

# Boris Sokolov

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

118  
papers

4,501  
citations

31  
h-index

66  
g-index

125  
ext. papers

5,411  
ext. citations

2.9  
avg, IF

6.59  
L-index

#	Paper	IF	Citations
118	Cyber-Physical System Adaptation in One Control Problem for Supply Chain. <i>Lecture Notes in Control and Information Sciences - Proceedings</i> , <b>2022</b> , 591-597	0.2	
117	Cloud supply chain: Integrating Industry 4.0 and digital platforms in the Supply Chain-as-a-Service. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , <b>2022</b> , 160, 102676	9	20
116	A control approach to scheduling flexibly configurable jobs with dynamic structural-logical constraints. <i>IIE Transactions</i> , <b>2021</b> , 53, 21-38	3.3	33
115	An Empirical Examination of the Consistency Ratio in the Analytic Hierarchy Process (AHP). <i>IFIP Advances in Information and Communication Technology</i> , <b>2021</b> , 477-485	0.5	0
114	A Probabilistic Estimation of Perfect Order Parameters. <i>IFIP Advances in Information and Communication Technology</i> , <b>2021</b> , 447-454	0.5	0
113	Reconfigurable supply chain: the X-network. <i>International Journal of Production Research</i> , <b>2020</b> , 58, 4138-4163	7.4	146
112	Integrated Scheduling of Information Services and Logistics Flows in the Omnichannel System. <i>Profiles in Operations Research</i> , <b>2020</b> , 125-140	1	
111	Application of Cyber-Physical System and Real-Time Control Construction Algorithm in Supply Chain Management Problem. <i>Studies in Computational Intelligence</i> , <b>2020</b> , 394-403	0.8	1
110	Methodology of Complex Objects Structural Dynamics Proactive Management and Control Theory and Its Application. <i>Lecture Notes in Networks and Systems</i> , <b>2020</b> , 169-177	0.5	1
109	Control of inventory dynamics: A survey of special cases for products with low demand. <i>Annual Reviews in Control</i> , <b>2020</b> , 49, 306-320	10.3	1
108	Problems of Socio-Cyber-Physical Systems Development and Implementation: State-of-Art and Directs of Research. <i>Advances in Intelligent Systems and Computing</i> , <b>2020</b> , 596-606	0.4	
107	Introduction to Scheduling in Industry 4.0 and Cloud Manufacturing Systems. <i>Profiles in Operations Research</i> , <b>2020</b> , 1-9	1	5
106	Proactive Scheduling and Reactive Real-Time Control in Industry 4.0. <i>Profiles in Operations Research</i> , <b>2020</b> , 11-37	1	4
105	Combined approach to the complex objects control and stability analysis of management decisions. <i>International Journal of Risk Assessment and Management</i> , <b>2020</b> , 23, 106	0.9	4
104	Blockchain-oriented dynamic modelling of smart contract design and execution in the supply chain. <i>International Journal of Production Research</i> , <b>2020</b> , 58, 2184-2199	7.8	187
103	A Model-Oriented System for Operational Forecasting of River Floods. <i>Herald of the Russian Academy of Sciences</i> , <b>2019</b> , 89, 405-417	0.7	4
102	Ripple Effect in the Supply Chain: Definitions, Frameworks and Future Research Perspectives. <i>Profiles in Operations Research</i> , <b>2019</b> , 1-33	1	12

