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Autore	Keil Sophia
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Nota di contenuto	A holistic digital twin based on Semantic Web technologies to accelerate digitalization -- Framework for Simulation-based Decision Making in Semiconductor Value Chains -- Digital Twin for Plan and Make Using Semantic Web Technologies – Extending the JESSI/SEMATECH MIMAC Standard to the Digital Reference -- Enhancing Prediction Quality of Fab Simulation by advanced Cycle Time modelling -- Visualization of Automated Material Handling System Components in Semiconductor Industry over the Lifecycle .

This open access book reports on cutting-edge electrical engineering and microelectronics solutions to foster and support digitalization in the semiconductor industry. Based on the outcomes of the European project iDev40, which were presented at the two first conference editions of the European Advances in Digital Transformation Conference (EADCT 2018 and EADTC 2019), the book covers different, multidisciplinary aspects related to digital transformation, including technological and industrial developments, as well as human factors research and applications. Topics include modeling and simulation methods in semiconductor operations, supply chain management issues, employee training methods and workplaces optimization, as well as smart software and hardware solutions for semiconductor manufacturing. By highlighting industrially relevant developments and discussing open issues related to digital transformation, the book offers a timely, practice-oriented guide to graduate students, researchers and professionals interested in the digital transformation of manufacturing domains and work environments. .
