

All publications of the Functional Interfaces Research Group members:

(Author search in the Hungarian Scientific Bibliography)

<https://m2.mtmt.hu/gui2/>

Selected publications

[Development of high-sensitivity analytical instrumentation](#)

F. Vavrek, J. Gasior, J. Šebera, M. Valášek, G. Mészáros, M. Hromadová

Single Molecule Conductance of Anthraquinone-Based Molecular Wire: Effect of the Anchoring Group

HELVETICA CHIMICA ACTA 108: 2 Paper: e202400155 (2025)

<https://doi.org/10.1002/hlca.202400155>

T. Sebechlebska, V. Kolivoska, J. Sebera, J. Fukal, D. Reha, M. Budesinsky, I. Rosenberg, L. Bednarova, J. Gasior, G. Mészáros, M. Hromadová, V. Sychrovský

Additive transport in DNA molecular circuits

JOURNAL OF MATERIALS CHEMISTRY C 10: 12022-12031 (2022)

<https://doi.org/10.1039/D2TC01219G>

T. N. Török, J. G. Fehérvári, G. Mészáros, L. Pósa, A. Halbritter, András

Tunable, Nucleation-Driven Stochasticity in Nanoscale Silicon Oxide Resistive Switching Memory Devices

ACS APPLIED NANO MATERIALS 5 : 6691-6698 (2022)

<https://doi.org/10.1021/acsanm.2c00722>

G. Mészáros, S. Akbarzadeh, B. De La Franier, Z. Keresztes, M. Thompson

Advances in Electromagnetic Piezoelectric Acoustic Sensor Technology for Biosensor-Based Detection

CHEMOSENSORS 9:3, 58 (2021)

<https://doi.org/10.3390/chemosensors9030058>

Š. Lachmanová Nováková, V. Kolivoška, J. Šebera, J. Gasior, G. Mészáros, G. Dupeyre, P. P. Lainé, M. Hromadová,
Environmental Control of Single-Molecule Junction Evolution and Conductance: A Case Study of Expanded Pyridinium Wiring

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 60: 9, 4732-4739 (2021)

<https://doi.org/10.1002/anie.202013882>

F. Vavrek, O. Butsyk, V. Kolivoška, Š. Lachmanová Nováková, T. Sebechlebská, J. Šebera, J. Gasior, G. Mészáros, M. Hromadová

Does the Seebeck coefficient of a single-molecule junction depend on the junction configuration?

JOURNAL OF MATERIALS CHEMISTRY A 9 : 32, 17512-17520 (2021)

<https://doi.org/10.1039/D1TA05324H>

J. Bails, A. Daaoub, S. Sangtarash, X. Li, Y. Tang, Q. Zou, H. Sadeghi, S. Liu, X. Huang, Z. Tan, J. Liu, Y. Yang, J. Shi, G. Mészáros, W. Chen, C. Lambert, W. Hong

Anti-resonance features of destructive quantum interference in single-molecule thiophene junctions achieved by electrochemical gating

NATURE MATERIALS 18 : 4 364-369. (2019)

<https://doi.org/10.1038/s41563-018-0265-4>