Record Nr. UNINA9910817186903321 Heat transfer enhancement with nanofluids / / editors, Vincenzo **Titolo** Bianco, Oronzio Manca, Sergio Nardini, and Kambiz Vafai Pubbl/distr/stampa Boca Raton:,: CRC Press,, [2015] ©2015 **ISBN** 0-429-17183-8 1-138-74948-6 Descrizione fisica 1 online resource (473 p.) Disciplina 621.402/2 621.4022 Heat exchangers - Fluid dynamics Soggetti Nanofluids Microfluidics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Front Cover; Contents; Preface; Contributors; Chapter 1: Properties of Nanofluid; Chapter 2: Exact Solutions and Their Implications in Anomalous Heat Transfer; Chapter 3: Mechanisms and Models of Thermal Conductivity in Nanofluids: Chapter 4: Experimental Methods for the Characterization of Thermophysical Properties of Nanofluids: Chapter 5: Nanofluid Forced Convection; Chapter 6: Experimental Study of Convective Heat Transfer in Nanofluids; Chapter 7: Performance of Heat Exchangers Using Nanofluids; Chapter 8: Thermal Nanofluid Flow in Microchannels with Applications Chapter 9: Use of Nanofluids for Heat Transfer Enhancement in Mixed ConvectionChapter 10: Buoyancy-Driven Convection of Enclosed Nanoparticle Suspensions; Chapter 11: Modeling Convection in Nanofluids; Chapter 12: Convection and Instability Phenomena in Nanofluid-Saturated Porous Media; Chapter 13: Nanofluid Two-Phase Flow and Heat Transfer; Chapter 14: Heat Pipes and Thermosyphons Operated with Nanofluids; Chapter 15: Entropy Generation Minimization in Nanofluid Flow; Chapter 16: Gas-Based Nanofluids (Nanoaerosols); Color Insert; Back Cover

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