

1. Record Nr.	UNINA9910760281003321
Autore	Liu T (Tianshu)
Titolo	Inverse Problems in Global Flow Diagnostics / / by Tianshu Liu, Zemin Cai
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-42474-3
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (342 pages)
Disciplina	543.22
Soggetti	Fluid mechanics Flow chemistry Microfluidics Thermodynamics Heat engineering Heat - Transmission Mass transfer Mechanics, Applied Engineering Fluid Dynamics Flow Chemistry Engineering Thermodynamics, Heat and Mass Transfer Engineering Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Velocity from Flow Visualizations -- Skin Friction from Global Luminescent Oil-Film Visualizations -- Skin Friction from Surface Pressure Visualizations -- Skin Friction from Surface Temperature Visualizations -- Skin Friction from Surface Scalar Visualizations -- Skin Friction from Surface Optical Flow Pressure from Velocity -- Heat Flux from Surface Temperature Visualizations -- Analysis of Physics-Based Optical Flow.
Sommario/riassunto	This book describes unified image-based measurement methods (theories, numerical methods, and algorithms) to determine the important physical quantities of complex flows in engineering and natural systems, including velocity, pressure, temperature, heat

transfer, and skin friction. It presents a systematical study of the inverse problems in global flow diagnostics in a unified framework of the variational formulations. The authors further illustrate the main physical quantities in fluid mechanics, including velocity, pressure, skin friction and surface heat flux, extracted from flow visualization images obtained in experiments and observations. The developed methods are applicable in various image-based flow measurements in diverse disciplines ranging from fluid mechanics/aerodynamics to planetary sciences. .

2. Record Nr.	UNINA9910972496503321
Titolo	Soil genesis and classification / / S.W. Buol ... [et al.]
Pubbl/distr/stampa	Chichester, West Sussex ; ; Ames, Iowa, : Wiley-Blackwell, 2011
ISBN	0-470-96062-0 0-470-96059-0 0-470-96060-4
Edizione	[6th ed.]
Descrizione fisica	xvi, 543 p. : ill., maps
Altri autori (Persone)	BuolS. W
Disciplina	631.4
Soggetti	Soil formation Soil science Soils
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	Builds on the success of the previous editions to present an unparalleled resource on soil formation and classification. 12 page color plate section featuring soil profiles. Inclusion of new classification systems in China and Brazil. Re-organization of soil formation topics to expand weather and solum formation. .