

Table of Contents

Preface

Cooling of Fruit with Arbitrary Shape: Simulation Using Galerkin-Based Integral Method P.M. Pessôa, A.G. Barbosa de Lima, R. Swarnakar, J.P. Gomes and W.M.P.B. de Lima	1
Water Absorption in Caroá-Fiber Reinforced Polymer Composite at Different Temperatures: A Theoretical Investigation C.J. Silva, A.G. Barbosa de Lima, E.G. da Silva, T.H.F. de Andrade and R.Q. da Costa Melo	16
Viscosity Controlled Interdiffusion in Nitriding K. Tkacz-Śmiech, B. Božek, L. Sapa and M. Danielewski	28
Thermal Behaviour of Polymer Composite Reinforced with NiTi Shape Memory Alloys C.A. Araújo Mota, A.S. Cavalcanti Leal, C.J. Araújo, A.G. Barbosa de Lima and K.B. Moura da Silva	39
Pressure Drop through Structured Porous Media - Inlet and Outlet Effects I. Malico and P.J.S.A. Ferreira de Sousa	55
On the Use of CFD in Thermal Analysis of Industrial Hollow Ceramic Brick M.V. Araújo, J.M.P.Q. Delgado and A.G. Barbosa de Lima	70
Experimental Study of the Klinkenberg Effect on the Gas Permeability of Coal R. Zagorščak and H.R. Thomas	83
Heat and Mass Transfer during Drying of Clay Ceramic Materials: A Three-Dimensional Analytical Study M.K.T. de Brito, D.B. Teixeira de Almeida, A.G. Barbosa de Lima, L. Almeida Rocha, E.S. de Lima and V.A. Barbosa de Oliveira	93
Case Studies of Rising Damp Treatment in Historical Buildings A.S. Guimarães, J.M.P.Q. Delgado and V.P. de Freitas	107
Diagnosis of Rising Damp and other Kinds of Moisture in Building Components Using Non-Destructive Techniques E. Barreira and J.M.P.Q. Delgado	120
Numerical Analysis of Hygrothermal Building Performance of Gypsum Houses in Brazil P. Paula, M. Vázquez da Silva and J.M.P.Q. Delgado	132