



## About the cover: *Advanced Photonics* Volume 6, Issue 2

Perovskite light-emitting diodes (PeLEDs) are considered promising candidates for future display and lighting technologies due to their excellent optoelectronic properties and simple fabrication methods. However, the performance of blue PeLEDs is not satisfactory. The introduction of the zwitterionic molecule 3-(benzyltrimethylammonio)propanesulfonate (3-BAS) serves multiple purposes: it passivates defects on the perovskite surface, suppresses the migration of halide ions, and effectively regulates the crystallization process of perovskite thin films. This leads to the development of high-performance pure blue perovskite LEDs, which can further be applied in the field of visible light communications.

The image on the cover of *Advanced Photonics* Volume 6 Issue 2 illustrates blue LEDs based on perovskites and suggests potential application prospects in future visible light communication.

The image is based on the original research presented in the article by Chao Shen, Shuyan Fang, Jibin Zhang, Xiangfei Liang, Chenhui Su, Jian Qing, Wanzhu Cai, Yunhan Luo, Renqiang Yang and Lintao Hou, “[High performance and stable pure-blue quasi-2D perovskite light-emitting diodes by multifunctional zwitterionic passivation engineering](#),” *Adv. Photonics* 6(2), 026002 (2024), doi: [10.1117/1.AP.6.2.026002](#).