Wouter R. van Joolingen

List of Publications by Year
in descending order

89 papers	4,337 citations	159585 30 h-index	114465 63 g-index
94 all docs	94 docs citations	94 times ranked	2230 citing authors

#	Article	IF	Citations
1	An Educational Reconstruction of Special Relativity Theory for Secondary Education. Science and Education, 2023, 32, 57-100.	2.7	9
2	Studentsâ€™ self-reported well-being under corona measures, lessons for the future. Heliyon, 2022, 8, e08733.	3.2	9
3	You escaped! How did you learn during gameplay?. British Journal of Educational Technology, 2022, 53, 1430-1458.	6.3	8
4	Environmental Citizenship of Dutch Lower Secondary Students. , 2022, 14, .		0
5	Prior knowledge of potential energy and the understanding of quantum mechanics. Physics Education, 2022, 57, 025012.	0.5	3
6	Involving Teachers in the Design Process of a Teaching and Learning Trajectory to Foster Studentsâ€™ Systems Thinking. , 2022, , 41-62.		0
7	Engaging Preuniversity Students in Sustainability and Life Cycle Assessment in Upper-Secondary Chemistry Education: The Case of Polylactic Acid (PLA). Journal of Chemical Education, 2022, 99, 2991-2998.	2.3	1
8	Developing and Integrating an Augmented Reality App for Teaching and Learning About Enzymes. Gaming Media and Social Effects, 2021, , 137-150.	0.7	1
9	Online lesson study: virtual teaming in a new normal. International Journal for Lesson and Learning Studies, 2021, 10, 217-229.	0.9	13
10	Pre-university studentsâ€™ conceptions regarding radiation and radioactivity in a medical context. International Journal of Science Education, 2021, 43, 179-196.	1.9	5
11	Stimulating Mechanistic Reasoning in Physics Using Student-Constructed Stop-Motion Animations. Journal of Science Education and Technology, 2021, 30, 777-790.	3.9	2
12	Teaching and learning special relativity theory in secondary and lower undergraduate education: A literature review. Physical Review Physics Education Research, 2021, 17, .	2.9	17
13	Secondary Science Teachersâ€™ Views on Environmental Citizenship in The Netherlands. Sustainability, 2021, 13, 7963.	3.2	7
14	Lesson study as a research approach: a case study. International Journal for Lesson and Learning Studies, 2021, 10, 286-301.	0.9	5
15	Fostering Studentsâ€™ Understanding of Complex Biological Systems. CBE Life Sciences Education, 2021, 20, ar37.	2.3	10
16	Teachersâ€™ and educatorsâ€™ perspectives on systems thinking and its implementation in Dutch biology education. Journal of Biological Education, 2020, 54, 485-496.	1.5	21
17	Escape education: A systematic review on escape rooms in education. Educational Research Review, 2020, 31, 100364.	7.8	117
18	Student-Generated Stop-Motion Animation in Science Classes: a Systematic Literature Review. Journal of Science Education and Technology, 2020, 29, 797-812.	3.9	17

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19	Bringing systems thinking into the classroom. International Journal of Science Education, 2020, 42, 1253-1280.	1.9	32
20	Escape boxes: Bringing escape room experience into the classroom. British Journal of Educational Technology, 2020, 51, 1220-1239.	6.3	47
21	Pre-university studentsâ€™ perceptions about the life cycle of bioplastics and fossil-based plastics. Chemistry Education Research and Practice, 2020, 21, 908-921.	2.5	12
22	Assessing studentsâ€™ understanding of models of biological processes: a revised framework. International Journal of Science Education, 2019, 41, 981-994.	1.9	17
23	Designing an Intrinsically Integrated Educational Game on Newtonian Mechanics. Lecture Notes in Computer Science, 2019, , 123-133.	1.3	4
24	Key topics for quantum mechanics at secondary schools: a Delphi study into expert opinions. International Journal of Science Education, 2019, 41, 349-366.	1.9	32
25	Virtual Reality Enzymes: An Interdisciplinary and International Project Towards an Inquiry-Based Pedagogy. Gaming Media and Social Effects, 2019, , 45-54.	0.7	5
26	Drawing-Based Modeling in Teaching Elementary Biology as a Diagnostic Tool. Models and Modeling in Science Education, 2019, , 131-145.	0.6	6
27	Revealing the balancing act of vertical and shared leadership in Teacher Design Teams. Teaching and Teacher Education, 2018, 72, 1-12.	3.2	14
28	Stimulating Scientific Reasoning with Drawing-Based Modeling. Journal of Science Education and Technology, 2018, 27, 45-56.	3.9	14
29	A qualitative analysis of teacher design teams: In-depth insights into their process and links with their outcomes. Studies in Educational Evaluation, 2017, 55, 135-144.	2.3	14
30	Insights into teaching quantum mechanics in secondary and lower undergraduate education. Physical Review Physics Education Research, 2017, 13, .	2.9	110
31	A Germ for Young European Scientists: Drawing-Based Modelling. Gaming Media and Social Effects, 2017, , 13-28.	0.7	2
32	A serious game for interactive teaching of Newton's laws. , 2016, , .		6
33	VR biology, an interdisciplinary and international student project towards an inquiry-based pedagogy. , 2016, , .		1
34	Investigating an intervention to support computer simulation use in whole-class teaching. Learning: Research and Practice, 2016, 2, 27-43.	0.4	0
35	Bouncing droplets: a classroom experiment to visualize wave-particle duality on the macroscopic level. European Journal of Physics, 2016, 37, 055706.	0.6	2
36	Understanding Elementary Astronomy by Making Drawing-Based Models. Journal of Science Education and Technology, 2015, 24, 256-264.	3.9	22