101	Digital Supply Chain Twins: Managing the Ripple Effect, Resilience, and Disruption Risks by Data-Driven Optimization, Simulation, and Visibility. <i>Profiles in Operations Research</i> , <b>2019</b> , 309-332	1	45
100	Performance Impact Analysis of Disruption Propagations in the Supply Chain. <i>Profiles in Operations Research</i> , <b>2019</b> , 163-180	1	
99	Simultaneous structural-operational control of supply chain dynamics and resilience. <i>Annals of Operations Research</i> , <b>2019</b> , 283, 1191-1210	3.2	37
98	A Model of an Integrated Analytics Decision Support System for Situational Proactive Control of Recovery Processes in Service-Modularized Supply Chain. <i>Profiles in Operations Research</i> , <b>2019</b> , 129-144 <sup>1</sup>		
97	Multiple-Model Description and Control Construction Algorithm of Supply Chain. <i>Advances in Intelligent Systems and Computing</i> , <b>2019</b> , 102-108	0.4	1
96	The impact of digital technology and Industry 4.0 on the ripple effect and supply chain risk analytics. <i>International Journal of Production Research</i> , <b>2019</b> , 57, 829-846	7.8	549
95	Integrated detection of disruption scenarios, the ripple effect dispersal and recovery paths in supply chains. <i>Annals of Operations Research</i> , <b>2019</b> , 1	3.2	40
94	Segmentation Algorithm for the Evolutionary Biological Objects Images on a Complex Background. <i>Advances in Intelligent Systems and Computing</i> , <b>2019</b> , 151-171	0.4	
93	Model-Algorithmic Support for Abilities Calculating of Control System Based on Projection Operators. <i>Advances in Intelligent Systems and Computing</i> , <b>2019</b> , 342-348	0.4	1
92	Intellectualization of control: cyber-physical supply chain risk analytics. <i>IFAC-PapersOnLine</i> , <b>2019</b> , 52, 355-360	0.7	4
91	Methodology and integrated modeling technologies for synthesis of cyber-physical production systems modernization programs and plans. <i>IFAC-PapersOnLine</i> , <b>2019</b> , 52, 642-647	0.7	3
90	Modification of Multiple-model Description and Planning and Update Control Algorithms of Supply Chain. <i>IFAC-PapersOnLine</i> , <b>2019</b> , 52, 1972-1977	0.7	1
89	Comparison of ERP Systems with Blockchain Platform. <i>Advances in Intelligent Systems and Computing</i> , <b>2019</b> , 240-247	0.4	0
88	Scheduling in production, supply chain and Industry 4.0 systems by optimal control: fundamentals, state-of-the-art and applications. <i>International Journal of Production Research</i> , <b>2019</b> , 57, 411-432	7.8	142
87	. <i>IEEE Transactions on Engineering Management</i> , <b>2018</b> , 65, 303-315	2.6	74
86	Ripple effect in the supply chain: an analysis and recent literature. <i>International Journal of Production Research</i> , <b>2018</b> , 56, 414-430	7.8	316
85	Optimal Control Algorithms and Their Analysis for Short-Term Scheduling in Manufacturing Systems. <i>Algorithms</i> , <b>2018</b> , 11, 57	1.8	17
84	Simulation Vs. Optimization Approaches to Ripple Effect Modelling in the Supply Chain. <i>Lecture Notes in Logistics</i> , <b>2018</b> , 34-39	0.5	4

