

1. Record Nr.	UNINA9910817251603321
Autore	Dranovsky Mark L
Titolo	Combustion instabilities in liquid rocket engines [[electronic resource]] : testing and development practices in Russia // Mark L. Dranovsky ; edited by Vigor Yang, Fred E.C. Culick, Douglas G. Talley
Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, c2007
ISBN	1-60086-690-5 1-60086-471-6
Descrizione fisica	1 online resource (342 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 221
Altri autori (Persone)	YangVigor CulickF <1933-> (Fred) TalleyDouglas G
Disciplina	621.43/56
Soggetti	Liquid propellant rockets Rocket engines - Combustion - Russia (Federation) - Testing Liquid fuels - Combustion - Russia (Federation) - Testing Rockets (Aeronautics) - Russia (Federation) - Testing
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	Introduction -- Terms and definitions -- Mechanisms of transition from noise to high-frequency oscillations or to noise at a new level -- Uncertainty in conversion of propellant to combustion products -- Studies of operating process stability at various stages of combustor development -- Quantitative characteristics for estimating stability of LRE combustion chambers for gas generators -- Acoustic study of combustion chamber stability characteristics -- Determination of stability of oscillations from natural disturbances -- Evaluation of LRE process stability by use of artificial pressure disturbances -- Model firing tests for selection of injector head elements -- Estimation of operating process stability from pressure oscillation decrements -- Test results for pulsing liquid-liquid chambers -- Stability of gas-liquid combustion chambers -- Gas-liquid combustion-chamber tests for stability to hard excitation -- Injector head for RD-170 engine combustion chamber -- Stability characteristics of engines with

adjustable injectors -- Control of stability in production of the proton engine.
