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List of Publications by Year
in descending order

Version: 2024-02-01

54 papers	1,120 citations	331670 21 h-index	454955 30 g-index
54 all docs	54 docs citations	54 times ranked	592 citing authors

#	Article	IF	Citations
1	The ACS Exams Institute Undergraduate Chemistry Anchoring Concepts Content Map II: Organic Chemistry. Journal of Chemical Education, 2013, 90, 1443-1445.	2.3	78
2	Beliefs about learning and enacted instructional practices: An investigation in postsecondary chemistry education. Journal of Research in Science Teaching, 2018, 55, 1111-1133.	3.3	52
3	Foundation Coursework in Undergraduate Inorganic Chemistry: Results from a National Survey of Inorganic Chemistry Faculty. Journal of Chemical Education, 2015, 92, 973-979.	2.3	48
4	What really impacts the use of active learning in undergraduate STEM education? Results from a national survey of chemistry, mathematics, and physics instructors. PLoS ONE, 2021, 16, e0247544.	2.5	47
5	Self-efficacy and academic performance in first-semester organic chemistry: testing a model of reciprocal causation. Chemistry Education Research and Practice, 2016, 17, 973-984.	2.5	46
6	Evaluating student motivation in organic chemistry courses: moving from a lecture-based to a flipped approach with peer-led team learning. Chemistry Education Research and Practice, 2018, 19, 251-264.	2.5	46
7	The ACS Exams Institute Undergraduate Chemistry Anchoring Concepts Content Map IV: Physical Chemistry. Journal of Chemical Education, 2018, 95, 238-241.	2.3	41
8	A Historical Analysis of the Curriculum of Organic Chemistry Using ACS Exams as Artifacts. Journal of Chemical Education, 2013, 90, 1437-1442.	2.3	38
9	Improved Student Learning through a Faculty Learning Community: How Faculty Collaboration Transformed a Large-Enrollment Course from Lecture to Student Centered. CBE Life Sciences Education, 2016, 15, ar22.	2.3	37
10	Chasm Crossed? Clicker Use in Postsecondary Chemistry Education. Journal of Chemical Education, 2017, 94, 549-557.	2.3	37
11	A Research Module for the Organic Chemistry Laboratory: Multistep Synthesis of a Fluorous Dye Molecule. Journal of Chemical Education, 2014, 91, 126-130.	2.3	33
12	In-Depth Coursework in Undergraduate Inorganic Chemistry: Results from a National Survey of Inorganic Chemistry Faculty. Journal of Chemical Education, 2015, 92, 980-985.	2.3	33
13	Using Lexical Analysis To Predict Lewis Acidâ€“Base Model Use in Responses to an Acidâ€“Base Proton-Transfer Reaction. Journal of Chemical Education, 2018, 95, 1267-1275.	2.3	33
14	The biochemistry tetrahedron and the development of the taxonomy of biochemistry external representations (TOBER). Chemistry Education Research and Practice, 2012, 13, 296-306.	2.5	32
15	Analyzing explanations of substitution reactions using lexical analysis and logistic regression techniques. Chemistry Education Research and Practice, 2020, 21, 267-286.	2.5	32
16	Flipped classroom use in chemistry education: results from a survey of postsecondary faculty members. Chemistry Education Research and Practice, 2018, 19, 1307-1318.	2.5	30
17	Great Expectations: Using an Analysis of Current Practices To Propose a Framework for the Undergraduate Inorganic Curriculum. Inorganic Chemistry, 2015, 54, 8859-8868.	4.0	26
18	Using the Research Literature to Develop an Adaptive Intervention to Improve Student Explanations of an S_N1 Reaction Mechanism. Journal of Chemical Education, 2020, 97, 3551-3562.	2.3	26

