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Education

- **Ph.D. in Materials Science and Engineering (2012.03.01 – 2016.08.12), Pohang University of Science and Technology (POSTECH)**
 - Thesis title: 금속 할라이드 페로브스카이트 박막 및 발광 다이오드의 발광 효율 및 안정성 향상 연구(Improving Luminescence Efficiency and Stability of Metal Halide Perovskite Films and Light-Emitting Diodes), Ph.D. Advisor: Prof. Tae-Woo Lee
- **B.S. in Materials Science and Engineering (2008.03.03 – 2012.02.10), Pohang University of Science and Technology (POSTECH)**

Professional Experience

Korea Advanced Institute of Science and Technology (KAIST) (2021.03 ~ present)

- Assistant Professor
- KwonOh-Hyun Endowed Chair Assistant Professor (2023.03 ~ present)

The University of Chicago (2018.05.07 – 2021.01.19)

- Postdoctoral Scholar in James Franck Institute (Mentor: Dmitri V. Talapin in Dept. of Chemistry)

Seoul National University (2016.09.01 – 2018.04.30)

- Postdoctoral researcher in Dept. of Materials Science and Engineering (Mentor: Tae-Woo Lee)
 - Research Institute of Advanced Materials (2016.09 – 2017.02; 2018.03 – 2018.04)
 - BK21 PLUS SNU Materials Division for Educating Creative Global Leaders (2017.03 – 2018.02)

Research Highlights

1. Jung-Min Heo[†], **Himchan Cho[†]**, Seong-Chul Lee, Min-Ho Park, Joo Sung Kim, Hobeom Kim, Jinwoo Park, Young-Hoon Kim, Hyung Joong Yun, Eojin Yoon, Dong-Hyeok Kim, Soyeong Ahn, Sung-Joo Kwon, Chan-Yul Park, Tae-Woo Lee* "Bright Lead-Free Inorganic CsSnBr₃ Perovskite Light-Emitting Diodes" *ACS Energy Letters* **2022**, 7, 2807–2815 ([†]: these authors contributed equally to this study)

2. **H. Cho**, J.-A. Pan, H. Wu, X. Lan, I. Coropceanu, Y. Wang, W. Cho, E. A. Hill, J. A. Anderson, D. V. Talapin*, "Direct Optical Patterning of Quantum Dot Light-Emitting Diodes via *in situ* ligand exchange", *Advanced Materials* **2020**, 32(46), 2003805 (*Frontispiece*)

3. H.-D. Lee[†], H. Kim[†], **H. Cho[†]**, W. Cha, Y. Hong, Y.-H. Kim, A. Sadhanala, V. Venugopalan, J. S. Kim, J.W. Choi, C.-L. Lee, D. Kim, H. Yang, R. H. Friend, T.-W. Lee*, "Efficient Ruddlesden–Popper Perovskite Light-Emitting Diodes with Randomly Oriented Nanocrystals", *Advanced Functional Materials* **2019**, 29(27), 1901225 ([†]: these authors equally contributed to this study)