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37	Understanding teacher design teams â€“ A mixed methods approach to developing a descriptive framework. Teaching and Teacher Education, 2015, 51, 213-224.	3.2	43
38	Inquiry-Based Whole-Class Teaching with Computer Simulations in Physics. International Journal of Science Education, 2015, 37, 1225-1245.	1.9	45
39	GearSketch: an adaptive drawing-based learning environment for the gears domain. Educational Technology Research and Development, 2014, 62, 555-570.	2.8	2
40	Using selfâ€made drawings to support modelling in science education. British Journal of Educational Technology, 2013, 44, 82-94.	6.3	21
41	SimSketch: Multiagent Simulations Based on Learner-Created Sketches for Early Science Education. IEEE Transactions on Learning Technologies, 2013, 6, 208-216.	3.2	21
42	Model-Based Diagnosis for Regulative Support in Inquiry Learning. Springer International Handbooks of Education, 2013, , 589-600.	0.1	6
43	Collaborative drawing on a shared digital canvas in elementary science education: The effects of script and task awareness support. International Journal of Computer-Supported Collaborative Learning, 2013, 8, 427-453.	3.0	38
44	Investigating Ecosystems as a Blended Learning Experience. Science, 2013, 340, 1537-1538.	12.6	15
45	Drawing-Based Simulation for Primary School Science Education: An Experimental Study of the GearSketch Learning Environment. , 2012, , .		6
46	The learning effects of computer simulations in science education. Computers and Education, 2012, 58, 136-153.	8.3	572
47	Using scenarios to design complex technology-enhanced learning environments. Educational Technology Research and Development, 2012, 60, 883-901.	2.8	43
48	What Can Be Learned from Computer Modeling? Comparing Expository and Modeling Approaches to Teaching Dynamic Systems Behavior. Journal of Science Education and Technology, 2012, 21, 267-275.	3.9	29
49	Support of the collaborative inquiry learning process: influence of support on task and team regulation. Metacognition and Learning, 2012, 7, 7-23.	2.7	52
50	Effects of face-to-face versus chat communication on performance in a collaborative inquiry modeling task. Computers and Education, 2011, 56, 379-387.	8.3	27
51	Learning by creating and exchanging objects: The SCY experience. British Journal of Educational Technology, 2010, 41, 909-921.	6.3	68
52	Using Drawings in Knowledge Modeling and Simulation for Science Teaching. Studies in Computational Intelligence, 2010, , 249-264.	0.9	6
53	Interaction between tool and talk: how instruction and tools support consensus building in collaborative inquiryâ€learning environments. Journal of Computer Assisted Learning, 2009, 25, 252-267.	5.1	48
54	Using Co-Lab to build System Dynamics models: Studentsâ€™ actions and on-line tutorial advice. Computers and Education, 2009, 53, 243-251.	8.3	37

