

1. Record Nr.	UNINA9910265221903321
Titolo	Mechanical properties and performance of engineering ceramics and composites IX : a collection of papers presented at the 38th International Conference on Advanced Ceramics and Composites, January 26-31, 2014, Daytona Beach, Florida // edited by Dileep Singh, Jonathan Salem
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2015 ©2015
ISBN	1-119-03122-2 1-119-03119-2 1-119-03131-1
Descrizione fisica	1 online resource (252 pages) : illustrations
Disciplina	666
Soggetti	Ceramics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Anisotropic Creep Behavior of a Unidirectional All-Oxide CMC / Katia Artzt, Stefan Hackemann, Ferdinand Flucht, and Marion Bartsch -- Indicators for the Damage Evolution at Intermediate Temperature under Air of a SiC/[Si-B-C] Composite Subjected to Cyclic and Static Loading / Elie Racie, Nathalie Godin, Pascal Reynaud, Mohamed R'Mili, Gilbert Fantozzi, Lionel Marcin, Florent Bouillon, and Myriam Kaminski -- Durability Results from Ceramic Matrix Composite with Differing Porosity Levels / G. Ojard, I. Smyth, U. Santhosh, J. Ahmad, and Y. Gowayed -- Effects of Stress Concentrators on Damage Evolution in SiC/SiC Composites / Christopher Baker, Emmanuel Maillet, Matthew Appleby, Richard Smith, Gregory N. Morscher, and Thomas Cook -- Advancements in Acoustic Micro Imaging for the Non-Destructive Inspection of Ceramic Components and Devices / John H. Richtsmeier and Thomas J. McClenahan -- Effect of Specimen Geometry on Microstructural Fracture Behavior in Nano Composites under HVEM / Hisashi Serizawa, Tamaki Shibayama, and Hidekazu Murakawa -- Effects on Mechanical and Thermal Properties by Varying the

Interconnectivity of SiC in a Si:SiC Composite System / A. L. Marshall -- Microstructure-Property Relationships in SiC/Diamond Composites as a Function of Diamond Content / A. L. Marshall, A. F. Liszkiewicz, S. M. Salamone, P. G. Karandikar, and M. K. Aghajanian -- Effect of SiC:B4C Ratio on the Properties of Si-Cu/SiC/B4C Composites / S. M. Salamone, M. K. Aghajanian, S. E. Horner, and J. Q. Zheng -- Plastic Deformation and Cracking Resistance of SiC Ceramics Measured by Indentation / James Wade, Phoebe Claydon, and Houzheng Wu -- Fabrication of SiC Fiber-Reinforced SiC Matrix Composites by Low Temperature Melt Infiltration Method using Si-Hf and Si-Y Alloy / Yosuke Okubo, Toyohiko Yano, Katsumi Yoshida, Takuya Aoki, and Toshio Ogasawara -- Development of Electrical Porcelain Insulators from Ceramic Minerals in Uganda / Peter W. Olupot, Stefan Jonsson, and Joseph K. Byaruhanga -- The Mechanical Properties of Sandwich Structures based on a Metal Ceramic Core and Fiber Metal Laminate Skin Material / K. Myers, M. Curl, P. Cortes, B. Hetzel, and K.M. Peters -- Alkali Treatment on Sugarcane Bagasse to Improve Properties of Green Composites of Sugarcane Bagasse Fibers-Polypropylene / Juliana Anggono, Niko Riza Habibi, and dan Suwandi Sugondo -- Characteristics of a Zirconia-Spinel Composite Processed by a Current-Activated Pressure-Assisted Densification Method / Mahmood Shirooyeh, Javier E. Garay, and Terence G. Langdon -- Enhancement of Oxidation Resistance of Graphite Foams by SiC Coating for Concentrated Solar Power Applications / Taeil Kim, Dileep Singh, and Mrityunjay Singh -- Spark Plasma Sintering of Ceramic Matrix Composites with Self-Healing Matrix / Jerome Magnant, Laurence Maille, Rene Pailler, and Alain Guette -- Advanced Ceramic Composite using Self-Healing and Fiber-Reinforcement / Wataru Nakao, Daisuke Maruoka, Shingo Ozaki, Makoto Nanko, and Toshio Osada -- Applying Fracture Mechanics Methods to Model Coating Delamination / M. Prabhakar Rao, Xuemei Wang, Robert G. Hutchinson, and G.V. Srinivasan -- A New Analysis of the Edge Chipping Resistance of Brittle Materials / G. D. Quinn and J. B. Quinn -- Tribological Background for the Use of Niobium Carbide (NbC) as Cutting Tools and For Wear Resistant Tribosystems / Mathias Woydt and Hardy Mohrbacher.

2. Record Nr.	UNINA9910558694203321
Autore	Liu Kailong
Titolo	Data Science-Based Full-Lifespan Management of Lithium-Ion Battery : Manufacturing, Operation and Reutilization / / by Kailong Liu, Yujie Wang, Xin Lai
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-01340-9
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (277 p.) : illustrations (chiefly color)
Collana	Green Energy and Technology, , 1865-3537
Classificazione	COM018000TEC021000TEC031000
Altri autori (Persone)	WangYujie LaiXin
Disciplina	620.11 621.31242
Soggetti	Electric batteries Materials Catalysis Force and energy Engineering - Data processing Electric power production Batteries Materials for Energy and Catalysis Data Engineering Electrical Power Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Chapter 1. Introduction to Battery Full-Lifespan Management -- Chapter 2. Key Stages for Battery Full-Lifespan Management -- Chapter 3. Data Science-based Battery Manufacturing Management -- Chapter 4. Data Science-based Battery Operation Management I -- Chapter 5. Data Science-based Battery Operation Management II -- Chapter 6. Data Science-based Battery Reutilization Management -- Chapter 7. The Ways Ahead.
Sommario/riassunto	This open access book comprehensively consolidates studies in the rapidly emerging field of battery management. The primary focus is to

overview the new and emerging data science technologies for full-lifespan management of Li-ion batteries, which are categorized into three groups, namely (i) battery manufacturing management, (ii) battery operation management, and (iii) battery reutilization management. The key challenges, future trends as well as promising data-science technologies to further improve this research field are discussed. As battery full-lifespan (manufacturing, operation, and reutilization) management is a hot research topic in both energy and AI fields and none specific book has focused on systematically describing this particular from a data science perspective before, this book can attract the attention of academics, scientists, engineers, and practitioners. It is useful as a reference book for students and graduates working in related fields. Specifically, the audience could not only get the basics of battery manufacturing, operation, and reutilization but also the information of related data-science technologies. The step-by-step guidance, comprehensive introduction, and case studies to the topic make it accessible to audiences of different levels, from graduates to experienced engineers. .
