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## Ansættelse

### Adjunkt

Kemisk Institut  
Københavns Universitet  
København Ø, Danmark  
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## Publikationer

### **Improving single-molecule conductance measurements with change point detection from the econometrics toolbox**

Hamill, Joseph Martin, Bro-Jørgensen, William Dilys, Balogh, Z., Li, H., Leitherer, Susanne, Solomon, D., Halbritter, A. & Solomon, Gemma C., 23 jan. 2024, arxiv.org, 41 s.

### **Chemistry of the Au-Thiol Interface through the Lens of Single-Molecule Flicker Noise Measurements**

Rashid, U., Bro-Jørgensen, William Dilys, Harilal, K. B., Sreelakshmi, P. A., Mondal, R. R., Chittari Pisharam, V., Parida, K. N., Geetharani, K., Hamill, Joseph Martin & Kaliginedi, V., 2024, I: Journal of the American Chemical Society. 146, 13, 11 s.

### **Quantum Interference and Contact Effects in the Thermoelectric Performance of Anthracene-Based Molecules**

Hamill, Joseph Martin, Ismael, A., Al-Jobory, A., Bennett, T. L. R., Alshahrani, M., Wang, X., Akers-Douglas, M., Wilkinson, L. A., Robinson, B. J., Long, N., Lambert, C. & Albrecht, T., 10 apr. 2023, I: The Journal of Physical Chemistry Part C. 127, 15, s. 7484–7491 8 s.

### **Assembly, structure and thermoelectric properties of 1,1'-dialkynylferrocene 'hinges'**

Wilkinson, L. A., Bennett, T. L. R., Grace, I., Hamill, Joseph Martin, Wang, X., Au-Yong, S., Ismael, A., Jarvis, S. P., Hou, S., Albrecht, T., Cohen, L. F., Lambert, C., Robinson, B. J. & Long, N., 2022, I: Chemical Science. 28, s. 8380–8387 8 s.

### **Significant two-step potential-induced surface reconstruction observed on Au(1 1 1) in aqueous sulfuric acid**

Hamill, Joseph Martin, Zhou, K., Diddens, D. & Baghernejad, M., 2022, I: Electrochemistry Communications. 140, 5 s., 107332.

### **Trusting our machines: validating machine learning models for single-molecule transport experiments**

Bro-Jørgensen, William Dilys, Hamill, Joseph Martin, Bro, Rasmus & Solomon, Gemma C., 2022, I: Chemical Society Reviews. 51, 16, s. 6875-6892

### **Multivariate Approach to Single-Molecule Thermopower and Electrical Conductance Measurements**

Hamill, Joseph Martin, Weaver, C. & Albrecht, T., 2 dec. 2021, I: The Journal of Physical Chemistry Part C.

### **Scale-Up of Room-Temperature Constructive Quantum Interference from Single Molecules to Self-Assembled Molecular-Electronic Films**

Wang, X., Bennett, T. L. R., Ismael, A., Wilkinson, L. A., Hamill, Joseph Martin, White, A. J. P., Grace, I. M., Kolosov, O. V., Albrecht, T., Robinson, B. J., Long, N., Cohen, L. F. & Lambert, C., 2020, I: Journal of the American Chemical Society. 142, 19, s. 8555-8560 6 s.

### **Single Molecule Conductance of Electroactive Helquats: Solvent Effect**

Kolivoška, V., Šebera, J., Severa, L., Mészáros, G., Sokolová, R., Gasior, J., Kocábová, J., Hamill, Joseph Martin, Pospíšil, L. & Hromadová, M., 2 dec. 2019, I: ChemElectroChem.

### **Fast Data Sorting with Modified Principal Component Analysis to Distinguish Unique Single Molecular Break Junction Trajectories**

Hamill, Joseph Martin, Zhao, X. ., Mészáros, G., Bryce, M. . & Arenz, Matthias, 2 jan. 2018, I: Physical Review Letters. 120, 5 s., 016601.

### **Electrochemical control of the single molecule conductance of a conjugated bis(pyrrolo)tetrathiafulvalene based molecular switch**

O'Driscoll, L. J., Hamill, Joseph Martin, Grace, I., Nielsen, B. W., Almutib, E., Fu, Y., Wenjing, H. 洪., Lambert, C. & Jeppesen, J. O., 2017, I: Chemical Science. 8, 9, s. 6123-6130 8 s.

### **Single-molecule detection of dihydroazulene photo-thermal reaction using break junction technique**

Huang, C., Jevric, M., Borges, A. C., Olsen, S. T., Hamill, Joseph Martin, Zheng, J. T., Yang, Y., Rudnev, A., Baghernejad, M., Broekmann, P., Petersen, A. U., Wandlowski, T., Mikkelsen, Kurt Valentin, Solomon, Gemma C., Nielsen, Mogens Brøndsted & Hong, W., 2017, I: Nature Communications. 8, 7 s., 15436.

### **Molecular rectifier composed of DNA with high rectification ratio enabled by intercalation**

Guo, C., Wang, K., Zerah-Harush, E., Hamill, Joseph Martin, Wang, B., Dubi, Y. & Xu, B., maj 2016, I: Nature Chemistry.

### **Three-State Single-Molecule Naphthalenediimide Switch: Integration of a Pendant Redox Unit for Conductance Tuning**

Li, Y., Baghernejad, M., Qusiy, A., Zsolt Manrique, D., Zhang, G., Hamill, Joseph Martin, Fu, Y., Broekmann, P., Hong, W. , Wandlowski, T., Zhang, D. & Lambert, C., 9 nov. 2015, I: Angewandte Chemie International Edition.

### **Mapping the Details of Contact Effect of Modulated Au-Octanedithiol-Au Break Junction by Force-Conductance Cross-Correlation**

Wang, K., Hamill, Joseph Martin, Zhou, J. & Xu, B., 17 dec. 2014, I: Journal of the American Chemical Society.

### **Measurement and control of detailed electronic properties in a single molecule break junction**

Wang, K., Hamill, Joseph Martin, Zhou, J., Guo, C. & Xu, B., 8 sep. 2014, I: Faraday Discussions. 174, s. 91-104 14 s.

### **Structure determined charge transport in single DNA molecule break junctions**

Wang, K., Hamill, Joseph Martin, Wang, B., Guo, C., Jiang, S., Huang, Z. & Xu, B., sep. 2014, I: Chemical Science. 5, 9, s. 3425-3431 7 s.

### **Measurement and understanding of single-molecule break junction rectification caused by asymmetric contacts**

Wang, K., Zhou, J., Hamill, Joseph Martin & Xu, B., 7 aug. 2014, I: The Journal of Chemical Physics.

### **Force and conductance molecular break junctions with time series crosscorrelation**

Hamill, Joseph Martin, Wang, K. & Xu, B., 7 jun. 2014, I: Nanoscale. 6, 11, s. 5657-5661 5 s.

### **Characterizing molecular junctions through the mechanically controlled break-junction approach**

Xu, B., Hamill, Joseph Martin & Wang, K., 31 maj 2014, I: Reports in Electrochemistry. s. 1