Singapore-made anti-reflective plastics to be commercialized

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The innovative plastics offer improved performance and wider viewing angles over existing anti-reflective plastics in the market. This plastic uses a locally-developed nanotechnology method that creates a complex pattern of super tiny structures that mimic the patterns found on a moth's eye, which has a unique method of diffusing light.

Researchers from A*STAR's Institute of Materials Research and Engineering (IMRE) and their commercial partners have developed a new plastic that reflects just 0.09 – 0.2% of the visible light hitting its surface. This matches or betters existing anti-reflective and anti-glare plastics in the market, which typically have reported reflectivity of around 1% of visible light. Such plastics are used in anything from TV displays to windows and even solar cells. Because of the unique nanotechnology method used, the new plastic developed by IMRE maintains very low reflectivity (