Record Nr.	UNINA9910437867503321
Titolo	Numerical Mathematics and Advanced Applications 2011 : Proceedings of ENUMATH 2011, the 9th European Conference on Numerical Mathematics and Advanced Applications, Leicester, September 2011 / / edited by Andrea Cangiani, Ruslan L Davidchack, Emmanuil Georgoulis, Alexander N. Gorban, Jeremy Levesley, Michael V. Tretyakov
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-33134-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (810 p.)
Disciplina	518
Soggetti	Computer mathematics Applied mathematics Engineering mathematics Numerical analysis Mathematical models Mathematical physics Computational Mathematics and Numerical Analysis Applications of Mathematics Numerical Analysis Computational Science and Engineering Mathematical Modeling and Industrial Mathematics Theoretical, Mathematical and Computational Physics
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.
Nota di contenuto	Part I A Posteriori Error Estimation and Adaptive Methods Part II Computational Electromagnetics Part III Computational Methods Part IV Convection, Diffusion, Conservation, and Hyperbolic Systems Part V Discontinuous Galerkin Methods Part VI Finite Element and Finite Volume techniques Part VII Fluid Mechanics Part VIII High Performance Computing Part IX Multiscale Modeling and Simulations Part X Preconditioners and Solvers Part XI Uncertainty, Stochastic

1.

	Modelling, and Applications.
Sommario/riassunto	The European Conferences on Numerical Mathematics and Advanced Applications (ENUMATH) are a series of conferences held every two years to provide a forum for discussion of new trends in numerical mathematics and challenging scientific and industrial applications at the highest level of international expertise. ENUMATH 2011 was hosted by the University of Leicester (UK) from the 5th to 9th September 2011. This proceedings volume contains more than 90 papers by speakers of the conference and gives an overview of recent developments in scientific computing, numerical analysis, and practical use of modern numerical techniques and algorithms in various applications. New results on finite element methods, multiscale methods, numerical linear algebra, and finite difference schemes are presented. A range of applications include computational problems from fluid dynamics, materials, image processing, and molecular dynamics.