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19	Testing a reciprocal causation model between anxiety, enjoyment and academic performance in postsecondary organic chemistry. Educational Psychology, 2018, 38, 838-856.	2.7	25
20	Problem types in synthetic organic chemistry research: Implications for the development of curricular problems for second-year level organic chemistry instruction. Chemistry Education Research and Practice, 2012, 13, 179-185.	2.5	23
21	Evaluating the impact of malleable factors on percent time lecturing in gateway chemistry, mathematics, and physics courses. International Journal of STEM Education, 2022, 9, .	5.0	22
22	Designing undergraduate-level organic chemistry instructional problems: Seven ideas from a problem-solving study of practicing synthetic organic chemists. Chemistry Education Research and Practice, 2012, 13, 277-285.	2.5	21
23	Adaptation of an Instrument for Measuring the Cognitive Complexity of Organic Chemistry Exam Items. Journal of Chemical Education, 2013, 90, 1290-1295.	2.3	21
24	Development and evaluation of a Lewis acidâ€“base tutorial for use in postsecondary organic chemistry courses. Canadian Journal of Chemistry, 2019, 97, 711-721.	1.1	21
25	Building a Database for the Historical Analysis of the General Chemistry Curriculum Using ACS General Chemistry Exams as Artifacts. Journal of Chemical Education, 2015, 92, 230-236.	2.3	19
26	Development of a machine learning-based tool to evaluate correct Lewis acidâ€“base model use in written responses to open-ended formative assessment items. Chemistry Education Research and Practice, 2021, 22, 866-885.	2.5	18
27	Investigating Faculty Familiarity with Assessment Terminology by Applying Cluster Analysis To Interpret Survey Data. Journal of Chemical Education, 2014, 91, 1145-1151.	2.3	17
28	Using Structural Equation Modeling To Understand Chemistry Faculty Familiarity of Assessment Terminology: Results from a National Survey. Journal of Chemical Education, 2013, 90, 981-987.	2.3	16
29	Development and evaluation of the organic chemistryâ€specific achievement emotions questionnaire (<scp>AEQâ€OCHEM</scp>). Journal of Research in Science Teaching, 2019, 56, 163-183.	3.3	16
30	Benchmarking problems used in second year level organic chemistry instruction. Chemistry Education Research and Practice, 2010, 11, 25-32.	2.5	15
31	Validating Chemistry Faculty Membersâ€™ Self-Reported Familiarity with Assessment Terminology. Journal of Chemical Education, 2013, 90, 1130-1136.	2.3	15
32	What We Donâ€™t Test: What an Analysis of Unreleased ACS Exam Items Reveals about Content Coverage in General Chemistry Assessments. Journal of Chemical Education, 2017, 94, 418-428.	2.3	15
33	Pedagogies of engagement use in postsecondary chemistry education in the United States: results from a national survey. Chemistry Education Research and Practice, 2021, 22, 30-42.	2.5	15
34	Selfâ€beliefs in organic chemistry: Evaluation of a reciprocal causation, crossâ€lagged model. Journal of Research in Science Teaching, 2019, 56, 598-618.	3.3	14
35	Polytomous versus Dichotomous Scoring on Multiple-Choice Examinations: Development of a Rubric for Rating Partial Credit. Journal of Chemical Education, 2013, 90, 1310-1315.	2.3	13
36	Historical Analysis of the Inorganic Chemistry Curriculum Using ACS Examinations as Artifacts. Journal of Chemical Education, 2018, 95, 726-733.	2.3	13

#	Article	IF	Citations
37	The American Chemical Society Exams Institute Undergraduate Chemistry Anchoring Concepts Content Map V: Analytical Chemistry. Journal of Chemical Education, 2020, 97, 1530-1535.	2.3	13
38	Research and Teaching: Training the Foot Soldiers of Inquiry: Development and Evaluation of a Graduate Teaching Assistant Learning Community. Journal of College Science Teaching, 2014, 044, .	0.4	9
39	The Postsecondary Inorganic Chemistry Instructional Laboratory Curriculum: Results from a National Survey. Journal of Chemical Education, 2022, 99, 1971-1981.	2.3	9
40	Examining the Impact of Chemistry Education Research Articles from 2007 through 2013 by Citation Counts. Journal of Chemical Education, 2015, 92, 1299-1305.	2.3	8
41	Using the ACS Anchoring Concepts Content Map (ACCM) To Aid in the Evaluation and Development of ACS General Chemistry Exam Items. ACS Symposium Series, 2016, , 179-194.	0.5	8
42	Adapting the Anchoring Concepts Content Map (ACCM) of ACS Exams by Incorporating a Theme: Merging Green Chemistry and Organic Chemistry. Journal of Chemical Education, 2020, 97, 374-382.	2.3	8
43	Goals for the Undergraduate Instructional Inorganic Chemistry Laboratory When Course-Based Undergraduate Research Experiences Are Implemented: A National Survey. Journal of Chemical Education, 2022, 99, 4068-4078.	2.3	8
44	Assessment Tools in Context: Results from a National Survey of Postsecondary Chemistry Faculty. Journal of Chemical Education, 2022, 99, 2843-2852.	2.3	7
45	Alignment of ACS Inorganic Chemistry Examination Items to the Anchoring Concepts Content Map. Journal of Chemical Education, 2018, 95, 1468-1476.	2.3	5
46	Building Community: A Reflection on the Interactive Online Network of Inorganic Chemists. ACS Symposium Series, 2020, , 131-139.	0.5	5
47	Assessment in Postsecondary Chemistry Education: A Comparison of Course Types. Assessment Update, 2018, 30, 1-16.	0.2	2
48	Exploring Student Affective Experiences in Inorganic Chemistry Courses: Understanding Student Anxiety and Enjoyment. ACS Symposium Series, 2020, , 117-129.	0.5	2
49	Are Content Tests All the Assessment We Need?. ACS Symposium Series, 2015, , 257-275.	0.5	1
50	Coupling Eye Tracking with Verbal Articulation in the Evaluation of Assessment Materials Containing Visual Representations. ACS Symposium Series, 2018, , 165-181.	0.5	1
51	Exploring the Apparent Motivational Impact of Resurrection Points from Final Exam Performance. ACS Symposium Series, 2014, , 115-131.	0.5	0
52	Evaluation of Subset Norm Stability in ACS General Chemistry Exams. Journal of Chemical Education, 2019, 96, 2132-2140.	2.3	0
53	Development of a Method for Imputation of Missing Data Using ACS Exams as a Prototype. Journal of Chemical Education, 2019, 96, 1083-1095.	2.3	0
54	Effect of a Representative Sample of Internally Calibrated Mental Effort and Polytomously Scored Data on Representing Cognitive Efficiency. Journal of Chemical Education, 2022, 99, 1326-1335.	2.3	0