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Altri autori (Persone)	SilvaniXavier
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Nota di contenuto	Nomenclature -- Introduction -- Measurement systems -- Beyond measurement devices -- Conclusion.
Sommario/riassunto	Natural fires can be considered as scale-dependant, non-linear processes of mass, momentum and heat transport, resulting from a turbulent reactive and radiative fluid medium flowing over a complex medium, the vegetal fuel. In natural outdoor conditions, the experimental study of natural fires at real scale needs the development of an original metrology, one able to capture the large range of time and length scales involved in its dynamic nature and also able to resist the thermal, mechanical and chemical aggression of flames on devices. Robust, accurate and poorly intrusive tools must be carefully set-up and used for gaining very fluctuating data over long periods. These signals also need the development of original post-processing tools that take into account the non-steady nature of their stochastic components. Metrology for Fire Experiments in Outdoor Conditions closely analyzes these features, and also describes measurements techniques, the thermal insulation of fragile electronic systems, data acquisition, measurement errors and optimal post-processing algorithms. This book is intended for practitioners as a reference guide for optimizing measurements techniques in an outdoor environment. Advanced-level students and researchers will also find the book invaluable.

