# George M Bodner

List of Publications by Year
in descending order



| 46 | 3,332 | 201674 27 | 254184 43 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 47 | 47 | 47 | 1717 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Constructivism: A theory of knowledge. Journal of Chemical Education, 1986, 63, 873. | 2.3 | 636 |
| 2 | The Purdue Visualization of Rotations Test. The Chemical Educator, 1997, 2, 1-17. | 0.0 | 229 |
| 3 | Factors Influencing the Self-Efficacy Beliefs of First-Year Engineering Students. Journal of Engineering Education, 2006, 95, 39-47. | 3.0 | 208 |
| 4 | "It Gets Me to the Product": How Students Propose Organic Mechanisms. Journal of Chemical Education, 2005, 82, 1402. | 2.3 | 207 |
| 5 | The beginning science teacher: Classroom narratives of convictions and constraints. Journal of Research in Science Teaching, 1992, 29, 471-485. | 3.3 | 172 |
| 6 | Spatial ability and its role in organic chemistry: A study of four organic courses. Journal of Research in Science Teaching, 1987, 24, 229-240. | 3.3 | 167 |
| 7 | The Many Forms of Constructivism. Journal of Chemical Education, 2001, 78, 1107. | 2.3 | 166 |
| 8 | A study of two measures of spatial ability as predictors of success in different levels of general chemistry. Journal of Research in Science Teaching, 1987, 24, 645-657. | 3.3 | 137 |
| 9 | Making sense of the arrow-pushing formalism among chemistry majors enrolled in organic chemistry. Chemistry Education Research and Practice, 2008, 9, 102-113. | 2.5 | 130 |
| 10 | What Does it Mean to Design? A Qualitative Investigation of Design Professionals' Experiences. Journal of Engineering Education, 2012, 101, 187-219. | 3.0 | 126 |
| 11 | Cognitive restructuring as an early stage in problem solving. Journal of Research in Science Teaching, 1986, 23, 727-737. | 3.3 | 102 |
| 12 | Providing a Voice: Qualitative Investigation of the Impact of a Firstâ€Year Engineering Experience on Students' Efficacy Beliefs. Journal of Engineering Education, 2008, 97, 177-190. | 3.0 | 101 |
| 13 | What can we do about â€˜Parkerâ€™? A case study of a good student who didn't â€˜getâ€™ organic chemistry. Chemistry Education Research and Practice, 2008, 9, 93-101. | 2.5 | 93 |
| 14 | Sixth-Grade Studentsâ€™ Views of the Nature of Engineering and Images of Engineers. Journal of Science Education and Technology, 2011, 20, 123-135. | 3.9 | 83 |
| 15 | Contextual epistemic development in science: A comparison of chemistry students and research chemists. Science Education, 2006, 90, 468-495. | 3.0 | 79 |
| 16 | Nonâ€mathematical problem solving in organic chemistry. Journal of Research in Science Teaching, 2010, 47, 643-660. | 3.3 | 61 |
| 17 | WHAT RESEARCH TELLS US ABOUT USING ANALOGIES TO TEACH CHEMISTRY. Chemistry Education Research and Practice, 2004, 5, 15-32. | 2.5 | 59 |
| 18 | An analysis of the effectiveness of analogy use in college-level biochemistry textbooks. Journal of Research in Science Teaching, 2006, 43, 1040-1060. | 3.3 | 59 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The role of algorithms in teaching problem solving. Journal of Chemical Education, 1987, 64, 513. | 2.3 | 58 |
| 20 | Why changing the curriculum may not be enough. Journal of Chemical Education, 1992, 69, 186. | 2.3 | 51 |
| 21 | Using Studentsâ€™ Representations Constructed during Problem Solving To Infer Conceptual Understanding. Journal of Chemical Education, 2012, 89, 837-843. | 2.3 | 39 |
| 22 | Culturing reality: How organic chemistry graduate students develop into practitioners. Journal of Research in Science Teaching, 2014, 51, 694-713. | 3.3 | 35 |
