-Won Park***, *Catalysis Communications* 15(1) (2011) 137-140.
113. "TiO₂ nanobranched electrodes synthesized by seeding method for dye-sensitized solar cells", Jae-Kyung Oh, Jin-Kyu Lee, Hyun-Soo Kim, Sang-Beom Han, **Kyung-Won Park***, *Chemistry of Materials*, 22(3) (2010) 1114-1118.
114. "Methanol electrooxidation of Pt catalyst on titanium nitride nanostructured support", Jong-Min Lee, Sang-Beom Han, You-Jung Song, Jy-Yeon Kim, Bumwook Roh, Inchul Hwang, Woojin Choi, **Kyung-Won Park***, *Applied Catalysis A: General* 375(1) (2010) 149-155.
115. "TiO₂@carbon core-shell nanostructured supports for platinum and their use for methanol electrooxidation", Jong-Min Lee, Sang-Beom Han, Jy-Yeon Kim, Young-Woo Lee, A-Ra Ko, Bumwook Roh, Inchul Hwang, **Kyung-Won Park***, *Carbon* 48(8) (2010) 2290-2296.
116. "Effects of particle size on surface electronic and electrocatalytic properties of Pt/TiO₂ nanocatalysts", Sung Jong Yoo, Tae-Yeol Jeon, Kug-Seung Lee, **Kyung-Won Park**, and Yung-Eun Sung, *Chemical Communications*, 46(5) (2010) 794-796.
117. "Shape-controlled Pd nanostructure catalysts for highly efficient electrochemical power sources", Young-Woo Lee, Jae-Kyung Oh, Hyun-Su Kim, Jin-Kyu Lee, Sang-Beom Han, Woojin Choi, **Kyung-Won Park***, *Journal of Power Sources* 195 (2010) 5896-5901.
118. "Development of the novel control algorithm for the small proton exchange membrane fuel cell stack without external humidification", Tae-Hoon Kim, Sang-Hyun Kim, Wook Kim, Jong-Hak Lee, Kwan-Seok Cho, **Kyung-Won Park**, Woojin Choi, *Journal of Power Sources* 195 (2010) 6008-6015.
119. "Development of a Method to Estimate the Life Span of PEM Fuel Cell Using Electrochemical Impedance Spectroscopy", Juhyung Lee, Jong-Hak Lee, Woojin Choi, **Kyung-Won Park**, Hee-Young Sun, Jae-Hyuk Oh, *Journal of Power Sources* 195 (2010) 6001-6007.

120. "Test methods and reduction of organic pollutant compound emissions from wood-based building and furniture materials" Sumin Kim, Yoon-Ki Choi, Kyung-Won Park, Jeong Tai Kim, *Bioresource Technology*, 101(16) (2010) 6562-6568.
121. "Polyimide gel polymer electrolyte-nanoencapsulated LiCoO₂ cathode materials for high-voltage Li-ion batteries", Jang-Hoon Park, Jong-Su Kim, Eun-Gi Shim, Kyung-Won Park, Young Taik Hong, Yun-Sung Lee*, Sang-Young Lee*, *Electrochemistry Communications* 12 (2010) 1099-1102.
122. "Pt nanowire electrodes electrodeposited in PVP for methanol electrooxidation", You-Jung Song, Sang-Beom Han, **Kyung-Won Park***, *Materials Letters* 64 (2010) 1981-1984.
123. "RuO₂-SnO₂ nanostructured electrodes for methanol electrooxidation", Jong-Min Lee, Sang-Beom Han, You-Jung Song, Jy-Yeon Kim, **Kyung-Won Park***, *Journal of Alloys and Compounds* 506(1) (2010) 57-62.
124. "Synergy Effect of Nanostructure Electrodes Supported by Tungsten Carbide and Oxide for Methanol Electrooxidation", A-Ra Ko, Jy-Yeon Kim, Jae-Kyung Oh, Hyun-Su Kim, Young-Woo Lee, Sang-Beom Han, **Kyung-Won Park***, *Physical Chemistry Chemical Physics* 12(46) (2010) 15181-15183.
