

SIALON Co., Ltd.

SIALON Co., Ltd. is a venture company for both the manufacture and sale of all kinds of oxynitride phosphors (sialon) developed by National Institute of Materials Science. These phosphors that are hard to be available can also be obtained through our contract manufacturing even in a small amount. Upon your requests like spectrum tuning, the specifics of sialon phosphors that are already available in the market can be customized. SIALON CO., Ltd., your partner for fundamental R & D and application of phosphors

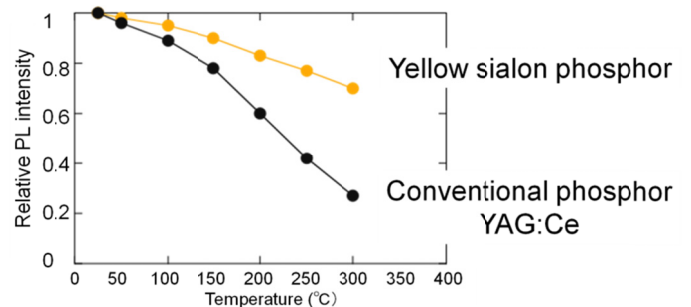
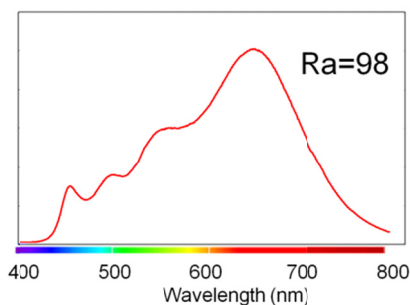
URL: <http://www.sialon.co.jp>

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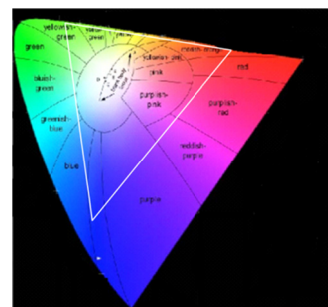
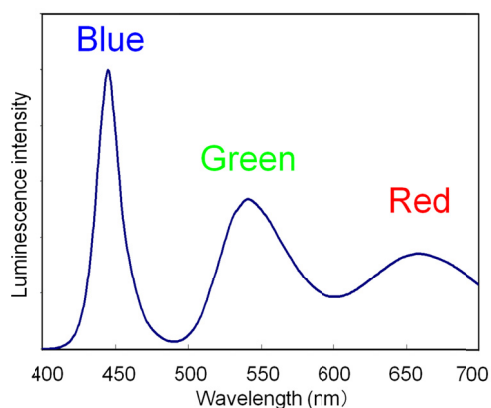
1-1 Namiki Tsukuba Ibaraki 305-0044, Japan

Advantages of SiAlON phosphors

Tunable emission colors can be realized by tailoring the material compositions in system Si-Al-O-N. These promise high color rendering of white LED for general lighting. In addition, excellent chemical stability and small thermal quenching enable sialon phosphors to be the best choice for such applications.



Green and red sialon phosphors have been also applied in backlight for liquid crystal displays with wide color gamut.

