

**Liang Li**

**Ph.D Macau University of Science and Technology**

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**Web:https://www.webofscience.com/wos/author/record/T-4075-2019**

***EDUCATION***

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| Shanghai Jiao Tong University, Shanghai, China | Ph.D | Applied Chemistry | **2006** |
| Central South University, Changsha, China | MS | Physical Chemistry  | **2003** |
| Xiangnan University, Chenzhou, China | College | Chemistry  | **1997** |

***POSITION HELD***

* **Full Professor**, Macao Institute of Materials Science and Engineering Macau University of Science and Technology, Macau, 2022-Present
* **Full Professor**, School of Environmental Science and Engineering, Shanghai Jiao Tong University, China, June 2013- August, 2022
* **Full Professor**, Ningbo Institute of Industrial Technology, CAS, China, September 2012 to June 2013.
* **Senior Scientist**/Project Leader, Intematix Corporation, United States, July 2011 to September 2012.
* **Postdoctoral researcher**, Los Alamos National Laboratory, United States, January 2010 to July 2011.
* **Postdoctoral researcher**, University of California at Santa Babara, United States, January 2009 to January 2010.
* **Postdoctoral researcher**, CEA Grenoble, France, September 2006 to December 2008.

***AWARD AND HONORS***

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| Nomination award of China TOP 10 research progress in optics of 2021 |
| Best Editor award of Nanoresearch (Journal), 2021 |
| Best Paper award of SESE Shanghai Jiaotong University, 2021 |
| The most favorated teacher of SESE Shanghai Jiaotong University, 2020 |
| Excellent Award for the industrialization of scientific technology, SJTU, 2018 |
| Best Paper award of SESE Shanghai Jiaotong University, 2018 |
| The First Prize of Natural Science Award by the Ministry of Education, China, 2016 |
| Best Paper award of SESE Shanghai Jiaotong University, 2015 |
| Feixiang program for young talents, Science and technology Commission of Shanghai, 2014 |
| Program for New Century Excellent Talents, China, 2013 |

**Publication Record: 96 peer-reviewed journal papers. Citation times = 8600+, H-index = 39**

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| **Peer-reviewed Journal Publications (96)** | Numbers |
| Nature Photonics | 2 |
| Nature Nanotechnology | 1 |
| Advanced Materials | 1 |
| ACS Energy Lett. | 2 |
| Journal of the American Chemical Society | 5 |
| Angewandte Chemie International Edition | 4 |
| Nature Communications | 2 |
| Chemical Engineering Journal | 2 |
| Nano Energy | 1 |
| Journal of Materials Chemistry A | 3 |
| Journal of Hazardous Materials | 3 |
| Chemical Science | 2 |
| Chemistry of Materials | 4 |
| Advanced Optical Materials | 2 |
| ACS Applied Materials and interface (Applied nanomaterials, Sustainable Chemistry&. Engineering) | 7 |
| Nano Research/Nanosacle/Chemical Communications/Small | 9 |
| J. Phys. Chem. (L, B,C) | 4 |
| Other Journals (Impact factor ~4-6) | 42 |

