1.	Record Nr.	UNINA9910789440303321
	Autore	Pistikopoulos E. N
	Titolo	21st European Symposium on Computer Aided Process Engineering [[electronic resource]]
	Pubbl/distr/stampa	Burlington, : Elsevier Science, 2011
	ISBN	1-283-16440-X 9786613164407 0-444-53896-8
	Descrizione fisica	1 online resource (2086 p.)
	Collana	Computer Aided Chemical Engineering ; ; v.29
	Altri autori (Persone)	GeorgiadisMichael C KokossisAntonis C
	Disciplina	620.00420285 660.2815
	Soggetti	Chemical engineering Congresses Computer-aided engineering Congresses Production engineering Congresses Chemical & Materials Engineering Engineering & Applied Sciences Chemical Engineering
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di contenuto	 e9780444537119pa; Front Cover; 21stEuropean Symposium on Computer Aided Process Engineering; Copyright Page; Contents; Escape-21 - Preface; Members of the International Scientific Committee; Detailed Mathematical Modelling of Liquid-LiquidExtraction Columns; Abstract; 1. Introduction; 2. Mathematical model; 3. LLECMOD program; 4. Results and discussion; 5. Conclusions; References; Multi-Scale modelling of a membrane reformingpower cycle with CO2 capture; Abstract; 1. Introduction; 2. Multi-scale modelling and numerical approach; 3. Results and discussion; 4. Conclusion; 5. Acknowledgements ReferencesModeling the liquid back mixing characteristics fora kinetically controlled reactive distillation process; Abstract; 1. Introduction; 2. Model development; 3. Results and discussions; 4. Conclusions; Acknowledgement; References; Application of computer-

	 aided multi-scalemodelling framework - Aerosol case study; Abstract; 1. Introduction; 2. Work-flow in multi-scale modelling problems; 3. Case study; 4. Conclusions; References; Sensitivity of shrinkage and collapse functionsinvolved in pore formation during drying; Abstract; 1. Introduction; 2. Theoretical background of the model 3. Sensitivity study approach4. Results and discussion; 5. Conclusions; Nomenclatures; References; A Reduced-Order Approach of Distributed Parameter Models using Proper Orthogonal Decomposition; Abstract; 1. Introduction; 2. Proper Orthogonal Decomposition; Abstract; 1. Introduction; 2. Proper Orthogonal Decomposition; 3. Example; 4. Conclusions; References; A Process Unit Modeling Framework within aHeterogeneous Simulation Environment; Abstract; 1. Introduction; 2. A new lightweight modeling environment; A. Modeling Requirements in a Heterogeneous Simulation Environment: An Example; 4. Workflow and Strategical Benefits; 5. Experiences; 6. Conclusion ReferencesMathematical description of mass transfer insupercritical-carbon-dioxide-drying processes; Abstract; 1. Introduction; 2. System description; 3. Model Development and Implementation; 4. Results; 5. Conclusions and Future Work; References; Three-moments conserving sectional techniques for the solution of coagulation and breakagepopulation balances; Abstract; 1. Main Text; 2. Problem Formulation; 3. Solution techniques; 4. Results; References; Modelling and Simulation results4. Conclusions; 5. Acknowledgements; Nomenclature; References; Comprehensive Mathematical Modeling of Controlled Radical Copolymerization in TubularReactors; Abstract; 1. Introduction; 2. Mathematical Model; 3. Modeling of the Bivariate MWD; 4. Conclusions; References; Comprehensive Mathematical Modeling of Controlled Radical Copolymerization in TubularReactors; Abstract; 1. Introduction; 2. Mathematical Model; 3. Modeling of the Bivariate MWD; 4. Conclusions; References; A
Sommario/riassunto	The European Symposium on Computer Aided Process Engineering (ESCAPE) series presents the latest innovations and achievements of leading professionals from the industrial and academic communities. The ESCAPE series serves as a forum for engineers, scientists, researchers, managers and students to present and discuss progress being made in the area of Computer Aided Process Engineering (CAPE). European industries large and small are bringing innovations into our lives, whether in the form of new technologies to address environmental problems, new products to make our homes more comfor