1. Record Nr. UNISA996465318503316

Titolo	Transactions on Computational Science II [[electronic resource] /] / edited by Yingxu Wang, Yiyu Y. Yao, Guoyin Wang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2008
ISBN	3-540-87563-8
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (XI, 250 p.)
Collana	Transactions on Computational Science, , 1866-4733 ; ; 5150
Disciplina	502.85
Soggetti	Software engineering Computer science—Mathematics Computers Computer mathematics Software Engineering/Programming and Operating Systems Mathematics of Computing Theory of Computation Computational Science and Engineering
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.
Nota di contenuto	Regular Papers -- Perspectives on Denotational Mathematics: New Means of Thought -- On Contemporary Denotational Mathematics for Computational Intelligence -- Mereological Theories of Concepts in Granular Computing -- On Mathematical Laws of Software -- Rough Logic and Its Reasoning -- On Reduct Construction Algorithms -- Attribute Set Dependence in Reduct Computation -- A General Model for Transforming Vague Sets into Fuzzy Sets -- Quantifying Knowledge Base Inconsistency Via Fixpoint Semantics -- Contingency Matrix Theory I: Rank and Statistical Independence in a Contigency Table -- Applying Rough Sets to Information Tables Containing Possibilistic Values -- Toward a Generic Mathematical Model of Abstract Game Theories -- A Comparative Study of STOPA and RTPA.
Sommario/riassunto	The LNCS journal Transactions on Computational Science reflects recent developments in the field of Computational Science, conceiving the field not as a mere ancillary science but rather as an innovative

approach supporting many other scientific disciplines. The journal focuses on original high-quality research in the realm of computational science in parallel and distributed environments, encompassing the facilitating theoretical foundations and the applications of large-scale computations and massive data processing. It addresses researchers and practitioners in areas ranging from aerospace to biochemistry, from electronics to geosciences, from mathematics to software architecture, presenting verifiable computational methods, findings and solutions and enabling industrial users to apply techniques of leading-edge, large-scale, high performance computational methods. Transactions on Computational Science II is devoted to the subject of denotational mathematics for computational intelligence. Denotational mathematics, as a counterpart of conventional analytic mathematics, is a category of expressive mathematical structures that deals with high-level mathematical entities beyond numbers and sets, such as abstract objects, complex relations, behavioral information, concepts, knowledge, processes, granules, and systems. This volume includes 12 papers covering the following four important areas: foundations and applications of denotational mathematics; rough and fuzzy set theories; granular computing; and knowledge and information modeling.

2. Record Nr. UNINA9910557290603321

Autore	Guerrero-Ruiz A
Titolo	Application of New Nanoparticle Structures as Catalysts
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (190 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Catalysts are made of nanoparticles of metals, metal oxides, and other compounds that may act as active phases, support the latter, or a combination of both. The initial incentive to reduce as much as possible, up to the nano-scale, the size of the particles of active catalyst components is to maximize the surface area exposed to reactants, thus minimizing the specific cost per function and increasing the rate of conversion of feedstocks to products in relatively simple reactions. Nowadays, the interest in nanocatalyst developments has shifted to an emphasis on improving the selectivity of catalysts, allowing one to obtain desirable reactions in more complex synthetic processes. Thus, new generations of nanocatalysts should be designed at the molecular level to display well-defined structural characteristics, in terms of size, shapes, hierarchical porosity, and morphologies, as well as with controlled chemical composition. The development of efficient nanocatalysts supposes the characterization of their various surface active sites at the nanometer scale, which is focused on establishing synthesis-structure-performance relationships.