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Autore	Ciofalo Michele
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Soggetti	Thermodynamics Heat engineering Heat - Transmission Mass transfer Fluid mechanics Quantum statistics Engineering Thermodynamics, Heat and Mass Transfer Engineering Fluid Dynamics Quantum Fluids and Solids
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Solid bodies approaching each other in a viscous fluid -- Velocity and displacement of spherical particles subjected only to drag -- Flow through parallel channels separated by a permeable wall -- Laminar oscillatory flow in a plane channel -- Nusselt number in channel flow with general thermal boundary conditions -- Buoyant flow in a duct or a loop -- Stability of two-phase flow in a heated duct -- Heat transfer in spray cooling as an inverse problem -- Apparent Sherwood number in mass transfer with wall transpiration -- One-dimensional mixed MHD convection.
Sommario/riassunto	This book gathers ten thermofluid dynamics problems involving the use of analytical solutions. All these problems have been encountered by the author during his research activity; some of the solutions are his

own contributions, while others either are classic literature results or can be derived from them. The physical phenomena involved range from pure hydrodynamics to flow with heat or mass transfer, two-phase flow, and magnetohydrodynamics. The problems discussed are not canonical problems; they are rarely found in textbooks, and often exhibit surprising, or even paradoxical, solutions. The potential readership of the book includes students, teachers and scientists in science and engineering interested in fluid dynamics and heat/mass transfer: to them it may offer food for thought, suggestions for lectures or tutorials and ideas for further original developments.
