

Professor LIAO Liangsheng

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Academic Qualification:

- Ph.D. in Condensed Matter Physics, Nanjing University, 1996
- M.S. in Physics of Semiconductor & Semiconductor Devices, Nanjing University, 1988
- B.S. in Semiconductor Physics, Nanchang University, 1982

Teaching Area

- Organic Semiconductors
- Electrical Engineering

Research Area

- Organic Optoelectronic Materials and Devices
- Surface and Interface Studies on Thin Films

Working Experience

- 01/2021-Present Professor, Macau University of Science and Technology, Macau, China
- 03/2009-Present Professor, Institute of Functional Nano & Soft Materials (FUNSOM)
Soochow University, Suzhou, China
- 12/2000-03/2009 Senior Research Scientist, Research Laboratories, R&D
Eastman Kodak Company, Rochester, NY 14650, USA
- 12/1997-12/2000 Associate Professor, Dept. of Phys.
Fudan University, Shanghai, China
- (12/1998-6/2000) Research Fellow, Center Of Supper-Diamond & Advanced Films (COSDAF)
City University of Hong Kong, Hong Kong, SAR, China
(On leave from Fudan University)
- 07/1988-09/1993 Lecturer (07/1988), Associate Professor (06/1993), Dept. of Phys.

Nanchang University (AKA: Jiangxi Univ.), Nanchang, China

- (6/1989-10/1990) Visiting Scholar, California State University, Northridge, CA 91330, USA
(On leave from Jiangxi University)
- 01/1982-09/1985 Teaching Assistant, Dept. of Phys.
Jiangxi University, Nanchang, China

Academic Publication (selected)

- Y. K. Wang, D. Ma, F. Yuan, K. Singh, J. M. Pina, A. Johnston, Y. Dong, C. Zhou, B. Chen, B. Sun, H. Ebe, J. Fan, M. J. Sun, Y. Gao, Z. H. Lu, O. Voznyy*, **L. S. Liao***, E. H. Sargent*, "Chelating-agent-assisted control of CsPbBr₃ quantum well growth enables stable blue perovskite emitters", *Nat. Commun.* 11, 3674 (2020). doi: 10.1038/s41467-020-17482-0.
- Y. T. Dong, Y. K. Wang, F. L. Yuan, A. Johnston, Y. Liu, D. X. Ma, M. J. Choi, B. Chen, M. Chekini, S. W. Baek, L. K. Sagar, J. Fan, Y. Hou, M. J. Wu, S. J. Lee, B. Sun, S. Hoogland, R. Quintero-Bermudez, H. Ebe, P. Todorovic, F. Dinic, P. C. Li, H. T. Kung, M. I. Saidaminov, E. Kumacheva, E. Spiecker, **L. S. Liao**, O. Voznyy, Z. H. Lu*, and E. H. Sargent*, "Bipolar-shell resurfacing for blue LEDs based on strongly confined perovskite quantum dots", *Nat. Nanotechnology* 15, 668-674 (2020). doi: 10.1038/s41565-020-0714-5.
- Y. C. Wei, S. F. Wang, Y. Hu, **L. S. Liao***, D. G. Chen, K. H. Chang, C. W. Wang, S. H. Liu, W. H. Chan, J. L. Liao, W. Y. Hung, T. H. Wang, P. T. Chen, H. F. Hsu, Y. Chi*, P. T. Chou*, "Overcoming the energy gap law in near-infrared OLEDs by exciton–vibration decoupling", *Nat. Photonics* 14, 570-577 (2020). doi: 10.1038/s41566-020-0653-6.
- X. Tang, L. S. Cui*, H. C. Li, A. J. Gillett, F. Auras, Y. K. Qu, C. Zhong, S. T. E. Jones, Z. Q. Jiang*, R. H. Friend*, **L. S. Liao***, "Highly efficient luminescence from space-confined charge-transfer emitters", *Nat. Mater.* 19, 1332-1338 (2020). doi: 10.1038/s41563-020-0710-z.
- M. P. Zhuo, J. J. Wu, X. D. Wang*, Y. C. Tao, Y. Yuan, **L. S. Liao***, "Hierarchical self-assembly of organic heterostructure nanowires", *Nat. Commun.* 10, 3839 (2019). doi: 10.1038/s41467-019-11731-7.
- L. S. Cui, S. B. Ruan, F. Bencheikh, R. Nagata, L. Zhang, K. Inada, H. Nakanotani, **L.S. Liao***, C. Adachi*, "Long-lived efficient delayed fluorescence organic light-emitting diodes using n-type hosts", *Nat. Commun.* 8, 2250 (2017). doi: 10.1038/s41467-017-02419-x.
- **L. S. Liao**, S.T. Lee*, "Materials science in China", *Nat. Rev. Mater.* 1, 16025 (2016). doi: 10.1038/natrevmats.2016.25.

Professional Society Membership

- Member, Society for Information Display (SID), USA