Nâ€g Holmes

List of Publications by Year
in descending order

45 papers	984 citations	516215 16 h-index	454577 30 g-index
46 all docs	46 docs citations	46 times ranked	586 citing authors

#	Article	IF	Citations
1	Evaluating the role of student preference in physics lab group equity. Physical Review Physics Education Research, 2022, 18, .	1.4	10
2	Examining the effects of lab instruction and gender composition on intergroup interaction networks in introductory physics labs. Physical Review Physics Education Research, 2022, 18, .	1.4	9
3	Instructor interactions in traditional and nontraditional labs. Physical Review Physics Education Research, 2022, 18, .	1.4	3
4	Skills-focused lab instruction improves critical thinking skills and experimentation views for all students. Physical Review Physics Education Research, 2022, 18, .	1.4	11
5	Exploring the effects of omitted variable bias in physics education research. Physical Review Physics Education Research, 2021, 17, .	1.4	7
6	Supporting decision-making in upper-level chemical engineering laboratories. Education for Chemical Engineers, 2021, 35, 69-80.	2.8	9
7	Best practice for instructional labs. Nature Physics, 2021, 17, 662-663.	6.5	18
8	Not engaging with problems in the lab: Studentsâ€™ navigation of conflicting data and models. Physical Review Physics Education Research, 2021, 17, .	1.4	11
9	Restructuring physics labs to cultivate sense of student agency. Physical Review Physics Education Research, 2021, 17, .	1.4	16
10	Online administration of research-based assessments. American Journal of Physics, 2021, 89, 7-8.	0.3	5
11	Ready student one: Exploring the predictors of student learning in virtual reality. PLoS ONE, 2020, 15, e0229788.	1.1	47
12	Direct Measurement of the Impact of Teaching Experimentation in Physics Labs. Physical Review X, 2020, 10, .	2.8	41
13	Developing scientific decision making by structuring and supporting student agency. Physical Review Physics Education Research, 2020, 16, .	1.4	30
14	How expectations of confirmation influence studentsâ€™ experimentation decisions in introductory labs. Physical Review Physics Education Research, 2020, 16, .	1.4	16
15	Group roles in unstructured labs show inequitable gender divide. Physical Review Physics Education Research, 2020, 16, .	1.4	30
16	Examination of quantitative methods for analyzing data from concept inventories. Physical Review Physics Education Research, 2020, 16, .	1.4	11
17	Evaluating instructional labsâ€™ use of deliberate practice to teach critical thinking skills. Physical Review Physics Education Research, 2020, 16, .	1.4	8
18	Why Traditional Labs Failâ€¦and What We Can Do About It. , 2020, , 271-290.		2

#	Article	IF	Citations
19	Investigating the landscape of physics laboratory instruction across North America. Physical Review Physics Education Research, 2020, 16, .	1.4	30
20	Using the Ecology and Evolutionâ€Measuring Achievement and Progression in Science assessment to measure student thinking across the Fourâ€Dimensional Ecology Education framework. Ecosphere, 2019, 10, e02873.	1.0	3
21	Operationalizing the AAPT Learning Goals for the Lab. Physics Teacher, 2019, 57, 296-299.	0.2	30
22	Exploring bias in mechanical engineering students' perceptions of classmates. PLoS ONE, 2019, 14, e0212477.	1.1	4
23	A re-examination of the fundamental parameters approach to calibration of the Curiosity rover alpha particle X-ray spectrometer. Nuclear Instruments & Methods in Physics Research B, 2019, 447, 22-29.	0.6	5
24	Tools for Change: Measuring Student Conceptual Understanding Across Undergraduate Biology Programs Using Bio-MAPS Assessments. Journal of Microbiology and Biology Education, 2019, 20, .	0.5	13
25	Quantifying critical thinking: Development and validation of the physics lab inventory of critical thinking. Physical Review Physics Education Research, 2019, 15, .	1.4	41
26	Value added or misattributed? A multi-institution study on the educational benefit of labs for reinforcing physics content. Physical Review Physics Education Research, 2017, 13, .	1.4	63
27	Toolboxes and handing students a hammer: The effects of cueing and instruction on getting students to think critically. Physical Review Physics Education Research, 2017, 13, .	1.4	3
28	Examining and contrasting the cognitive activities engaged in undergraduate research experiences and lab courses. Physical Review Physics Education Research, 2016, 12, .	1.4	38
29	Gender gaps and gendered action in a first-year physics laboratory. Physical Review Physics Education Research, 2016, 12, .	1.4	43
30	Quantitative Comparisons to Promote Inquiry in the Introductory Physics Lab. Physics Teacher, 2015, 53, 352-355.	0.2	29
31	Teaching critical thinking. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11199-11204.	3.3	135
32	Making the failure more productive: scaffolding the invention process to improve inquiry behaviors and outcomes in invention activities. Instructional Science, 2014, 42, 523-538.	1.1	55
33	Teaching Assistant Professional Development by and for TAs. Physics Teacher, 2013, 51, 218-219.	0.2	16
34	Evaluating metacognitive scaffolding in Guided Invention Activities. Instructional Science, 2012, 40, 691-710.	1.1	90
35	A fundamental parameters approach to calibration of the Mars Exploration Rover Alpha Particle Xâ€ray Spectrometer. Journal of Geophysical Research, 2009, 114, .	3.3	15
36	Finding Evidence of Transfer with Invention Activities: Teaching the Concept of Weighted Average. , 0, , .		1

#	Article	IF	Citations
37	â€œLetâ€™s just pretendâ€ Studentsâ€™ shifts in frames during a content-reinforcement lab. , 0, , .		2
38	Student reasoning about sources of experimental measurement uncertainty in quantum versus classical mechanics. , 0, , .		1
39	Doing Science or Doing a Lab? Engaging Students with Scientific Reasoning during Physics Lab Experiments. , 0, , .		1
40	The Impact of Targeting Scientific Reasoning on Student Attitudes about Experimental Physics. , 0, , .		2
41	How do gender and inchargeness interact to affect equity in lab group interactions?. , 0, , .		2
42	Student evaluation of more or better experimental data in classical and quantum mechanics. , 0, , .		0
43	Sense of agency, gender, and studentsâ€™ perception in open-ended physics labs. , 0, , .		0
44	Connecting the dots: Student social networks in introductory physics labs. , 0, , .		0
45	Problematizing in inquiry-based labs: how students respond to unexpected results. , 0, , .		1