

1. Record Nr.	UNINA9910746975003321
Autore	Krob Daniel
Titolo	Complex Systems Design & Management : Proceedings of the 14th International Conference on Complex Systems Design & Management CSD&M 2023 // edited by Daniel Krob, Lefei Li, Xinguo Zhang, Junchen Yao, Mengyu Guo
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9965-11-X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (430 pages)
Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 1085
Altri autori (Persone)	LiLefei ZhangXinguo YaoJunchen GuoMengyu
Disciplina	530.1
Soggetti	System theory Industrial engineering Production engineering Complex Systems Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	An Architectural Design and Architectural Transformation Method Based on the Complex Real-time Embedded Systems -- A Generalized Reuse Framework for Systems Engineering -- The research on the task scheduling and optimization technology for flight tests -- A systematic approach to conducting FHA -- A Systems Engineering Framework that Integrates Aircraft Final Assembly Design Activities -- An Adaptive Assembly Process Modeling Approach for Aircraft Manufacturing: Distinguishing Between Product-specific Constraints and Optimal Assembly Sequences -- Research and Application of Decoupling Method for Fuel System Testing in the Final Assembly Stage of Aircraft Complex Systems -- Study of MBSE development framework for Flying Cars -- A Unified SoS and System Architecture Modeling Framework Based on Grid-type MBSE Methodology -- Building A Unified Model-based SoSE and SE Tool-Chain Framework Economically Based on Data

This book contains all refereed papers accepted during the 14th International Conference on Complex Systems Design & Management CSD&M 2023 that took place in Beijing, People's Republic of China by the end October 2023. Mastering complex systems requires an integrated understanding of industrial practices as well as sophisticated theoretical techniques and tools. This explains the creation of an annual go-between European and Asian forum dedicated to academic researchers and industrial actors working on complex industrial systems architecting, modeling and engineering. These proceedings cover the most recent trends in the emerging field of complex systems, both from an academic and professional perspective. A special focus was put this year on "New Trends in Complex Systems Engineering." The CSD&M series of conferences were initiated under the guidance of CESAM Community in Europe, managed by CESAMES. Its Asian version took place in Singapore for three consecutive sessions during 2014 and 2018. The fourth Asian edition was held in Beijing in hybrid with the Chinese Society of Aeronautics and Astronautics (CSAA) as the co-organizer in 2021. Since 2023, its European and Asian conferences merge into one, taking place in China and Europe in turn. CESAM Community aims in organizing the sharing of good practices in systems architecting and model-based systems engineering (MBSE) and certifying the level of knowledge and proficiency in this field through the CESAM certification. The CESAM systems architecting, and model-based systems engineering (MBSE) certification is especially currently the most disseminated professional certification in the world in this domain through more than 3,000 real complex system development projects on which it was operationally deployed and around 10,000 engineers who were trained on the CESAM framework at international level.
