

Superfast non-linear diffusion model of capillary transport in particulate porous media

by

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A L y no ¹ M M shch h² M B nes¹ G heof no s²

Dep r en of M he cs nd s cs n ers y of Re d ng Re d ng RG AX ¹

Cen er for R s d es nd fe y n ers y of C forn n B r r n B r r CA A ²

Abstract

The migration of liquids driven by the capillary fán

s r on e e he q d do ns y e her e he for of so ed pend r r ngs or
 s p y q d r dges for ed e een he spher c p r c es he po n s of con c s_{min}
 s — or hey y co escence n o ore co p e s r c res e r ers pen ers

surface only occurs over the surface elements of the grains. The general theory
of analysis of the growth of surface defects is essentially incomplete. The
analysis of the permeability coefficient on the basis of results

from the case of PME the s values of $s \approx$ the front edge of the solid solution
for which $\mathbf{v} \approx$ and $\mathbf{v}$ occurs before the front edge of the solid solution

$\tau \approx$ the ypc ree ponen of he second reg q_p efore he from re ches
sgn onpon sfo nd oe $V\tau \propto \tau q_p q_p^{TEHP} - . \pm .$ Fg As r e
of $q_p^{TCP} - . \pm .$ h seen fo nd n he c se of spre dng of no her pers sen q d
CP h soe h d eren physc proper es no ce y he coe cen of srf ce ens on
nd he con c ng es $p_{vs} \simeq \times^{-5}\text{P} - . \pm \text{N} \simeq \text{P} \cdot \text{s}_1 \approx ^\circ$
 $r_1 \approx ^\circ$ As e see f r her n he comp rson hese es of q_p gree ery e h
he ones fo nd no rn ec s ons of n hree d ens on c se hp r ers
 $s_{r,F}^0$ ree n oore per en cond ons pr eer D_0 does no ec he r ee ponen
nd cn ony resc e τ One needs oe phsse h n gener he r ee ponen s
fnc on of $s_{r,F}^0$ n he ode h s fne on osf

[illegible]

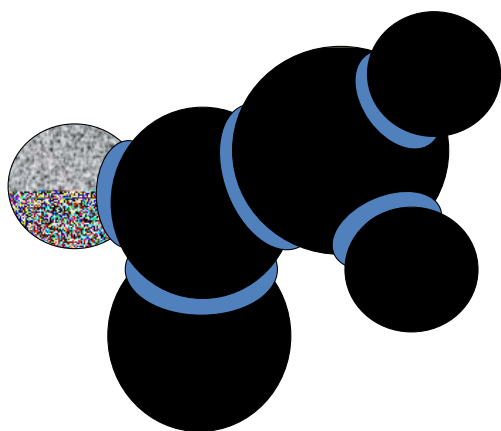


Figure 1. Structure of the pendant ring reg. ¹H NMR spectra of structure