

Chih-Jen Shih

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ACADEMIC APPOINTMENTS

- 2022 - Associate Professor (tenured), Institute for Chemical and Bioengineering, Department of Chemistry and Applied Biosciences, ETH Zürich, Switzerland
- 2015 - 2021 Assistant Professor (tenure-track)
- 2014 - 2015 Postdoctoral Research Associate, with Prof. Zhenan Bao, Department of Chemical Engineering, Stanford University, USA

EDUCATION

- 2014 Ph.D., Chemical Engineering, MIT, Cambridge, USA (w/ Profs. Daniel Blankschtein and Michael Strano)
- 2004 M.S., Chemical Engineering, NTU, Taipei, Taiwan (w/ Prof. Chung-Wen Lan)
- 2002 B.S., Chemical Engineering, NTU, Taipei, Taiwan

HONORS

- 2019 ERC Starting Grant, EU.
- 2018 Selected as “Best Paper Award” by International Display Workshops, Society for Information Display, Japan.
- 2017 Ružička Prize, ETH Zürich, Switzerland.
- 2017 Named as “Influential Researcher 2017” by Ind. Eng. Chem. Res., American Chemical Society, USA.
- 2017 Victor K. LaMer Award, Colloid & Surface Chemistry Division, American Chemical Society, USA.
- 2017 Named as “Emerging Investigator 2017” by J. Mater. Chem., Royal Society of Chemistry, UK.

RECENT SELECTED PUBLICATIONS

- “Aggregation-Induced Emission in Lamellar Solids of Colloidal Perovskite Quantum Wells” J. Jagielski, S. Kumar, M. Wang, D. Scullion, R. Lawrence, Y.T. Lee, S. Yakunin, T. Tian, M. Kovalenko, Y.C. Chiu, E.J.G. Santos, S. Lin and C.J. Shih*, *Sci. Adv.* 3(12), eaaq0208 (2017). ([pdf](#)).
- “Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates” S. Kumar, J. Jagielski, N. Kallikounis, Y.H. Kim, C. Wolf, F. Jenny, T. Tian, C.J. Hofer, Y.C. Chiu, W.J. Stark, T.W. Lee and C.J. Shih*, *Nano Lett.* 17(9), 5277, (2017). ([pdf](#)).
- “Asymmetric Electric Field Screening in van der Waals Heterostructures” L.H. Lee, T. Tian, Q. Cai, C.J. Shih and E.J.G. Santos, *Nat. Commun.* 9, 1271 (2018). ([pdf](#)).
- “Macroscopic Salt Rejection through Electrostatically Gated Porous Graphene” W. Roman, T. Tian, K. Yazda, H.G. Park and C.J. Shih*, *Nano Lett.* 19(9), 6400 (2019). ([pdf](#)).
- “Scalable Photonic Sources Using Two-Dimensional Lead Halide Perovskite Superlattices” J. Jagielski, S. Solari, L. Jordan, D. Scullion, B. Blülle, Y.T. Li, Y.C. Chiu, B. Ruhstaller, E.J.G. Santos and C.J. Shih*, *Nat. Commun.* 11, 387 (2020) ([pdf](#)).
- “Continuous Color Tuning of Single-Fluorophore Emission via Polymerization-Mediated Through-Space Charge Transfer” S. Ye, T. Tian, A.J. Christofferson, S. Erikson, J. Jagielski, Z. Luo, S. Kumar, C.J. Shih, J.-C. Leroux, Y. Bao, *Sci. Adv.*, 7(15), eabd1794 (2021) ([pdf](#)).
- “Anisotropic Nanocrystal Superlattices Overcoming Intrinsic Light Outcoupling Efficiency Limit in Perovskite Quantum Dot Light-Emitting Diodes” S. Kumar, T. Marcato, F. Krumeich, Y.T. Li, Y.C. Chiu, and C.J. Shih*, *Nat. Commun.* 13, 2106 (2022) ([pdf](#)).
- “Stabilization of Lead-Reduced Metal Halide Perovskite Nanocrystals by High-Entropy Alloying” S.F. Solari, L.N. Poon, M. Würle, F. Krumeich, Y.T. Li, Y.C. Chiu, C.J. Shih*, *J. Am. Chem. Soc.* 144(13), 5864 (2022) ([pdf](#)).