

1. Record Nr.	UNINA9910438118103321
Titolo	Bubble dynamics and shock waves // Can F. Delale (ed.)
Pubbl/distr/stampa	Heidelberg, : Springer, 2013
ISBN	1-283-91113-2 3-642-34297-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (392 p.)
Collana	Shock wave science and technology reference library ; ; 8
Altri autori (Persone)	DelaleCan F
Disciplina	530.4275
Soggetti	Shock waves Bubbles - Dynamics
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	pt. I. Bubble dynamics and shock wave emission -- pt. II. Shock wave propagation in bubbly liquids -- pt. III. Shocks in cavitating flows -- pt. IV. Applications in medical and earth sciences.
Sommario/riassunto	This volume of the Shock Wave Science and Technology Reference Library is concerned with the interplay between bubble dynamics and shock waves. It is divided into four parts containing twelve chapters written by eminent scientists. Topics discussed include shock wave emission by laser generated bubbles (W Lauterborn, A Vogel), pulsating bubbles near boundaries (DM Leppinen, QX Wang, JR Blake), interaction of shock waves with bubble clouds (CD Ohl, SW Ohl), shock propagation in polydispersed bubbly liquids by model equations (K Ando, T Colonius, CE Brennen, T Yano, T Kanagawa, M Watanabe, S Fujikawa) and by DNS (G Tryggvason, S Dabiri), shocks in cavitating flows (NA Adams, SJ Schmidt, CF Delale, GH Schnerr, S Pasinlioglu) together with applications involving encapsulated bubble dynamics in imaging (AA Doinikov, A Novell, JM Escoffre, A Bouakaz), shock wave lithotripsy (P Zhong), sterilization of ships' ballast water (A Abe, H Mimura) and bubbly flow model of volcano eruptions ((VK Kedrinskii, K Takayama). The book offers a timely reference for graduate students as well as professional scientists and engineers interested in the interaction of shock waves with bubbles and their propagation properties in bubbly liquids with applications in medical and earth

sciences. .
