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Fouling Induction Period of $CaCO_3$ on Heated Surface

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摘要 Fouling induction period of CaCO3 on heated surface was studied with themicro video technology. The rates of nucleating and nuclei growing weremeasured under various experimental conditions. The experimental resultsshowed that both nucleating and nuclei growing rates of CaCO3 increased obviouslywith surface temperature and concentration of reagents. In addition, theexperiment of fouling induction period on the surface material of chemicalplated nickel-phosphorus-polytetrafluoroethylene indicated that not only thenucleate rate of CaCO3 decreased but also some fouling particles with certainsize were easy to peel off from the heated surface under shearing stress,which means that the property of surface material is one of the most importantfactors influencing fouling induction periods.

关键词 fouling induction period micro video new surface material

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Key words fouling; induction period; micro video; new surface material

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