125. "Cuboctahedral Pd Nanoparticles on WC for Enhanced Methanol Electrooxidation in Alkaline Solution", Young-Woo Lee, A-Ra Ko, Sang-Beom Han, Hyun-Su Kim, Do-Young Kim, Si-Jin Kim, and **Kyung-Won Park***, *Chemical Communications* 46(48) (2010) 9241-9243.
126. "Synthesis of Pd Dendritic Nanowires by Electrochemical Deposition", You-Jung Song, Jy-Yeon Kim, **Kyung-Won Park***, *Crystal Growth and Design*, 9(1) (2009) 505-507.
127. "PtRu alloy nanostructure electrodes for methanol electrooxidation", You-Jung Song, Sang-Beom Han, Jong-Min Lee, **Kyung-Won Park***, *Journal of Alloys and Compounds*, 473 (2009) 516-520.
128. "Synthesis of phase- and shape-controlled TiO₂ nanoparticles via hydrothermal process in acid medium", Jae-Kyung Oh, Jin-Kyu Lee, Sung Justin Kim, **Kyung-Won Park***, *Journal of Industrial Engineering Chemistry*, 15(2) (2009) 270-274.
129. "Electrochemical Properties of Pd Nanostructures in Alkaline Solution", Young-Woo Lee, Sang-Beom Han, **Kyung-Won Park***, *Electrochemistry Communications*, 11(10) (2009) 1968-1971.

130. "Synthesis of platinum nanostructures using seeding method", Sang-Beom Han, You-Jung Song, Jong-Min Lee, Jy-Yeon Kim, Do-Hyung Kim, **Kyung-Won Park***, *Bulletin Korean Chemical Society*, 30(10) (2009) 2362-2364.
131. "Pt nanostructure electrodes pulse-electrodeposited in PVP for electrochemical power sources", You-Jung Song, Jae-Kyung Oh, **Kyung-Won Park***, *Nanotechnology* 19(35) (2008) 355602-355607.
132. "Pt nanocube catalysts for methanol and ethanol electrooxidation", Sang-Beom Han, You-Jung Song, Jong-Min Lee, Jy-Yeon Kim, **Kyung-Won Park***, *Electrochemistry Communications* 10 (2008) 1044-1047.
133. "Electrocatalytic Enhancement of Methanol Oxidation by Graphite Nanofibers with a High Loading of PtRu Alloy Nanoparticles" In-Su Park, **Kyung-Won Park**, Jong-Ho Choi, Chong Rae Park, Yung-Eun Sung, *Carbon*, 45 (2007) 28-33.
134. "Photo(UV)-enhanced electrode performance of Pt-TiO₂ nanostructure for methanol oxidation", **Kyung-Won Park**, Sang-Beom Han, Jong-Min Lee, *Electrochemistry Communications*, 9 (2007) 1578-1581.
135. "Dye-sensitized solar cells with Pt-NiO and Pt-TiO₂ biphasic counter electrodes", Seok-Soon Kim, **Kyung-Won Park**, Jun-Ho Yum, Yung-Eun Sung, *Journal of Photochemistry and Photobiology A: Chemistry*, 189(2-3) (2007) 301-306.
136. "Influence of Pt and Au nanophases on electrochromism of WO₃ in nanostructure thin-film electrodes" **Kyung-Won Park**, You-Jung Song, Jong-Min Lee, Sang-Beom Han, *Electrochemistry Communications*, 9 (2007) 2111-2115.
137. "Nb-TiO₂ supported Pt cathode catalyst for polymer electrolyte membrane fuel cells", **Kyung-Won Park**, Kwang-Su Seol, *Electrochemistry Communications*, 9 (2007) 2257-2261.
