Dov Dori

List of Publications by Year
in descending order

163 papers	2,917 citations	236612 25 h-index	288905 40 g-index
169 all docs	169 docs citations	169 times ranked	1159 citing authors

#	Article	IF	Citations
1	The Model Fidelity Hierarchy: From Text to Conceptual, Computational, and Executable Model. IEEE Systems Journal, 2021, 15, 1287-1298.	2.9	2
2	Assessing Novelty and Systems Thinking in Conceptual Models of Technological Systems. IEEE Transactions on Education, 2021, 64, 155-162.	2.0	10
3	Improving Conceptual Modeling with Object-Process Methodology Stereotypes. Applied Sciences (Switzerland), 2021, 11, 2301.	1.3	4
4	Gaining Insights into Conceptual Models: A Graph-Theoretic Querying Approach. Applied Sciences (Switzerland), 2021, 11, 765.	1.3	14
5	Object-Process Methodology as an Alternative to Human Factors Task Analysis. Human Factors, 2021, , 001872082110483.	2.1	1
6	Business process improvement using Object‐Process Methodology. Systems Engineering, 2020, 23, 36-48.	1.6	6
7	System Definition, System Worldviews, and Systemness Characteristics. IEEE Systems Journal, 2020, 14, 1538-1548.	2.9	25
8	Model-Based Systems Thinking: Assessing Engineering Student Teams. IEEE Transactions on Education, 2020, 63, 39-47.	2.0	17
9	Towards an Ontology for Collaboration in System of Systems Context. Incose International Symposium, 2020, 30, 666-679.	0.2	7
10	Improving OPM Conceptual Models by Incorporating Design Structure Matrix. , 2020, , .		1
11	Incorporating Hardware-in-the-Loop Simulation into Object-Process Methodology. , 2020, , .		1
12	STEM Graduate Students' Systems Thinking, Modeling and Scientific Understanding—The Case of Food Production. Applied Sciences (Switzerland), 2020, 10, 7417.	1.3	9
13	Toward integrating systems engineering with software engineering through Object-Process Programming. International Journal of Information Technology (Singapore), 2020, , 1.	1.8	3
14	Integrating Real-Time Modeling and Assessment into a MOOC Environment for Teaching Model-Based Systems Engineering. , 2020, , .		2
15	How can OPM-based modeling disambiguate system concepts in ISO/IEC/IEEE 15288?. , 2020, , .		1
16	Model-Based Systems Engineering for Aircraft Design With Dynamic Landing Constraints Using Object-Process Methodology. IEEE Access, 2019, 7, 61494-61511.	2.6	21
17	Model-Based Diagnosis with FTTell: Assessing the Potential for Pediatric Failure to Thrive (FTT) During the Perinatal Stage. Lecture Notes in Business Information Processing, 2019, , 37-47.	0.8	7
18	Metacognition and Meta-assessment in Engineering Education. Innovations in Science Education and Technology, 2018, , 191-216.	0.1	14

