Record Nr. UNINA9910811833403321 Turbulent premixed flames / / edited by Nedunchezhian Swaminathan, **Titolo** K.N.C. Bray [[electronic resource]] Pubbl/distr/stampa Cambridge:,: Cambridge University Press,, 2011 **ISBN** 1-107-21800-4 1-283-11225-6 9786613112255 1-139-07519-5 1-139-06713-3 1-139-06942-X 1-139-07745-7 1-139-07974-3 0-511-97522-8 1-139-08201-9 Descrizione fisica 1 online resource (xvi, 421 pages) : digital, PDF file(s) Classificazione TEC009070 Disciplina 621.402/3 Soggetti Combustion engineering Flame Turbulence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1. Fundamentals and challenges -- 2. Modelling methods -- 3. Combustion Instabilities -- 4. Lean flams in practice -- 5. Future directions. A work on turbulent premixed combustion is timely because of Sommario/riassunto increased concern about the environmental impact of combustion and the search for new combustion concepts and technologies. An improved understanding of lean fuel turbulent premixed flames must play a central role in the fundamental science of these new concepts. Lean premixed flames have the potential to offer ultra-low emission levels, but they are notoriously susceptible to combustion oscillations. Thus, sophisticated control measures are inevitably required. The

editors' intent is to set out the modeling aspects in the field of turbulent premixed combustion. Good progress has been made recently on this topic. Thus, it is timely to edit a cohesive volume containing contributions from international experts on various subtopics of the lean premixed flame problem.