4. **H. Cho**[†], J. S. Kim[†], C. Wolf, Y.-H. Kim, H. J. Yun, S.-H. Jeong, A. Sadhanala, V. Venugopalan, J. W. Choi, C.-L. Lee, R. H. Friend, T.-W. Lee*, “High-Efficiency Polycrystalline Perovskite Light-Emitting Diodes based on Mixed Cations”, *ACS Nano* **2018**, 12(3), 2883-2892 (†: these authors equally contributed to this study)
 5. **H. Cho**, Y.-H. Kim, C. Wolf, H.-D. Lee, T.-W. Lee*, “Improving the Stability of Metal Halide Perovskite Materials and Light-Emitting Diodes”, *Advanced Materials* **2018**, 30(42), 1704587
 6. **H. Cho**, C. Wolf, J. S. Kim, H. J. Yun, J. S. Bae, T.-W. Lee*, “High-Efficiency Solution-Processed Inorganic Metal Halide Perovskite Light-Emitting Diodes”, *Advanced Materials* **2017**, 29(31), 1700579
 7. J. Byun[†], **H. Cho**[†], C. Wolf, M. Jang, A. Sadhanala, R. H. Friend, H. Yang, T.-W. Lee*, "Efficient Visible Quasi-2D Perovskite Light-Emitting Diodes", *Advanced Materials* **2016**, 28(34), 7515–7520 (**back cover**) (†: these authors equally contributed to this study) (**Citations = 564** as of 5/1/2023)
 8. **H. Cho**[†], S.-H. Jeong[†], M.-H. Park[†], Y.-H. Kim, C. Wolf, C.-L. Lee, J. H. Heo, A. Sadhanala, N. Myoung, S. Yoo, S. H. Im, R. H. Friend, T.-W. Lee*, “Overcoming the electroluminescence efficiency limitations of perovskite light-emitting diodes”, *Science* **2015**, 350(6265), 1222-1225. (†: these authors contributed equally to this study) (**Citations = 2,529** as of 5/1/2023)
 9. Y.-H. Kim[†], **H. Cho**[†], J. H. Heo[†], T.-S. Kim, N. Myoung, C.-L. Lee, S. H. Im*, T.-W. Lee*, “Multicolored Organic/Inorganic Hybrid Perovskite Light-Emitting Diodes”, *Advanced Materials* **2015**, 27(7), 1248-1254 (**inside back cover**), (†: these authors contributed equally to this study) (**Citation = 1,170** as of 5/1/2023)
- **Total number of papers = 38** (14 first-author, 22 co-author, 2 corresponding papers)
 - **Total number of citations = 7,595** (Google Scholar)
 - **h-index = 24** (Google Scholar)
 - **Total number of patents = 29** (등록 특허 26 건: 국제 13 건, 국내 13 건)

Honors and Awards

- 2023.03~present: **KwonOh-Hyun Endowed Chair Assistant Professor, KAIST**
- 2021.10: **2022 POSCO Science Fellowship from POSCO TJ Park Foundation** (포스코 사이언스 펠로 – 신진교수)
- 2017.02.10: **POSTECH Alumni President Award (POSTECH 총동창회장상)** from POSTECH Alumni Association at the POSTECH commencement ceremony for 2016 Academic Year
- 2016, 2017: Selected as a **Promising Young Scientist of Korea (2016) and Rising Researcher (2017)** from The Korean Academy of Science and Technology (KAST) (한국과학기술한림원 선정 최우수 젊은 과학자 2016, 2017)
- 2016.08.23: **KIDS Award (Bronze)**, sponsored by Samsung Display, from the 16th International Meeting on Information Displays (IMID)
- 2016.05.19: **Young Scientist Award** from the 27th International Conference on Molecular Electronics and Devices
- 2016.01.08: **Best Paper Award of Year (2015)** from Dept. of Materials Science and Engineering, POSTECH
- 2015.04.29: **SK Hynix Fellowship** from SK Hynix
- 2014.09.03: **Go Jun Sik Scholarship** from Dept. of Materials Science and Engineering, POSTECH

Press Highlights

- UNN, “KAIST, 2022 테크페어(Tech Fair) 개최” (2022.09.20) (KAIST 대표 특허 선정)
- CDRinfo, “PeLEDs Could Replace LEDs and OLEDs?” (Dec 4, 2015)
- Pulse News, “New display emitter likely to replace LED and OLED” (Dec 4, 2015)
- Noodls (gateway to facts), “Prof. Tae-Woo Lee and Students Develop Perovskite LED That Could Replace LED

- and OLED” (Dec 11, 2015)
- OLED-info, “Will Perovskite LEDs one day replace OLEDs?” (Dec 14, 2015)
- Printed Electronics World, IDTechEx, “Perovskite LED that could replace LED and OLED” (Dec 22, 2015)

