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Titolo	Tunnel Fire Dynamics [[electronic resource] /] / by Haukur Ingason, Ying Zhen Li, Anders Lönnermark
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Descrizione fisica	1 online resource (586 pages)
Altri autori (Persone)	LiYing Zhen LönnermarkAnders
Disciplina	628.92
Soggetti	Fire prevention Buildings - Protection Buildings - Design and construction Transportation engineering Traffic engineering Civil engineering Security systems Fire Science, Hazard Control, Building Safety Building Construction and Design Transportation Technology and Traffic Engineering Civil Engineering Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Fuel and ventilation controlled fires -- Tunnel fire tests -- Heat release rates in tunnels -- Fire growth rates in tunnels -- Design fire curves -- Combustion products from fires -- Gas temperatures -- Flame length -- Heat flux and thermal resistance -- Fire spread -- Smoke stratification -- Tunnel fire ventilation -- Visibility -- Tenability -- Fire suppression and detection in tunnels -- CFD modeling of tunnel fires -- Scaling technique.
Sommario/riassunto	This updated, second edition unveils the mystery of the tunnel fires, covering most of the issues in fire safety engineering in tunnels, clearly

describes the phenomena related to tunnel fire safety, presents state-of-the-art research, and gives detailed solutions to these major issues. The book retains its chapters on fuel and ventilation control, combustion products, gas temperatures, heat fluxes, smoke stratification, visibility, tenability, design fire curves, heat release, fire suppression and detection, CFD modelling, and scaling techniques allowing readers to create their own fire safety plans for tunnels. It gives detailed solutions to the major issues in fire safety engineering in tunnels and provides example calculations. A new chapter on Alternative Fuel Vehicle (AFV) safety has been introduced as well as updated information related to AFVs in respective chapters.
