1. Record Nr. UNINA9910457203903321 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 621.43/56 Disciplina Soggetti Liquid propellant rockets Rocket engines - Combustion - Russia (Federation) - Testing Liquid fuels - Combustion - Russia (Federation) - Testing Rockets (Aeronautics) - Russia (Federation) - Testing Electronic books. 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 --

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combustion chamber -- Stability characteristics of engines with adjustable injectors -- Control of stability in production of the proton engine.