Complexity Challenges in Development of
Cyber-Physical Systems

#	Paper	IF	Citations
31	How to Deal with the Complexity of Future Cyber-Physical Systems?. *Designs*, **2018**, 2, 40	1.8	26
30	Emergence in cyber-physical systems: potential and risk. *Frontiers of Information Technology and Electronic Engineering*, **2020**, 21, 1554-1566	2.2	0
29	System-level co-simulation for embedded systems. *AIP Advances*, **2020**, 10, 035113	1.5	1
28	A Conceptual Model for Mitigation of Root Causes of Uncertainty in Cyber-Physical Systems. *Communications in Computer and Information Science*, **2021**, 9-17	0.3	
27	Dependable and Efficient Cloud-Based Safety-Critical Applications by Example of Automated Valet Parking. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2021**, 90-109	0.2	2
26	Encyclopedia of Cryptography, Security and Privacy. **2021**, 1-3		
25	Model-Based Testing in Practice: An Industrial Case Study using GraphWalker. **2021**,		1
24	Understand and Control Complexity in Cyber-Physical Systems by Analyzing Complexity Drivers. **2021**,		
23	Towards the Definition of a Strategic Complexity Management Framework for Complex Industrial Systems. **2021**,		0
22	Case Studies Key-Findings of a Strategic Complexity Management Framework for Industrial Manufacturing Systems. **2021**,		0
21	Digital Engineering Development in an Academic CubeSat Project. *Journal of Aerospace Information Systems*, 1-12	1	0
20	Communication Systems. **2019**, 89-99		
19	Cyber-Physical Systems Are Different. **2019**, 69-75		
18	Complexity-Oriented Description of Cyber-Physical Systems. *Lecture Notes in Production Engineering*, **2021**, 602-610	0	0
17	Cyber-Physical Systems as Sources of Dynamic Complexity in Cyber-Physical-Systems of Systems. **2020**,		
16	Using Knowledge Synthesis to Identify Multi-dimensional Risk Factors in IoT Assets. *Communications in Computer and Information Science*, **2021**, 176-197	0.3	0
15	Requirements Elicitation for an Assistance System for Complexity Management in Product Development of SMEs during COVID-19: A Case Study. *Computers*, **2021**, 10, 149	1.9	

14	A Model of Continuous Integration and Deployment of Engineering Software. *Lecture Notes in Networks and Systems*, **2021**, 789-796	0.5	2
13	Uncertainty handling in cyber physical systems: State-of-the-art approaches, tools, causes, and future directions. *Journal of Software: Evolution and Process*,	1	1
12	Blockchain for IoT-Based Cyber-Physical Systems (CPS): Applications and Challenges. *Lecture Notes on Data Engineering and Communications Technologies*, **2022**, 81-111	0.4	
11	Design of Educational Scenarios with BigFoot Walking Robot: A Cyber-physical System Perspective to Pedagogical Rehabilitation. *Lecture Notes in Computer Science*, **2022**, 259-269	0.9	
10	Complexity-oriented design for cyber-physical systems. *Procedia CIRP*, **2022**, 109, 203-208	1.8	
9	Temporal Multi-view Contracts for Efficient Test Models. *Communications in Computer and Information Science*, **2022**, 136-151	0.3	
8	Engineering Complexity beyond the surface: Discerning the viewpoints, the drivers, and the challenges.	0	
7	Governance in Cyber-Physical Systems. **2023**, 1-3	0	
6	Adopting microservices and DevOps in the cyber-physical systems domain: A rapid review and case study.	0	
5	Towards a Holistic and Functional Model-Based Design Method for Mechatronic Cyber-Physical Systems. 1-55	0	
4	Prioritizing the Barriers to the Adoption of Cyber-Physical Systems in Manufacturing Organizations Using Fuzzy AHP. **2023**, 554-567	0	
3	Towards a method to quantitatively measure toolchain interoperability in the engineering lifecycle: A case study of digital hardware design. **2023**, 86, 103744	0	
2	DLR Institute of Systems Engineering for Future Mobility Technical Trustworthiness as a Basis for Highly Automated and Autonomous Systems. **2022**, 25, 9-14	0	
1	Engineering complexity beyond the surface: discerning the viewpoints, the drivers, and the challenges.	0	