

Publications intéressantes

Dans Journal of Chemical Education

2019

- [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
- [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
- [Design, Fabrication, and Optical Characterization of a Low-Cost and Open-Source Spin Coater](#) Mohammad Sadegh-cheri, *J. Chem. Educ.*, 2019, 96 (6), pp 1268-1272 DOI: 10.1021/acs.jchemed.9b00013
- [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 + [<https://community.asdlib.org/activelearningmaterials/biological-mass-spectrometry-proteomics/>][Biological Mass Spectrometry: Proteomics]]
- [A Tale of Two Molecules: How the Heat Capacities of N₂\(g\) and F₂\(g\) Differ At High Temperature and Why Naïve Expectations Fail to Explain These Differences: A Spreadsheet Exercise for Physical Chemistry Students](#) Arthur M. Halpern and Robert J. Noll, *J. Chem. Educ.*, 2019, 96 (5), pp 926-935 DOI: 10.1021/acs.jchemed.9b00029
- [Creating and Experimenting with a Low-Cost, Rugged System to Visually Demonstrate the Vapor Pressure of Liquids as a Function of Temperature](#) Rodrigo Papai, Mayara Araujo Romano, Aline Rodrigues Arroyo, Bárbara Rodrigues da Silva, Bruno Tresoldi, Gabriela Cabo Winter, Julia Messias Costa, Maria Aparecida Freitas Santos, Matheus Damasceno Prata, and Ivanise Gaubeur, *J. Chem. Educ.*, 2019, 96 (2), pp 335-341 DOI: 10.1021/acs.jchemed.8b00381
- [Teaching Boyle's Law and Charles' Law through Experiments that Use Novel, Inexpensive Equipment Yielding Accurate Results](#) Taweetham Limpanuparb, Siradanai Kanithasevi, Maytouch Lojanarungsiri, and Puh Pakwilaikiat, *J. Chem. Educ.*, 2019, 96 (1), pp 169-174 DOI: 10.1021/acs.jchemed.8b00460
- [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](#)

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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. Marzocco, 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
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- [Facilitating Students' Interaction with Real Gas Properties Using a Discovery-Based Approach and Molecular Dynamics Simulations](#) Chelsea Sweet, Oyewumi Akinfenwa, and Jonathan J. Foley, IV J. Chem. Educ., 2018, 95 (3), pp 384–392 DOI: 10.1021/acs.jchemed.7b00747

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Dans Chemistry Education Research and Practice

- [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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