Academic activities

- 2023 MRS Spring, Symposium lead-organizer (EL17: Halide Perovskite and Other Low-Dimensional Light Emitters—Synthesis, Defect Passivation and Optoelectronic Applications)
- 한국재료학회, 2023 Global Conference on Innovation Materials (GCIM), Symposium organizer (Materials and Devices for Displays and Optoelectronics)
- 대한금속·재료학회 디스플레이재료분과 신설 (총무간사) (2022-present)
- 한국고분자학회 운영이사 (2022.12-present)
- 한국정보디스플레이학회, International Meeting on Information Displays (IMID) QD session organizer (2022, 2023), Micro LED session organizer (2023)
- 한국공업화학회 디스플레이분과 기획간사 (2022-present)
- 한국유연인쇄전자학회 편집위원회 편집위원 (2022.04.14 ~ present)
- 한국전기전자재료학회 학회지 편집위원회 편집위원 (2022)
- International Conference on Molecular Electronics and Devices (IC ME&D), Steering committee (2021, 2022)

1. Wei Liu, Cheng Zhang, R. Alessandri, Benjamin T. Diroll, Y. Li, H. Liang, X. Fan, K. Wang, **Himchan Cho**, Y. Liu, Y. Dai, Q. Su, N. Li, S. Li, S. Wai, Q. Li, S. Shao, L. Wang, J. Xu, X. Zhang, Dmitri V. Talapin, Juan J. de Pablo, and Sihong Wang, "High-efficiency stretchable light-emitting polymers from thermally activated delayed fluorescence", *Nature Materials* **2023** (SCI, IF = 47.656) (online published) DOI: 10.1038/s41563-023-01529-w
2. Sun Jae Park†, Changmin Keum†, Huanyu Zhou, Tae-Woo Lee, Wonhee Choe, **Himchan Cho*** "Progress and prospects of nanoscale emitter technology for AR/VR displays" *Advanced Materials Technologies* **2022**, 2201070 (**Corresponding Author**, DOI: doi.org/10.1002/admt.202201070, SCI, IF = 8.856) (†: these authors contributed equally to this study)
3. Jiaze Xie, Simon Ewing, Jan-Kiklas Boyn, Alexander S. Filatov, Baorui Cheng, Tengzhou Ma, Garrett L. Grocke, Norman Zhao, Ram Itani, Xiaotong Sun, **Himchan Cho**, Zhihengyu Chen, Karena W. Chapman, Shrayesh N. Patel, Dmitri V. Talapin, Jiwoong Park, David A. Mazziotti, John S. Anderson* "Intrinsic glassy-metallic transport in an amorphous coordination polymer" *Nature* **2022**, 611, 479–484 (**Co-Author**, DOI: doi.org/10.1038/s41586-022-05261-4, SCI, IF = 69.5)
