Young-Hoon Kim

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PROFESSIONAL EXPERIENCE

2024. 05 ~ 2027.05	**Oak Ridge National Laboratory (Postdoctoral Researcher Associate)** Center for Nanophase Materials Sciences (CNMS) Scanning Transmission Electron Microscopy (STEM) Group Advisor: Dr. Miaofang Chi	Oak Ridge, Tennessee, United States
2024. 03. ~ 2024. 04.	**Sungkyunkwan University (Postdoctoral Researcher)** Center for Fostering Renewable Energy Integrated System Researcher BrainKorea(BK)21FOUR project	Suwon, Republic of Korea

EDUCATION

2018. 09. ~ 2024. 02.	**Sungkyunkwan University (Ph.D. in Energy Science)** Department of Energy Science Advisor: Prof. Young-Min Kim Dissertation: *Multidimensional Scanning Transmission Electron Microscopy-based Structural and Chemical Characterization of Polycrystalline Oxide Materials*	Suwon, Republic of Korea
2014. 03. ~ 2018. 08.	**Sungkyunkwan University (B.S.)** School of Advanced Materials Science and Engineering	Suwon, Republic of Korea

RESEARCH INTEREST

- ***Advanced analytical STEM for atomic structural analysis*** *for freestanding membranes with twist angles of (anti)ferroelectric oxide materials*

  Young-Hoon Kim*, Reza Ghanbari ShokraliKandi, Ruijuan Xu, Miaofang Chi*, "Emergence of Novel Electronic Structures Driven by Complete Interfacial Bonding in Twisted Freestanding Oxide Membranes", *To be submitted*

- ***Cryogenic S/TEM structural characterization***

  Young-Hoon Kim*, Fehmi Sami Yasin*, Nayeon Kim, Max Birch, Xiuzhen Yu, Akiko Kikkawa, Yasujiro Taguchi, Jiaqiang Yan, Miaofang Chi*, "Liquid Helium-Flow Cryostat Holder for Sub-7 K Cryogenic Transmission Electron Microscopy", ***Ultramicroscopy***, *Under Revision*

- ***Deep learning-assisted 4D-STEM crystallographic analysis and simulations***

  Young-Hoon Kim†, Sang-Hyeok Yang†, Su Jae Kim, Sang-Soo Oh, Se-Young Jeong, Ho-Sup Kim* and Young-Min Kim*, "High-Precision Texture Analysis of Superconducting Alloy Films with Deep Learning Four-dimensional Scanning Transmission Electron Microscopy (4D-STEM)", *Submitted*

- ***Machine learning-assisted spectroscopic imaging and monochromated EELS*** *to probe electronic structures, defect structures and dopant behaviors*
- ***3D electron tomography*** *for cathode materials and proton-exchange membrane fuel cells (PEMFC)*

HONORS & AWARDS

1. Best Poster Award (The Korean Society of Microscopy, 2018)
2. Certificate (Gatan EELS & EFTEM Analysis Training School, 2019)

3. Best Poster Award (The 5th DOES Thesis Competition, 2019)
4. Best Poster Award (The 7th DOES Thesis Competition, 2021)
5. KCerS Best Poster Award (The Korean Ceramic Society, 2021)
6. Best Oral Presentation Award (The Korean Society of Microscopy, 2022)
7. Best Oral Presentation Award (Materials Research Society (MRS) Spring, 2022)
8. Bronze Prize (The 28th Samsung Humantech Paper Award, 2022)
9. Pacific Rim Conference of Ceramic Societies (PACRIM) Prize (The Korean Ceramic Society, 2022)
10. Grand Prize of Poster Award (The 8th DOES Thesis Competition, 2023)
11. Best Oral Presentation Award (The 8th DOES Thesis Competition, 2023)
12. Silver Prize (The 29th Samsung Humantech Paper Award, 2023)
13. M&M Student Scholar Award (Microscopy & Microanalysis, 2023)
14. Grand Prize of Oral Presentation Award (The 9th DOES Thesis Competition, 2024)
15. M&M Postdoctoral Scholar Award (Microscopy & Microanalysis, 2025)

INTERNATIONAL SCI JOURNALS (27), DOMESTIC or NON-SCI JOURNALS (2)

