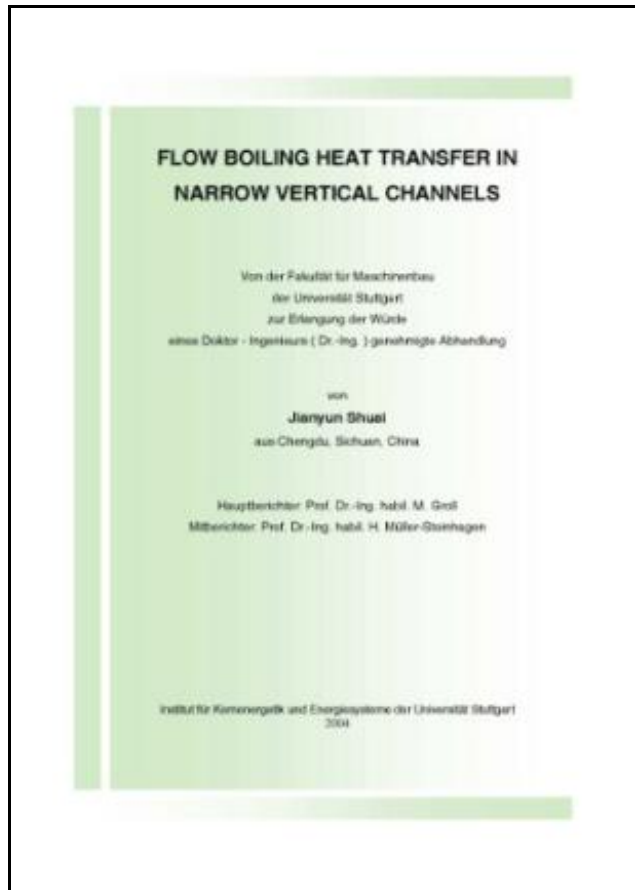


FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS



Filesize: 4.81 MB

Reviews

It in a single of the best book. This is for those who statte there had not been a well worth reading through. Once you begin to read the book, it is extremely difficult to leave it before concluding.
(Dr. Barney Robel Jr.)

FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS



To save **FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS** eBook, remember to refer to the web link listed below and download the document or gain access to additional information which might be have conjunction with FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS ebook.

Cuvillier Verlag Okt 2004, 2004. Taschenbuch. Book Condition: Neu. 208x147x12 mm. Neuware - Saturated flow boiling heat transfer and flow visualization experiments were carried out in three vertical rectangular channels with dimensions (width×height) 2.0×4.0, 0.86×2.0 and 0.54×1.60 mm (corresponding to hydraulic diameters 2.67, 1.20 and 0.81 mm, respectively). The channels were heated from three sides. Deionized water was used as the working fluid. The channel exit was at atmospheric pressure. Benchmark experiments of single-phase flow were also conducted for pressure drop and heat transfer. Experimental results show that for the 0.54×1.60 mm channel, the singlephase friction factor is higher than predicted by well-accepted correlations, while for the other two channels it can be well correlated. The heat transfer performance for both laminar and turbulent regimes under asymmetric heating conditions is different from that under uniform heating conditions on which the existing correlations are based. Therefore single-phase heat transfer correlations were modified so that they could be incorporated into the two-phase heat transfer correlations employed for asymmetric heating conditions. For flow boiling, three basic flow patterns are observed for all the channels, viz., bubbly, slug and annular flow. However, based on the developed flow pattern maps, the transition from slug to annular flow for the 2.0×4.0 mm channel occurs at a lower superficial vapor velocity than for the two small channels. This suggests that the nucleate boiling mechanism, which generally corresponds to slug flow, is more important for the two small channels. Saturated flow boiling heat transfer characteristics were investigated under different heat flux, mass flux and vapor quality. The experimental local heat transfer coefficient for the 2.0×4.0 mm channel is in good agreement with the modified Kandlikar correlation and the Shah correlation. For the smaller channels (0.86×2.0 mm and 0.54×1.60 mm), the heat transfer characteristics are not dominated by...



Read FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS Online



Download PDF FLOW BOILING HEAT TRANSFER IN NARROW VERTICAL CHANNELS

Related Books



[PDF] Psychologisches Testverfahren

Click the hyperlink listed below to download "Psychologisches Testverfahren" document.

[Save Document »](#)



[PDF] Programming in D

Click the hyperlink listed below to download "Programming in D" document.

[Save Document »](#)



[PDF] Have You Locked the Castle Gate?

Click the hyperlink listed below to download "Have You Locked the Castle Gate?" document.

[Save Document »](#)



[PDF] The Java Tutorial (3rd Edition)

Click the hyperlink listed below to download "The Java Tutorial (3rd Edition)" document.

[Save Document »](#)



[PDF] Adobe Indesign CS/Cs2 Breakthroughs

Click the hyperlink listed below to download "Adobe Indesign CS/Cs2 Breakthroughs" document.

[Save Document »](#)



[PDF] Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(Chinese Edition)

Click the hyperlink listed below to download "Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(Chinese Edition)" document.

[Save Document »](#)