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Soggetti	Fire prevention Buildings - Protection Materials - Analysis Mathematical physics Security systems Fire Science, Hazard Control, Building Safety Characterization and Analytical Technique Theoretical, Mathematical and Computational Physics Security Science and Technology
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Nota di contenuto	Chapter 1: Model Error for Calculating the Structural Reliability of Dowel Connections in Fire Situations -- Chapter 2: Three-Dimensional Numerical Analysis on the Fire Behaviour of Composite Slabs with Steel Deck -- Chapter 3: Durability of Reaction to Fire Performance of Wood Based Panels through Accelerated Aging Cycles -- Chapter 4: Modelling Real Fire by Fds and 2-Zone Model for Structural Post-Fire Assessment -- Chapter 5: Buckling Resistance of Partially Encased Columns Embedded on Walls under Fire from One Side -- Chapter 6: Numerical Analysis of Cellular Steel Beams Failure Modes in Fire Conditions -- Chapter 7: Wood Connections under Fire Conditions Protected with Gypsum Plasterboard Types A and F -- Chapter 8: Emergency Exits:

Analysis and Reflection Based on a Modelling and Standardization Study  
-- Chapter 9: Performance of Plaster Walls Exposed to High  
Temperatures.

**Sommario/riassunto**

This book gathers selected, extended and revised papers presented at the 5th Iberian-Latin American Congress on Fire Safety, CILASCI 5, held on 15-17 July 2019, in Porto, Portugal. The respective chapters address experimental efforts and the computational and numerical modelling of materials (e.g. wood, concrete, and steel) and structures to assess their fire behavior and/or improve their fire resistance. In addition, they present simulation studies on fire events and findings from fire performance tests on walls. Given its scope, the book offers a valuable resource for researchers, graduate students, and practitioners whose work involves fire safety-related topics.