#	Article	IF	Citations
19	TOWARDS A QUANTITATIVE FRAMEWORK FOR EVALUATING THE EXPRESSIVE POWER OF CONCEPTUAL SYSTEM MODELS. Insight, 2018, 21, 28-37.	0.1	1
20	Model-Based Interoperability Engineering in Systems-of-Systems and Civil Aviation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 637-648.	5.9	26
21	A Fresh Look at Systems Engineering â€" What is it, How Should it Work?. Insight, 2018, 21, 44-51.	0.1	3
22	Studentsâ€™ Collaborative Learning Attitudes and Their Satisfaction with Online Collaborative Case-Based Courses. American Journal of Distance Education, 2018, 32, 283-300.	1.0	22
23	Envisioning Systems Engineering as a Transdisciplinary Venture. Insight, 2018, 21, 52-61.	0.1	9
24	A fresh look at Systems Engineering - what is it, how should it work?. Incose International Symposium, 2018, 28, 955-970.	0.2	10
25	Envisioning Systems Engineering as a Transdisciplinary Venture. Incose International Symposium, 2018, 28, 995-1011.	0.2	13
26	What do we mean by â€œsystemâ€? â€" System Beliefs and Worldviews in the INCOSE Community. Incose International Symposium, 2018, 28, 1190-1206.	0.2	26
27	Meta-assessment in a project-based systems engineering course. Assessment and Evaluation in Higher Education, 2017, 42, 607-624.	3.9	28
28	What is a System? An Ontological Framework. Systems Engineering, 2017, 20, 207-219.	1.6	36
29	Modelâ€Based Projectâ€Product Lifecycle Management and Gantt Chart Models: A Comparative Study. Systems Engineering, 2017, 20, 447-466.	1.6	9
30	Defining â€œSystemâ€ a Comprehensive Approach. Incose International Symposium, 2017, 27, 170-186.	0.2	32
31	Minding the Cyber-Physical Gap: Model-Based Analysis and Mitigation of Systemic Perception-Induced Failure. Sensors, 2017, 17, 1644.	2.1	15
32	Model-based operational-functional unified specification for mission systems. , 2016, , .		5
33	Towards a Quantitative Framework for Evaluating the Expressive Power of Conceptual System Models. Incose International Symposium, 2016, 26, 42-57.	0.2	1
34	Model-based guidelines for user-centric satellite control software development. International Journal of Satellite Communications and Networking, 2016, 34, 295-319.	1.2	5
35	Object-Process Language: The Text. , 2016, , 123-133.		0
36	The Dynamic System Aspect. , 2016, , 157-182.		0

#	Article	IF	Citations
37	Conceptual Modeling: Purpose and Context. , 2016, , 75-96.		3
38	Model-Based Systems Engineering with OPM and SysML. , 2016, , .		149
39	When quantitative meets qualitative: enhancing OPM conceptual systems modeling with MATLAB computational capabilities. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2016, 27, 141-164.	1.2	11
40	Cognition–Based Visualization of the Dynamics of Conceptual Models: The Vivid OPM Scene Player. Systems Engineering, 2015, 18, 431-440.	1.6	5
41	Agile modeling of an evolving ballistic missile defense system with Object-Process Methodology. , 2015, , .		9
42	Model-Based System Specification With Tesperanto: Readable Text From Formal Graphics. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 1448-1458.	5.9	12
43	A comparative study of languages for model-based systems-of-systems engineering (MBSSE). , 2014, , .		3
44	Model-based protocol engineering: Specifying Kerberos with object-process methodology. , 2014, , .		1
45	Presence-awareness: A conceptual model-based systems biology approach. , 2014, , .		3
46	Operation room tool handling and miscommunication scenarios: An object-process methodology conceptual model. Artificial Intelligence in Medicine, 2014, 62, 153-163.	3.8	7
47	5.3.2 Conceptual Modeling of System–Based Decision–Making. Incose International Symposium, 2014, 24, 463-478.	0.2	5
48	Defining Object-Process Methodology in Web Ontology Language for Semantic Mediation. , 2014, , .		0
49	Modeling Software Agent Awareness of Physical-Informatical Essence Duality. , 2014, , .		5
50	Transactional distance in an undergraduate project-based systems modeling course. Knowledge-Based Systems, 2014, 71, 41-51.	4.0	10
51	Conceptual Modeling of mRNA Decay Provokes New Hypotheses. PLoS ONE, 2014, 9, e107085.	1.1	27
52	Improving Project–Product Lifecycle Management with Model–Based Design Structure Matrix: A joint project management and systems engineering approach. Systems Engineering, 2013, 16, 413-426.	1.6	43
53	Physical-Informatical Essence-Duality-Aware Generic Modeling of Threat Handling Processes. , 2013, , .		4
54	Constructing and Evaluating "as-is" and "to-be" OPM Models for the Healthcare Sector for Adoption of Vscan. Procedia Computer Science, 2013, 16, 413-422.	1.2	3

