

SPIE AR/VR/MR 2026 Display Related Technical Papers

1. [Lightweight and distortion-free **Maxwellian** AR display enabled by flat optical elements](#)
National Taipei Univ. of Technology (Taiwan), Oomii Inc. (Taiwan)
 - A flat-optics-based Maxwellian near-eye display that corrects geometric distortion caused by tilted **LBS** projection
2. [Scalable **fiber scanning** architecture for laser projection](#)
Nanyang Technological University (Singapore)
3. [System-level optimized high-efficiency compact RGB **Laser-LCOS** AR light engine](#)
Appotronics Corp. (China)
 - Laser light **LCOS** engine with waveguide
4. [AR display dilemma: a comparative study of **LCOS vs MicroLED**](#)
Avegant Corp. (United States)
5. [Downscaling AR microdisplay architectures below 0.5cc: a comparative **study of \$\mu\$ LED, LCOS, and LBS**](#)
Alexander Mityashin, Labbet Advice (Belgium)
6. [One-micron pixel metasurface liquid crystal on silicon \(**LCoS**\) display](#)
A*STAR Institute of Materials Research and Engineering (Singapore)
7. [The future in colour: **perovskite-based colour conversion**](#) (QD)
Helio Display Materials Ltd. (United Kingdom)
8. [384-channel **2D addressable blue VCSEL \[laser\] arrays**](#)
Sony Semiconductor Solutions Corp. (Japan)
 - 16x24 array for compact and individually addressable visible light sources
9. [On-chip **laser beam scanner** based on SiN PIC integrated with PZT MEMS cantilever for AR **Meta**](#) (United States)
10. [High-resolution **Lissajous scanning** light engine with wide field of view for AR glasses](#)
Appotronics Corp. (China)
11. [Uncooled micro-RGB optical module with wavelength-stable DFB/DBR **laser diodes and collimated output beams**](#)
indie (Switzerland)
 - For AR/MR display systems based on holographic grating structures that show a significant change of diffraction angle and efficiency with wavelength
12. [Beyond fixed pixels: unlocking display flexibility with **LBS**](#)
Maradin Ltd. (Israel)
13. [Small and **scalable laser source** for AR glasses by flip chip of bare laser diode in silicon nitride PIC technology](#)
Brilliance B.V. (Netherlands)
14. [Unlocking true **holographic displays** for the AI + AR computing era](#)
Swave Photonics (United States)
15. [Compact and scalable **laser beam scanner** architecture for consumer AR applications](#)
TriLite Technologies GmbH (Austria)
16. [On the path to wafer-level **integrated laser-beam scanning micro display engines** for AR](#)
Brilliance RGB (Netherlands)