**Peer reviewed journal publications (selected)**

1. Mengda He, Qinggang Zhang, Francesco Carulli, Andrea Erroi, Weiyu Wei, Long Kong, Changwei Yuan, Qun Wan, Mingming Liu, Xinrong Liao, Wenji Zhan, Lei Han, Xiaojun Guo, Sergio Brovelli, **Liang Li\***, Ultra-stable, solution-processable CsPbBr3-SiO2 nanospheres for highly efficient color conversion in μ-LEDs, **ACS Energy Lett.** 2023, 8, 151–158
2. Matteo L. Zaffalon, Francesca Cova, Mingming Liu , Alessia Cemmi, Ilaria Di, Sarcina, Francesca Rossi, Francesco Carulli1, Andrea Erroi1, Carmelita Rodà, Jacopo Perego, Angiolina Comotti, Mauro Fasoli, Francesco Meinardi, **Liang Li \***, Anna Vedda\*, Sergio Brovelli\* Extreme γ-ray radiation hardness and high scintillation yield in perovskite nanocrystals, **Nature Photonics,** 2022, 16,  860–868.
3. Qinggang Zhang,Shiqiang Liu,Mengda He,Weilin Zheng,Qun Wan,Mingming Liu,Xinrong Liao,Wenji Zhan,Changwei Yuan,Jinyu Liu,Haijiao Xie,Xiaojun Guo,Long Kong\*,**Liang Li**\* Stable Lead-Free Tin Halide Perovskite with Operational Stability>1200h by Suppressing Tin(II) Oxidation, **Angewandte Chemie-International Edition**, 2022, 61, e2022054.
4. Qinggang. Zhang, Mengda. He, Qun Wan, Weilin Zheng, Minmin Liu, Congyang. Zhang, Xinrong Liao, Wenji Zhan, Long Kong, Xiaojun Guo, **Liang Li\***, Suppressing thermal quenching of lead halide perovskite nanocrystals by constructing a wide-bandgap surface layer for achieving thermally stable white light-emitting diodes, **Chemical Science**2022, 13 3719-3727.
5. Congyang Zhang, Qun Wan, Luis K Ono, Yuqiang Liu, Weilin Zheng, Qinggang Zhang, Mingming Liu, Long Kong, **Liang Li**\*, Yabing Qi\*, "Narrow-Band Violet-Light-Emitting Diodes Based on Stable Cesium Lead Chloride Perovskite Nanocrystals" **ACS Energy Lett**. 2021,6,3545-355.
6. Mingming Liu, Qun Wan, Huamiao Wang, Francesco Carulli, Xiaochuan Sun, Weilin Zheng, Long Kong, Qi Zhang, Congyang Zhang, Qinggang Zhang, Sergio Brovelli\*, **Liang Li**\*, Suppression of temperature quenching in perovskite nanocrystals for efficient and thermally stable light-emitting diodes, **Nature Photonics**, 2021, 15, 379–385.
7. Congyang Zhang, Wanbin Li, **Liang Li**∗, Metal Halide Perovskite Nanocrystals in Metal‐Organic Framework Host: Not Merely Enhanced Stability, 2021,  **Angewandte Chemie-International Edition**, 2021, 60,7488–7501.
8. Qinggang Zhang, Bo Wang, Weilin Zheng, Long Kong, Qun Wan, Congyang Zhang, Zhichun Li, Xueyan Cao, Mingming Liu, **Liang Li**\*, Ceramic-like stable CsPbBr3 nanocrystals encapsulated in silica derived from molecular sieve templates, **Nature Communications**, 2020, 11, 1-9.
9. Lu Huang, Zhichun Li, Congyang Zhang, Long Kong, Bo Wang, Shouqiang Huang, Vaishali Sharma, Houyu Ma, Qingchen Yuan, Yue Liu, Guoqing Shen, Kaifeng Wu, **Liang Li**\*, Sacrificial oxidation of a self-metal source for the rapid growth of metal oxides on quantum dots towards improving photostability, **Chemical Science**, 2019, 10, 6683-6688.
10. Congyang Zhang, Bo Wang, Weilin Zheng, Shouqiang Huang, Long Kong, Zhichun Li, Gufeng He, **Liang Li**\*, Hydrofluoroethers as orthogonal solvents for all-solution processed perovskite quantum-dot light-emitting diodes, **Nano Energy**, 2018, 51, 358-365.
11. Congyang Zhang, Bo Wang, Wanbin Li, Shouqiang Huang, Long Kong, Zhichun Li，**Liang Li**\*, Conversion of invisible metal-organic frameworks to luminescent perovskite nanocrystals for confidential information encryption and decryption, **Nature Communications**, 2017, 8, 1138.
12. Zhichun Li, Long Kong, Shouqiang Huang, **Liang Li**\*, Highly Luminescent and Ultrastable CsPbBr3 Perovskite Quantum Dots Incorporated into a Silica/Alumina Monolith, **Angewandte Chemie-International Edition**, 2017, 129, 8246 –8250.
13. Shouqiang Huang, Zhichun Li, Long Kong, Nanwen Zhu, Aidang Shan, **Liang Li**\*, Enhancing the Stability of CH3NH3PbBr3 Quantum Dots by Embedding in Silica Spheres Derived from Tetramethyl Orthosilicate in “Waterless” Toluene, **Journal of the American Chemical Society**, 2016, 138, 5749–5752.
14. Zhichun Li, Wei Yao, Long Kong, Yixin Zhao, **Liang Li**\*, General Method for the Synthesis of Ultrastable Core/Shell Quantum Dots by Aluminum Doping, J**ournal of the American Chemical Society**, 2015, 137, 12430-12433.
15. A. Pandey, S. Brovelli, R. Viswanatha, **Liang Li**, J.M.Pietryga, V.I. Klimov\*, S.A.Crooker\*. Long-lived photo induced magnetization in copper doped ZnSe–CdSe core–shell nanocrystals, **Nature Nanotechnology**, 2012, 7, 792-797.
16. **Liang Li**, Anshu Pandey, Donald J. Werder, Bishnu P. Khanal, Jeffrey M. Pietryga, Victor I. Klimov\*, Efficient Synthesis of Highly Luminescent Copper Indium Sulfide-Based Core/Shell Nanocrystals with Surprisingly Long-Lived Emission, **Journal of the American Chemical Society**, 2011, 133, 1176-1179.
17. Ung Thi Dieu Thuy, Pham Thi Thuy, Nguyen Quang Liem, **Liang Li**, Peter Reiss,Comparative photoluminescence study of close-packed and colloidal InP/ZnS quantum dots, **Applied Physics Letters**, 2010, 96, 073102-1- 073102-3.
18. Nelson E. Coates, Huiqiong Zhou, Stephan Krämer, **Liang Li**, Daniel Moses\*, Solution-Based In Situ Synthesis and Fabrication of Ultrasensitive CdSe Photoconductors, **Advanced Materials**, 2010, 22, 5366-5369.
19. **Liang Li**, Nelson Coates, Daniel Moses\*, Solution-Processed Inorganic Solar Cell Based on in Situ Synthesis and Film Deposition of CuInS2 Nanocrystals, **Journal of the American Chemical Society**, 2010, 132, 22-23.
20. **Liang Li**, Peter Reiss\*, One-pot Synthesis of Highly Luminescent InP/ZnS Nanocrystals without Precursor Injection, **Journal of the American Chemical Society**, 2008, 130, 11588-11589.

