1. Record Nr. UNINA9910254214803321

Autore	Vadasz Peter
Titolo	Fluid flow and heat transfer in rotating porous media [[electronic resource] /] / by Peter Vadasz
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-20056-9
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (85 p.)
Collana	SpringerBriefs in Thermal Engineering and Applied Science, , 2193-2530
Disciplina	620
Soggetti	Thermodynamics Heat engineering Heat transfer Mass transfer Engineering geology Engineering—Geology Foundations Hydraulics Engineering—Materials Engineering Thermodynamics, Heat and Mass Transfer Geoengineering, Foundations, Hydraulics Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Modeling of Flow and Heat Transfer in Porous Media. - Isothermal Flow in Heterogeneous Porous Media -- Natural Convection due to Thermal Buoyancy of Centrifugal Body Forces. - Coriolis Effect on Natural Convection -- Other Effects of Rotation of Flow and Natural Convection in Porous Media -- Appendix.
Sommario/riassunto	This Book concentrates the available knowledge on rotating fluid flow and heat transfer in porous media in one single reference. Dr. Vadasz develops the fundamental theory of rotating flow and heat transfer in porous media and introduces systematic classification and

identification of the relevant problems. An initial distinction between rotating flows in isothermal heterogeneous porous systems and natural convection in homogeneous non--isothermal porous systems provides the two major classes of problems to be considered. A few examples of solutions to selected problems are presented, highlighting the significant impact of rotation on the flow in porous media.