

1.	Record Nr.	UNINA990009880160403321
	Autore	International Geological Congress : 23. : <1968
	Titolo	20.: General Proceedings / edited by Arnost Dudek
	Pubbl/distr/stampa	Prague : Academia, 1970
	Descrizione fisica	227 p., [8] c. di tav. : ill. ; 24 cm
	Locazione	DINGE
	Collocazione	Z 8/43
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	In testa al front.: International Geological Congress
2.	Record Nr.	UNINA9910456701103321
	Titolo	Advanced mathematical & computational tools in metrology & testing VIII [[electronic resource] /] / editors, F. Pavese ... [et al.]
	Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2009
	ISBN	1-282-44272-4 9786612442728 981-283-952-6
	Descrizione fisica	1 online resource (419 p.)
	Collana	Series on advances in mathematics for applied sciences ; ; v. 78
	Altri autori (Persone)	PaveseFranco
	Disciplina	530.8
	Soggetti	Measurement Physical measurements Metrology Electronic books.
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.

Foreword; Contents; Sensitivity Analysis in Metrology: Study and Comparison on Different Indices for Measurement Uncertainty A Allard and N Fischer; 1. Introduction to Sensitivity Analysis; 2. Sensitivity Analysis Indices; 2.1. Partial Derivative Approach - GUM; 2.2. "One At a Time" Index - GUM S1; 2.3. Rank Correlation; 2.4. Variance Based Method - Sobol Indices; 2.4.1. Definitions; 2.4.2. Estimation; 3. Examples; 3.1. Mass Calibration; 3.2. Ishigami Function; 4. Conclusion; Acknowledgments; References

Likelihood Maximization Against the Probability Density Function Shape S Aranda, J-M Linares and J-M Sprauel1. Introduction; 2. Statistical Best-Fit Approach; 3. Definition of Probability Density Function (PDF); 4. Definition of the Likelihood Criterion Function; 5. Conclusion; References; Methods for Estimation of the Effect of Correlation at the Measurement of Alternating Voltage T Barashkova; 1. The Research on the Effect of Correlation in the Measurement of Alternating Voltage; 2. Expert Statistical Method; Acknowledgments; References

Multi-Determination of Aerodynamic Loads Using Calibration Curve with a Polynomial and MLP Neural Network Combination I M Barbosa, O A De Faria Mello, M L Collucci da Costa Reis and E del Moral Hernandez1. Instrumentation; 2. Methodology; 2.1. Fitting by Polynomial Only; 2.2. Fitting by Multilayer Perceptron (MLP) Only; 2.3. Fitting by Combination between Polynomial and MLP; 3. Results; 3.1. The Polynomial Approach; 3.2. The MLP Approach; 3.3. Combination of MLP and Polynomial Approaches; 3.4. Other Indicators for Performance Function; 4. Conclusions; REFERENCES

Uncertainty Analysis in Calibration of Standard Volume Measures E Batista, N Almeida and E Filipe1. Introduction; 2. Uncertainty Evaluation; 2.1. The Measurement Model and Uncertainty Components; 2.2. Combined and Expanded Uncertainty; 3. Experimental Results; 4. Concluding Remarks; References; Virtual Atomic Force Microscope as a Tool for Nanometrology V S Bormashov, A S Baturin, A V Zablotskiy, R V Goldshtein and K B Ustinov; 1. Introduction; 2. "Virtual AFM" Features; 2.1. Scanning system; 2.2. Feedback system; 2.3. Optical registration system; 2.4. Probe-specimen interaction module

3. ConclusionAcknowledgments; References; Development of a Mathematical Procedure for Modelling and Inspecting Complex Surfaces for Measurement Process S Boukebbab, H Bouchenitfa and J-M Linares; 1. Introduction; 2. Presentation of the Mathematical Procedure; 3. Application for Rapid Prototyping Technology; 4. Conclusion; References; A Software Simulation Tool to Evaluate the Uncertainties for a Lock-in Amplifier P Clarkson, T J Esward, P M Harris, K J Lines, F O Onakunle and I M Smith; 1. Introduction; 2. Principles Of The Lock-in Amplifier; 3. Monte Carlo Calculation

4. Simulation Software Tool

The main theme of the AMCTM 2008 conference, reinforced by the establishment of IMEKO TC21, was to provide a central opportunity for the metrology and testing community worldwide to engage with applied mathematicians, statisticians and software engineers working in the relevant fields. This review volume consists of reviewed papers prepared on the basis of the oral and poster presentations of the Conference participants. It covers all the general matters of advanced statistical modeling (e.g. uncertainty evaluation, experimental design, optimization, data analysis and applications, multiple me