CURRICULUM VITAE

SEUNGJUN CHUNG Ph. D.

Associate Professor

School of Electrical Engineering
Korea University, Seoul, Korea
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EDUCATION

2006 - 2012 Seoul National University, Seoul, Korea

Ph. D. Electrical Engineering and Computer Science

Thesis title: All-Inkjet-Printed Flexible Organic Thin-Film Transistor / Circuit

Fabrication and its Electrical Characterization

(Advisor: Prof. Yongtaek Hong)

2002 -2006 Korea University, Seoul, Korea

B.S Electrical Engineering

RESEARCH EXPERIENCE

2024.3-present Associate Professor

School of Electrical Engineering Korea University, Seoul, Korea

2023.3-2024.2 Adjunct Professor

KU-KIST Graduate School of Converging Science and Technology

Korea University, Seoul, Korea

2017.12-2024.2 Senior/Principal Research Scientist

Soft Hybrid Materials Research Center

Korea Institute of Science and Technology (KIST), Seoul, Korea

2016.04-2017.11 BK Assistant Professor

Dept. of Physics and Astronomy

Seoul National University, Seoul, Korea

2013.05-2016.03 Postdoctoral Researcher

Dept. of Electrical Engineering and Computer Sciences, UC Berkeley, USA

(Advisor: Vivek Subramanian)

RESEARCH INTERESTS

- Printed soft electronics, flexible and stretchable semiconductor device applications (Thin-film transistors, circuits, display, energy harvesting, and memory devices)
- Two-dimensional (2D) transition metal dichalcogenides (TMDs) and their applications
- Energy harvesting devices (thermoelectrics) and storage devices

REPRESENTATIVE AWARDS

2024.08	Merck Young Scientist Award Korea Information Display Society
2024.07	Chairman Award National Research Foundation
2023.09	Nanotechnologies Top 10 in 2023 Korea Nanotechnology Research Society
2023.07	Outstanding KIST Researcher Award
2022.10	President Award Korea Flexible & Printed Electronics Society
2021 02	Distinguished Researcher Award (Park Won Hee Award) Korea Institute of Science and Technology (KIST)
2021 02	Outstanding Research Team Award Korea Institute of Science and Technology (KIST)
2020.03	KIST Young Fellow
2019.08	KIDS Awards (Gold) The 19 th International Meeting on Information Displays (IMID)
2012.10	DOYEON Thesis Award : Inter-university Semiconductor Research Center, Seoul National University

PROFESSIONAL ACTIVITIES

2022 - present	Editorial Board Member, The Korea Flexible and Printed Electronics
2021 - present	Board of Trustees, The Korea Information Display Society (KIDS)
2020 - present	Board of Trustees, The Korea Sensors Society
2018 - present	Board of Trustees, The Korea Flexible & Printed Electronics Society
2018 - present	Technical Sub-Program Committee Member, The Korea Conference on on Semiconductors

REPRESENTATIVE 10 PUBLICATIONS

- J.-C. Choi, H. Y. Jeong, J.-H. Sun, J. Byun, J. Oh, S. J. Hwang, P. Lee, D. W. Lee, J. G. Son, S. Lee, <u>S. Chung*</u>, "Bidirectional Zero Poisson's Ratio Elastomers with Self-Deformable Soft Mechanical Metamaterials for Stretchable Displays", *Advanced Functional Materials*, 2406725 (2024)
- B. Lee, H. Cho, S. Moon, Y. Ko, H. Kim, J. Jeong, <u>S. Chung*</u>, "Omnidirectional printing of elastic conductors for 3D-structured stretchable electronics", *Nature Electronics* 6, 307 (2023) (Front cover highlight & additional article in news & views by H. Yuk et al.)
- 3. S. Hwang, D. Jang, B. Lee, Y.-S. Ryu, J. Kwak*, H. Kim*, <u>S. Chung*</u>, "All direct ink writing of 3D compliant carbon thermoelectric generators for high energy conversion efficiency", *Advanced Energy Materials* 13, 2204171 (2023) (Back cover highlight paper)
- 4. H. Cho, D. Jang, J. Yoon, Y.-S. Ryu, B. Lee, B. Lee*, S. Chung*, Y. Hong*, "Milliwatt-scale body-heat harvesting using stretchable thermoelectric generators for fully untethered, self-sustainable wearables", ACS Energy Letters 8, 2585 (2023) (Front cover highlight paper)
- J. Bae, S. Oh, B. Lee, C. H. Lee, J. Chung, J. Kim, S. Jo, S. Seo, J. Lim*, <u>S. Chung*</u>, "High-performance, Printable Quasi-solid-state Electrolytes Toward All 3D Direct Ink Writing of Shape-versatile Li-ion Batteries", *Energy Storage Materials* 57, 277 (2023)
- K. T. Park, Y. S. Cho, I. Jeong, D. Jang, H. Cho, Y. Choi, T. Lee, Y. Ko, J. Choi, S. Y. Hong, M.-W. Oh, <u>S. Chung*</u>, C. R. Park*, H. Kim*, "Highly Integrated, Wearable Carbon-Nanotube-Yarn-based Thermoelectric Generators Achieved by Selective Inkjet-Printed Chemical Doping", *Advanced Energy Materials* 12, 2200256 (2022)
- I. Jeong, K. Cho, S. Yun, J. Shin, J. Kim, G. T. Kim, T. Lee*, <u>S. Chung*</u>, "Tailoring the electrical characteristics of MoS₂ FETs through controllable surface charge transfer doping using selective inkjet printing" *ACS Nano* 16, 6215 (2022)
- B. Lee, <u>S. Chung*</u>, "Printed carbon electronics get recycled," *Nature Electronics*, 4, 241 (2021)
- B. Lee, H. Cho, K. T. Park, M. Park, J. S. Kim, H. Kim, Y. Hong, <u>S. Chung*</u>, "High-performance compliant thermoelectric generators with magnetically self-assembled soft heat conductors for self-powered wearable electronics," *Nature Communications* 11, 5948 (2020).
- J. Byun, <u>S. Chung*</u>, Y. Hong*, "Artificial Soft Elastic Media with Periodic Hard Inclusions for Tailoring Strain-Sensitive Thin Film Responses" *Advanced Materials*, vol. 30, 1870304 (2018). (*Back cover highlight paper*).