4. Jung-Min Heo†, **Himchan Cho† (equal 1st author)**, Seong-Chul Lee, Min-Ho Park, Joo Sung Kim, Hobeom Kim, Jinwoo Park, Young-Hoon Kim, Hyung Joong Yun, Eojin Yoon, Dong-Hyeok Kim, Soyeong Ahn, Sung-Joo Kwon, Chan-Yul Park, Tae-Woo Lee* "Bright Lead-Free Inorganic CsSnBr₃ Perovskite Light-Emitting Diodes" *ACS Energy Letters* **2022**, 7, 2807–2815 (**First Author**, SCI, IF = 19.54) (†: these authors contributed equally to this study)
5. Haoqi Wu, Yuanyuan Wang, Jaehyung Yu, Jia-Ahn Pan, **Himchan Cho**, Artrajit Gupta, Igor Coropceanu, Chenkun Zhou, Jiwoong Park, Dmitri V Talapin* "Direct Heat-Induced Patterning of Inorganic Nanomaterials" *J. Am. Chem. Soc.* **2022**, 144, 10495–10506 (**Co-Author**, SCI, IF = 15.4, Publication date: 2022.06.09)
6. Ayoung Ham, Tae Soo Kim, Minsoo Kang, **Himchan Cho***, Kibum Kang*, "Strategies for Chemical Vapor Deposition of Two-Dimensional Organic–Inorganic Halide Perovskites", *iScience* **2021**, 103486, (**Corresponding Author**, SCI Expanded, IF = 5.08, DOI: 10.2139/ssrn.3882888)
7. Jia-Ahn Pan, Zichao Rong, Yuanyuan Wang, **Himchan Cho**, Igor Coropceanu, Haoqi Wu, and Dmitri V. Talapin*, "Direct Optical Lithography of Colloidal Metal Oxide Nanomaterials for Diffractive Optical Elements with 2 π Phase Control", *J. Am. Chem. Soc.* **2021**, 143, 5, 2372–2383 (**Co-Author**, SCI, IF = 15.419, Publication date: 2021.01.28)
8. **H. Cho**, J.-A. Pan, H. Wu, X. Lan, I. Coropceanu, Y. Wang, W. Cho, E. A. Hill, J. A. Anderson, D. V. Talapin*, "Direct Optical Patterning of Quantum Dot Light-Emitting Diodes via *in situ* ligand exchange", *Advanced Materials* **2020**, 32(46), 2003805 (*Frontispiece*) (**First Author**, SCI, IF = 30.849)
9. H.-D. Lee†, H. Kim†, **H. Cho†**, W. Cha, Y. Hong, Y.-H. Kim, A. Sadhanala, V. Venugopalan, J. S. Kim, J.W. Choi, C.-L. Lee, D. Kim, H. Yang, R. H. Friend, T.-W. Lee*, "Efficient Ruddlesden–Popper Perovskite Light-Emitting Diodes with Randomly Oriented Nanocrystals", *Advanced Functional Materials* **2019**, 29(27), 1901225 (†: these authors equally contributed to this study) (**First Author**, SCI, IF = 18.808, Publication date: 2019.04.01, DOI: 10.1002/adfm.201901225)
10. S. Ahn, M.-H. Park, S.-H. Jeong, Y.-H. Kim, J. Park, S. Kim, H. Kim, **H. Cho**, C. Wolf, M. Pei, H. Yang, T.-W. Lee*, "Fine Control of Perovskite Crystallization and Reducing Luminescence Quenching