83	Structural Analysis and Animated Simulation of Biotechnical Position-Velocity Control System of a Robot-Manipulator. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 222-232	0.9	4
82	Dynamic Models of Self-organization Through Mass Behavior in Society. <i>Advances in Intelligent Systems and Computing</i> , <b>2018</b> , 114-123	0.4	2
81	Scheduling of recovery actions in the supply chain with resilience analysis considerations. <i>International Journal of Production Research</i> , <b>2018</b> , 56, 6473-6490	7.8	64
80	Multiple-model description and generalised algorithm of ship-building wharf scheduling. <i>International Journal of Service and Computing Oriented Manufacturing</i> , <b>2018</b> , 3, 238	0	
79	CONTROL THEORY APPLICATIONS TO OPERATIONS SYSTEMS, SUPPLY CHAIN MANAGEMENT AND INDUSTRY 4.0 NETWORKS. <i>IFAC-PapersOnLine</i> , <b>2018</b> , 51, 1536-1541	0.7	13
78	Dynamic analysis of space robot remote control system <b>2018</b> ,		5
77	A survey on control theory applications to operational systems, supply chain management, and Industry 4.0. <i>Annual Reviews in Control</i> , <b>2018</b> , 46, 134-147	10.3	97
76	Minimization of disruption-related return flows in the supply chain. <i>International Journal of Production Economics</i> , <b>2017</b> , 183, 503-513	9.3	55
75	Literature review on disruption recovery in the supply chain*. <i>International Journal of Production Research</i> , <b>2017</b> , 55, 6158-6174	7.8	296
74	Optimal control representation of the mathematical programming model for supply chain dynamic reconfiguration. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 4994-4999	0.7	4
73	Mathematical model and algorithm of operation scheduling for monitoring situation in local waters. <i>MATEC Web of Conferences</i> , <b>2017</b> , 113, 02012	0.3	
72	A Dynamic Approach to Multi-stage Job Shop Scheduling in an Industry 4.0-Based Flexible Assembly System. <i>IFIP Advances in Information and Communication Technology</i> , <b>2017</b> , 475-482	0.5	8
71	<b>2017</b> ,		1
70	Methodology and Structure Adaptation Algorithm for Complex Technical Objects Reconfiguration Models. <i>Advances in Intelligent Systems and Computing</i> , <b>2017</b> , 319-328	0.4	2
69	Control Theory Application to Complex Technical Objects Scheduling Problem Solving. <i>Advances in Intelligent Systems and Computing</i> , <b>2017</b> , 172-179	0.4	
68	Structural quantification of the ripple effect in the supply chain. <i>International Journal of Production Research</i> , <b>2016</b> , 54, 152-169	7.8	100
67	Schedule coordination in cyber-physical supply networks Industry 4.0. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 839-844	7.4	32
66	Exact and heuristic methods for integrated supply chain design reliability analysis. <i>International Journal of Integrated Supply Management</i> , <b>2016</b> , 10, 206	3.8	9

65	Flexible flow shop scheduling for continuous production. <i>International Journal of Service and Computing Oriented Manufacturing</i> , <b>2016</b> , 2, 189	0	1
64	A dynamic model and an algorithm for short-term supply chain scheduling in the smart factory industry 4.0. <i>International Journal of Production Research</i> , <b>2016</b> , 54, 386-402	7.8	338
63	Schedule robustness analysis with the help of attainable sets in continuous flow problem under capacity disruptions. <i>International Journal of Production Research</i> , <b>2016</b> , 54, 3397-3413	7.8	26
62	Disruption-driven supply chain (re)-planning and performance impact assessment with consideration of pro-active and recovery policies. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , <b>2016</b> , 90, 7-24	9	101
61	Robust dynamic schedule coordination control in the supply chain. <i>Computers and Industrial Engineering</i> , <b>2016</b> , 94, 18-31	6.4	31
60	Integrated Planning and Scheduling with Dynamic Analysis and Control of Service Level and Costs. <i>Operations Research/ Computer Science Interfaces Series</i> , <b>2016</b> , 263-283	0.3	2
59	Methodological Basis of Socio-Cyber-Physical Systems Structure-Dynamics Control and Management. <i>Communications in Computer and Information Science</i> , <b>2016</b> , 610-617	0.3	9
58	Robot master slave and supervisory control with large time delays of control signals and feedback. <i>Applied Mathematical Sciences</i> , <b>2016</b> , 10, 1783-1796	0.6	13
57	<b>2016</b> ,		3
56	Conceptual and Formal Modelling of Monitoring Systems Structure-Dynamics Control. <i>Advances in Intelligent Systems and Computing</i> , <b>2016</b> , 391-401	0.4	2
55	RFID Technology for Adaptation of Complex Systems Scheduling and Execution Control Models. <i>Advances in Intelligent Systems and Computing</i> , <b>2016</b> , 433-442	0.4	1
54	Dynamic recovery policies for time-critical supply chains under conditions of ripple effect. <i>International Journal of Production Research</i> , <b>2016</b> , 54, 7245-7258	7.8	64
53	Development of intelligent information systems for operational river-flood forecasting. <i>Herald of the Russian Academy of Sciences</i> , <b>2016</b> , 86, 24-33	0.7	10
52	Disruptions in supply chains and recovery policies: state-of-the art review. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 1436-1441	0.7	24
51	Supply Chain Design With Disruption Considerations: Review of Research Streams on the Ripple Effect in the Supply Chain. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 1700-1707	0.7	22
50	Intelligent Integrated Decision Support Systems for Territory Management. <i>Advances in Intelligent Systems and Computing</i> , <b>2015</b> , 321-331	0.4	2
49	Coordination of the supply chain schedules with re-scheduling considerations. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 1509-1514	0.7	3
48	Advanced river flood monitoring, modelling and forecasting. <i>Journal of Computational Science</i> , <b>2015</b> , 10, 77-85	3.4	48

