1. Record Nr. UNINA9910595071103321

Autore	Chen Zhitong
Titolo	Advances in Plasma Diagnostics and Applications
Pubbl/distr/stampa	Basel, : MDPI Books, 2022
Descrizione fisica	1 electronic resource (124 p.)
Soggetti	Technology: general issues History of engineering & technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Plasma can be generated via the combination of energy-inducing fragmentation, ionization, and excitation of molecular. Such processes occur throughout the life of the plasma, resulting in a wide variety of atomic and molecular species, which can be electrically charged, energetically excited, highly reactive, or any combination of these states. Plasma diagnostics can demonstrate important discharge characteristics and the mechanisms of plasma-induced processes. Parameter’s dynamic range spans many orders of magnitude, and spatial/temporal scales significantly vary during plasma source configurations. Many diagnostic techniques have been developed to characterize plasma, including scattering techniques, intensified charge-coupled device cameras, laser-based methods, optical emission spectroscopy, mass spectrometry, electron paramagnetic resonance spectroscopy, gas chromatography, etc. Although various mature diagnostic technologies for plasma discharges have been developed, there are still many challenges. The measurement precision is not only affected by the diagnostic equipment/ techniques, but also by the plasma discharge itself. In many applications, direct measurements of the parameters of interest are still not possible. In addition, the plasma environments in application processes are unusually complex, and their reactions are still not fully understood. Plasma can exist in a variety of forms due to discharge modes resulting from different means of

	creation, resulting in a wide range of applications. This brings together many research fields, including physics, engineering, chemistry, biology, and medicine.

2.

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; Acknowledgment; 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; 3. Example; 4. Conclusions; References; A Process Unit Modeling Framework within aHeterogeneous Simulation Environment; Abstract; 1. Introduction; 2. A new lightweight modeling environment; 3. 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 of Forced ConvectionDrying of Electric Insulators; Abstract; 1. Introduction; 2. Model description
3. 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; An Efficient High Resolution FEM for PDE Systems; Abstract; 1. Introduction; 2. Theory; 3. Case studies; 4. Conclusion and Outlook; References; Simulation of Reactive Absorption: ModelValidation for CO2-MEA system; Abstract; 1. Introduction; 2. Rate-based model; 3. Process simulator
4. Case study: Absorption of CO2 by MEA

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

3. Record Nr. UNICAMPANIAVAN00110666

Autore	Israel seminar (GAFA)
Titolo	Geometric aspects of functional analysis : Israel seminar (GAFA) 2014-2016 / Bo’az Klartag, Emanuel Milman, editors
Pubbl/distr/stampa	Cham, : Springer, 2017
Titolo uniforme	Geometric aspects of functional analysis : Israel seminar (GAFA) 2014-2016
Descrizione fisica	XII, 366 p. : ill ; 24 cm
Soggetti	26A51 - Convexity of real functions in one variable, generalizations [MSC 2020] 32-XX - Several complex variables and analytic spaces [MSC 2020] 46-XX - Functional analysis [MSC 2020] 60-XX - Probability theory and stochastic processes [MSC 2020] 80M35 - Asymptotic analysis for problems in thermodynamics and heat transfer [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia