

عنوان مقاله:

SURFACE ROUGHNESS AND PARTICLE SIZE EFFECTS ON NANOFLUIDS POOL BOILING HEAT TRANSFER

محل انتشار:

اولین همایش ملی تکنولوژی های نوین در شیمی و پتروشیمی (سال: 1393)

تعداد صفحات اصل مقاله: 4

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خلاصه مقاله:

The present paper is an investigation for modeling of roughness effects on nucleate pool boiling heat transfer. The role of nanoparticle size has been considered indirectly through roughness parameter. Roughness changes over pool boiling procedure derived as a function of initial surface roughness and particle size using literature data. The results show significant improvement of heat transfer coefficient as the surface roughness is increased. On the other hand, heat transfer will be reduced, whenever particle size increased.

کلمات کلیدی:

Nanofluids, pool boiling, heat transfer, roughness, particle size

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<https://civilica.com/doc/244308>

