Marcos D Caballero

List of Publications by Year in Descending Order

38	569	13	23
papers	citations	h-index	g-index
63	**748**	**3.2**	**3.88**
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
38	Three cases that demonstrate how students connect the domains of mathematics and computing. *Journal of Mathematical Behavior*, **2022**, 67, 100955	1.1	0
37	Physics Graduate Record Exam does not help applicants “stand out”. *Physical Review Physics Education Research*, **2021**, 17,	2.3	1
36	Framework for evaluating statistical models in physics education research. *Physical Review Physics Education Research*, **2021**, 17,	2.3	2
35	Characterizing college science instruction: The Three-Dimensional Learning Observation Protocol. *PLoS ONE*, **2020**, 15, e0234640	3.7	12
34	Thematic analysis of 18 years of physics education research conference proceedings using natural language processing. *Physical Review Physics Education Research*, **2020**, 16,	2.3	2
33	Predicting time to graduation at a large enrollment American university. *PLoS ONE*, **2020**, 15, e0242334	3.7	3
32	PICUP: A Community of Teachers Integrating Computation into Undergraduate Physics Courses. *Physics Teacher*, **2019**, 57, 397-399	0.4	9
31	Design, analysis, tools, and apprenticeship (DATA) Lab. *European Journal of Physics*, **2019**, 40, 065701	0.8	1
30	Identifying features predictive of faculty integrating computation into physics courses. *Physical Review Physics Education Research*, **2019**, 15,	2.3	6
29	Modeling student pathways in a physics bachelor’s degree program. *Physical Review Physics Education Research*, **2019**, 15,	2.3	7
28	Physics computational literacy: An exploratory case study using computational essays. *Physical Review Physics Education Research*, **2019**, 15,	2.3	4
27	Analysis of the most common concept inventories in physics: What are we assessing?. *Physical Review Physics Education Research*, **2018**, 14,	2.3	10
26	Prevalence and nature of computational instruction in undergraduate physics programs across the United States. *Physical Review Physics Education Research*, **2018**, 14,	2.3	8
25	Development of the Modes of Collaboration framework. *Physical Review Physics Education Research* , **2018**, 14,	2.3	1
24	Evaluating the extent of a large-scale transformation in gateway science courses. *Science Advances*, **2018**, 4, eaau0554	14.3	27
23	Fostering students’ epistemic agency through the co-configuration of moth research. *Science Education*, **2018**, 102, 1176-1200	4.3	21
22	Comment on “Analyzing the Role of Science Practices in ACS Exam Items”. *Journal of Chemical Education*, **2017**, 94, 673-674	2.4	

21	P 3 : a practice focused learning environment. *European Journal of Physics*, **2017**, 38, 055701	0.8	16
20	Assessing learning outcomes in middle-division classical mechanics: The Colorado Classical Mechanics and Math Methods Instrument. *Physical Review Physics Education Research*, **2017**, 13,	2.3	3
19	Characterizing College Science Assessments: The Three-Dimensional Learning Assessment Protocol. *PLoS ONE*, **2016**, 11, e0162333	3.7	113
18	Challenge faculty to transform STEM learning. *Science*, **2015**, 350, 281-2	33.3	84
17	Unpacking students' use of mathematics in upper-division physics: where do we go from here?. *European Journal of Physics*, **2015**, 36, 065004	0.8	10
16	Educational transformation in upper-division physics: The Science Education Initiative model, outcomes, and lessons learned. *Physical Review Physics Education Research*, **2015**, 11,		19
15	Development and uses of upper-division conceptual assessments. *Physical Review Physics Education Research*, **2015**, 11,		11
14	Bridging physics and biology teaching through modeling. *American Journal of Physics*, **2014**, 82, 434-441	0.7	17
13	Integrating Numerical Computation into the Modeling Instruction Curriculum. *Physics Teacher*, **2014** , 52, 38-42	0.4	15
12	A model for incorporating computation without changing the course: An example from middle-division classical mechanics. *American Journal of Physics*, **2014**, 82, 231-237	0.7	8
11	Uncovering the hidden meaning of cross-curriculum comparison results on the Force Concept Inventory. *Physical Review Physics Education Research*, **2014**, 10,		6
10	Upper-division student understanding of Coulomb's law: Difficulties with continuous charge distributions **2013**,		6
9	Understanding student computational thinking with computational modeling **2013**,		10
8	ACER: A framework on the use of mathematics in upper-division physics **2013**,		4
7	Analytic framework for students' use of mathematics in upper-division physics. *Physical Review Physics Education Research*, **2013**, 9,		27
6	Fostering computational thinking in introductory mechanics **2012**,		2
5	Colorado Upper-Division Electrostatics diagnostic: A conceptual assessment for the junior level. *Physical Review Physics Education Research*, **2012**, 8,		20
4	Implementing and assessing computational modeling in introductory mechanics. *Physical Review Physics Education Research*, **2012**, 8,		20

3	Tale of two curricula: The performance of 2000 students in introductory electromagnetism. *Physical Review Physics Education Research*, **2009**, 5,		25
2	Placing the Deep Impact Mission into context: Two decades of observations of 9P/Tempel 1 from McDonald Observatory. *Icarus*, **2009**, 199, 119-128	3.8	5
1	Students Development of a Logarithm Function in Python Using Taylor Expansions: a Teaching Design Case Study. *Digital Experiences in Mathematics Education*,1	0.7	1