

PUBLICATIONS & BOOK CHAPTERS

1. S. Groveman, J. Peng, B. Itin, I. Diallo, L. M. Pratt, A. Greer, E. J. Biddinger, S. G. Greenbaum, C. M. Drain, L. C. Francesconi, M. Vittadello, *Carbon*, **2017**, *in press*. "The Role of Ozone in the Formation and Structural Evolution of Graphene Oxide Obtained from Nanographite"
2. C. Farley, A. Aggarwal, S. Singh, A. Dolor, P. To, A. Falber, M. Crossley, C. M. Drain, *J. Compu. Chem.* **2017**, *in press*. "A Structural Model of Nitro-Porphyrin Dyes based on Spectroscopy and Density Functional Theory"
3. A. A. Pawlicki, A. Vilan, M. Jurow, C. M. Drain, J. D. Batteas *Faraday Discussions* **2017** *in press*. "The Influence of Nearest-Neighbor Interactions and Assembly Dynamics on the Transport Properties of Porphyrin Supramolecular Assemblies on Au(111)" DOI: 10.1039/C7FD00118E.
4. P. M. R. Pereira, N. Berisha, N. V. S. D. K. Bhupathiraju, R. Fernandes, J. P.C. Tomé, C. M. Drain. *PLOS-One*, **2017**, doi.org/10.1371/journal.pone.0177737 "Cancer Cell Spheroids are a Better Screen for the Photodynamic Efficiency of Glycosylated Photosensitizers"
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9. T. M. Shaffer, S. Harmsen, E. Khwaja, M. Kircher, C.M. Drain, J. Grimm, *Nano Lett.* **2016**, *16*, 5601–5604. "Stable radiolabeling of copper-64 with sulfur-functionalized silica nanoparticles"
10. W. Rizvi, Charles M. Drain, Patrick Moy, Matthew J. Jurow, "Solventless Synthesis, Separation and Characterization of Zinc and Free-Base Tetraphenylporphyrin" in *Comprehensive Organic Chemistry Experiments for the Laboratory Classroom*, Royal Soc. Chem. **2016**. ISBN-10: 1849739633
11. C. Xu, A. Wan, X. Gong, N. V. S. D. K. Bhupathiraju, J. D. Batteas, C. M. Drain, *J. Porphyrins Phthalocyanines* **2016**, *20*, 438–443. "Reorganization of porphyrin nanoparticle morphology driven by surface energetics"
12. A. Pawlicki, E. Avery, M. Jurow, B. Ewers, A. Vilan, C.M. Drain, J.D. Batteas, *J. Phys: Cond. Mat.* **2016**, *28*, 094013, 11pages. "Studies of the Structure and Phase Transitions of Nano-confined Pentanedithiol and its Applications in Directing Hierarchical Molecular Assemblies on Au(111)"
13. N. V. S. D. K. Bhupathiraju, W. Rizvi, J. D. Batteas, C. M. Drain, *Org. Biomol. Chem.* **2016**, *14*, 389-408. "Fluorinated Porphyrinoids as Efficient Platforms for New Photonic Materials, Sensors, and Therapeutics" Cover article, DOI: 10.1039/C5OB01839K
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^B This procedure is used in several undergraduate teaching labs (such as the University of California Riverside and the University of Oregon) as an inexpensive way to teach 'green' chemistry.

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PATENTS

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Reports on Our Work

1. ACS website on the international year of chemistry 2011
<http://www.acs.org/content/acs/en/pressroom/newsreleases/2011/march/whitehouse-school-students-to-conduct-global-water-chemistry-experiments-for-the-international-year-of-chemistry-may-26.html> and in the New Jersey newspaper *Hunterdon County Democrat*
2. U.S. National Science Foundation, Division of Chemistry: "Realignment of the Division of Chemistry Programs" May 2009 featured as an example of "Macromolecular, Supramolecular and Nanochemistry" <http://www.nsf.gov/mps/che/realign/brochure.pdf>
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YouTube Videos

YouTube videos that feature Hunter College graduate and undergraduate students describing their research. Produced by C.M. Drain

A new method to synthesize gold, nickel, and cobalt nanoparticles at room temperature (2011):

<http://www.youtube.com/watch?v=CLYt3hoP7jo&feature=colike>

New ideas for solar cell dyes part 1 (2011):

<http://www.youtube.com/watch?v=72JfmxvQ63Y&feature=colike>

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New Green Catalysts for Green Chemistry (2011):

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On line reports and posters

30 Years of Porphyrinoid Chemistry [10.13140/RG.2.1.1939.6568](https://doi.org/10.13140/RG.2.1.1939.6568)

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Research: Self-Organized Porphyrin & Phthalocyanine Materials

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