

# Publications intéressantes

## Dans Journal of Chemical Education

### 2019

- [Total Chemical Footprint of an Experiment: A Systems Thinking Approach to Teaching Rovibrational Spectroscopy](#) Paul D. Cooper, Jacob Walser, J. Chem. Educ. 2019, 96(12), 2947-2951 DOI: 10.1021/acs.jchemed.9b00405
- [Valorization of Waste Orange Peel to Produce Shear-Thinning Gels](#) Lucy S. Mackenzie, Helen Tyrrell, Robert Thomas, Avtar S. Matharu, James H. Clark, Glenn A. Hurst, J. Chem. Educ. 2019, 96(12), 3025-3029 DOI: 10.1021/acs.jchemed.8b01009
- [Helping Students Connect Interdisciplinary Concepts and Skills in Physical Chemistry and Introductory Computing: Solving Schrödinger's Equation for the Hydrogen Atom](#) Oka Kurniawan, Li Ling Apple Koh, Jermaine Zhi Min Cheng, Maggie Pee, J. Chem. Educ. 2019, 96(10), 2202-2207 DOI: 10.1021/acs.jchemed.9b00068
- [Teaching Entropy from Phase Space Perspective: Connecting the Statistical and Thermodynamic Views Using a Simple One-Dimensional Model](#) Dhritiman Bhattacharyya, Jahan M. Dawlaty, J. Chem. Educ. 2019, 96(10), 2208-2216 DOI: 10.1021/acs.jchemed.9b00134
- [Demystifying Mathematical Modeling of Electrochemical Systems](#) Lisa I. Stephens, Janine Mauzeroll, J. Chem. Educ. 2019, 96(10), 2217-2224 DOI: 10.1021/acs.jchemed.9b00542
- [Development of the Enthalpy and Entropy in Dissolution and Precipitation Inventory](#) Timothy N. Abell, Stacey Lowery Bretz, J. Chem. Educ. 2019, 96(9), 1804-1812, DOI: 10.1021/acs.jchemed.9b00186
- [Investigating Student Understanding of London Dispersion Forces: A Longitudinal Study](#) Keenan Noyes, Melanie M. Cooper, J. Chem. Educ. 2019, 96(9), 1821-1832 DOI: 10.1021/acs.jchemed.9b00455
- [Bouncing Droplets: A Hands-On Activity To Demonstrate the Properties and Applications of Superhydrophobic Surface Coatings](#) Carolina Cionti, Tommaso Taroni, Daniela Meroni, J. Chem. Educ. 2019, 96(9), 1971-1976 DOI: 10.1021/acs.jchemed.9b00406
- [Chemical Curiosity on Campus: An Undergraduate Project on the Structure and Wettability of Natural Surfaces](#) Anthony Katselas, Alice Motion, Chiara O'Reilly, Chiara Neto, J. Chem. Educ. 2019, 96(9), 1998-2002 DOI: 10.1021/acs.jchemed.9b00324
- [Alternative Derivation of the Maxwell Distribution of Speeds](#) Francisco Rivadulla, J. Chem. Educ. 2019, 96(9), 2063-2065 DOI: 10.1021/acs.jchemed.9b00188
- [Realistic Implementation of the Particle Model for the Visualization of Nanoparticle Precipitation and Growth](#) Antonella Di Vincenzo, Michele A. Floriano, J. Chem. Educ. 2019, 96(8), 1654-1662 DOI: 10.1021/acs.jchemed.9b00330
- [Implementing New Educational Platforms in the Classroom: An Interactive Approach to the Particle in a Box Problem](#) Vinícius Wilian D. Cruzeiro, Xiang Gao, Valeria D. Kleiman, J. Chem. Educ. 2019, 96(8), 1663-1670 DOI: 10.1021/acs.jchemed.9b00195
- [Development of the Quantization and Probability Representations Inventory as a Measure of Students' Understandings of Particulate and Symbolic Representations of Electron Structure](#) Zahilyn D. Roche Allred, Stacey Lowery Bretz, J. Chem. Educ. 2019, 96(8), 1558-1570 DOI: 10.1021/acs.jchemed.9b00098
- [Developing and Using a Computer Simulation of Liquid-Vapor Transitions to Improve Students' Assimilation of Concepts Related to the Behavior of Real Gases](#) David Zorrilla, Jesús Sánchez-