PUBLICATIONS (*1st Authorship*), 11 Papers

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1. Daehee Yang†, ***Young-Hoon Kim***†, Hyo June Lee†, Sang-Hyeok Yang, Min Hyoung Jung, Eun-Byeol Park, Hang Sik Kim, Yerin Jeon, Yuseong Heo, Ka Hyun Kim, Sungyong Cho, Yun Sik Kang, Ki Kang Kim, Hangil Lee, Sung-Dae Yim, Jae Hyuck Jang*, Sungchul Lee* and Young-Min Kim*, "Integrated Probing of Cycling-induced Degradation of Multi-component Electrode in Hydrogen Fuel Cells via Machine Learning-empowered Spectroscopic Imaging", ***Applied Catalysis B-Environmental and Energy***, 125911 (2025) [IF = 21.1]

2. ***Young-Hoon Kim***†, Minjeong Shin†, Eun-Byeol Park†, Sunyoung Hwang, Jung A. Hong, Jae Hyuck Jang, Young-Min Kim*, Hangil Lee*, "Enhancing the Multifunctional Photocatalytic Activity of Sustainable Magnetic Nanoparticles", ***Small Structures***, 2500123 (2025) [IF = 11.3]

3. Su Jae Kim†, ***Young-Hoon Kim***†, Bipin Lamichhane†, Binod Regmi, Yousil Lee, Sang-Hyeok Yang, Seon Je Kim, Min-Hyoung Jung, Jae Hyuck Jang, Hu Young Jeong, Miaofang Chi, Maeng-Je Seong, Hak Soo Choi, Seong-Gon Kim*, Young-Min Kim*, Se-Young Jeong*, "An impermeable copper surface monolayer with high-temperature oxidation resistance", ***Nature Communications***, 16, 1462 (2025) (†equal contribution) [IF = 15.7]

4. Hyeon-Ah Ju†, Eun-Byeol Park†, Jaejin Hwang†, ***Young-Hoon Kim***†, Min-Hyoung Jung, Min-Ji Yang, Seon Je Kim, Jaehan Lee, In Kim, Yoo-Shin Kim, Songhun Yoon, Jae Hyuck Jang, Hu Young Jeong, Jaekwang Lee*, Jae-Hyun Shim*, Young-Min Kim*, "Oxygen vacancy-induced directional ordering of Li-ion pathways for superior ion-conducting solid electrolytes", ***ACS Energy Letters***, 9(11), 5606-5615 (2024) (†equal contribution) [IF = 18.2]

5. ***Young-Hoon Kim***†, Seong-Gon Kim†, Seunghun Lee†, Miyeon Cheon, Su Jae Kim, Kideuk Nam, Bipin Lamichhane, Sung Heum Park, Min-Hyoung Jung, Ji-Soo Kim, Yu-Seong Seo, Taewoo Ha, Jungseek Hwang, Hu Young Jeong, Yusil Lee, Young Hee Lee*, Young-Min Kim*, Se-Young Jeong*, "Self-oxidation resistance of the curved surface of achromatic copper", ***Advanced Materials***, 35(42), 2210564 (2023) **(Back Cover)** [IF = 26.8]

6. Pavan Pujar†, Haewon Cho†, ***Young-Hoon Kim***†, Nicolò Zagni, Eunha Lee, Srinivas Gandla, Pavan Nukala*, Young-Min Kim*, Muhammad Ashraful Alam*, Sunkook Kim*, "An aqueous route to oxygen-deficient wakeup-free La-doped HfO_2 ferroelectrics for Negative Capacitance Field Effect Transistor (NCFET)", ***ACS Nano***, 17(19), 19076-19086 (2023) (†equal contribution) [IF = 16.0]

7. Jaekwang Kim†, Ilbok Lee†, ***Young-Hoon Kim***†, Joong Ho Bae, Keebum Hwang, Hyunchul Kang, Jae-Hyun Shim, Ji-Soo Kim, Chul Wan Park, Young-Min Kim*, Songhun Yoon*, "Ni-rich cathode material with isolated porous layer hindering crack propagation under 4.5 V high cut-off voltage cycling", ***Chemical Engineering Journal***, 455, 140578 (2023) (†equal contribution) [IF = 13.2]

8. Woo-Sung Jang†, Yeongrok Jin†, ***Young-Hoon Kim***†, Sang-Hyeok Yang, Seon Je Kim, Jung A. Hong, Jaeyoon Baik, Jaekwang Lee*, Hangil Lee*, Young-Min Kim*, "Site-selective doping mechanisms for the enhanced photocatalytic activity of tin oxide nanoparticles", ***Applied Catalysis B-Environmental***, 305, 121083 (2022) (†equal contribution) [IF = 21.1]