***Supervision of students (selected)***

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| --- | --- |
| Name | Date |
| Mengda He (PhD) | 2022.03-present |
| Qiangang Zhang (Postdoctoral) | 2021.09-present |
| Xinrong Liao (PhD) | 202109-present |
| Changwei Yan | 2021.09-present |
| Wenji Zhang (PhD) | 2020.09-present |
| Bo Wang (PhD) | 2015.09-2020.7 |
| Wei Liu (PhD) | 2016.09-2021.7 |
| Weilin Zheng (PhD) | 2017.09-2021.7 |
| Qinggang Zhang (PhD) | 2018.09-2021.7 |
| Qun Wan (PhD) | 2018.09-2022.8 |
| Mingming Liu (PhD) | 2019.03-present |
| Xiuping Feng (Master) | 2018.09-2021.07 |
| Ruixin Yan (Master) | 2018.09-2021.07 |
| Vaishali Sharma (Master) | 2018.09-2022.07 |
| Xunqiang Cheng (Master) | 2019.09-2022.07 |
| Junqing Xu (Master) | 2019.09-2022.07 |
| Shouqiang Huang (Postdoctoral) | 2015.06-2018.12 |
| Long Kong (PhD) | 2013.09-2018.06 |
| Zhichun Li (PhD) | 2013.09-2018.09 |
| Congyang Zhang (PhD) | 2015.09-2019.06 |
| Jingwei Ma (Master) | 2013.09-2016.03 |
| Lu Huang (Master) | 2014.09-2017.03 |
| HIROTAKA IWASHITA(Master) | 2014.09-2017.03 |
| Xueqiong Huang (Master) | 2015.09-2018.03 |
| Hua Sun (Master) | 2016.09-2019.03 |
| Junhui Liu (Master) | 2016.09-2019.03 |
| Qi Zhang (Master) | 2017.09-2020.03 |
| MARIO KUNIYOSHI(Master) | 2017.09-2020.03 |