

Rachel E Scherr

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

1,366
citations

430874

18
h-index

361022

35
g-index

74
all docs

74
docs citations

74
times ranked

691
citing authors

#	ARTICLE	IF	CITATIONS
1	Place-Based Education in High School Science: Situating Energy and Climate Change in Students' Communities. <i>Sustainability and Climate Change</i> , 2022, 15, 58-67.	0.3	4
2	Impetus-Force-Like Drawings May Be Less Common Than You Think. <i>Physics Teacher</i> , 2022, 60, 254-257.	0.3	1
3	University student conceptual resources for understanding forces. <i>Physical Review Physics Education Research</i> , 2021, 17, .	2.9	5
4	Impetus-Like Reasoning as Continuous with Newtonian Physics. <i>Physics Teacher</i> , 2021, 59, 185-188.	0.3	2
5	Students' context-sensitive use of conceptual resources: A pattern across different styles of question about mechanical waves. <i>Physical Review Physics Education Research</i> , 2021, 17, .	2.9	3
6	Developing the Physics Teacher Education Program Analysis rubric: Measuring features of thriving programs. <i>Physical Review Physics Education Research</i> , 2020, 16, .	2.9	5
7	Initial findings of the Physics Teacher Education Program Analysis rubric: What do thriving programs do?. <i>Physical Review Physics Education Research</i> , 2020, 16, .	2.9	4
8	Isolation and connectedness among Black and Latinx physics graduate students. <i>Physical Review Physics Education Research</i> , 2020, 16, .	2.9	7
9	Pulses as not-objects: student responses to a new question about the superposition of mechanical waves. <i>Physics Education</i> , 2019, 54, 055023.	0.5	1
10	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
11	Student conceptual resources for understanding mechanical wave propagation. <i>Physical Review Physics Education Research</i> , 2019, 15, .	2.9	15
12	Periscope: Looking into Learning in Best-Practices Physics Classrooms. <i>Physics Teacher</i> , 2018, 56, 100-103.	0.3	3
13	Scherr responds. <i>Physics Teacher</i> , 2018, 56, 4-5.	0.3	0
14	Making Space to Sensemake: Epistemic Distancing in Small Group Physics Discussions. <i>Cognition and Instruction</i> , 2018, 36, 396-423.	2.9	18
15	The pedagogical value of conceptual metaphor for secondary science teachers. <i>Science Education</i> , 2018, 102, 1051-1076.	3.0	14
16	Unveiling Privilege to Broaden Participation. <i>Physics Teacher</i> , 2017, 55, 394-397.	0.3	7
17	Sustaining Physics Teacher Education Coalition programs in physics teacher education. <i>Physical Review Physics Education Research</i> , 2017, 13, .	2.9	5
18	Fixed and growth mindsets in physics graduate admissions. <i>Physical Review Physics Education Research</i> , 2017, 13, .	2.9	24

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19	Identifying content knowledge for teaching energy: Examples from high school physics. <i>Physical Review Physics Education Research</i> , 2017, 13, .	2.9	3
20	Energy Tracking Diagrams. <i>Physics Teacher</i> , 2016, 54, 96-102.	0.3	27
21	Editorial: Never mind the gap: Gender-related research in <i>Physical Review Physics Education Research</i> , 2005â€”2016. <i>Physical Review Physics Education Research</i> , 2016, 12, .	2.9	10
22	Exclusively visual analysis of classroom group interactions. <i>Physical Review Physics Education Research</i> , 2016, 12, .	2.9	2
23	Editorial: Focused Collection: Preparing and Supporting University Physics Educators. <i>Physical Review Physics Education Research</i> , 2016, 12, .	2.9	0
24	Enacting Conceptual Metaphor through Blending: Learning activities embodying the substance metaphor for energy. <i>International Journal of Science Education</i> , 2015, 37, 839-866.	1.9	34
25	Energy conservation in dissipative processes: Teacher expectations and strategies associated with imperceptible thermal energy. <i>Physical Review Physics Education Research</i> , 2015, 11, .	1.7	21
26	Productivity of “collisions generate heat” for reconciling an energy model with mechanistic reasoning: A case study. <i>Physical Review Physics Education Research</i> , 2015, 11, .	1.7	18
27	Energy Theater. <i>Physics Teacher</i> , 2014, 52, 291-294.	0.3	32
28	Goals for teacher learning about energy degradation and usefulness. <i>Physical Review Physics Education Research</i> , 2014, 10, .	1.7	18
29	Tackling energy head on. <i>Physics World</i> , 2014, 27, 17-17.	0.0	0
30	Conserving energy in physics and society: Creating an integrated model of energy and the second law of thermodynamics. <i>AIP Conference Proceedings</i> , 2013, , .	0.4	9
31	Negotiating energy dynamics through embodied action in a materially structured environment. <i>Physical Review Physics Education Research</i> , 2013, 9, .	1.7	46
32	Development of proximal formative assessment skills in video-based teacher professional development. , 2012, , .		2
33	Differentiation of energy concepts through speech and gesture in interaction. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	3
34	Criteria for creating and categorizing forms of energy. , 2012, , .		6
35	Intuitive ontologies for energy in physics. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	10
36	Promoting proximal formative assessment with relational discourse. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	3