9. ***Young-Hoon Kim***†, Sang-Hyeok Yang†, Myoungho Jeong†, Min-Hyoung Jung, Daehee Yang, Hyangsook Lee,

Taehwan Moon, Jinseong Heo, Hu Young Jeong, Eunha Lee*, Young-Min Kim*, "Hybrid deep learning crystallographic mapping of polymorphic phases in polycrystalline $Hf_{0.5}Zr_{0.5}O_2$ thin films", ***Small***, 18(18), 2107620 (2022) [IF = 12.1]

10. ***Young-Hoon Kim***, Sunyang Kim, Ki-jeong Kim, Chaeyoung Kim, Young-Min Kim*, Hangil Lee*, "Multiscale probing of the defect-induced variation of oxygen vacancies on the photocatalytic activity of doped ZnO nanoparticles", ***Journal of Materials Chemistry A***, 8(47), 25345-25354 (2020) [IF = 9.5]

11. Jae-Hyun Shim†, ***Young-Hoon Kim***†, Han-Sol Yoon, Han-A Kim, Ji-Soo Kim, Jong-Sik Kim, Nam-Hee Cho, Young-Min Kim*, Sanghun Lee*, "Hierarchically structured core-shell design of a lithium transition-metal oxide cathode material for excellent electrochemical performance", ***ACS Applied Materials & Interfaces***, 11(4), 4017-4027 (2019) (†equal contribution) [IF = 8.2]

PUBLICATIONS (Co-Authorship), 18 Papers

1. Reza Ghanbari, Harikrishnan KP, Kinnary Patel, Hua Zhou, Tao Zhou, Rui Liu, Liyan Wu, Aarushi Khandelwal, Kevin J. Crust, Sankalpa Hazra, John Carroll, Cedric J. G. Meyers, Jiayue Wang, Sergey Prosandeev, Huimin Qiao, ***Young-Hoon Kim***, Yoji Nabei, Miaofang Chi, Dali Sun, Nina Balke, Martin Holt, Venkatraman Gopalan, Jonathan E. Spanier, David A. Muller, Laurent Bellaiche, Harold Y. Hwang, Ruijuan Xu K.*, "Strain-induced lead-free morphotropic phase boundary", ***Nature Communications*** 16, 7766 (2025) [IF = 15.7]

2. Hyeon-Ah Ju, Dung Thanh Hoang, Woo-Sung Jang, ***Young-Hoon Kim***, Eun-Byeol Park, Sang-Hyeok Yang, Kyuwook Ihm, Young-Min Kim*, Hangil Lee*, "Interfacial contact-driven enhanced environmental photocatalysis of CdS-loaded OH-functionalized carbon nanotubes with low biotoxicity", ***Applied Surface Science***, 679, 161197 (2025) [IF = 6.9]

3. Hee-Beom Lee, Seon-Je Kim, Min-Hyoung Jung, ***Young-Hoon Kim***, Su-Jae Kim, Hai-Feng Gao, Brandon Van Leer, Se-Young Jeong*, Hu Young Jeong*, Young-Min Kim*, "Artifact-free sample preparation of metal thin films using Xe plasma-focused ion beam milling for atomic resolution and in situ biasing analyses", ***Materials Characterization***, 216, 114260 (2024) [IF = 5.5]

4. Yu-Seong Seo, Taewoo Ha, Ji Hee Yoo, Su Jae Kim, Yousil Lee, Seungje Kim, ***Young-Hoon Kim***, Seung Nam Cha, Young-Min Kim, Se-Young Jeong*, Jungseek Hwang*, "Stray light in 3D porous nanostructures of single-crystalline copper film", ***Small Science***, 2400174 (2024) [IF = 8.3]

5. Jong Mok Ok, Kyungrok Kang, Jounghoon Hyun, Chan-young Lim, Seonggeon Gim, Jinwoong Hwang, Jonathan D. Denlinger, Miyeon Cheon, Binod Regmi, Ji-Eun Lee, Hyejin Ryu, Su Jae Kim, Yousil Lee, ***Young-Hoon Kim***, Young-Min Kim, Yeongkwan Kim*, Seong-Gon Kim*, Heejun Yang*, Se-Young Jeong*, "Hole-carrier-dominant in 2D single-crystal copper", ***Advanced Materials***, 2403783 (2024) [IF = 26.8]

