

1. Record Nr.	UNINA9910141480803321
Autore	Prud'homme Roger
Titolo	Flows and chemical reactions / / Roger Prud'homme
Pubbl/distr/stampa	London, England ; ; Hoboken, New Jersey : , : ISTE : , : Wiley, , 2012 ©2012
ISBN	1-118-56158-9 1-299-18706-4 1-118-58793-6 1-118-58822-3
Descrizione fisica	1 online resource (385 p.)
Collana	ISTE
Disciplina	541/.39
Soggetti	Chemical reactions Fluid mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Simple fluids -- Reactive mixtures -- Interfaces and lines -- Appendices.
Sommario/riassunto	The aim of this book is to relate fluid flows to chemical reactions. It focuses on the establishment of consistent systems of equations with their boundary conditions and interfaces, which allow us to model and deal with complex situations. Chapter 1 is devoted to simple fluids, i.e. to a single chemical constituent. The basic principles of incompressible and compressible fluid mechanics, are presented in the most concise and educational manner possible, for perfect or dissipative fluids. Chapter 2 relates to the flows of fluid mixtures in the presence of chemical reactions. Chapter 3