

Abstract

A light-emitting device comprising a light source which emits excitation light and a fluorescent substance which absorbs the excitation light to emit light in combination, wherein a fluorescent substance comprising an α type SiAlON represented by the general formula:
 $(\text{Ca}_\alpha, \text{Eu}_\beta)(\text{Si}, \text{Al})_{12}(\text{O}, \text{N})_{16}$ ($1.5 < \alpha + \beta < 2.2$, $0 < \beta < 0.2$, $\text{O/N} \leq 0.04$) as a main component and having a specific surface area of 0.1 to 0.35 m²/g is used as the fluorescent substance. This light-emitting device shows little color change due to temperature change and efficiently emits light, even when it is used in a high temperature environment, and it is especially suitable for lighting apparatuses for vehicles such as headlamps.