1. Record Nr. UNINA9910458053003321

Autore	Beall G. W (Gary W.)
Titolo	Fundamentals of Polymer-Clay Nanocomposites / / Gary W. Beall and Clois E. Powell [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2011
ISBN	1-139-09723-7 1-107-22593-0 1-283-34168-9 1-139-10303-2 9786613341686 1-139-10057-2 1-139-10123-4 1-139-09854-3 0-511-97731-X 1-139-09921-3
Descrizione fisica	1 online resource (vii, 185 pages) : digital, PDF file(s)
Disciplina	620.1/92
Soggetti	Nanocomposites (Materials) Polymer clay
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di contenuto	1. Introduction -- 2. Thermodynamics and kinetics of polymer-clay nanocomposites -- 3. Analytical methods in nanocomposites; 4. Gas diffusion characteristics of polymer-clay nanocomposites -- 5. Engineering properties of polymer-clay nanocomposites theory and theory validation -- 6. Variables associated with polymer-clay processing in relation to reinforcement theory -- 7. The effect of polymer type specificity to the production of polymer-clay nanocomposites -- 8. Flame retardancy.
Sommario/riassunto	Written for graduate students, researchers, and practitioners, this book provides a complete introduction to the science, engineering, and commercial applications of polymer-clay nanocomposites. Starting with a discussion of general concepts, the authors define specific terms

	used in the field, providing newcomers with a strong foundation to the area. The physical and mechanical properties of polymer-clay nanocomposites are then described, with chapters on thermodynamics and kinetics, engineering properties, barrier properties, and flame retardancy. Mechanisms underpinning observed effects, such as UV resistance, solvent resistance, and hardness, are also explained. In-depth discussions of clay and clay surface treatment, fabrication, and characterization of nanocomposites are provided, and particular emphasis is placed on the proper use and interpretation of analytical techniques, helping readers to avoid artifacts in their own work. With commercial applications discussed throughout, and experimental results connected with theory, this is an ideal reference for those working in polymer science.

2.	Record Nr.	UNISA996465378203316
	Titolo	Evolutionary Computation in Combinatorial Optimization [[electronic resource]] : 11th European Conference, EvoCOP 2011, Torino, Italy, April 27-29, 2011, Proceedings / / edited by Peter Merz, Jin-Kao Hao
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011
	ISBN	3-642-20364-7
	Edizione	[1st ed. 2011.]
	Descrizione fisica	1 online resource (XIV, 263 pages)
	Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6622
	Disciplina	005.1
	Soggetti	Algorithms Computer science Pattern recognition systems Computer science—Mathematics Discrete mathematics Mathematical statistics Theory of Computation Automated Pattern Recognition Discrete Mathematics in Computer Science Probability and Statistics in Computer Science
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	This book constitutes the refereed proceedings of the 11th European Conference on Evolutionary Computation in Combinatorial Optimization, EvoCOP 2011, held in Torino, Italy, in April 2011. The 22 revised full papers presented were carefully reviewed and selected from 42 submissions. The papers present the latest research and discuss current developments and applications in metaheuristics - a paradigm to effectively solve difficult combinatorial optimization problems appearing in various industrial, economical, and scientific domains. Prominent examples of metaheuristics are evolutionary algorithms, simulated annealing, tabu search, scatter search, memetic algorithms, variable neighborhood search, iterated local search, greedy randomized adaptive search procedures, estimation of distribution algorithms, and ant colony optimization.