#	Article	IF	Citations
55	A Model‐Based Approach to Unifying Disparate Project Management Tools for Project Classification and Customized Management. Incose International Symposium, 2013, 23, 960-972.	0.2	4
56	An OPM conceptual model‐based executable simulation environment: Implementation and evaluation. Systems Engineering, 2013, 16, 381-390.	1.6	22
57	Conceptual Modeling Semantics for the Physical-Informatical Essence Duality Problem. , 2013, , .		8
58	Model-based risk-oriented robust systems design with object-process methodology. International Journal of Strategic Engineering Asset Management, 2013, 1, 331.	0.6	8
59	3.5.2 Tesperanto â€" A Model‐Based System Specification Methodology and Language. Incose International Symposium, 2013, 23, 139-153.	0.2	6
60	6.5.1 I⁵: A Model‐Based Framework for Architecting System‐of‐Systems Interoperability, Interconnectivity, Interfacing, Integration, and Interaction. Incose International Symposium, 2013, 23, 1234-1255.	0.2	13
61	The human spatiotemporal comfort zone and its technology-based enhancement. , 2012, , .		0
62	A Model-Based Approach for Planning Work Breakdown Structures of Complex Systems Projects. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1083-1088.	0.4	5
63	Integrating the Project with the Product for Applied Systems Engineering Management. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1153-1158.	0.4	2
64	The use of visual semantic web for designing virtual expeditions. International Journal of Learning Technology, 2012, 7, 297.	0.2	0
65	Global collaboration and Transactional Distance - Development of a TD assessment instrument for the VISIONAIR project. , 2012, , .		2
66	Conceptual Model-Based Systems Biology: Mapping Knowledge and Discovering Gaps in the mRNA Transcription Cycle. PLoS ONE, 2012, 7, e51430.	1.1	17
67	A graph grammar-based formal validation of object-process diagrams. Software and Systems Modeling, 2012, 11, 287-302.	2.2	3
68	Model-based approaches and frameworks for embedded software systems. Innovations in Systems and Software Engineering, 2012, 8, 1-2.	1.6	0
69	Modeling Design Patterns for Semi-Automatic Reuse in System Design. , 2012, , 29-56.		0
70	OPM Model-Driven Animated Simulation with Computational Interface to Matlab. , 2011, , .		0
71	5.6.1 Model‐Based Standards Authoring: This research is supported by EU FP7 VISIONAIR â€•A World‐class infrastructure for Advanced 3D visualization‐based research. Incose International Symposium, 2011, 21, 650-659.	0.2	5
72	Generating SysML views from an OPM model: Design and evaluation. Systems Engineering, 2011, 14, 327-340.	1.6	20

