Best Paper

»Impact on Science«

Brunton, Alan; Arikan, Can Ates; Urban, Philipp

Pushing the Limits of 3D Color Printing:
Error Diffusion with Translucent Materials

In: ACM Transactions on Graphics, Vol.35 (2015), 1, Article 4, 13 p.

Contribution

Reproducing complex appearance properties in 3D printing is a challenging problem with a large impact on numerous real world applications.

This paper presents algorithms for material placement in multi-jet 3D printers. Based on profound knowledge in color imaging, color management and 2D color printing, novel error diffusion techniques on surfaces are proposed which allow for highly accurate color and appearance reconstruction even with highly translucent 3D printing materials.