1. Record Nr. UNINA9910816557503321

Titolo	Computational fluid dynamics for engineers [[electronic resource] /] / Bengt Andersson ... [et al.]
Pubbl/distr/stampa	Cambridge [England], : Cambridge University Press, 2012
ISBN	1-139-19986-2 1-107-23101-9 1-280-48463-2 9786613579614 1-139-20579-X 1-139-20360-6 1-139-20658-3 1-139-20219-7 1-139-20500-5 1-139-09359-2
Descrizione fisica	xi, 189 p. : ill
Altri autori (Persone)	AnderssonBengt <1947 June 15->
Disciplina	532/.05
Soggetti	Fluid dynamics Engineering mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: 1. Introduction; 2. Modelling; 3. Numerical aspects of CFD; 4. Turbulent flow modelling; 5. Turbulent mixing and chemical reactions; 6. Multiphase flow modelling; 7. Best practice guidelines; 8. References and further reading; Appendix.
Sommario/riassunto	"Computational fluid dynamics, CFD, has become an indispensable tool for many engineers. This book gives an introduction to CFD simulations of turbulence, mixing, reaction, combustion and multiphase flows. The emphasis on understanding the physics of these flows helps the engineer to select appropriate models to obtain reliable simulations. Besides presenting the equations involved, the basics and limitations of the models are explained and discussed. The book combined with tutorials, project and power-point lecture notes (all available for

	download) forms a complete course. The reader is given hands-on experience of drawing, meshing and simulation. The tutorials cover flow and reactions inside a porous catalyst, combustion in turbulent non-premixed flow, and multiphase simulation of evaporation spray respectively. The project deals with design of an industrial-scale selective catalytic reduction process and allows the reader to explore various design improvements and apply best practice guidelines in the CFD simulations"--

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Record Nr.	UNINA9910879595103321
Autore	Schlutow Angela
Titolo	Climate Change and Atmospheric Deposition as Drivers of Forest Ecosystem Integrity and Services : A Methodology for Assessing and Mapping Ecosystem Services across Time and Space / / by Angela Schlutow, Winfried Schröder
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031671036 3031671031
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (172 pages)
Collana	SpringerBriefs in Environmental Science, , 2191-5555
Altri autori (Persone)	SchroderWinfried
Disciplina	577.5
Soggetti	Landscape ecology Bioclimatology Environmental monitoring Climatology Ecology Pollution Landscape Ecology Climate Change Ecology Environmental Monitoring Climate Sciences Terrestial Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	1. Introduction -- 2. Methods of rules-based rating system of ecosystem services -- 4. Discussion -- 5. Conclusions -- 6. Recommendations.
Sommario/riassunto	This book is intended to provide a hitherto missing English-language overview of a multi-year research project in which a comprehensive methodology was developed to assess a rule-based classification of the habitat services, the primary net biomass productivity and carbon sequestration capacity. The comprehensive methodology presented operationalises the specifications of the MAES working group quantitatively. The MAES classification framework for integrative ecosystem assessments comprises the mapping of ecosystems, the classification of ecosystem conditions (ecosystem condition information for individual indicators, ecosystem functions and ecosystem types), the classification of ecosystem services and their integration. The presented rule-based classification of the three ecosystem services examined in depth using quantitative indicators is unique in the EU to date.