

## Luke M. Davis

Department of Chemistry  
Tufts University

### Complete list of publications

"Vapor deposition of copper(I) bromide films via two-step conversion process," R. Heasley, C. M. Chang, L. M. Davis, K. Liu, R. G. Gordon, *J. Vac. Sci. Technol. A* **2017**, *35*, 01B109/1-01B109/7. doi: 10.1116/1.4967726

"Synthesis of Calcium(II) Amidinate Precursors for Atomic Layer Deposition through a Redox Reaction between Calcium and Amidines," S. B. Kim, C. Yang, T. Powers, L. M. Davis, X. Lou, R. G. Gordon, *Angew. Chem. Int. Ed.* **2016**, *55*, 10228-10233. doi: 10.1002/anie.201602406

"Iron-cobalt alloy thin films with high saturation magnetizations grown by conformal metalorganic CVD," P. Zhang, S. Babar, J. R. Abelson, S. Sahoo, M. Zhu, M. Kautzky, L. M. Davis, G. S. Girolami, *J. Vac. Sci. Technol. A* **2015**, *33*, 061521/1-061521/6. doi: 10.1116/1.4935449

"Low-temperature CVD of thin films of iron, cobalt, and nickel nitrides from bis[di(*tert*-butyl)amido]metal(II) precursors and ammonia," A. N. Cloud, L. M. Davis, G. S. Girolami, J. R. Abelson, *J. Vac. Sci. Technol. A* **2014**, *32*, 020606/1-020606/7. doi: 10.1116/1.4865903

"Chemical Vapor Deposition of Copper: Use of a Molecular Inhibitor to Afford Uniform Nanoislands or Smooth Films," S. Babar, L. M. Davis, P. Zhang, E. Mohimi, G. S. Girolami, J. R. Abelson, *ECS J. Solid State Sci. Technol.* **2014**, *3*, Q79-Q83. doi: 10.1149/2.009405jss

"Low-temperature CVD of  $\eta$ -Mn<sub>3</sub>N<sub>2-x</sub> from bis[di(*tert*-butyl)amido]manganese(II) and ammonia," T. S. Spicer, C. W. Spicer, A. N. Cloud, L. M. Davis, G. S. Girolami, J. R. Abelson, *J. Vac. Sci. Technol. A* **2013**, *31*, 030604/1-030604/6. doi: 10.1116/1.4799036

"Single-Stage Synthesis and Characterization of Reflective and Conductive Silver-Polyimide Films Prepared from Silver(I) Complexes with ODPA/4,4'-ODA," D. S. Thompson, L. M. Davis, D. W. Thompson, R. E. Southward, *ACS Appl. Mater. Interfaces* **2009**, *1*, 1457-1466. doi: 10.1021/am900133a

"Latent Patterned Surface Metallization of Silver Ion-Doped Polyimide Films," L. M. Davis, T. S. Stukenbroeker, C. J. Abelt, J. L. Scott, E. Orlova, D. W. Thompson, *Mater. Res. Soc. Symp. Proc.* **2009**, *1192*, 1192-PP11-05. doi: 10.1557/PROC-1192-PP11-05

"Latent Synthesis of Electrically Conductive Surface-Silvered Polyimide Films," L. M. Davis, C. J. Abelt, J. L. Scott, E. Orlova, D. W. Thompson, *ACS Appl. Mater. Interfaces* **2009**, *1*, 204-210. doi: 10.1021/am800023b

"Novel and Facile Approach to the Fabrication of Metal-Patterned Dielectric Substrates," L. M. Davis, D. W. Thompson, *Chem. Mater.* **2007**, *19*, 2299-2303. doi: 10.1021/cm062372y

"Silver-polyimide nanocomposite films: a single-stage thermally-induced metallization of aromatic fluorinated polyimides yielding highly reflective films," L. M. Davis, D. S. Thompson, D. W. Thompson, R. E. Southward, *Polyimides and Other High Temperature Polymers* **2007**, *4*, 261-286.

"Silver-Polyimide Nanocomposite Membranes: Macromolecular-Matrix-Mediated Metallization of an Aromatic, Fluorinated Polyimide Yielding Highly Reflective Films at Low Metal Concentrations," L. M. Davis, D. S. Thompson, C. J. Dean, M. Pevzner, J. L. Scott, S. T. Broadwater, D. W. Thompson, R. E. Southward, *J. Appl. Polym. Sci.* **2007**, *103*, 2409-2418. doi: 10.1002/app.25384

"Reflective and Electrically Conductive Palladium Surface-Metallized Polyimide Nanocomposite Membranes," L. M. Davis, J. M. Compton, D. E. Kranbuehl, D. W. Thompson, R. E. Southward, *J. Appl. Polym. Sci.* **2006**, *102*, 2708-2716. doi: 10.1002/app.24162

"Palladium-Polyimide Nanocomposite Membranes: Synthesis and Characterization of Reflective and Electrically Conductive Surface-Metallized Films," B. L. French, L. M. Davis, E. S. Munzinger, J. W. J. Slavin, P. C. Christy, D. W. Thompson, R. E. Southward, *Chem. Mater.* **2005**, *17*, 2091-2100. doi: 10.1021/cm040378m