47	Integrated scheduling of material flows and information services in industry 4.0 supply networks. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 1533-1538	0.7	27
46	Ripple Effect in the Time-Critical Food Supply Chains and Recovery Policies. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 1682-1687	0.7	6
45	Analysis of position optimization method applicability in supply chain management problem <b>2015</b> ,		7
44	Integration of aggregate distribution and dynamic transportation planning in a supply chain with capacity disruptions and the ripple effect consideration. <i>International Journal of Production Research</i> , <b>2015</b> , 53, 6963-6979	7.8	45
43	Models Adaptation of Complex Objects Structure Dynamics Control. <i>Advances in Intelligent Systems and Computing</i> , <b>2015</b> , 21-33	0.4	2
42	Optimal distribution (re)planning in a centralized multi-stage supply network under conditions of the ripple effect and structure dynamics. <i>European Journal of Operational Research</i> , <b>2014</b> , 237, 758-770	5.6	126
41	The Ripple effect in supply chains: trade-off Efficiency-flexibility-resilienceIn disruption management. <i>International Journal of Production Research</i> , <b>2014</b> , 52, 2154-2172	7.8	330
40	Multiple models of information fusion processes: Quality definition and estimation. <i>Journal of Computational Science</i> , <b>2014</b> , 5, 380-386	3.4	10
39	Control theory application to spacecraft scheduling problem <b>2014</b> ,		2
38	Analysis of dynamic scheduling robustness with the help of attainable sets <b>2014</b> ,		1
37	Integrated dynamic scheduling of material flows and distributed information services in collaborative cyber-physical supply networks1 The paper is an extended version of the conference paper Ivanov D., Sokolov B. (2012c), Structure dynamics control-based service scheduling in collaborative cyber-physical supply networksin Camarinha-Matos, L., Xu, L. and Afsarmanesh, H.	2.6	14
36	Multi-stage supply chain scheduling with non-preemptive continuous operations and execution control. <i>International Journal of Production Research</i> , <b>2014</b> , 52, 4059-4077s and <i>Logistics</i> , <b>2014</b> , 1, 18-26	7.8	20
35	Complex Objects Remote Sensing Forest Monitoring and Modeling. <i>Advances in Intelligent Systems and Computing</i> , <b>2014</b> , 445-453	0.4	7
34	Dual problem formulation and its application to optimal redesign of an integrated productiondistribution network with structure dynamics and ripple effect considerations. <i>International Journal of Production Research</i> , <b>2013</b> , 51, 5386-5403	7.8	56
33	Control and system-theoretic identification of the supply chain dynamics domain for planning, analysis and adaptation of performance under uncertainty. <i>European Journal of Operational Research</i> , <b>2013</b> , 224, 313-323	5.6	151
32	Task re-allocation in temporary production networks. <i>International Journal of Integrated Supply Management</i> , <b>2013</b> , 8, 107	3.8	
31	Complex Objects Remote Sensing Monitoring and Modeling: Methodology, Technology and Practice <b>2013</b> ,		2
30	Dynamic co-ordinated scheduling in the supply chain under a process modernisation. <i>International Journal of Production Research</i> , <b>2013</b> , 51, 2680-2697	7.8	27