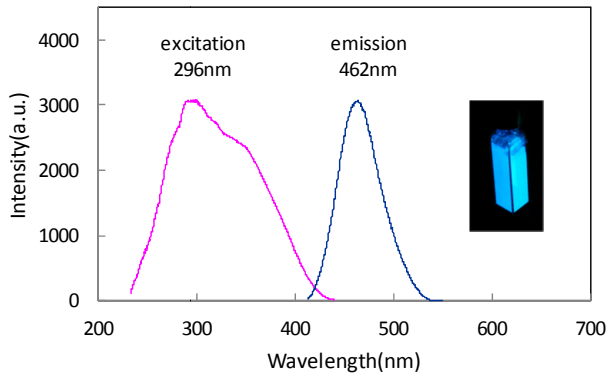


NTSC 91%

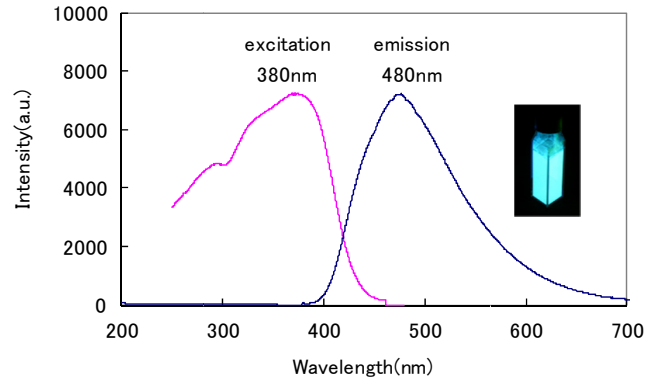
SiAlON Phosphors

A large amount of oxynitride phosphors have been developed by NIMS. The photoluminescence excitation and emission spectra of typical phosphors are as shown below. All of these phosphors have high emission efficiency that makes them applicable for the practical use.

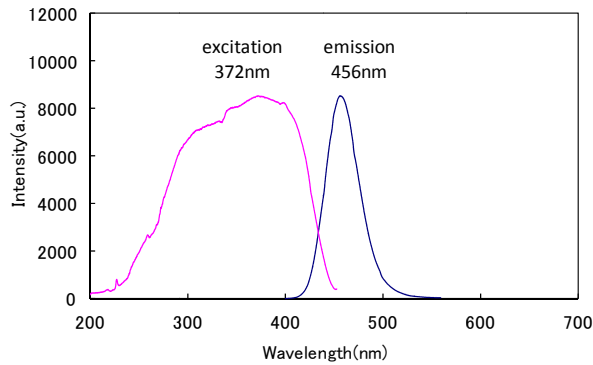
Blue phosphor (AlN)



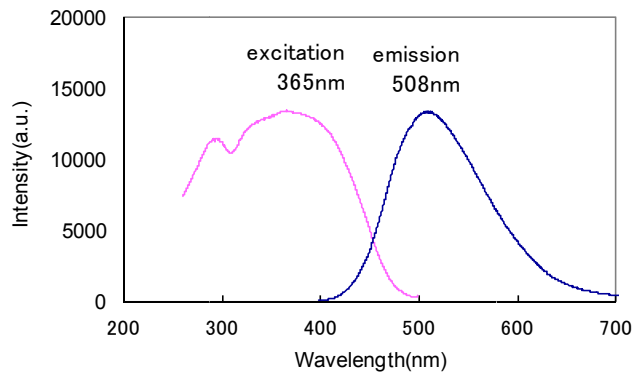
Broad blue phosphor (JEM)



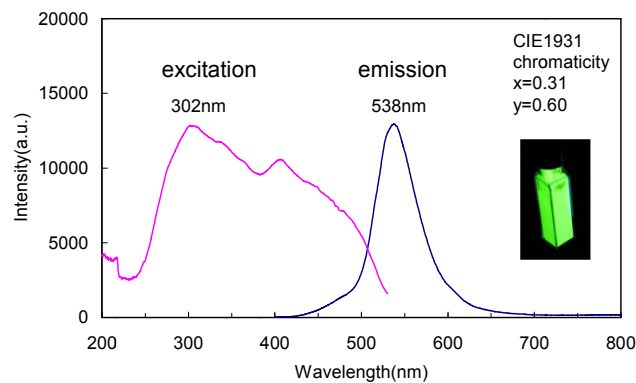
Narrow blue phosphor



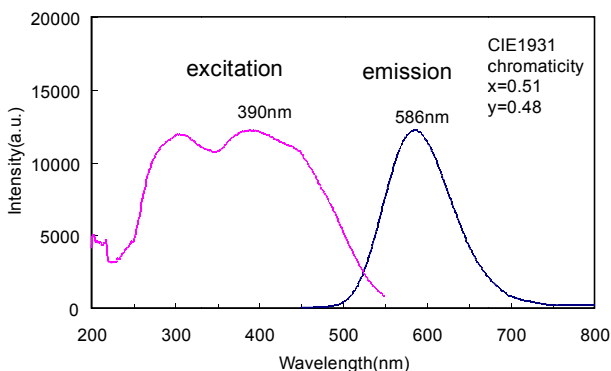
Broad blue-green phosphor (α -sialon)



Narrow green phosphor (β -sialon)



Yellow~Orange phosphor (α -sialon)



Red phosphor (CASN)