Using Self-Doped Polyaniline Hole Injection Layer for Efficient Perovskite Light-Emitting Diodes”, *Advanced Functional Materials* **2019**, 29(6), 1807535 (Co-Author, SCI, IF=18.808, Publication date: 2018.12.18, DOI: 10.1002/adfm.201807535)

11. J. S. Kim, **H. Cho**, C. Wolf, H. J. Yun, J.-M. Heo, T.-W. Lee, “Increased luminescent efficiency of perovskite light emitting diodes based on modified two-step deposition method providing gradient concentration”, *APL Materials* **2018**, 6(11), 111101 (Co-Author, SCI Expanded, IF=5.096, Publication date: 2018.11.1, DOI: 10.1063/1.5047456)
12. **H. Cho**[†], J. S. Kim[†], C. Wolf, Y.-H. Kim, H. J. Yun, S.-H. Jeong, A. Sadhanala, V. Venugopalan, J. W. Choi, C.-L. Lee, R. H. Friend, T.-W. Lee*, “High-Efficiency Polycrystalline Perovskite Light-Emitting Diodes based on Mixed Cations”, *ACS Nano* **2018**, 12(3), 2883-2892 (†: these authors equally contributed to this study) (First Author, SCI, IF = 15.881, Publication date: 2018.03.01, DOI: 10.1021/acsnano.8b00409)
13. **H. Cho**, J. S. Kim, Y.-H. Kim, T.-W. Lee*, “Influence of A-site cation on the thermal stability of metal halide perovskite polycrystalline films”, *Journal of Information Display* **2018**, 19(1), 53-60 (First Author, SCI Expanded, IF = 2.913, Publication date: 2018.02.01, DOI: 10.1080/15980316.2018.1424652)
14. **H. Cho**, Y.-H. Kim, C. Wolf, H.-D. Lee, T.-W. Lee*, “Improving the Stability of Metal Halide Perovskite Materials and Light-Emitting Diodes”, *Advanced Materials* **2018**, 30(42), 1704587 (First Author, SCI, IF=30.849, Citations = 228, Publication date: 2018.01.25, DOI: 10.1002/adma.201704587)
15. M.-H. Park, S.-H. Jeong, H.-K. Seo, C. Wolf, Y.-H. Kim, H. Kim, J. Byun, J. S. Kim, **H. Cho**, T.-W. Lee*, “Unravelling Additive-based Nanocrystal Pinning for High Efficiency Organic-Inorganic Halide Perovskite Light-Emitting Diodes”, *Nano Energy* **2017**, 42, 157-165 (Co-Author, SCI Expanded, IF=17.881, Publication date: 2017.10.12, DOI: 10.1016/j.nanoen.2017.10.012)
16. C. Wolf, **H. Cho**, Y.-H. Kim, T.-W. Lee*, “Polaronic charge carrier–lattice interaction in lead halide perovskites”, *ChemSusChem* **2017**, 10(19), 3705-3711 (Co-Author, SCI, IF=8.928, Publication date: 2017.09.18, DOI: 10.1002/cssc.201701284)
17. S.-H. Jeong, S.-H. Woo, T.-H. Han, M.-H. Park, **H. Cho**, Y.-H. Kim, H. Cho, H. Kim, S. Yoo, T.-W. Lee*, “Universal high work function flexible anode for simplified ITO-Free organic and perovskite light-emitting diodes with ultra-high efficiency”, *NPG Asia Materials* **2017**, 9, e411 (Co-Author, SCI Expanded, IF=10.481, Publication date: 2017.07.28, DOI: 10.1038/am.2017.108)
18. **H. Cho**, C. Wolf, J. S. Kim, H. J. Yun, J. S. Bae, T.-W. Lee*, “High-Efficiency Solution-Processed Inorganic Metal Halide Perovskite Light-Emitting Diodes”, *Advanced Materials* **2017**, 29(31), 1700579 (First Author, SCI, IF=30.849, Publication date: 2017.06.13, DOI: 10.1002/adma.201700579)
19. Y.-H. Kim, C. Wolf, Y.-T. Kim, **H. Cho**, W. Kwon, S. Do, A. Sadhanala, C. G. Park, S.-W. Rhee, S. H. Im, R. H. Friend, T.-W. Lee*, “Highly Efficient Light-Emitting Diodes of Colloidal Metal-Halide Perovskite Nanocrystals beyond Quantum Size”, *ACS Nano* **2017**, 11(7), 6586-6593 (Co-Author, SCI, IF=15.881, Publication date: 2017.06.06, DOI: 10.1021/acsnano.6b07617)
20. S. H. Cho, E. H. Kim, B. Jeong, J. H. Lee, G. Song, I. Hwang, **H. Cho**, K. L. Kim, S. Yu, R. H. Kim, S. W. Lee, T.-W. Lee and C. Park*, “Solution-processed electron-only tandem polymer light-emitting diodes for broad wavelength light emission”, *Journal of Materials Chemistry C* **2017**, 5(1), 110-117. (Co-Author, SCI, IF = 7.393, Publication date: 2016.11.27, DOI: 10.1039/c6tc04229e)

