

1. Record Nr.	UNINA9910484097003321
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Titolo	Control of fuel combustion in boilers // Artur O. Zaporozhets
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-46299-4
Edizione	[1st edition 2020.]
Descrizione fisica	1 online resource (XI, 123 p. 100 illus., 70 illus. in color.)
Collana	Studies in Systems, Decision and Control, , 2198-4182 ; ; 287
Disciplina	621.183
Soggetti	Fire prevention Thermodynamics Heat engineering Heat - Transmission Mass transfer Automatic control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Methods and means for the control of the fuel combustion process -- Research of the process of fuel combustion in boilers -- Hardware and software implementation of modules of the system of the fuel combustion control process -- Experimental research of a computer system for the control of the fuel combustion process.
Sommario/riassunto	This book examines key issues in improving the efficiency of small and medium power boiler units by adding control systems for the fuel combustion process. The original models, algorithms, software and hardware of the system developed for controlling the fuel combustion process are presented. In turn, the book presents a methodology for assessing the influence of climatic factors on the combustion process, and proposes new methods for measuring the thermophysical characteristics, which require taking into account the concentration of oxygen in the air. The system developed here was implemented on a boiler of the NIISTU-5 type, which is widely used for heat power engineering in Ukraine and other Eastern European countries. Given its scope, the book offers a valuable asset for researchers and engineers, as well as lecturers and graduate students at higher education

institutions dealing with heat engineering equipment. .

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