

1. Record Nr.	UNISALENTO991001805019707536
Titolo	Combustion instabilities in gas turbine engines : operational experience, fundamental mechanisms and modeling / edited by Timothy C. Lieuwen, Vigor Yang
Pubbl/distr/stampa	Reston, VA : American Institute of Aeronautics and Astronautics, c2005
ISBN	156347669X
Descrizione fisica	xiv, 657 p. : ill. ; 24 cm
Collana	Progress in astronautics and aeronautics ; v. 210
Altri autori (Persone)	Lieuwen, Timothy C. Yang, Vigor
Disciplina	629.134
Soggetti	Gas-turbines - Combustion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and indexes
Nota di contenuto	Combustion instabilities: basic concepts -- Combustion instabilities in industrial gas turbines: Solar Turbine's experience -- Incorporation of combustion instability issues into design process: GE aeroderivative and aero engines experience -- Combustion instability and its passive control: Rolls-Royce aeroderivative engine experience -- Thermoacoustic design tools and passive control: Siemens power generation approaches -- Characterization and control of aeroengine combustion Instability: Pratt & Whitney and NASA experience -- Monitoring of combustion instabilities: Calpine's experience -- Monitoring combustion instabilities: E.ON UK's experience -- Combustion instability mechanisms in premixed combustors -- Flow and flame dynamics of lean premixed swirl Injectors -- Acoustic-vortex-flame interactions in gas turbines -- Physics of premixed combustion-acoustic wave interactions -- Acoustic analysis of gas-turbine combustors -- Three-dimensional linear stability analysis of gas turbine combustion dynamics -- Implementation of instability prediction in design: ALSTOM approaches -- Experimental diagnostics of combustion instabilities -- Passive control of combustion instabilities in stationary gas turbines -- Factors affecting the control of unstable combustors -- Implementation of active control in a full-scale gas-turbine combustor.