6. Arnab De, Min-Hyoung Jung, ***Young-Hoon Kim***, Seong Bin Bae, Seung Gyo Jeong, Jin Young Oh, Youngju Choi, Hojin Lee, Yunseok Kim, Taekjib Choi, Young-Min Kim, Sang Mo Yang, Hu Young Jeong*, Woo Seok Choi*, "Symmetry engineering of epitaxial $Hf_{0.5}Zr_{0.5}O_2$ ultrathin films", ***ACS Applied Materials & Interfaces***, 16(21), 27532-27540 (2024) [IF = 8.2]

7. Dongyeun Won, Do Hoon Kiem, Woohyun Cho, Sang-Hyeok Yang, ***Young-Hoon Kim***, Young-Min Kim, Suyeon Cho*, Myung Joon Han*, Heejun Yang*, "Polymorphic Kondo effects driven by spin lattice coupling in VTe_2", ***Advanced Functional Materials***, 2313180 (2024) [IF = 19.0]

8. Hee-Beom Lee, Min-Hyoung Jung, ***Young-Hoon Kim***, Eun-Byeol Park, Woo-Sung Jang, Seon-Je Kim, Ki-ju Choi, Ji-young Park, Kee-bum Hwang, Jae-Hyun Shim, Songhun Yoon*, Young-Min Kim*, "Deep learning image segmentation for the reliable porosity measurement of high-capacity Ni-based oxide cathode secondary particles", ***Journal of Analytical Science and Technology***, 14, 47 (2023) [IF = 2.8]

9. Taewoo Ha, Yu-Seong Seo, Teun–Teun Kim, Bipin Lamichhane, ***Young-Hoon Kim***, Su Jae Kim, Yousil Lee, Jong Chan Kim, Sang Eon Park, Kyung Ik Sim, Jae Hoon Kim, Yong In Kim, Seon Je Kim, Hu Young Jeong, Young Hee Lee, Seong-Gon Kim*, Young-Min Kim*, Jungseek Hwang*, Se-Young Jeong*, "Coherent consolidation of trillions of nucleations for mono-atom step-level flat surfaces", ***Nature Communications***, 14, 685 (2023) [IF = 15.7]

10. Heekyeong Park, Md Mokhlesur Rahman, Arindam Bala, ***Young-Hoon Kim***, Anamika Sen, Young-Min Kim*,

Jaichan Lee*, Sunkook Kim*, "Nanoscale patterning on layered MoS2 with stacking-dependent morphologies and optical tuning for phototransistor applications", ***Materials Today Nano***, 23, 100367 (2023) [IF = 8.2]

