1. Record Nr. UNISA996466612703316 Dontchev A. L. <1948-> Autore Titolo Well-posed optimization problems / / Assen L. Dontchev, Tullio Zolezzi Pubbl/distr/stampa Berlin, Germany:,: Springer,, [1993] ©1993 **ISBN** 3-540-47644-X Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (XII, 424 p.) Lecture Notes in Mathematics, , 0075-8434; ; 1543 Collana Classificazione 49K40 Disciplina 519 Soggetti Mathematical optimization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Tykhonov well-posedness -- Hadamard and tykhonov well-posedness -- Generic well-posedness -- Well-posedness and variational, epi- and mosco convergences -- Well-posedness in optimal control --Relaxation and value hadamard well-posedness in optimal control --Singular perturbations in optimal control -- Well-posedness in the calculus of variations -- Hadamard well-posedness in mathematical programming. Sommario/riassunto This book presents in a unified way the mathematical theory of wellposedness in optimization. The basic concepts of well-posedness and the links among them are studied, in particular Hadamard and Tykhonov well-posedness. Abstract optimization problems as well as applications to optimal control, calculus of variations and mathematical programming are considered. Both the pure and applied side of these topics are presented. The main subject is often introduced by heuristics, particular cases and examples. Complete proofs are provided. The expected knowledge of the reader does not extend beyond textbook (real and functional) analysis, some topology and differential equations and basic optimization. References are provided for more advanced topics. The book is addressed to mathematicians interested in optimization and related topics, and also to engineers,

control theorists, economists and applied scientists who can find here a mathematical justification of practical procedures they encounter.

Record Nr. UNINA9910869159703321 Autore Elkhattabi El Mehdi **Titolo** Advanced Materials for Sustainable Energy and Engineering: Selected Proceedings of the 2023 International Conference on Advanced Materials for Sustainable Energy and Engineering (ICAMSEE) / / edited by El Mehdi Elkhattabi, Mourad Boutahir, Konstantinos Termentzidis, Kohji Nakamura, Abdelhai Rahmani Pubbl/distr/stampa Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 **ISBN** 9783031570223 9783031570216 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (554 pages) Springer Proceedings in Energy, , 2352-2542 Collana Altri autori (Persone) **BoutahirMourad TermentzidisKonstantinos** NakamuraKohji RahmaniAbdelhai 620.1 Disciplina Soggetti Materials Catalysis Force and energy Photovoltaic power generation Sustainability Nanotechnology Materials science - Data processing Materials for Energy and Catalysis **Photovoltaics** Computational Materials Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Contents -- Ensemble Learning Method for Forecasting HVAC System Nota di contenuto Demand -- 1 Introduction -- 2 Literature Review -- 3 Methodology 3.1 Ensemble Learning Methods [2] --3.2 Case Study and Data Set Information -- 4 Results and Discussion -- 5 Conclusion --

References -- RBDO Approach for Site-to-Wind Turbine Generator Pairing -- 1 Introduction -- 2 Literature Review -- 3 Methodology

Review -- 3.1 RBDO Approach -- 4 Problem Formulation -- 4.1 Wind Turbine Performance -- 4.2 Cost Function of the Wind Power Generation -- 5 Conclusion and Future Work -- References -- Investigation Performance of Shell-and-Tube Heat Exchangers in an Energy Storage System: Thermo-Mechanic Load -- 1 Introduction -- 2 Method and Material -- 3 Result and Discussion -- 4 Conclusion -- References -- Numerical Thermal Analysis of Shell-and-Tube Thermal Energy Storage Under the Constraint of High Cycle Temperatures -- 1 Introduction -- 2 Numerical Model -- 3 Result and Discussion

Sommario/riassunto

This book presents selected peer-reviewed proceedings from the International Conference on Advanced Materials, Sustainable Energy, and Engineering (ICAMSEE2023), held at Ecole Normale Supérieure, University Moulay Ismail Meknes, Morocco, from November 27 to 29, 2023. The conference served as an exceptional platform for international and national scientists, professors, students, and industry professionals to convene and exchange knowledge in the fields of materials science, microscopy, engineering, technology, and energy. The book features contributions from researchers and experts, including keynote speakers, special sessions, posters, and tutorials, showcasing the latest advancements and developments in these areas of research. The topics covered in this book span a wide array of subjects within the realm of advanced materials, sustainable energy, and engineering. The forefront of materials science is explored, including nanomaterials, carbon nanotubes, graphene, materials for various applications, environmental protection, advanced optical materials, thermoelectric and magnetic materials, and additive manufacturing. Addressing the energy demands of today, the focus extends to novel materials for solar cells, energy storage, electronic devices, solar and wind energy, advanced thermal management materials, and materials for advanced water treatment and desalination. Sustainable energy and engineering topics encompass energy policy, clean energy production technologies, carbon capture and utilization, biomass energy, building energy efficiency, smart systems for climate change, and energy efficiency in mineral processing. Additionally, the book covers modeling and numerical simulations in material science, encompassing model development, computational techniques, and simulations in both material science and energy fields.