21. Y.-H. Kim[†], [H. Cho[†]](#), T.-W. Lee*, "Metal Halide Perovskite Light Emitters", *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* **2016**, 113(42), 11694–11702, (†: these authors equally contributed to this study) (**First Author**, SCI, IF = 11.205, **Citations** > **400**, Publication date: 2016.09.27, DOI: 10.1073/pnas.1607471113)
22. T.-H. Han[†], M.-H. Park[†], S.-J. Kwon, S.-H. Bae, H.-K. Seo, [H. Cho](#), J.-H. Ahn, T.-W. Lee*, "Approaching Ultimate Flexible Organic Light-Emitting Diodes Using a Graphene Anode", *NPG Asia Materials* **2016**, 8, e303, (†: these authors equally contributed to this study) (**Co-Author**, SCI Expanded, IF = 10.481, Publication date: 2016.09.09, DOI: 10.1038/am.2016.108)
23. W. Xu, [H. Cho](#), Y.-H. Kim, Y.-T. Kim, C. Wolf, C.-G. Park, T.-W. Lee*, "Organometal halide perovskite artificial synapses", *Advanced Materials* **2016**, 28(28), 5916–5922 (**inside back cover**) (**Co-Author**, SCI, IF=30.849, Publication date: 2016.07.27, DOI: 10.1002/adma.201506363)
24. J. Byun[†], [H. Cho[†]](#), C. Wolf, M. Jang, A. Sadhanala, R. H. Friend, H. Yang, T.-W. Lee*, "Efficient Visible Quasi-2D Perovskite Light-Emitting Diodes", *Advanced Materials* **2016**, 28(34), 7515–7520 (**back cover**) (†: these authors equally contributed to this study) (**First Author**, SCI, IF=30.849, **Citation** > **500**, Publication date: 2016.06.23, DOI: 10.1002/adma.201601369)
25. Y.-H. Kim, [H. Cho](#), J. H. Heo, S. H. Im, T.-W. Lee*, "Effects of thermal treatment on organic-inorganic hybrid perovskite films and luminous efficiency of light-emitting diodes", *Current Applied Physics* **2016**, 16(9), 1069-1074 (**Co-Author**, SCI Expanded, IF=2.480, Publication date: 2016.06.07, DOI: 10.1016/j.cap.2016.06.002)
26. [H. Cho](#), S.-H. Jeong, S.-Y. Min, T.-H. Han, M.-H. Park, Y.-H. Kim, W. Xu, T.-W. Lee*, "Scalable Noninvasive Organic Fiber Lithography for Large-Area Optoelectronics", *Advanced Optical Materials* **2016**, 4(6), 967-972 (**back cover**) (**First Author**, SCI Expanded, IF = 9.926, Publication date: 2016.03.09, DOI: 10.1002/adom.201600005)
27. [H. Cho[†]](#), S.-H. Jeong[†], M.-H. Park[†], Y.-H. Kim, C. Wolf, C.-L. Lee, J. H. Heo, A. Sadhanala, N. Myoung, S. Yoo, S. H. Im, R. H. Friend, T.-W. Lee*, "Overcoming the electroluminescence efficiency limitations of perovskite light-emitting diodes", *Science* **2015**, 350(6265), 1222-1225. (†: these authors contributed equally to this study) (**First Author**, SCI, IF = 41.845, **Citations** > **2,500**, Publication date: 2015.12.04, DOI: 10.1126/science.aad1818)
28. Y.-H. Kim, C. Wolf, [H. Cho](#), S.-H. Jeong, T.-W. Lee*, "Highly Efficient, Simplified, Solution-Processed Thermally Activated Delayed-Fluorescence Organic Light-Emitting Diodes", *Advanced Materials* **2016**, 28(4), 734-741. (**Co-Author**, SCI, IF = 30.849, Publication date: 2015.11.30, DOI: 10.1002/adma.201504490)
29. M.-H. Park, T.-H. Han, Y.-H. Kim, S.-H. Jeong, Y. Lee, H.-K. Seo, [H. Cho](#), T.-W. Lee*, "Flexible Organic Light-Emitting Diodes for Solid-State Lighting", *Journal of Photonics for Energy* **2015**, 5(1), 053599. (**Co-Author**, SCI Expanded, IF = 1.836, Publication date: 2015.07.21, DOI: 10.1117/1.JPE.5.053599)
30. [H. Cho[†]](#), S. D. Kim[†], T.-H. Han, I. Song, J.-W. Byun, Y.-H. Kim, S. Kwon, S.-H. Bae, H. C. Choi, J.-H. Ahn*, T.-W. Lee*, "Improvement of Work Function and Hole Injection Efficiency of Graphene Anode Using CHF₃ Plasma Treatment", *2D Materials* **2015**, 2(1), 014002 (†: these authors contributed equally to this study) (**First Author**, SCI Expanded, IF = 7.103, Publication date: 2014.12.31, DOI: 10.1088/2053-1583/2/1/014002)
31. Y.-H. Kim[†], [H. Cho[†]](#), J. H. Heo[†], T.-S. Kim, N. Myoung, C.-L. Lee, S. H. Im*, T.-W. Lee*, "Multicolored Organic/Inorganic Hybrid Perovskite Light-Emitting Diodes", *Advanced Materials* **2015**,