29	APPLICATION OF CONTROL THEORETIC TOOLS TO SUPPLY CHAIN DISRUPTION MANAGEMENT. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 1926-1931		4
28	Multi-disciplinary analysis of interfaces "Supply Chain Event Management - RFID - control theory". <i>International Journal of Integrated Supply Management</i> , <b>2013</b> , 8, 52	3.8	9
27	STRUCTURE DYNAMICS CONTROL-BASED INTEGRATION OF AGGREGATE DISTRIBUTION AND DYNAMIC TRANSPORTATION PLANNING. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 1920-1925		
26	Adaptation-Based Supply Chain Resilience. <i>Lecture Notes in Logistics</i> , <b>2013</b> , 267-287	0.5	4
25	DEVELOPING AN ADAPTIVE FRAMEWORK FOR SUSTAINABLE SUPPLY NETWORKS <b>2012</b> , 109-131		
24	Dynamic supply chain scheduling. <i>Journal of Scheduling</i> , <b>2012</b> , 15, 201-216	1.6	74
23	Applicability of optimal control theory to adaptive supply chain planning and scheduling. <i>Annual Reviews in Control</i> , <b>2012</b> , 36, 73-84	10.3	86
22	Structure dynamics control approach to supply chain planning and adaptation. <i>International Journal of Production Research</i> , <b>2012</b> , 50, 6133-6149	7.8	34
21	Intelligent technology for space and ground based monitoring of natural objects in cross-border Eu-Russia territory <b>2012</b> ,		3
20	ATTAINABLE SETS AND THEIR POSSIBLE APPLICATIONS TO SUPPLY CHAIN ANALYSIS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 578-583		
19	The inter-disciplinary modelling of supply chains in the context of collaborative multi-structural cyber-physical networks. <i>Journal of Manufacturing Technology Management</i> , <b>2012</b> , 23, 976-997	7.1	33
18	Structure Dynamics Control-Based Service Scheduling in Collaborative Cyber-Physical Supply Networks. <i>International Federation for Information Processing</i> , <b>2012</b> , 280-288		2
17	ON APPLICABILITY OF OPTIMAL CONTROL THEORY TO ADAPTIVE SUPPLY CHAIN PLANNING AND SCHEDULING. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 423-434		1
16	RFID-based Adaptive Feedbacks between Supply Chain Scheduling and Execution Control. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 435-440		1
15	Integrated supply chain planning based on a combined application of operations research and optimal control. <i>Central European Journal of Operations Research</i> , <b>2011</b> , 19, 299-317	2.2	21
14	A multi-structural framework for adaptive supply chain planning and operations control with structure dynamics considerations. <i>European Journal of Operational Research</i> , <b>2010</b> , 200, 409-420	5.6	188
13	Disaster Risk Assessment Based on Heterogeneous Geospatial Information. <i>Journal of Automation and Information Sciences</i> , <b>2010</b> , 42, 32-45	1.9	30
12	Adaptive Supply Chain Management <b>2010</b> ,		77

11	Situational Modelling for Structural Dynamics Control of Industry-Business Processes and Supply Chains. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 279-308	0.8	8
10	Integrated Adaptive Design and Planning of Supply Networks. <i>Lecture Notes in Business Information Processing</i> , <b>2010</b> , 152-163	0.6	2
9	New concept of RFID reader networks structure: hardware and software architecture <b>2009</b> ,		3
8	INTEGRATED MODELLING ENVIRONMENT FOR DECISION MAKING SUPPORT IN SUPPLY CHAIN MANAGEMENT: CONCEPTUAL APPROACH. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2009</b> , 42, 594-599		
7	ISSUES IN SUPPLY CHAIN STABILITY ESTIMATION IN FLEXIBLE SUPPLY NETWORKS AND POSSIBLE METHODS AND TOOLS FOR THEIR DECISION. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2009</b> , 42, 570-575		
6	Integrated situational modelling of industry-business processes for every stage of their life cycle <b>2008</b> ,		2
5	Integrated modelling of agile enterprise networks. <i>International Journal of Agile Systems and Management</i> , <b>2007</b> , 2, 23	1.7	16
4	A Conceptional Framework for Modeling Complex Adaptation of Collaborative Networks <b>2006</b> , 15-22		7
3	Stability Analysis in the Framework of Decision Making Under Risk and Uncertainty <b>2006</b> , 211-218		5
2	Quantitative Models of Collaborative Networks. <i>International Federation for Information Processing</i> , <b>2005</b> , 387-394		9
1	Scheduling in Production, Supply Chain and Industry 4.0 Systems by Optimal Control: Fundamentals, State-of-the-Art, and Applications. <i>SSRN Electronic Journal</i> ,	1	2