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37	Representing energy. II. Energy tracking representations. Physical Review Physics Education Research, 2012, 8, .	1.7	42
38	Representing energy. I. Representing a substance ontology for energy. Physical Review Physics Education Research, 2012, 8, .	1.7	65
39	Interactional processes for stabilizing conceptual coherences in physics. Physical Review Physics Education Research, 2012, 8, .	1.7	13
40	Elements of proximal formative assessment in learners' discourse about energy. , 2012, , .		3
41	â€œEnergy Theaterâ€: Using The Body Symbolically To Understand Energy. , 2010, , .		6
42	Using The Algebra Project Method To Regiment Discourse In An Energy Course for Teachers. , 2010, , .		9
43	An Evolving Model for Seeing Colored Objects: A Case Study Progression. , 2010, , .		0
44	Energy In Action: The Construction Of Physics Ideas In Multiple Modes. , 2010, , .		5
45	Respecting tutorial instructors' beliefs and experiences: A case study of a physics teaching assistant. Physical Review Physics Education Research, 2010, 6, .	1.7	14
46	Tutorial teaching assistants in the classroom: Similar teaching behaviors are supported by varied beliefs about teaching and learning. Physical Review Physics Education Research, 2010, 6, .	1.7	29
47	Accounting for tutorial teaching assistantsâ€™ buy-in to reform instruction. Physical Review Physics Education Research, 2009, 5, .	1.7	39
48	Video analysis for insight and coding: Examples from tutorials in introductory physics. Physical Review Physics Education Research, 2009, 5, .	1.7	14
49	Student Behavior and Epistemological Framing: Examples from Collaborative Active-Learning Activities in Physics. Cognition and Instruction, 2009, 27, 147-174.	2.9	172
50	Recognizing mechanistic reasoning in student scientific inquiry: A framework for discourse analysis developed from philosophy of science. Science Education, 2008, 92, 499-525.	3.0	269
51	Indicators of Understanding: What TAs Listen for in Student Responses. , 2008, , .		1
52	Gesture analysis for physics education researchers. Physical Review Physics Education Research, 2008, 4, .	1.7	51
53	Enabling Informed Adaptation of Reformed Instructional Materials. AIP Conference Proceedings, 2007, , .	0.4	13
54	The Dynamics of Students' Behaviors and Reasoning during Collaborative Physics Tutorial Sessions. , 2007, , .		6

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55	Reverse-Engineering the Solution of a "Simple" Physics Problem: Why Learning Physics Is Harder Than It Looks. <i>Physics Teacher</i> , 2006, 44, 293-300.	0.3	26
56	Initiation of student-TA interactions in tutorials. <i>Physical Review Physics Education Research</i> , 2006, 2, .	1.7	8
57	Newton's Zeroth Law: Learning from Listening to Our Students. <i>Physics Teacher</i> , 2005, 43, 41-45.	0.3	6
58	Gestures as evidence of student thinking about physics. <i>AIP Conference Proceedings</i> , 2004, , .	0.4	2
59	An Implementation of Physics by Inquiry in a Large-Enrollment Class. <i>Physics Teacher</i> , 2003, 41, 113-118.	0.3	13
60	The challenge of changing deeply held student beliefs about the relativity of simultaneity. <i>American Journal of Physics</i> , 2002, 70, 1238-1248.	0.7	51
61	Student understanding of time in special relativity: Simultaneity and reference frames. <i>American Journal of Physics</i> , 2001, 69, S24-S35.	0.7	59
62	Physics teacher production: Patterns of institutional engagement and faculty theories. , 0, , .		2
63	The challenge of listening: The effect of researcher agenda on data collection and interpretation. , 0, , .		3
64	Responsiveness Among Peers Leads to Productive Disciplinary Engagement. , 0, , .		0
65	Content Knowledge for Teaching Energy: An Example From Middle-School Physical Science. , 0, , .		0
66	Education Metaphors We Live By. , 0, , .		0
67	Drawing energy: Evidence of Next Generation Science Standards for energy in diagrams. , 0, , .		1
68	Student conceptual resources for understanding mechanical wave propagation. , 0, , .		1
69	University Student Conceptual Resources for Understanding Forces. , 0, , .		0
70	Examining the productiveness of student resources in a problem-solving interview. , 0, , .		0
71	Belonging, Success, Access, and Disruption: Physics Faculty Goals for Inclusive Learning Environments. , 0, , .		0
72	Development and validation of the Physics Teacher Education Program Analysis (PTEPA) Rubric. , 0, , .		0