138. "Structural effect of PtRu-WO₃ Alloy Nanostructures on Methanol Electrooxidation" **Kyung-Won Park**, Yung-Eun Sung, Michael F. Toney, *Electrochemistry Communications*, 8 (2006) 359-363.
139. "Pt-NiO nanophase electrodes for all-solid-state dye-sensitized solar cells". Seok-Soon Kim, **Kyung-Won Park**, Jun-Ho Yum, Yung-Eun Sung, *Solar Energy Materials & Solar Cells*, 90(3) (2006) 283-290.

140. "Design of Nanostructured Electrocatalysts for Direct Methanol Fuel Cells" **Kyung-Won Park**, Yung-Eun Sung, *Journal of Industrial & Engineering Chemistry*, 12(2) (2006) 165-174.
141. "Modified electrochromism of tungsten oxide via platinum nanophases" **Kyung-Won Park**, Hee-Sang Shim, Tae-Yeon Sung, Yung-Eun Sung, *Applied Physics Letters*, 88(21) (2006) 211107-1~211107-3.
142. "A PtAu Nanoparticle Electrocatalyst for Methanol Electrooxidation in Direct Methanol Fuel Cells" Jong-Ho Choi, **Kyung-Won Park**, In-Su Park, Keon Kim, Jae-Suk Lee, Yung-Eun Sung, *Journal of The Electrochemical Society*, 153(10) (2006) 1812-1817.
143. "PtRh alloy nanostructure electrocatalysts for oxygen reduction for use in direct methanol fuel cells" **Kyung-Won Park**, Dae-Seob Han, Yung-Eun Sung, *Journal of Power Sources*, 163(1) (2006) 82-86.
144. "Electrochromic properties of Au-WO₃ nanocomposite thin-film electrode" **Kyung-Won Park**, *Electrochimica Acta*, 50(24) (2005) 4690-4693.
145. "Catalytic activity of platinum on Ru electrodes with modified (electro)chemical states" **Kyung-Won Park**, Yung-Eun Sung, *Journal of Physical Chemistry B*, 109(28) (2005) 13585-13589.
146. "Structure and Electrocatalysis of Sputtered RuPt Thin-Film Electrodes" Tae-Wook Kim, Seong-Ju Park, Lindsay E. Jones, Michael F. Toney, **Kyung-Won Park**, Yung-Eun Sung, *Journal of Physical Chemistry B*, 109(26) (2005) 12845-12849.
147. "Visualization of methanol concentration using electrochromism of nickel oxide" Hee-Sang Shim, Hyo-Jin Ahn, Tae-Yeon Seong, **Kyung-Won Park**, Yung-Eun Sung, *Electrochemical and Solid-State Letters*, 8(6) (2005) 277-278.
148. "Influence of Pt nanocrystallinity on electrochromism of TiO₂" **Kyung-Won Park**, Yung-Eun Sung, *Inorganic Chemistry*, 44(9) (2005) 3190-3193.
149. "Electrochemical and electrochromic properties of nanoworm-shaped Ta₂O₅-Pt thin-films" **Kyung-Won Park**, & Michael F. Toney, *Electrochemistry Communications*, 7(2) (2005) 151-155.
150. "Use of Sn-Si Nanocomposite electrodes for Li rechargeable batteries", Hyo-Jin Ahn, Youn-Su Kim, **Kyung-Won Park**, Tae-Yeon Seong, *Chemical Communications*, (1) (2005) 43-45.

151. "Pt nanostructured electrode encapsulated by a tantalum oxide for thin-film fuel cell" **Kyung-Won Park**, Yung-Eun Sung, *Journal of Vacuum Science and Technology B*, 22(6) (2004) 2628-2631.
152. "Origin of enhanced catalytic activity of PtRu alloy electrocatalysts supported by carbon nanocoils (CNCs)" **Kyung-Won Park**, Yung-Eun Sung, Sangjin Han, Youngkwang Yun, Taeghwan Hyeon, *Journal of Physical Chemistry B*, 108(3) (2004) 939-944.
