Title: Multi-Notch High See-Through Bragg Mirror/Grating for MR/AR Applications

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Abstract: In this paper, we introduce innovative multiband polarization-preserving Bragg mirrors and gratings tailored for augmented and mixed reality (AR/MR) applications. These optical steering components are particularly effective as they operate across narrow spectral bands while covering a broad field of view. Such features enable efficient steering of display wavelengths, while enhancing the optical see-through experience essential for AR/MR environments. We present the operational principles of these elements, explore their design trade-space, and examine the diverse applications they facilitate in AR/MR settings. Additionally, we will offer insights into the potential future developments of these optical components and their impact on the evolution of AR/MR technologies.

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