

1. Record Nr.	UNINA9910557105403321
Autore	Kaynak Akif
Titolo	Functional Polymers in Sensors and Actuators: Fabrication and Analysis
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (166 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Recent advances in the fabrication techniques have enabled the production of different types of polymer sensors and actuators that can be utilized in a wide range of applications, such as soft robotics, biomedical, smart textiles and energy harvesting. Functional polymers possess dynamic physical and chemical properties, which make them suitable candidates for sensing and actuating tasks in response to external stimuli, such as radiation, temperature, chemical reaction, external force, magnetic and electric fields. This book focuses on the recent advancements in the modeling and analysis of functional polymer systems.

2. Record Nr.	UNINA9911034971203321
Autore	Tu Jiyuan
Titolo	Computational Fluid Dynamics: A Practical Approach
Pubbl/distr/stampa	Butterworth-Heinemann, 2023
ISBN	0-323-93939-2
Edizione	[Fourth edition]
Descrizione fisica	1 online resource (560 p.)
Disciplina	620.1/064
Soggetti	SCIENCE / Mechanics / Fluids SCIENCE / Physics / General TECHNOLOGY & ENGINEERING / Hydraulics SCIENCE / Mechanics / Dynamics TECHNOLOGY & ENGINEERING / Mechanical
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Computational Fluid Dynamics: A Practical Approach, Fourth Edition is an introduction to computational fluid dynamics (CFD) fundamentals and commercial CFD software to solve engineering problems. The book is designed for a wide variety of engineering students new to CFD, but is also ideal for practicing engineers learning CFD for the first time. Combining an appropriate level of mathematical background, worked examples, computer screen shots, and step-by-step processes, this book walks the reader through modeling and computing, as well as interpreting CFD results. This new edition has been updated throughout, with new content and improved figures, examples and problems. Updated throughout, with new case studies, examples, references, and corrections according to readers' and reviewers' feedback. Delivers the latest developments in CFD including the high-order and reduced-order modeling approach, machine learning-accelerated CFD, full coverage of high-speed fluid dynamics, and the meshless approaches to provide a broader overview of the application areas where CFD can be used. Reorganized and rewritten to better meet the needs of CFD instructors and students. Online resources include all lecturing and guest lecturing PPTs, computer lab practicing with step-</p>

by-step and screenshot guidelines, assignment and course project details, answers for review questions in each chapter, a new bonus chapter featuring detailed case studies, and result discussion
