Publication list

Cumulative impact factor: 33,264

Number of journal papers: 23

Number of conference proceeding papers: 20

Number of D1/Q1 papers: 2

Number of Q1 papers: 9

Number of Q2 papers: 4

Number of co-authors: 37

Refereed journals:

- L. R. Kolozsvári, T. Bérczes, A. Hajdu, R. Gesztelyi, A. Tiba, **I. Varga**, A. B. Al-Tammemi, G. J. Szőllősi, Sz. Harsányi, Sz. Garbóczy, J. Zsuga,
  Predicting the epidemic curve of the coronavirus (SARS-CoV-2) disease (COVID-19) using artificial intelligence: An application on the first and second waves,
  Informatics in Medicine Unlocked **25** p. 100691 (2021).
  DOI: 10.1016/j.imu.2021.100691 (13 pages)
  Impact factor: ? [Q2]
- **I. Varga**, G. Kocsis,
  Statistical Properties of VANET-based Information,
  Advances in Systems Science and Applications **20**, (4) pp. 36-44 (2021).
  DOI: 10.25728/assa.2020.20.4.895, (9 pages)
  Impact factor: - [Q2]
- **I. Varga**,
  A complex SIS spreading model in ad hoc networks with reduced communication efforts,
  Advances in Complex Systems **23** (4), 2050009 (2020)
  DOI: 10.1142/S0219525920500095, (10 pages)
  Impact factor: 0.976 [Q2]
- G. Kocsis, **I. Varga**,
  The effect of moving agents on the network formation in smart-city applications,
  Computer modelling and new technologies 23 (1) pp. 44-49 (2019).
  DOI: ?, (6 pages)
  Impact factor: - [Q4] [2017]
- F. Kun, G. Pál, **I. Varga**, I. G. Main,
  Effect of disorder on the spatial structure of damage in slowly compressed porous rocks,
  Philosophical Transactions of the Royal Society A **377**, 20170393 (2018).
  DOI: 10.1098/rsta.2017.0393, (14 pages)
  Impact factor: 3.093 [D1]
- **I. Varga**,
  Weighted multiplex network of air transportation,
  European Physical Journal B **89**, (6) 139 (2016).

DOI: 10.1140/epjb/e2016-60887-x, (5 pages)
Impact factor: 1.436 [Q2]

- G. Pál, **I. Varga**, F. Kun,
  Emergence of energy dependence in the fragmentation of heterogeneous materials,
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  DOI: 10.1103/PhysRevE.90.062811, (8 pages)
  Impact factor: 2.288 [Q1]

- G. Kocsis, **I. Varga**,
  Investigation of spreading phenomena on social networks,
  Infocommunications Journal **VI,** No 3, pp. 45-50 (2014).
  DOI: -, (6 pages).
  Impact factor: - [Q4]

- G. Kocsis, **I. Varga**,
  Investigating the effectiveness of advertising on declining social networks,
  Creative Mathematics and Informatics **23**, No. 1, pp. 73-80 (2014).
  DOI: -, (8 pages).
  Impact factor: -

- F. Kun, **I. Varga**, S. Lennartz-Sassinek, I.G. Main,
  Rupture cascades in a discrete element model of a porous sedimentary rock,
  Physical Review Letters 112, 065501 (2014).
  DOI: 10.1103/PhysRevLett.112.065501, (5 pages).
  Impact factor: 7.512 [D1]

- G. Pál, **I. Varga**, F. Kun,
  Mass-velocity Correlation in Impact Fragmentation,
  Key Engineering Materials **592-593,** pp. 141-144 (2014).
  DOI: 10.4028/www.scientific.net/KEM.592-593.141, (4 pages).
  Impact factor: - [Q3]

- F. Kun, **I. Varga**, S. Lennartz-Sassinek, I.G., Main,
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  Physical Review E **88**, 062207, (2013).
  DOI: 10.1103/PhysRevE.88.062207, (11 pages).
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- G. Pál, F. Kun, **I. Varga**, D. Sohler, S. Gang,
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  Physical Review E **83**, 061504 (2011).
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- **I. Varga**, F. Kun, N. Ito, W. Wen,
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  Journal of Statistical Mechanics: Theory and Experiment P11014 (2007).
  DOI: 10.1088/1742-5468/2007/11/P11014, (11 pages).
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- **I. Varga**, N. Yoshioka, F. Kun, S. Gang, N. Ito,
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  DOI: 10.1088/1742-5468/2007/09/P09015, (12 pages).
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- **I. Varga**, F. Kun,
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- N. Yoshioka, **I. Varga**, F. Kun, S. Yukawa, N. Ito,
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- **I. Varga**, H. Yamada, F. Kun, H.-G. Matuttis, N. Ito,
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- **I. Varga**, F. Kun, K. F. Pál,
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Not refereed journals:

- **I. Varga,**
  Betekintés a komplex hálózatok világába,
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  DOI: - (4 oldal)
- G. Pál, **I. Varga**, F. Kun,
  Emergence of energy dependence in the fragmentation of heterogeneous materials,
  Acta Physica Debrecina XLVIII, pp. 1-7 (2014).
  DOI: - (7 pages)
- G. Pál, **I. Varga**, T. Kadono, F. Kun,
  Effect of Spatial dimension on impact fragmentation,
  Acta Physica Debreceniensis XLVII, pp. 129-135 (2013).
  DOI: - (7 pages)
- **I. Varga**, F. Kun,
  Structure and Dynamics of Binary Dipolar Monolayers,
  Acta Physica Debreceniensis XLI, pp. 139-146 (2007).
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Book:

- **I. Varga,**
  Structure formation in binary dipolar monolayers,
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  ISBN: 3639116437 (2009).