#	Article	IF	Citations
73	COIM: An object–process based method for analyzing architectures of complex, interconnected, large-scale socio-technical systems. Systems Engineering, 2011, 14, 364-382.	1.6	19
74	Project management vs. systems engineering management: A practitioners' view on integrating the project and product domains. Systems Engineering, 2011, 14, 427-440.	1.6	59
75	Humans, semantic services and similarity: A user study of semantic Web services matching and composition. Web Semantics, 2011, 9, 16-28.	2.2	15
76	Object-Process Methodology for Structure-Behavior Co-Design. , 2011, , 209-258.		13
77	11.3.1 Systems Engineers' Perceptions on the Adequacy of Project Management Methods for Systems Engineering Management. Incose International Symposium, 2010, 20, 1366-1379.	0.2	0
78	An Object-Process-Based Modeling Language for Multiagent Systems. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2010, 40, 227-241.	3.3	9
79	Model-based meta-standardization. , 2010, , .		7
80	Modeling Design Patterns for Semi-Automatic Reuse in System Design. Journal of Database Management, 2010, 21, 29-57.	1.0	3
81	Creating SysML views from an OPM model. , 2009, , .		5
82	A methodology for eliciting and modeling exceptions. Journal of Biomedical Informatics, 2009, 42, 736-747.	2.5	35
83	Reusing semi-specified behavior models in systems analysis and design. Software and Systems Modeling, 2009, 8, 221-234.	2.2	2
84	Bridging the requirements–implementation modeling gap with object–process methodology. Innovations in Systems and Software Engineering, 2009, 5, 27-34.	1.6	1
85	OPM model based simulation environment for systems engineering conceptualization phase. , 2009, , .		0
86	1.3.2 Is There a Complete Project Plan? A Model–Based Project Planning Approach. Incose International Symposium, 2009, 19, 96-109.	0.2	13
87	6.1.2 Generating SysML Views from an OPM Model: Design and Evaluation. Incose International Symposium, 2009, 19, 879-893.	0.2	0
88	From conceptual models to schemata: An object-process-based data warehouse construction method. Information Systems, 2008, 33, 567-593.	2.4	16
89	Situation-Based Access Control: Privacy management via modeling of patient data access scenarios. Journal of Biomedical Informatics, 2008, 41, 1028-1040.	2.5	82
90	THE APPLICATION-BASED DOMAIN ANALYSIS APPROACH AND ITS OBJECT-PROCESS METHODOLOGY IMPLEMENTATION. International Journal of Software Engineering and Knowledge Engineering, 2008, 18, 1115-1142.	0.6	4

#	Article	IF	Citations
91	Words from pictures for dual-channel processing. Communications of the ACM, 2008, 51, 47-52.	3.3	14
92	9.2.2 Evaluating Aspects of Systems Modeling Languages by Example: SysML and OPM. Incose International Symposium, 2008, 18, 1023-1037.	0.2	4
93	Towards a Unified Product and Project Lifecycle Model (PPLM) for Systems Engineering. , 2008, , .		2
94	8.2.2 A Project–Product Lifecycle Management approach for improved systems engineering practices. Incose International Symposium, 2008, 18, 942-957.	0.2	14
95	Object-Process Methodology. , 2008, , 421-434.		1
96	A semantic approach to approximate service retrieval. ACM Transactions on Internet Technology, 2007, 8, 2.	3.0	34
97	Systems Modeling Languages: OPM Versus SysML. , 2007, , .		21
98	SOA for services or UML for objects: Reconciliation of the battle of giants with Object-Process Methodology. , 2007, , .		1
99	Classifying and Modeling Exceptions through Object Process Methodology. , 2007, , .		6
100	Conceptual Modeling in Systems Biology Fosters Empirical Findings: The mRNA Lifecycle. PLoS ONE, 2007, 2, e872.	1.1	24
101	Analyzing Object-Oriented Design Patterns from an Object-Process Viewpoint. Lecture Notes in Computer Science, 2006, , 186-197.	1.0	2
102	Object-Process Methodology. , 2006, , 683-693.		1
103	Modelling code mobility and migration: an OPM/Web approach. International Journal of Web Engineering and Technology, 2005, 2, 6.	0.1	5
104	OPM vs. UML—Experimenting with Comprehension and Construction of Web Application Models. Empirical Software Engineering, 2005, 10, 57-80.	3.0	41
105	Aligning an ERP system with enterprise requirements: An object-process based approach. Computers in Industry, 2005, 56, 639-662.	5.7	61
106	Automatically Grounding Semantically-Enriched Conceptual Models to Concrete Web Services. Lecture Notes in Computer Science, 2005, , 304-319.	1.0	9
107	A Reflective Meta-Model of Object-Process Methodology. , 2005, , 130-173.		13
108	OBJECT-PROCESS METHODOLOGY AND ITS APPLICATIONS TO IMAGE PROCESSING AND PATTERN RECOGNITION. , 2005, , 559-582.		0

