1. Record Nr. UNINA9910299951503321

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Titolo	Buoyancy-Driven Flow in Fluid-Saturated Porous Media near a Bounding Surface / / by Hitoshi Sakamoto, Francis A. Kulacki
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-89887-6
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XII, 104 p. 55 illus., 12 illus. in color.)
Collana	SpringerBriefs in Thermal Engineering and Applied Science, , 2193-2530
Disciplina	621.4021
Soggetti	Thermodynamics Heat engineering Heat transfer Mass transfer Hydrology Geophysics Fluid mechanics Surfaces (Physics) Interfaces (Physical sciences) Thin films Partial differential equations Engineering Thermodynamics, Heat and Mass Transfer Hydrology/Water Resources Geophysics/Geodesy Engineering Fluid Dynamics Surface and Interface Science, Thin Films Partial Differential Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Prior Research -- The Volume-Averaged Energy Equations -- Heat Transfer Measurements -- Results -- Thermal Dispersion -- Conclusion.

Sommario/riassunto

This Brief reports on heat transfer from a solid boundary in a saturated porous medium. Experiments reveal overall heat transfer laws when the flow along the wall is driven by buoyancy produced by large temperature differences, and mathematical analysis using advanced volume-averaging techniques produce estimates of how heat is dispersed in the porous zone. Engineers, hydrologists and geophysicists will find the results valuable for validation of laboratory and field tests, as well as testing their models of dispersion of heat and mass in saturated media. .