11. Jung A. Hong, Min-Hyoung Jung, Sung Yong Cho, Eun-Byeol Park, Daehee Yang, ***Young-Hoon Kim***, Sang-Hyeok Yang, Woo-Sung Jang, Jae Hyuck Jang, Hyo June Lee, Sungchul Lee*, Hu Young Jeong*, Young-Min Kim*, "Segmented tomographic evaluation of structural degradation of carbon support in proton exchange membrane fuel cells", ***Journal of Energy Chemistry***, 74, 359-367 (2022) [IF = 14.9]
12. Arindam Bala, Anamika Sen, ***Young-Hoon Kim***, Young-Min Kim, Srinivas Gandla, Heekyeong Park*, Sunkook Kim*, "Large-area MoS_2 nanosheets with triangular nanopore array as active and robust electrocatalysts for hydrogen evolution", ***Journal of Physical Chemistry C***, 126(23), 9696-9703 (2022) [IF = 3.2]
13. Seunghun Kang, Woo-Sung Jang, Anna N. Morozovska, Owoong Kwon, Yeongrok Jin, ***Young-Hoon Kim***, Hagyoul Bae, Chenxi Wang, Sang-Hyeok Yang, Alex Belianinov, Steven Randolph, Eugene A. Eliseev, Liam Collins, Yeehyun Park, Sanghyun Jo, Min-Hyoung Jung, Kyoung-June Go, Hae Won Cho, Si-Young Choi, Jae Hyuck Jang, Sunkook Kim, Hu Young Jeong, Jaekwang Lee, Olga S. Ovchinnikova, Jinseong Heo*, Sergei V. Kalinin*, Young-Min Kim*, Yunseok Kim*, "Highly enhanced ferroelectricity in HfO_2-based ferroelectric thin film by light ion bombardment", ***Science***, 376, 731-738 (2022) [IF = 45.8]
14. Su Jae Kim, Yong In Kim, Bipin Lamichhane, ***Young-Hoon Kim***, Yousil Lee, Chae Ryong Cho, Miyeon Cheon, Jong Chan Kim, Hu Young Jeong, Taewoo Ha, Young Hee Lee, Seong-Gon Kim*, Young-Min Kim*, Se-Young Jeong*, "Flat-surface-assisted and self-regulated oxidation resistance of Cu(111)", ***Nature***, 603, 434-438 (2022) [IF = 48.5]
15. Heekyeong Park, Gyuchull Han, AbdulAziz AlMutairi, ***Young-Hoon Kim***, Young-Min Kim*, Young Jun Kim*, Youngki Yoon*, Sunkook Kim*, "Nano-patterning on multilayer MoS_2 via block copolymer lithography for highly sensitive and responsive phototransistors", ***Communications Materials***, 2(1), 94 (2021) [IF = 9.6]
16. Juhong Park, Sanket Bhoyate, ***Young-Hoon Kim***, Young-Min Kim, Young Hee Lee, Patrick Conlin, Kyeongjae Cho, Wonbong Choi*, "Unusually high ion conductivity in large-scale patternable two-dimensional MoS_2 film", ***ACS Nano***, 15(7), 12267-12275 (2021) [IF = 16.0]
17. Hayoung Ko, Soo Ho Choi, Jungmo Kim, Yong In Kim, ***Young-Hoon Kim***, Laud Anim Adofo, Min-Hyoung Jung, Young-Min Kim, Mun Seok Jeong, Ki Kang Kim*, Soo Min Kim*, "Toward non-gas-permeable hBN film growth on smooth Fe surface", ***2D Materials***, 8(3), 034003 (2021) [IF = 4.3]
18. Su Jae Kim, Seonghoon Kim, Jegon Lee, Yongjae Jo, Yu-Seong Seo, Myounghoon Lee, Yousil Lee, Chae Ryong Cho, Jong-pil Kim, Miyeon Cheon, Jungseek Hwang, Yong In Kim, ***Young-Hoon Kim***, Young-Min Kim, Aloysius Soon, Myunghwan Choi, Woo Seok Choi*, Se-Young Jeong*, Young Hee Lee*, "Color of copper/copper oxide", ***Advanced Materials***, 33(15), 2007345 (2021) [IF = 26.8]
19. Seong Gon Park, Kyu Hyoung Lee, Jae-Hoon Lee, Geukchan Bang, Junghwan Kim, Hee Jung Park, Min Suk Oh, Suyoun Lee, ***Young-Hoon Kim***, Young-Min Kim, Hideo Hosono, Joonho Bang*, Kimoon Lee*, "Improved polaronic transport under a strong Mott-Hubbard interaction in Cu-substituted NiO", ***Inorganic Chemistry Frontiers***, 7, 853-858 (2020) [IF = 4.7]

DOMESTIC or NON-SCI JOURNALS, 2 Papers

1. Su Jae Kim, Yousil Lee, ***Young-Hoon Kim***, Seon Je Kim, Young-Min Kim, Se-Young Jeong*,"Development of Twin Boundaries in Ag(111) Thin Films Grown on Atomically Flat Cu(111)", ***New Physics: Sae Mulli***, 73, 801-809 (2023)
2. Su Jae Kim, ***Young-Hoon Kim***, Young-Min Kim, Se-Young Jeong*, "Grain Boundaries and Twin Boundaries in Cu(111) Thin Films", ***New Physics: Sae Mulli***, 72, 812-820 (2022)

METHOD and TECHNIQUES

- Hands-on Electron Microscopy & Spectroscopy

- 30/60/80/200-kV Double Cs-corrected TEM/STEM (ARM200CF, JEOL)
- 40/80/300-kV Double Cs-corrected TEM/STEM (GrandARM300CF, JEOL)
- 200-kV Double Wien-filter Monochromator TEM/STEM (NEOARM200F, JEOL)

- 60/80/200-kV Cs-corrected TEM/STEM (NEOARM200F, JEOL)
- 60/100-kV Cs-corrected STEM (UltraSTEM, Nion)

