Record Nr. UNINA9910337472603321 Active Flow and Combustion Control 2018 [[electronic resource]]: Titolo Papers Contributed to the Conference "Active Flow and Combustion Control 2018", September 19-21, 2018, Berlin, Germany / / edited by Rudibert King Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-319-98177-3 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (IX, 380 p. 190 illus., 110 illus. in color.) Collana Notes on Numerical Fluid Mechanics and Multidisciplinary Design, , 1612-2909 ; ; 141 Disciplina 627.05 Soggetti Fluid mechanics Control engineering Thermodynamics Heat engineering Heat transfer Mass transfer **Engines** Machinery **Engineering Fluid Dynamics** Control and Systems Theory Engineering Thermodynamics, Heat and Mass Transfer **Engine Technology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto The book reports on the latest theoretical and experimental findings in the field of active flow and combustion control. It covers new developments in actuator technology and sensing, in robust and optimal open- and closed-loop control, as well as in model reduction

for control, constant volume combustion and dynamic impingement cooling. The chapters reports oncutting-edge contributions presented

during the fourth edition of the Active Flow and Combustion Control conference, held in September 19 to 21, 2018 at the Technische Universität Berlin, in Germany. This conference, as well as the research presented in the book, have been supported by the collaborative research center SFB 1029 on "Substantial efficiency increase in gas turbines through direct use of coupled unsteady combustion and flow dynamics", funded by the DFG (German Research Foundation). It offers a timely guide for researchers and practitioners in the field of aeronautics, turbomachinery, control and combustion.