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55	The relation of learnersâ€™ motivation with the process of collaborative scientific discovery learning. Educational Studies, 2009, 35, 205-222.	2.4	10
56	The Relation between Studentsâ€™ Epistemological Understanding of Computer Models and their Cognitive Processing on a Modelling Task. International Journal of Science Education, 2009, 31, 1205-1229.	1.9	74
57	Developments in Inquiry Learning. , 2009, , 21-37.		19
58	Motivation and performance within a collaborative computer-based modeling task: Relations between studentsâ€™ achievement goal orientation, self-efficacy, cognitive processing, and achievement. Contemporary Educational Psychology, 2008, 33, 58-77.	2.9	122
59	CIEL, architectures for collaborative inquiry and experiential learning. , 2007, , .		1
60	A Broker Architecture for Integration of Heterogeneous Applications for Inquiry Learning. , 2007, , .		4
61	Issues in computer supported inquiry learning in science. Journal of Computer Assisted Learning, 2007, 23, 111-119.	5.1	136
62	Supporting Communication in a Collaborative Discovery Learning Environment: the Effect of Instruction. Instructional Science, 2007, 35, 73-98.	2.0	51
63	Use of Heuristics to Facilitate Scientific Discovery Learning in a Simulation Learning Environment in a Physics Domain. International Journal of Science Education, 2006, 28, 341-361.	1.9	64
64	Modeling and Simulation in Inquiry Learning: Checking Solutions and Giving Intelligent Advice. Simulation, 2006, 82, 769-784.	1.8	24
65	Communication in collaborative discovery learning. British Journal of Educational Psychology, 2005, 75, 603-621.	2.9	47
66	Studentsâ€™ reasoning during modeling in an inquiry learning environment. Computers in Human Behavior, 2005, 21, 441-461.	8.5	56
67	Co-Lab: research and development of an online learning environment for collaborative scientific discovery learning. Computers in Human Behavior, 2005, 21, 671-688.	8.5	246
68	The Difficult Process of Scientific Modelling: An analysis of novices' reasoning during computerâ€based modelling. International Journal of Science Education, 2005, 27, 1695-1721.	1.9	94
69	Supporting collaborative discovery learning by presenting a tool. , 2005, , .		2
70	The effects of discovery learning and expository instruction on the acquisition of definitional and intuitive knowledge. Journal of Computer Assisted Learning, 2004, 20, 225-234.	5.1	53
71	Designing Adaptive Interventions for Online Collaborative Modeling. Education and Information Technologies, 2004, 9, 355-375.	5.7	7
72	The effect of external representation on constructing computer models of complex phenomena. Instructional Science, 2003, 31, 395-418.	2.0	47

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73	Simquest. , 2003, , 1-31.		19
74	Promoting Self-Directed Learning in Simulation-Based Discovery Learning Environments Through Intelligent Support. Interactive Learning Environments, 2000, 8, 229-255.	6.4	46
75	Designing for Collaborative Discovery Learning. Lecture Notes in Computer Science, 2000, , 202-211.	1.3	29
76	The integration of computer simulation and learning support: An example from the physics domain of collisions. Journal of Research in Science Teaching, 1999, 36, 597-615.	3.3	82
77	Self-directed learning in simulation-based discovery environments. Journal of Computer Assisted Learning, 1998, 14, 235-246.	5.1	47
78	Supporting simulation-based learning; the effects of model progression and assignments on definitional and intuitive knowledge. Learning and Instruction, 1998, 8, 235-252.	3.2	97
79	Scientific Discovery Learning with Computer Simulations of Conceptual Domains. Review of Educational Research, 1998, 68, 179-201.	7.5	1,016
80	Using Induction to Generate Feedback in Simulation Based Discovery Learning Environments. Lecture Notes in Computer Science, 1998, , 196-205.	1.3	8
81	Scientific Discovery Learning with Computer Simulations of Conceptual Domains. Review of Educational Research, 1998, 68, 179.	7.5	30
82	An extended dual search space model of scientific discovery learning. Instructional Science, 1997, 25, 307-346.	2.0	77
83	Support for simulation-based learning: The effect of assignments in learning about transmission lines. Lecture Notes in Computer Science, 1996, , 9-26.	1.3	10
84	Modelling domain knowledge for intelligent simulation learning environments. Computers and Education, 1992, 18, 29-37.	8.3	4
85	Authoring for Intelligent Simulation Based Instruction: A Model Based Approach. , 1992, , 619-635.		6
86	MODELLING DOMAIN KNOWLEDGE FOR INTELLIGENT SIMULATION LEARNING ENVIRONMENTS**The research reported was conducted in the project SIMULATE. SIMULATE is part of SAFE, a R&D project partially funded by the CEC under contract D1014 within the Exploratory Action of the DELTA programme. In total 17 partners are involved in the SAFE consortium of which Philips TDS is the prime contractor. The partners directly involved in SIMULATE are: Philips TDS (Fed. Rep. Germany), University of Leeds, University of Lancaste. , 1992, , 29-37.		0
87	Aspects of computer simulations in an instructional context. Education and Computing, 1991, 6, 231-239.	0.2	7
88	Characteristics of simulations for instructional settings. Education and Computing, 1991, 6, 241-262.	0.2	20
89	Supporting hypothesis generation by learners exploring an interactive computer simulation. Instructional Science, 1991, 20, 389-404.	2.0	79