#	Article	IF	Citations
109	ViSWeb - the Visual Semantic Web: unifying human and machine knowledge representations with Object-Process Methodology. VLDB Journal, 2004, 13, 120-147.	2.7	19
110	OPCATeam â€" Collaborative Business Process Modeling with OPM. Lecture Notes in Computer Science, 2004, , 66-81.	1.0	5
111	SMART: System Model Acquisition from Requirements Text. Lecture Notes in Computer Science, 2004, , 179-194.	1.0	6
112	ERP modeling: a comprehensive approach. Information Systems, 2003, 28, 673-690.	2.4	99
113	Single-model method for specifying multi-agent systems. , 2003, , .		25
114	System function and architecture. Communications of the ACM, 2003, 46, 67-72.	3.3	141
115	Visual interfaces for a semantic content-based image retrieval system. , 2003, , .		0
116	Developing Complex Systems with Object-Process Methodology Using OPCAT. Lecture Notes in Computer Science, 2003, , 570-572.	1.0	31
117	An OPM-Based Metamodel of System Development Process. Lecture Notes in Computer Science, 2003, , 105-117.	1.0	15
118	Why significant UML change is unlikely. Communications of the ACM, 2002, 45, 82-85.	3.3	48
119	OPM/Web â€" Object-Process Methodology for Developing Web Applications. Annals of Software Engineering, 2002, 13, 141-161.	0.5	21
120	Extended Summary of the Arc Segmentation Contest. Lecture Notes in Computer Science, 2002, , 343-349.	1.0	22
121	Object-Process Methodology. , 2002, , .		300
122	Modelling Off-the-Shelf Information Systems Requirements: An Ontological Approach. Requirements Engineering, 2001, 6, 183-199.	2.1	51
123	Object-Process Methodology Applied to Modeling Credit Card Transactions. Journal of Database Management, 2001, 12, 4-14.	1.0	28
124	Detection and correction of recognition errors in check reading. International Journal on Document Analysis and Recognition, 2000, 2, 211-221.	2.7	7
125	Cost Evaluation of Interactively Correcting Recognized Engineering Drawings. Lecture Notes in Computer Science, 2000, , 329-334.	1.0	1
126	Impact of Sparse Pixel Vectorization Algorithm Parameters on Line Segmentation Performance. Lecture Notes in Computer Science, 2000, , 335-344.	1.0	1

#	Article	IF	Citations
127	Principles of Constructing a Performance Evaluation Protocol for Graphics Recognition Algorithms. Computational Imaging and Vision, 2000, , 81-90.	0.6	1
128	Syntactic and Semantic Graphics Recognition: The Role of the Object-Process Methodology. Lecture Notes in Computer Science, 2000, , 277-287.	1.0	3
129	From Raster to Vectors: Extracting Visual Information from Line Drawings. Pattern Analysis and Applications, 1999, 2, 10-21.	3.1	39
130	Object-process based graphics recognition class library: principles and applications. , 1999, 29, 1355-1378.		0
131	Document Analysis Systems Development and Representation through the Object-Process Methodology. Lecture Notes in Computer Science, 1999, , 271-282.	1.0	0
132	From Object-Process Diagrams to a Natural Object-Process Language. Lecture Notes in Computer Science, 1999, , 221-228.	1.0	0
133	Segmentation and Recognition of Dimensioning Text from Engineering Drawings. Computer Vision and Image Understanding, 1998, 69, 196-201.	3.0	24
134	A Generic Integrated Line Detection Algorithm and Its Object–Process Specification. Computer Vision and Image Understanding, 1998, 70, 420-437.	3.0	21
135	Semantic content based image retrieval using object-process diagrams. Lecture Notes in Computer Science, 1998, , 15-30.	1.0	4
136	OPCAT - Object-Process Case Tool: an Integrated System Engineering Environment (ISEE). Lecture Notes in Computer Science, 1998, , 555-556.	1.0	0
137	<title>Improving the arc detection method in the machine drawing understanding system</title>. , 1997, , .		0
138	A protocol for performance evaluation of line detection algorithms. Machine Vision and Applications, 1997, 9, 240-250.	1.7	92
139	System modeling of the R&D domain through the object-process methodology: a practical tool to help R&D satisfy its customers' needs. R and D Management, 1997, 27, 333-344.	3.0	12
140	Orthogonal Zig-Zag: An algorithm for vectorizing engineering drawings compared with Hough Transform. Advances in Engineering Software, 1997, 28, 11-24.	1.8	36
141	THE REPRESENTATION OF DOCUMENT STRUCTURE: A GENERIC OBJECT-PROCESS ANALYSIS. , 1997, , 421-456.		19
142	INTERPRETATION OF ENGINEERING DRAWINGS. , 1997, , 457-484.		9
143	From object-process analysis to object-process design. Annals of Software Engineering, 1996, 2, 25-50.	0.5	15
144	A scheme for 3D object reconstruction from dimensioned orthographic views. Engineering Applications of Artificial Intelligence, 1996, 9, 53-64.	4.3	14

