

# 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	Foregrounding epistemology and everyday intuitions in a quantum physics course for nonscience majors. <i>Physical Review Physics Education Research</i> , 2020, 16, .	2.9	1
2	Applying the resources framework of teaching and learning to issues in middle school physics instruction on energy. <i>American Journal of Physics</i> , 2019, 87, 535-542.	0.7	5
3	Drawings of energy: Evidence of the Next Generation Science Standards model of energy in diagrams. <i>Physical Review Physics Education Research</i> , 2019, 15, .	2.9	12
4	Reconsidering the encoding of data in physics education research. <i>Physical Review Physics Education Research</i> , 2019, 15, .	2.9	8
5	Editorial: AJP and PER. <i>American Journal of Physics</i> , 2018, 86, 5-6.	0.7	1
6	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
7	Use of item response curves of the Force and Motion Conceptual Evaluation to compare Japanese and American students'™ views on force and motion. <i>Physical Review Physics Education Research</i> , 2017, 13, .	2.9	11
8	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
9	Mathematical actions as procedural resources: An example from the separation of variables. <i>Physical Review Physics Education Research</i> , 2015, 11, .	1.7	13
10	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
11	Visualizing changes in pretest and post-test student responses with consistency plots. <i>Physical Review Physics Education Research</i> , 2014, 10, .	1.7	7
12	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
13	Algebraic manipulation as motion within a landscape. <i>Educational Studies in Mathematics</i> , 2013, 82, 169-181.	2.8	12
14	Evidence of embodied cognition via speech and gesture complementarity. , 2013, , .		2
15	Students talk about energy in project-based inquiry science. , 2013, , .		1
16	Student expectations in a group learning activity on harmonic motion. , 2013, , .		2
17	New ways of investigating the canonical coin toss acceleration problem. , 2013, , .		0
18	Negotiating energy dynamics through embodied action in a materially structured environment. <i>Physical Review Physics Education Research</i> , 2013, 9, .	1.7	46

#	ARTICLE	IF	CITATIONS
19	When basic changes to a solution suggest meaningful differences in mathematics. , 2012, , .		0
20	Probing student understanding with alternative questioning strategies. , 2012, , .		0
21	Evidence of embodied cognition about wave propagation. , 2012, , .		2
22	Elements of proximal formative assessment in learners' discourse about energy. , 2012, , .		3
23	Preparing future teachers to anticipate student difficulties in physics in a graduate-level course in physics, pedagogy, and education research. Physical Review Physics Education Research, 2011, 7, .	1.7	24
24	Studentsâ€™ Responses To Different Representations Of A Vector Addition Question. , 2010, , .		7
25	Students Consistency of Graphical Vector Addition Method on 2-D Vector Addition Tasks. , 2009, , .		10
26	Comparing Three Methods for Teaching Newtonâ€™s Second Law. , 2009, , .		1
27	Procedural Resource Creation in Intermediate Mechanics. , 2009, , .		7
28	Applying a resources framework to analysis of the Force and Motion Conceptual Evaluation. Physical Review Physics Education Research, 2008, 4, .	1.7	24
29	Plasticity of intermediate mechanics studentsâ€™ coordinate system choice. Physical Review Physics Education Research, 2008, 4, .	1.7	46
30	Resource Plasticity: Detailing a Common Chain of Reasoning with Damped Harmonic Motion. AIP Conference Proceedings, 2007, , .	0.4	6
31	Comparing three methods for teaching Newtonâ€™s third law. Physical Review Physics Education Research, 2007, 3, .	1.7	24
32	Applying clustering to statistical analysis of student reasoning about two-dimensional kinematics. Physical Review Physics Education Research, 2007, 3, .	1.7	20
33	Epistemic Games in Integration: Modeling Resource Choice. , 2007, , .		10
34	Comparing Student Use of Mathematical and Physical Vector Representations. , 2007, , .		21
35	Examining the Evolution of Student Ideas About Quantum Tunneling. AIP Conference Proceedings, 2006, , .	0.4	7
36	Laboratory-tutorial activities for teaching probability. Physical Review Physics Education Research, 2006, 2, .	1.7	9

#	ARTICLE	IF	CITATIONS
37	Using resource graphs to represent conceptual change. Physical Review Physics Education Research, 2006, 2, .	1.7	35
38	Twenty Questions for PER: How Does It All Fit Together?. AIP Conference Proceedings, 2005, , .	0.4	0
39	Addressing student models of energy loss in quantum tunnelling. European Journal of Physics, 2005, 26, 939-950.	0.6	42
40	Resource Selection in Nearly-Novel Situations. AIP Conference Proceedings, 2004, , .	0.4	3
41	Understanding Data Analysis from Multiple Viewpoints: An Example from Quantum Tunneling. AIP Conference Proceedings, 2004, , .	0.4	1
42	Student Understanding of Tunneling in Quantum Mechanics: Examining Interview and Survey Results for Clues to Student Reasoning. AIP Conference Proceedings, 2004, , .	0.4	8
43	Understanding and affecting student reasoning about sound waves. International Journal of Science Education, 2003, 25, 991-1013.	1.9	76
44	Investigating student understanding of quantum physics: Spontaneous models of conductivity. American Journal of Physics, 2002, 70, 218-226.	0.7	75
45	The object coordination class applied to wave pulses: Analysing student reasoning in wave physics. International Journal of Science Education, 2002, 24, 97-118.	1.9	76
46	Making sense of how students make sense of mechanical waves. Physics Teacher, 1999, 37, 15-21.	0.3	91
47	Mathematical tutorials in introductory physics. AIP Conference Proceedings, 1997, , .	0.4	9
48	Limitations in Predicting Student Performance on Standardized Tests. , 0, , .		2