

Michael C Wittmann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3313052/publications.pdf>

Version: 2024-02-01

48
papers

882
citations

567281

15
h-index

501196

28
g-index

52
all docs

52
docs citations

52
times ranked

392
citing authors

#	ARTICLE	IF	CITATIONS
1	Making sense of how students make sense of mechanical waves. <i>Physics Teacher</i> , 1999, 37, 15-21.	0.3	91
2	The object coordination class applied to wave pulses: Analysing student reasoning in wave physics. <i>International Journal of Science Education</i> , 2002, 24, 97-118.	1.9	76
3	Understanding and affecting student reasoning about sound waves. <i>International Journal of Science Education</i> , 2003, 25, 991-1013.	1.9	76
4	Investigating student understanding of quantum physics: Spontaneous models of conductivity. <i>American Journal of Physics</i> , 2002, 70, 218-226.	0.7	75
5	Plasticity of intermediate mechanics students' coordinate system choice. <i>Physical Review Physics Education Research</i> , 2008, 4, .	1.7	46
6	Negotiating energy dynamics through embodied action in a materially structured environment. <i>Physical Review Physics Education Research</i> , 2013, 9, .	1.7	46
7	Paying Attention to Gesture when Students Talk Chemistry: Interactional Resources for Responsive Teaching. <i>Journal of Chemical Education</i> , 2015, 92, 11-22.	2.3	43
8	Addressing student models of energy loss in quantum tunnelling. <i>European Journal of Physics</i> , 2005, 26, 939-950.	0.6	42
9	Using resource graphs to represent conceptual change. <i>Physical Review Physics Education Research</i> , 2006, 2, .	1.7	35
10	Productive resources in students' ideas about energy: An alternative analysis of Watts' original interview transcripts. <i>Physical Review Physics Education Research</i> , 2013, 9, .	1.7	31
11	Comparing three methods for teaching Newton's third law. <i>Physical Review Physics Education Research</i> , 2007, 3, .	1.7	24
12	Applying a resources framework to analysis of the Force and Motion Conceptual Evaluation. <i>Physical Review Physics Education Research</i> , 2008, 4, .	1.7	24
13	Preparing future teachers to anticipate student difficulties in physics in a graduate-level course in physics, pedagogy, and education research. <i>Physical Review Physics Education Research</i> , 2011, 7, .	1.7	24
14	Comparing Student Use of Mathematical and Physical Vector Representations. , 2007, , .		21
15	Applying clustering to statistical analysis of student reasoning about two-dimensional kinematics. <i>Physical Review Physics Education Research</i> , 2007, 3, .	1.7	20
16	Applying model analysis to a resource-based analysis of the Force and Motion Conceptual Evaluation. <i>Physical Review Physics Education Research</i> , 2014, 10, .	1.7	17
17	Aligning Coordination Class Theory With a New Context: Applying a Theory of Individual Learning to Group Learning. <i>Science Education</i> , 2017, 101, 333-363.	3.0	14
18	Mathematical actions as procedural resources: An example from the separation of variables. <i>Physical Review Physics Education Research</i> , 2015, 11, .	1.7	13

#	ARTICLE	IF	CITATIONS
19	Algebraic manipulation as motion within a landscape. Educational Studies in Mathematics, 2013, 82, 169-181.	2.8	12
20	Drawings of energy: Evidence of the Next Generation Science Standards model of energy in diagrams. Physical Review Physics Education Research, 2019, 15, .	2.9	12
21	Use of item response curves of the Force and Motion Conceptual Evaluation to compare Japanese and American students' views on force and motion. Physical Review Physics Education Research, 2017, 13, .	2.9	11
22	Epistemic Games in Integration: Modeling Resource Choice. , 2007, , .		10
23	Students Consistency of Graphical Vector Addition Method on 2-D Vector Addition Tasks. , 2009, , .		10
24	Mathematical tutorials in introductory physics. AIP Conference Proceedings, 1997, , .	0.4	9
25	Laboratory-tutorial activities for teaching probability. Physical Review Physics Education Research, 2006, 2, .	1.7	9
26	Student Understanding of Tunneling in Quantum Mechanics: Examining Interview and Survey Results for Clues to Student Reasoning. AIP Conference Proceedings, 2004, , .	0.4	8
27	Reconsidering the encoding of data in physics education research. Physical Review Physics Education Research, 2019, 15, .	2.9	8
28	Examining the Evolution of Student Ideas About Quantum Tunneling. AIP Conference Proceedings, 2006, , .	0.4	7
29	Procedural Resource Creation in Intermediate Mechanics. , 2009, , .		7
30	Students' Responses To Different Representations Of A Vector Addition Question. , 2010, , .		7
31	Visualizing changes in pretest and post-test student responses with consistency plots. Physical Review Physics Education Research, 2014, 10, .	1.7	7
32	Resource Plasticity: Detailing a Common Chain of Reasoning with Damped Harmonic Motion. AIP Conference Proceedings, 2007, , .	0.4	6
33	Applying the resources framework of teaching and learning to issues in middle school physics instruction on energy. American Journal of Physics, 2019, 87, 535-542.	0.7	5
34	Resource Selection in Nearly-Novel Situations. AIP Conference Proceedings, 2004, , .	0.4	3
35	Elements of proximal formative assessment in learners' discourse about energy. , 2012, , .		3
36	Evidence of embodied cognition about wave propagation. , 2012, , .		2

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37	Evidence of embodied cognition via speech and gesture complementarity. , 2013, , .		2
38	Student expectations in a group learning activity on harmonic motion. , 2013, , .		2
39	Limitations in Predicting Student Performance on Standardized Tests. , 0, , .		2
40	Understanding Data Analysis from Multiple Viewpoints: An Example from Quantum Tunneling. AIP Conference Proceedings, 2004, , .	0.4	1
41	Comparing Three Methods for Teaching Newton's Second Law. , 2009, , .		1
42	Students talk about energy in project-based inquiry science. , 2013, , .		1
43	Editorial: AJP and PER. American Journal of Physics, 2018, 86, 5-6.	0.7	1
44	Foregrounding epistemology and everyday intuitions in a quantum physics course for nonscience majors. Physical Review Physics Education Research, 2020, 16, .	2.9	1
45	Twenty Questions for PER: How Does It All Fit Together?. AIP Conference Proceedings, 2005, , .	0.4	0
46	When basic changes to a solution suggest meaningful differences in mathematics. , 2012, , .		0
47	Probing student understanding with alternative questioning strategies. , 2012, , .		0
48	New ways of investigating the canonical coin toss acceleration problem. , 2013, , .		0