Ismo Tapio Koponen

List of Publications by Year
in descending order

23 papers	234 citations	1306789 7 h-index	996533 15 g-index
24 all docs	24 docs citations	24 times ranked	179 citing authors

#	Article	IF	Citations
1	Coherent Knowledge Structures of Physics Represented as Concept Networks in Teacher Education. Science and Education, 2010, 19, 259-282.	1.7	56
2	Building a picture of students' conceptions of wave- and particle-like properties of quantum entities. European Journal of Physics, 2002, 23, 45-53.	0.3	51
3	Concept networks of studentsâ€™ knowledge of relationships between physics concepts: finding key concepts and their epistemic support. Applied Network Science, 2018, 3, .	0.8	26
4	Concept Development in Learning Physics: The Case of Electric Current and Voltage Revisited. Science and Education, 2013, 22, 2227-2254.	1.7	21
5	Network cartography of university studentsâ€™ knowledge landscapes about the history of science: landmarks and thematic communities. Applied Network Science, 2019, 4, .	0.8	12
6	Systemic view of learning scientific concepts: A description in terms of directed graph model. Complexity, 2014, 19, 27-37.	0.9	10
7	Pre-Service Teachersâ€™ Knowledge of Relational Structure of Physics Concepts: Finding Key Concepts of Electricity and Magnetism. Education Sciences, 2019, 9, 18.	1.4	9
8	Pre-Service Teachersâ€™ Declarative Knowledge of Wave-Particle Dualism of Electrons and Photons: Finding Lexicons by Using Network Analysis. Education Sciences, 2020, 10, 76.	1.4	7
9	First-Year Life Science Studentsâ€™ Understanding of the Role of Plants in the Ecosystemâ€"A Concept Network Analysis. Education Sciences, 2021, 11, 369.	1.4	7
10	Modelling studentsâ€™ knowledge organisation: Genealogical conceptual networks. Physica A: Statistical Mechanics and Its Applications, 2018, 495, 405-417.	1.2	6
11	Introduction: Conceptual Change and Its Models. Science and Education, 2014, 23, 1411-1412.	1.7	4
12	Characterising heavy-tailed networks using q-generalised entropy and q-adjacency kernels. Physica A: Statistical Mechanics and Its Applications, 2021, 566, 125666.	1.2	4
13	Systemic States of Spreading Activation in Describing Associative Knowledge Networks II: Generalisations with Fractional Graph Laplacians and q-Adjacency Kernels. Systems, 2021, 9, 22.	1.2	4
14	Nature of Science (NOS) Being Acquainted with Science of Science (SoS): Providing a Panoramic Picture of Sciences to Embody NOS for Pre-Service Teachers. Education Sciences, 2021, 11, 107.	1.4	4
15	Systemic States of Spreading Activation in Describing Associative Knowledge Networks: From Key Items to Relative Entropy Based Comparisons. Systems, 2021, 9, 1.	1.2	4
16	Usage of Terms â€œScienceâ€•and â€œScientific Knowledgeâ€•in Nature of Science (NOS): Do Their Lexicons in Different Accounts Indicate Shared Conceptions?. Education Sciences, 2020, 10, 252.	1.4	3
17	Editorial: Networks Applied in Science Education Research. Education Sciences, 2020, 10, 142.	1.4	2
18	Lexical Networks and Lexicon Profiles in Didactical Texts for Science Education. Studies in Computational Intelligence, 2020, , 15-27.	0.7	2

#	Article	IF	Citations
19	Dynamic systems view of learning a threeâ€tiered theory in physics: robust learning outcomes as attractors. Complexity, 2016, 21, 259-267.	0.9	1
20	Concept Networks in Learning and the Epistemic Support of Their Key Concepts. Studies in Computational Intelligence, 2018, , 759-769.	0.7	1
21	Modelling surface growth in IBAD with rate equations. Materials Research Society Symposia Proceedings, 2000, 648, 1.	0.1	0
22	Introduction: The Second Nordic HPS&ST Symposium. Science and Education, 2014, 23, 1565-1566.	1.7	0
23	Agent-Based-Model of Studentsâ€™ Sociocognitive Learning Process in Acquiring Tiered Knowledge. Communications in Computer and Information Science, 2019, , 82-95.	0.4	0