27(7), 1248-1254 (*inside back cover*), (†: these authors contributed equally to this study) (**First Author**, SCI, IF = 30.849, **Citation** >1,100, Publication date: 2014.11.25, DOI: 10.1002/adma.201403751)

32. S.-Y. Min, T.-S. Kim, Y. Lee, **H. Cho**, W. Xu, T.-W. Lee*, “Organic Nanowire Fabrication and Device Applications”, *Small* **2014**, 11(1), 45-62. (**Co-Author**, SCI, IF = 13.281, Publication date: 2014.10.06, DOI: 10.1002/sml.201401487)
33. W. Xu†, H.-K. Seo†, S.-Y. Min, **H. Cho**, T.-S. Lim, C.-Y. Oh, Y. Lee, T.-W. Lee*, “Rapid Fabrication of Designable Large-Scale-Aligned Graphene Nanoribbons by Electrohydrodynamic Nanowire Lithography”, *Advanced Materials* **2014**, 26(21), 3459-3464. (**Co-Author**, SCI, IF = 30.849, Publication date: 2014.04.09.)
34. Y.-H. Kim, T.-H. Han, **H. Cho**, S.-Y. Min, C.-L. Lee, T.-W. Lee*, “Polyethylene Imine as an Ideal Interlayer for Highly Efficient Inverted Polymer Light-Emitting Diodes”, *Advanced Functional Materials* **2014**, 24(24), 3808-3814. (**Co-Author**, SCI, IF = 18.808, Publication date: 2014.03.10.)
35. W. Xu†, T.-S. Lim†, H.-K. Seo, S.-Y. Min, **H. Cho**, M.-H. Park, Y.-H. Kim, T.-W. Lee* “N-Doped Graphene Field-Effect Transistors with Enhanced Electron Mobility and Air-stability”, *Small* **2014**, 10(10), 1999-2005. (**Co-Author**, SCI, IF = 13.281, Publication date: 2014.02.24.)
36. S. Cho†, S. Jo†, I. Hwang, J. Sung, J. Seo, S.-H. Jung, I. Bae, J. Choi, **H. Cho**, T. Lee, J. Lee, T.-W. Lee, C. Park*, “Extremely Bright Full Color Alternating Current Electroluminescence of Solution-Blended Fluorescent Polymers with Self-Assembled Block Copolymer Micelles”, *ACS Nano* **2013**, 7(12), 10809–10817. (**Co-Author**, SCI, IF = 15.881, Publication date: 2013.11.26.)
37. S.-Y. Min, T.-S. Kim, B. J. Kim, **H. Cho**, Y.-Y. Noh, H. Yang, J. H. Cho, T.-W. Lee*, “Large-scale organic nanowire lithography and electronics” *Nature Communications* **2013**, 4, 1773. (**Co-Author**, SCI, IF = 14.919, Publication date: 2013.04.30.)
38. **H. Cho**, S.-Y. Min, T.-W. Lee*, “Electrospun Organic Nanofiber Electronics and Photonics”, *Macromolecular Materials and Engineering* **2013**, 298(5), 475-486 (*back cover*) (**First Author**, SCI, IF = 4.367, Publication date: 2013.03.19, DOI: 10.1002/mame.201200364)