153. "Synthesis and characterization of Sn nanophases in a Ta₂O₅ matrix" Hyo-Jin Ahn, **Kyung-Won Park**, Yung-Eun Sung, *Chemistry of Materials*, 16(10) (2004) 1991-1995.
154. "PtRuRhNi nanoparticle electrocatalyst for methanol electrooxidation in direct methanol fuel cell" **Kyung-Won Park**, Jong-Ho Choi, Seol-Ah Lee, Chanho Pak, Hyuck Chang, Yung-Eun Sung, *Journal of Catalysis*, 224(2) (2004) 236-242.
155. "Investigation of the Structural and Electrochemical Properties of Size-Controlled SnO₂ Nanoparticles" Hyo-Jin Ahn, Hyun-Chul Choi, **Kyung-Won Park**, Seung-Bin Kim, Yung-Eun Sung, *Journal of Physical Chemistry B*, 108(28) (2004) 9815-9820.
156. "PtRu alloy and PtRu-WO₃ nanocomposite electrodes for methanol electrooxidation fabricated by sputtering deposition method" **Kyung-Won Park**, Jong-Ho Choi, Kwang-Soon Ahn, Yung-Eun Sung, *Journal of Physical Chemistry B*, 108(19) (2004) 5989-5994.
157. "Methanol electro-oxidation and direct methanol fuel cell using Pt/Rh and Pt/Ru/Rh alloy catalysts" Jong-Ho Choi, **Kyung-Won Park**, In-Su Park, Woo-Hyun Nam, Yung-Eun Sung, *Electrochimica Acta*, 50(2-3) (2004) 783-786.
158. "Characteristics of PVdF copolymer/Nafion blend membrane for direct methanol fuel cell (DMFC)", Ki-Yun Cho, Ji-Yong Eom, Ho-Young Jung, Nam-Soon Choi, Yong Min Lee, Jung-Ki Park, Jong-Ho Choi, **Kyung-Won Park** and Yung-Eun Sung, *Electrochimica Acta*, 50(2-3) (2004) 580-585.
159. "Proton conducting semi-IPN based on Nafion and crosslinked poly(AMPS) for direct methanol fuel cell", Ki-Yun Cho, Ho-Young Jung, Seung-Shik Shin, Nam-Soon Choi, Shi-Joon Sung, Jung-Ki Park, Jong-Ho Choi, **Kyung-Won Park** and Yung-Eun Sung, *Electrochimica Acta*, 50(2-3) (2004) 586-590.
160. "Modulation of electrode performance and in situ observation of proton transport in Pt-RuO₂ nanocomposite thin-film electrodes" **Kyung-Won Park**, Yung-Eun Sung, *Journal of Applied Physics*, 94 (11) (2003) 7276-7280.

161. "Simple solid-phase synthesis and purification of hollow graphitic particle and their application to DMFC electrode" Sangjin Han, Youngkwang Yun, **Kyung-Won Park**, Yung-Eun Sung, Taeghwan Hyeon, *Advanced Materials*, 15 (22) (2003) 1922-1925.
162. "Structural, Chemical, and Electronic Properties of Pt/Ni Thin-Film Electrodes for Methanol Electrooxidation" **Kyung-Won Park**, Jong-Ho Choi, Yung-Eun Sung, *Journal of Physical Chemistry B*, 107(24) (2003) 5851-5856.
163. "High performance direct methanol fuel cell electrodes using solid-phase synthesized carbon nanocoils" Taeghwan Hyeon, Sangjin Han, Yung-Eun Sung, **Kyung-Won Park**, Young-Woon Kim, *Angewandte Chemie Int., Ed.*, 42(36) (2003) 4352-4356.
