

CV of Zoltán Balogh

Personal data



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| Name | Zoltán Balogh |
| Position | Research fellow |
| Current institution | MTA-BME Condensed Matter Research Group 1111 Budapest, Budafoki út 8 Hungary |
| e-mail | balogh.zoltan@mail.bme.hu |
| Phone | +36 1 463 1650 |
| Fax | +36 1 643 4180 |
| Date of birth | 1988 |
| Civil status | Married |

Qualifications

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|------|---|
| 2012 | MSc degree in physics, BME, Hungary |
| 2017 | PhD in Physics " <i>Interaction of atomic junctions with carbon-monoxide molecules</i> ", BME, Hungary |

Employment

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|-----------|---------------------------|--|
| 2012-2015 | Assistant research fellow | MTA-BME Condensed Matter Research Group, BME, Hungary |
| 2015-2016 | Assistant research fellow | Department of Physics, BME, Hungary |
| 2017- | Research fellow | Department of Physics, BME, Hungary |
| 2017- | Research fellow | MTA-BME Condensed Matter Research Group, BME, Hungary |

Awards and prizes

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| 2011 | Scientific Students' Associations (TDK) 2 nd price |
| 2012 | <i>BMe Research Award</i> 1 st price |

Research interest

- Nanophysics
- Molecular electronics
- Resistive switching memories
- Noise measurements

Teaching activity

- Basic laboratory exercises I-II. (BSc in Physics)

Students supervised

- BSc students: Fanni Madarász (2018)
- MSc students: Gréta Mezei (2018)

Knowledge of languages: english, german

Collaborations (with joint publications)

Prof. Latha Venkataraman (Columbia University, USA), Prof. Colin Lambert (Lancaster University, UK), Prof. Gemma Solomon (University of Copenhagen, Denmark), Dr. László Oroszlány (ELTE, Hungary)

Scientometric data ([see details at mtmt.hu](#))

- Number of scientific publications (peer reviewed papers) : 6
- Independent citations: 49
- Summed impact factor: 34
- H-index: 4

Publication list

1.

Lauritzen, KP ; [Magyarkuti, A](#) ; [Balogh, Z](#) ; [Halbritter, A](#) ; Solomon, GC
[Classification of conductance traces with recurrent neural networks](#)
JOURNAL OF CHEMICAL PHYSICS 148 : 8 Paper: 084111 , 10 p. (2018)

2.

[A, Magyarkuti](#) ; K P, Lauritzen ; [Z, Balogh](#) ; A, Nyáry ; [G, Mészáros](#) ; [P, Makk](#) ; G C, Solomon ; [A, Halbritter](#)
[Temporal correlations and structural memory effects in break junction measurements](#)
JOURNAL OF CHEMICAL PHYSICS 146 : 9 p. 092319 Paper: 092319 (2017)
External citations: 1, Self citations: 2, Unhandled citations: 0, [All citations: 3](#)

3.

[Balogh, Zoltán](#) ; [Makk, Péter](#) ; [Halbritter, András](#)
[Alternative types of molecule-decorated atomic chains in Au–CO–Au single-molecule junctions](#)
BEILSTEIN JOURNAL OF NANOTECHNOLOGY 6 pp. 1369-1376. , 8 p. (2015)
External citations: 3, Self citations: 2, Unhandled citations: 0, [All citations: 5](#)
External citations: 10, Self citations: 4, Unhandled citations: 0, [All citations: 14](#)

4.

[Balogh, Z](#) ; [Visontai, D](#) ; [Makk, P](#) ; [Gillemot, K](#) ; [Oroszlány, L](#) ; [Pósa, L](#) ; Lambert, C ; [Halbritter, A](#)
[Precursor configurations and post-rupture evolution of Aq-CO-Aq single-molecule junctions](#)
NANOSCALE 6 : 24 pp. 14784-14791. , 8 p. (2014)
External citations: 2, Self citations: 2, Unhandled citations: 0, [All citations: 4](#)

5.

[Makk, P](#) ; [Balogh, Z](#) ; [Csonka, S](#) ; [Halbritter, A](#)

[*Pulling Platinum Atomic Chains by Carbon Monoxide Molecules*](#)

NANOSCALE 4 : 15 pp. 4739-4745. , 7 p. (2012)

External citations: 6, Self citations: 4, Unhandled citations: 0, [All citations: 10](#)

6.

[Makk, P](#) ; Tomaszewski, D ; Martinek, J ; [Balogh, Z](#) ; [Csonka, S](#) ; Wawrzyniak, M ; Frei, M ; Venkataraman, L ; [Halbritter, A](#)

[*Correlation Analysis of Atomic and Single-Molecule Junction Conductance*](#)

ACS NANO 6 : 4 pp. 3411-3423. , 13 p. (2012)

External citations: 34, Self citations: 7, Unhandled citations: 0, [All citations: 41](#)