1. Record Nr. UNINA9910781401903321

Titolo	Combustion diagnostics by nonintrusive methods / / editors, T.D. McCay, J.A. Roux
Pubbl/distr/stampa	New York : , : American Institute of Aeronautics and Astronautics, , 1984
ISBN	1-60086-565-8 1-60086-346-9
Descrizione fisica	1 online resource (355 pages) : illustrations
Collana	Progress in astronautics and aeronautics ; ; v. 92
Altri autori (Persone)	McCayT. D RouxJ. A
Disciplina	629.1 s 621.402/3
Soggetti	Combustion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Technical papers selected from the AIAA 21st Aerospace Sciences Meeting, January 1983, and the AIAA 18th Thermophysics Conference, June 1983, and subsequently revised for this volume."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Chapter I. CARS""; ""CARS Diagnostics of High Pressure and Temperature Gases""; ""CARS Thermometry and N2 Number-Density Measurments in a Turbulent Diffusion Flame""; ""Comparison of CARS Combustion Temperatures with Standard Techniques""; ""Electronically Resonant CARS Detection of OH""; ""Simultaneous CARS and Luminosity Measurements in a Bluff-Body Combustion""; ""Chapter II. Laser-Induced Fluorescence.""; ""Nonintrusive Pressure Measurements with Laser-Induced Iodine Fluorescence"" ""Laser-Induced Schlieren Effect in Sodium-Nitrogen Mixtures"" ""Use of Laser-Induced Fluorescence for Fundamental Gas-Phase Kinetic Measurements""; ""Chapter III. Particle Diagnostics""; ""Nonintrusive Laser-Based Particle Diagnostics - Invited Review""; ""Interpretation of Optical Measurements of Soot in Flames""; ""In Situ Measurement of the Complex Refractive Index of Combustion Generated Particulates""; ""Chapter IV. Combustion Diagnostics Applications""; ""Temperature and Concentration Measurements in an Internal Combustion Engine Using Laser Raman Spectroscopy""

		""Rayleigh Thermometry with Low-Power Laser Sources"" ""Laser Tomography for Simultaneous Concentration and Temperature Measurement in Reacting Flows""; ""Flow Measurement in a Model Combustion Chamber""; ""Author Index""
2.	Record Nr.	UNINA9911003589303321
	Titolo	Designing Renewable Energy Systems within Planetary Boundaries : A Textbook for Energy Engineers / / edited by Mika Järvinen, Hanna Paulomäki
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
	ISBN	3-031-69856-8
	Edizione	[1st ed. 2025.]
	Descrizione fisica	1 online resource (XIII, 709 p. 311 illus., 265 illus. in color.)
	Collana	Green Energy and Technology, , 1865-3537
	Disciplina	621.042
	Soggetti	Renewable energy sources Wind power Sustainability Solar energy Ecology Water-power Renewable Energy Wind Energy Solar Thermal Energy Hydroenergy
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Introduction -- Principles and Challenges of Energy Systems Relying on Renewable Energy -- Solar Energy -- Wind Power -- Bioenergy and Waste -- Energy Storage Systems -- Renewable Heat - Heat Pumps -- Summary and Future Directions.
	Sommario/riassunto	This open-access text book explores interdisciplinary sustainability for energy engineering students. Future generations of engineers need to be game changers. The book is designed to help future engineers

redesign the world, avoid harmful lockdowns, and prevent the creation of new problems while transforming energy systems in economically profitable and ecologically sustainable ways. It explains the principles of planetary boundaries, addressing the most relevant ones throughout. The book's focus is on the primary methods for producing renewable power and heating. It discusses the fundamental technical and economic design principles involved. The book also covers key energy storage solutions and includes an overview of the impacts of renewable energy production on ecosystems. The book also serves as a useful guide for engineers working on renewable energy projects.