| 23 | Students' perceptions of academic dishonesty in the chemistry classroom laboratory. Journal of Research in Science Teaching, 2004, 41, 47-64. | 3.3 | 33 |
| 24 | Finding fulfillment: women's self-efficacy beliefs and career choices in chemistry. Chemistry Education Research and Practice, 2011, 12, 420-426. | 2.5 | 32 |
| 25 | Problemâ€solving processes used by students in organic synthesis. International Journal of Science Education, 1991, 13, 143-158. | 1.9 | 31 |
| 26 | Locks and keys. Biochemistry and Molecular Biology Education, 2007, 35, 244-254. | 1.2 | 31 |
| 27 | Existence of a Problem-Solving Mindset among Students Taking Quantum Mechanics and Its Implications. ACS Symposium Series, 2007, , 155-173. | 0.5 | 30 |
| 28 | Instructors' Intended Learning Outcomes for Using Computational Simulations as Learning Tools. Journal of Engineering Education, 2012, 101, 220-243. | 3.0 | 28 |
| 29 | Twenty Years of Learning: How To Do Research in Chemical Education. 2003 George C. Pimentel Award. Journal of Chemical Education, 2004, 81, 618. | 2.3 | 24 |
| 30 | Introduction: Research and practice in chemical education in advanced courses. Chemistry Education Research and Practice, 2008, 9, 81-83. | 2.5 | 18 |
| 31 | Biochemistry instructors' perceptions of analogies and their classroom use. Chemistry Education Research and Practice, 2015, 16, 731-746. | 2.5 | 16 |
| 32 | What Happens When Discovery Laboratories Are Integrated into the Curriculum at a Large Research University?. The Chemical Educator, 1998, 3, 1-21. | 0.0 | 15 |
| 33 | A Review of Biochemistry Education Research. Journal of Chemical Education, 2020, 97, 2091-2103. | 2.3 | 13 |
| 34 | Chemical reactions: what understanding do students with blindness develop?. Chemistry Education Research and Practice, 2013, 14, 625-636. | 2.5 | 9 |
| 35 | Dishonesty in the biochemistry classroom laboratory: A synthesis of causes and prevention. Biochemistry and Molecular Biology Education, 2006, 34, 338-342. | 1.2 | 7 |
| 36 | Creation of an American Association of Chemistry Teachers. Journal of Chemical Education, 2014, 91, 3-5. | 2.3 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | The quadruple bottom line: the advantages of incorporating Green Chemistry into the undergraduate chemistry major. ChemistrySelect, 2017, 2, . | 1.5 | 6 |
| 38 | Strengthening conceptual connections in introductory chemistry courses. Chemistry Education Research and Practice, 2007, 8, 93-100. | 2.5 | 5 |
| 39 | CHEMiCALC (4000161) and CHEMiCALC Personal Tutor (4001108), Version 4.0 (Ramsay, O. Bertrand). Journal of Chemical Education, 1999, 76, 34. | 2.3 | 4 |
| 40 | Chemical education: Where we've been; where we are; where we're going. Journal of Chemical Education, 1984, 61, 843. | 2.3 | 2 |
| 41 | Factors that Influence Chemistry Students? Decisions to ?Drop Out? of Graduate School. The Chemical Educator, 1997, 1, 1-12. | 0.0 | 2 |
| 42 | SECONDARY SCIENCE TEACHERS' DEVELOPMENT OF PEDAGOGICAL CONTENT KNOWLEDGE AS RESULT OF INTEGRATING NANOSCIENCE CONTENT IN THEIR CURRICULUM. Cosmos, 2013, 08, 187-209. | 0.4 | 2 |
| 43 | Doing the Research that Informs Practice: A Retrospective View of One Group's Attempt to Study The Teaching and Learning of Organic Chemistry. Chemistry - an Asian Journal, 2017, 12, 1413-1420. | 3.3 | 1 |
| 44 | 2. The quadruple bottom line: the advantages of incorporating Green Chemistry into the undergraduate chemistry major. , 2017, , . | | 1 |
| 45 | Program for the Division of Chemical Education: Chicago, March 25-29, 2007. Journal of Chemical Education, 2007, 84, 394. | 2.3 | 0 |
| 46 | How To Avoid Common Mistakes When Searching for a Faculty Position. ACS Symposium Series, 2014, , 71-92. | 0.5 | 0 |