#	Article	IF	Citations
145	A temporal database with data dependencies: A key to computer integrated manufacturing. International Journal of Computer Integrated Manufacturing, 1996, 9, 89-104.	2.9	5
146	Vector-based segmentation of text connected to graphics in engineering drawings. Lecture Notes in Computer Science, 1996, , 322-331.	1.0	25
147	Object-process analysis of computer integrated manufacturing documentation and inspection functions. International Journal of Computer Integrated Manufacturing, 1996, 9, 339-353.	2.9	20
148	How to win a dashed line detection contest. Lecture Notes in Computer Science, 1996, , 286-300.	1.0	31
149	Object-process based segmentation and recognition of ANSI and ISO standard dimensioning texts. Lecture Notes in Computer Science, 1996, , 212-232.	1.0	2
150	From engineering drawings to 3D cad models: are we ready now?. CAD Computer Aided Design, 1995, 27, 243-254.	1.4	67
151	Representing pattern recognition-embedded systems through object-process diagrams: the case of the machine drawing understanding system. Pattern Recognition Letters, 1995, 16, 377-384.	2.6	14
152	Object-process Analysis: Maintaining the Balance Between System Structure and Behaviour. Journal of Logic and Computation, 1995, 5, 227-249.	0.5	85
153	Shape, Structure and Pattern Recognition. , 1995, , .		8
154	Sparse-pixel recognition of primitives in engineering drawings. Machine Vision and Applications, 1993, 6, 69-82.	1.7	59
155	<title>Automating measurement from standard radiographs</title>. , 1993, 1827, 157.		1
156	<title>Extraction of text boxes from engineering drawings</title>. , 1992, , .		8
157	Orthogonal Zig-Zag: An Efficient Method for Extracting Straight Lines from Engineering Drawings. , 1992, , 127-136.		13
158	Self-Structural Syntax-Directed Pattern Recognition of Dimensioning Components in Engineering Drawings. , 1992, , 359-384.		5
159	Line Drawings, Feature Extraction, and Symbol Recognition: SSPRâ€™90 Working Group Report. , 1992, , 568-569.		0
160	A syntactic/geometric approach to recognition of dimensions in engineering machine drawings. Computer Vision, Graphics, and Image Processing, 1989, 47, 271-291.	1.1	59
161	The grammar of dimensions in machine drawings. Computer Vision, Graphics, and Image Processing, 1988, 42, 1-18.	1.1	34
162	Object-Process Methodology. , 0, , 1208-1220.		11

#	Article	IF	Citations
163	Humans, Semantic Services and Similarity: A User Study of Semantic Web Services Matching and Composition. SSRN Electronic Journal, 0, , .	0.4	0