164. "A Pd-impregnated nanocomposite Nafion membrane for use in high-concentration methanol fuel in DMFC" Young-Min Kim, **Kyung-Won Park**, Jong-Ho Choi, In-Su Park, Yung-Eun Sung, *Electrochemistry Communications*, 5(7) (2003) 571-574.
165. "Nano-composite of PtRu Alloy Electrocatalyst and Electronically Conducting Polymer for Use as the Anode in a Direct Methanol Fuel Cell" Jong-Ho Choi, **Kyung-Won Park**, Hye-Kyung Lee, Young-Min Kim, Jae-Suk Lee, Yung-Eun Sung, *Electrochimica Acta*, 48 (2003) 2781-2789.
166. "Electrocatalytic Enhancement of Methanol Oxidation at Pt-WO_x Nanophase Electrodes and In-Situ Observation of Hydrogen Spillover Using Electrochromism" **Kyung-Won Park**, Kwang-Soon Ahn, Jong-Ho Choi, Yoon-Chae Nah, Yung-Eun Sung, *Journal of Physical Chemistry B*, 107(18) (2003) 4352-4355.
167. "PtRu-WO₃ Nanostructured Alloy Electrode for Use in Thin-Film Fuel Cells" **Kyung-Won Park**, Kwang-Soon Ahn, Jong-Ho Choi, Yoon-Chae Nah, Yung-Eun Sung, *Applied Physics Letters*, 82(7) (2003) 1090-1092.
168. "Methanol Oxidation on Pt/Ru, Pt/Ni and Pt/Ru/Ni Anode Electrocatalysts at Different Temperature For Direct Methanol Fuel Cells" Jong-Ho Choi, **Kyung-Won Park**, Boo-Kil Kwon, Yung-Eun Sung, *Journal of The Electrochemical Society*, 150(7) (2003) 973-978.
169. "PtRu Nanoparticle Electrocatalysts Prepared by Various for use in Direct Methanol Fuel Cells" Seol-Ah Lee, **Kyung-Won Park**, Boo-Kil Kwon, Yung-Eun Sung, *Journal of Industrial & Engineering Chemistry*, 9(1) (2003) 63-70.

170. "Pt-WO_x electrode structure for thin film fuel cells" **Kyung-Won Park**, Kwang-Soon Ahn, Jong-Ho Choi, Yoon-Chae Nah, Young-Min Kim, Yung-Eun Sung, *Applied Physics Letters*, 81(5) (2002) 907-909.
171. "Chemical and Electronic Effects of Ni in Pt/Ni and Pt/Ru/Ni Alloy Nanoparticles in Methanol Electrooxidation" **Kyung-Won Park**, Jong-Ho Choi, Boo-Kil Kwon, Seol-Ah Lee, Yung-Eun Sung, H.-Y. Ha, S.-A. Hong, H. Kim, A. Wieckowski, *Journal of Physical Chemistry B*, 106(8) (2002) 1869-1877.
172. "New Diffusion Layer using RuO₂ and Carbon - RuO₂ Composites for Direct Methanol Fuel Cell" **Kyung-Won Park**, Boo-Kil Kwon, Jong-Ho Choi, In-Su Park, Young-Min Kim, Yung-Eun Sung, *Journal of Power Sources*, 109 (2002) 439-445.
173. "An all-solid-state supercapacitor using a Nafion[®] polymer membrane and its hybridization for use in direct methanol fuel cells" **Kyung-Won Park**, Hyo-Jin Ahn, Yung-Eun Sung, *Journal of Power Sources*, 109 (2002) 500-506.
174. "Nanoparticle Synthesis and Electrocatalytic Activity of Pt Alloys for Direct Methanol Fuel Cells" Seol-Ah Lee, **Kyung-Won Park**, Jong-Ho Choi, Boo-Kil Kwon, Yung-Eun Sung, *Journal of The Electrochemical Society*, 149(10) (2002) 1299-1304.