1. Record Nr. UNINA9910674366103321

Autore	Gil Bravo Antonio
Titolo	Valorization of Material Wastes for Environmental, Energetic and Biomedical Applications
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
ISBN	3-0365-5692-3
Descrizione fisica	1 electronic resource (164 p.)
Soggetti	Technology: general issues History of engineering & technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The development of materials from industrial wastes has attracted the attention of the research community for years. A material's physico-chemical characteristics have specific impacts its properties and their application in environmental, energetic, and biomedical areas, such as in pollutant removal; CO2 capture; energy storage; catalytic oxidation and reduction processes; the conversion of biomass to biofuels; and drug delivery. Examples of such materials are activated carbons, clays, and zeolites, among others. The aim of this Special Issue is to collect the recent advances and progresses developed in this field considering valorised materials from industrial wastes and their applications in environmental, energetic, and biomedical areas.

2.

Record Nr.	UNINA9910299660703321
Autore	Kröger Bernd
Titolo	Hermann Haken: From the Laser to Synergetics : A Scientific Biography of the Early Years / / by Bernd Kröger
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-11689-4
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (317 p.)
Disciplina	509 530.01 620 621
Soggetti	Dynamics Nonlinear theories Nonlinear optics Physics—Philosophy Science—History Applied Dynamical Systems Nonlinear Optics Philosophical Foundations of Physics and Astronomy History of Science
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 and index.
Nota di contenuto	Introduction -- Hermann Haken: Youth and university education.-The Erlangen years: Solid State Physics 1950 – 1960 -- Appointment to the Theoretical Physics Chair at the Technical University Stuttgart -- Hermann Haken and the "Stuttgart School", 1960 – 1970: their contribution to the development of laser theory -- Early years of Synergetics: 1970 – 1978 -- The Propagation of Synergetics: 1978 - 1987 -- Synergetics 1987–2010: Applications in medicine, cognition and psychology – a survey -- Theories of self-organization: The role of synergetics.
Sommario/riassunto	Hermann Haken (born 1927) is one of the “fathers” of the quantum-

mechanical laser theory, formulated between 1962 and 1966, in strong competition with American researchers. Later on, he created Synergetics, the science of cooperation in multicomponent systems. The book concentrates on the development of his scientific work during the first thirty-five years of his career. In 1970 he and his doctoral student Robert Graham were able to show that the laser is an example of a nonlinear system far from thermal equilibrium that shows a phase-transition like behavior. Subsequently, this insight opened the way for the formulation of Synergetics. Synergetics is able to explain, how very large systems show the phenomenon of self-organization that can be mathematically described by only very few order parameters. The results of Haken's research were published in two seminal books Synergetics (1977) and Advanced Synergetics (1983). After the year 1985 Haken concentrated his research on the macroscopic foundation of Synergetics. This led him towards the application of synergetic principles in medicine, cognitive research and, finally, in psychology. A comprehensive bibliography of Hermann Haken's publications (nearly 600 numbers) is included in the book. .