

## عنوان مقاله:

Minimize Emittance Non Metallic Thin Films by Using Simulated Annealing Algorithm

## محل انتشار:

پنجمین کنگره بین المللی نانو و فناوری نانو (ICNN2014) (سال: 1393)

تعداد صفحات اصل مقاله: 3

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## خلاصه مقاله:

This paper, predict the directional, spectral, and temperature dependence of the radiative properties for the multilayerstructures consisting of silicon and related materials such as silicon dioxide, and silicon nitride. Empirical expression forthe optical constants of lightly dopped silicon is used. In this study the layers at 25°C has been investigated. Theelectromagnetic wave with an angle of 10° to the multi-layered structure is applied. Coating thickness is increased toreduce the emittance. The emission coating for optimum reduction rate of 0. 669 at a wavelength equal to 0.65m,reduction of 0. 68 at a wavelength equal to 0.8m, respectively. Coating thickness and the optimal coefficients foremittance can be achieved by the use of simulated annealing algorithm pattern in the required industry. By selecting theappropriate coating, It can be seen the reduction of 20% in the 0.65 m wavelength, and the .reduction of 12% in the 0.8m wavelength for the transmittance

## کلمات کلیدی:

Simulated Annealing, Emittance, Multilayer, Minimum, NanoScale

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/397555>

