Yellow emissive Ca₂SiO₄:Mn²⁺ phosphor for White-Light-Emitting Diode

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Yellow emitting Ca₂SiO₄:Mn²⁺ were synthesized at rapid cooling rate by a solid-state reaction. The yellow phosphor shows gamma-phase structure and strong absorption of blue light. The structure, luminescence, and water resistance of the phosphor are presented. This phosphor has a potential use for color conversion in white-light-emitting diode.