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- [Enthalpy and the Second Law of Thermodynamics](#) David Keifer, J. Chem. Educ., 2019, 96 (7), pp 1407-1411 DOI: 10.1021/acs.jchemed.9b00326
  - [µdroPi: A Hand-Held Microfluidic Droplet Imager and Analyzer Built on Raspberry Pi](#) Meng Sun, Zhengda LiQiong Yang, J. Chem. Educ., 2019, 96 (6), pp 1152-1156 DOI: 10.1021/acs.jchemed.8b00975
  - [PChem Challenge Game: Reinforcing Learning in Physical Chemistry](#) Tugba G. Kucukkal, Ajda Kahveci, J. Chem. Educ., 2019, 96 (6), pp 1187-1193 DOI: 10.1021/acs.jchemed.8b00757
  - [Effect of Chemical and Physical Modifications on the Wettability of Polydimethylsiloxane Surfaces](#) Carolyn L. Wanamaker, Brittany S. Neff, Azieta Nejati-Namin, Erin R. Spatenka, Mong-Lin Yang, J. Chem. Educ., 2019, 96 (6), pp 1212-1217 DOI: 10.1021/acs.jchemed.8b00814
  - [Disseminating a Free, Practical Java Tool To Interactively Generate and Edit 2D Chemical Structures](#) Andreas Hofmann, Mark J. Coster, Paul Taylor, J. Chem. Educ., 2019, 96 (6), pp 1262-1267 DOI: 10.1021/acs.jchemed.9b00073
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  - [Collaborative Learning Exercises for Teaching Protein Mass Spectrometry](#) Michelle L. Kovarik, Jill K. Robinson, J. Chem. Educ. 2019, 96 (5) pp905-911 DOI: 10.1021/acs.jchemed.8b00734 + [Biological Mass Spectrometry: Proteomics](#)
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  - [Simple and Low-Cost Setup for Measurement of the Density of a Liquid](#) Nima Noei, Iman Mohammadi Imani, Lee D. Wilson, and Saeid Azizian, J. Chem. Educ., 2019, 96 (1), pp 175-179 DOI: 10.1021/acs.jchemed.7b00979
  - [Reduction of Water Waste in an Organic Chemistry Laboratory Using a Low-Cost Recirculation System for Condenser Apparatus](#) Alex Schoeddert, Keshwaree Babooram, and Sarah Pelletier J. Chem. Educ., 2019, 96 (1), pp 180-182 DOI: 10.1021/acs.jchemed.8b00400
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- [Using the Principles of Classical and Statistical Thermodynamics To Calculate the Melting and Boiling Points, Enthalpies and Entropies of Fusion and Vaporization of Water, and the Freezing Point Depression and Boiling Point Elevation of Ideal and Nonideal Aqueous Solutions](#) Arthur M. Halpern and Charles J. Marzzacco, *J. Chem. Educ.*, 2018, 95 (12), pp 2205–2211 DOI: 10.1021/acs.jchemed.8b00561
  - [The Gibbs Phase Rule: What Happens When Some Phases Lack Some Components?](#) Deepika Janakiraman, *J. Chem. Educ.*, 2018, 95 (11), pp 2086–2088 DOI: 10.1021/acs.jchemed.8b00377
  - [Liquid Crystal Demonstration of Binary Phase Behavior for the Classroom](#) Marissa E. Tousley, *J. Chem. Educ.*, 2018, 95 (11), pp 2000–2005 DOI: 10.1021/acs.jchemed.8b00081
  - [Approximate Equation To Calculate Partial Pressures in a Mixture of Real Gases](#) Bernard Hayez, *J. Chem. Educ.*, 2018, 95 (11), pp 1982–1988 DOI: 10.1021/acs.jchemed.8b00185
  - [Investigation of the Ternary Phase Diagram of Water-Propan-2-ol-Sodium Chloride: A Laboratory Experiment](#) Cory C. Pye, M. Angelique Imperial, Coltin Elson, Megan L. Himmelman, Jacquelyn A. White, and Fuhao Lin, *J. Chem. Educ.*, 2018, 95 (8), pp 1398–1401 DOI: 10.1021/acs.jchemed.8b00242
  - [Pedagogical Approach to the Modeling and Simulation of Oscillating Chemical Systems with Modern Software: The Brusselator Model](#) Jaime H. Lozano-Parada, Helen Burnham, and Fiderman Machuca Martinez, *J. Chem. Educ.*, 2018, 95 (5), pp 758–766 DOI: 10.1021/acs.jchemed.7b00703
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- [Development and Use of an Open-Source, User-Friendly Package To Simulate Voltammetry Experiments](#) Shuo Wang, Jing Wang, and Yanjing Gao, *J. Chem. Educ.*, 2017, 94 (10), pp 1567–1570 DOI: 10.1021/acs.jchemed.6b00986
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- [University chemistry students' interpretations of multiple representations of the helium atom](#) Zahilyn D. Roche Allred and Stacey Lowery Bretz, Chem. Educ. Res. Pract., 2019,20, 358-368 DOI: 10.1039/C8RP00296G
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- [The hot chocolate effect might have practical application](#)
  - [Contactless, probeless and non-titrimetric determination of acid–base reactions using broadband acoustic resonance dissolution spectroscopy \(BARDS\)](#), M. Rizwan Ahmed, Sean McSweeney, Jacob Krüse, Bastiaan Vos and Dara Fitzpatrick, Analyst, 2018, 956-962. DOI : 10.1039/C7AN01447C

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