1. Record Nr. UNINA9910155067803321

Titolo	Handbook on Navier-Stokes equations : theory and applied analysis / / Denise Campos, editor
Pubbl/distr/stampa	New York : , : Nova Publishers, , 2016 ©2016
ISBN	1-5361-0308-X
Descrizione fisica	1 online resource (508 pages) : color illustrations
Collana	Physics Research and Technology
Disciplina	518/.64
Soggetti	Navier-Stokes equations Fluid dynamics - Mathematics Mathematical analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Generation of meshes in cardiovascular systems I: resolution of the Navier-Stokes equations for the blood flow in abdominal aortic aneurysms / Alejandro Acevedo-Malave (Multidisciplinary Center of Sciences, Venezuelan Institute for Scientific Research (IVIC), Merida, Venezuela) -- Generation of meshes in cardiovascular systems II: the blood flow in abdominal aortic aneurysms with exovascular stent devices / Alejandro Acevedo-Malave (Multidisciplinary Center of Sciences, Venezuelan Institute for Scientific Research (IVIC), Merida, Venezuela) -- A computational fluid dynamics (CFD) study of the blood flow in abdominal aortic aneurysms for real geometries in specific patients / Alejandro Acevedo-Malave, Ricardo Fontes-Carvalho and Nelson Loaiza (Multidisciplinary Center of Sciences, Venezuelan Institute for Scientific Research (IVIC), Merida, Venezuela, and others) -- Numerical resolution of the Navier-Stokes equations for the blood flow in intracranial aneurysms: a 3D approach using the finite volume method / Alejandro Acevedo-Malave (Multidisciplinary Center of Sciences, Venezuelan Institute for Scientific Research (IVIC), Merida, Venezuela) -- Numerical simulation of the turbulent flow around a savonius wind rotor using the Navier-Stokes equations / S. Frikha, Z. Driss, H. Kchaou and M.S. Abid (Laboratory of Electro-Mechanic

Systems (LASEM), National Engineering School of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Numerical prediction of the effect of the diameter outlet on the mixer flow of the diesel with the biodiesel / Mariem Lajnef, Zied Driss, Mohamed Chtourou, Dorra Driss, and Hedi Kchaou (Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Computer simulation of the turbulent flow around a six-blade rushton turbine / Zied Driss, Abdelkader Salah, Abdessalem Hichri, Sarhan Karray, and Mohamed Salah Abid (Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Study of the meshing choice of a negatively buoyant jet injected in a miscible liquid / Oumaima Eleuch, Noureddine Latrache, Sobhi Frikha, and Zied Driss (Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia, and others) -- Study of the wedging angle effect of a NACA2415 airfoil wind turbine / Zied Driss, Walid Barhoumi, Tarek Chelbi, and Mohamed Salah Abid (Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Study of the meshing effect on the flow characteristics inside a SCPP / Ahmed Ayadi, Abdallah Bouabidi, Zied Driss and Mohamed Salah Abid (Laboratory of Electro-Mechanic Systems (LASEM), National Engineering School of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Study of the natural ventilation in a residential living room opening with two no-opposed positions / Slah Driss, Zied Driss, Imen Kallel Kammoun (Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Existence, uniqueness and smoothness of a solution for 3D Navier-Stokes equations with any smooth initial velocity. A priori estimate of this solution / Arkadiy Tsionskiy and Mikhail Tsionskiy (Tucson, AZ, USA, and others) -- Fuzzy solutions of 2D Navier-Stokes equations / Yung-Yue Chen (Department of Systems and Naval Mechatronic Engineering, National Cheng Kung University, Tainan, Taiwan) -- Effective wall-laws for Stokes equations over curved rough boundaries / Myong-Hwan Ri (Institute of Mathematics, State Academy of Sciences, DPR Korea) -- Singularities of the Navier-Stokes equations in differential form at the interface between air and water / Xianyun Wen (Institute for Climate and Atmospheric Science, School of Earth and Environment, University of Leeds, Leeds, England, UK) -- Self-similar analysis of various Navier-Stokes equations in two or three dimensions / I.F. Barna (Wigner Research Center of the Hungarian Academy of Sciences, Plasma Physics Department, Budapest, Hungary) -- Asymptotic solutions for the Navier-Stokes equations, describing systems of vortices with different spatial structures / Victor P. Maslov and Andrei I. Shafarevich (M.V. Lomonosov Moscow State University, Moscow, Russia) -- Analytic solutions of incompressible Navier-Stokes equations by Green's function method / Algirdas Maknickas and Algis Dziugys (Institute of Mechanical Science, Vilnius Gediminas Technical University, Vilnius, Lithuania, and others) -- Analysis of the time step size effect for the study of the liquid sloshing inside a container / Abdallah Bouabidi, Zied Driss and Mohamed Salah Abid (Laboratory of Electro-Mechanic Systems (LASEM), National Engineering School of Sfax (ENIS), University of Sfax (US), Sfax, Tunisia) -- Numerical analysis of Navier-Stokes equations on unstructured meshes / K. Volkov (Faculty of Science, Engineering and Computing, Kingston University, London, UK, and others) -- Integrals of motion of an incompressible medium flow: from classic to contemporary / Alexander V. Koptev (Admiral Makarov State University of Maritime and Inland Shipping, Saint-Petersburg, Russia)

-- Local exact controllability of the Boussinesq equations with boundary conditions on the pressure / Tujin Kim and Daomin Cao (Institute of Mathematics, State Academy of Sciences, Pyongyang, DPR Korea, and others).