- Experimental Data Acquisition
  - High-resolution TEM and Bright field, Dark field, Two-beam TEM
  - Atomic-scale STEM imaging (HAADF / ABF / BF / eABF)
  - Multiscale spectroscopy (EDX/ EELS / Monochromated EELS, UV-VIS)
  - 4D-STEM-based (position-averaged) convergent beam electron diffraction ((PA)CBED)
  - 4D-STEM-based scanning electron nanobeam diffraction and precession electron diffraction
  - Electric field imaging by differential phase contrast (DPC) of segmented detectors (SAAF)
  - *In-situ* heating and biasing experiment (DENS solution, Protochips)
  - 3D electron tomography (FIB-SEM serial sectioning / STEM-based tilt series)
- Data Analysis and Simulation
  - Quantitative HRTEM and STEM data processing (post-filtering / bond length analysis / polarization mapping)
  - Simulation (Imaging / diffraction / EDX / EELS / 4D-STEM / CBED / PACBED)
  - Chemical analysis (bandgap / oxidation state mapping / oxygen vacancy distribution mapping)
  - 3D reconstruction (alignment / filtering / quantitative and qualitative rendering analysis)

FUNDINGS

1. **(2024 SKKU President Fellowship)** **Young-Hoon Kim**, "Deciphering strain relief mechanism of oxidation-resistance double heteroepitaxy single crystal metal thin film", **Funding ₩ 60,000,000.**

INTERNATIONAL CONFERENCES

1. **(Poster)** **Young-Hoon Kim**, Fehmi Sami Yasin, Nayeon Kim, Max Birch, Xiuzhen Yu, Akiko Kikkawa, Yasujiro Taguchi, Jiaqiang Yan, Miaofang Chi, "Strongly correlated quantum and topological materials characterization using Helium-cooled transmission electron microscopy at Oak Ridge National Laboratory", 2025 ORNL Joint Nanoscience and Neutron Scattering User Meeting, Knoxville, Aug. 11-14, 2025.
2. **(Oral)** **Young-Hoon Kim**, Su Jae Kim, Bipin Lamichhane, Seong-Gon Kim, Young-Min Kim, Se-Young Jeong, Miaofang Chi, "An atomically thin protective layer for high-temperature oxidation shielding of metals", Microscopy & Microanalysis 2025 (**M&M 2025**), Salt Lake City, Utah, July. 27-31, 2025.
   (M&M Postdoctoral Scholar Award)
3. **(Oral)** **Young-Hoon Kim**, Seong-Gon Kim, Seunghun Lee, Miyeon Cheon, Su Jae Kim, Se-Young Jeong, Young-Min Kim, "Self-regulating oxidation resistance at rough surface of achromatic copper", Microscopy & Microanalysis 2023 (**M&M 2023**), Minneapolis, Minnesota, July. 23-27, 2023.
   (M&M Student Scholar Award)
4. **(Oral)** **Young-Hoon Kim**, Sang-Hyeok Yang, Myoungho Jeong, Min-Hyoung Jung, Daehee Yang, Hyangsook Lee, Taehwan Moon, Jinseong Heo, Hu Young Jeong, Eunha Lee, Young-Min Kim, "Deep learning crystallographic mapping of polycrystalline $Hf_{0.5}Zr_{0.5}O_2$ thin films", 2022 Materials Research Society Spring (**2022 MRS spring**) Meeting & Exhibit, Honolulu, Hawaii, May. 8-13, 2022.
   (Best Oral Presentation Award)
5. **(Oral)** **Young-Hoon Kim**, Sang-Hyeok Yang, Myoungho Jeong, Eunha Lee, Young-Min Kim, "Direct Mapping of Local Crystal Symmetry in Ferroelectric Materials by Position-Averaged Convergent Beam Electron Diffraction", The 6th International Conference on Electronic Materials and Nanotechnology for Green Environment (**ENGE**), Jeju, Korea, Nov. 1-4, 2020.
6. **(Oral)** **Young-Hoon Kim**, Jae-Hyun Shim, Young-Min Kim, "Hierarchically-Structured Core-Shell Design of Lithium Transition Metal Oxide Cathode Material for Excellent Electrochemical Performance", 19^{th} International Microscopy Congress (**IMC-19**), Sydney, Australia, Sep. 9-14, 2018.