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- G. Kocsis, **I. Varga**,
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Specification Datasets,
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DOI: 10.5220/0000159400003197 (7 pages), acceptance ratio: 19%

- A. Ilyés, T. Kovács, G. Tisza, **I. Varga**,
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DOI: 10.5220/0009464001080112 (5 pages), acceptance ratio: 50%

- A. Bérczes, T. Bérczes, **I. Varga**, A. Tiba, J. Zsuga,
Using Laplacian spectrum to analise the comorbidities network of hemorrhagic stroke,
10th IEEE International Conference on Cognitive InfoCommunications,
pp. 53-60 (2019).
DOI: 10.1109/CogInfoCom47531.2019.9089931 (7 oldal)

- Z. Gal, **I. Varga**, T. Tajti, G. Kocsis, Z. Langmajer, M. Kosa, J. Panovics,
Performance evaluation of massively parallel communication sessions,
Proceedings of the Sixth International Conference on Parallel, Distributed, GPU and Cloud Computing for Engineering, Volume P, ISBN 978-1-905088-67-6, pp. 1-19 (2019).
DOI: 10.4203/ccp.112.34 (19 pages)

- **I. Varga,** A. Némethy, G. Kocsis**,**
Agent-based simulation of information spreading in VANET,
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DOI: 10.1007/978-3-319-99813-8_15 (9 oldal), acceptance ratio: 57%

- **I. Varga**,
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Proceedings of the 2nd International Conference on Complexity, Future Information Systems and Risk, SCITEPRESS, Porto, ISBN: 978-989-758-244-8 (2017).
DOI: 10.5220/0006142100170022 (6 pages)

- **I. Varga**,
Scale-free network topologies with clustering similar to online social,
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- **I. Varga**, G. Kocsis,
Novel model of social networks with tunable clustering coefficient,

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Eger, Hungary, ISBN: 978-615-5297-19-9, Vol. 2, pp. 171-176 (2015).
DOI: 10.14794/ICAI.9.2014.2.171 (6 pages)

- G. Kocsis, **I. Varga**,
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9th International Conference on Applied Informatics,
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- G. Kocsis, **I. Varga**,
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Lecture Notes in Computer Science, Volume 8751,
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- **I. Varga**, A. Németh, G. Kocsis,
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DOI: 10.1109/CogInfoCom.2013.6719189, (4 pages)

- G. Kocsis, **I. Varga**,
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- **I. Varga**, F. Kun,
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- **I. Varga**, F. Kun,
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Eger, Hungary, ISBN: 978-963-9894-72-3, Vol. 1, pp. 329-336, (2010).
DOI: - (8 pages)

- N. Yoshioka, **I. Varga**, F. Kun, S. Yukawa, N. Ito,
Attraction-limited cluster-cluster aggregation of Ising dipolar particles,
Computer Simulation Studies in Condensed-Matter Physics XIX,
Springer Proceedings in Physics, Volume 123, ISBN: 978-3-540-85624-5, pp. 106-111 (2009).
DOI: 10.1007/978-3-540-85625-2_17 (6 pages)

- **I. Varga,** F. Kun,
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Miskolc, Hungary, ISBN: 963 661 654 X, pp. 43-48 (2005).
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Domestic/Hungarian conference proceedings:

- **Varga I.**,
  Járműforgalom és információterjedés szimuláció,
  XXII. Energetika-Elektrotechnika és XXXI. Számítástechnika és Oktatás Multi-konferencia, Erdélyi Magyar Műszaki Tudományos Társaság, ISSN 2734-6757, pp. 86-92 (2021).
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- **Varga I.**, Szilágy Sz.,
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- **Varga I.**,
  Hardverközeli programozás oktatása a DIY Calculator segítségével,
  Informatika a felsőoktatásban 2014
  Debrecen, Hungary, ISBN 978-963-473-712-4, pp. 540-546 (2014).
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- **Varga I.**,
  A Logo a funkcionális paradigma szemszögéből,
  Informatika a felsőoktatásban 2011
  Debrecen, Hungary, ISBN 978-963-473-461-1, pp. 736-741 (2011).
  DOI: - (6 pages)

International conference posters/abstracts:

- **I. Varga**,
  Weighted multiplex approach of global airport network,
  PRACE Autumn School 2016,
  Hagenberg im Mühlkreis, 27-30 September 2016.
- F. Kun, **I. Varga**, S. Lennartz-Sassinek, I.G., Main,
  Discrete element modelling of rupture cascades during compressive failure of heterogeneous solids,
  IV International Conference on Particle-Based Methods – Fundamentals and Applications,
  Barcelona, Spain, 28-30 September 2015.
- G. Pál, **I. Varga**, F. Kun,
  Energy dependence in the fragmentation of heterogeneous materials,
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- Z. Jánosi, **I. Varga**,
  Opinion spreading models on different social network topologies,
  40th Conference of the Middle European Cooperation in Statistical Physics,
  Esztergom, Hungary, 23-25 March 2015, pp. 72-73.

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- **I. Varga**,
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- **I. Varga**, F. Kun,
  Crackling noise during the compressive failure of porous rocks,
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- G. Pál, **I. Varga**, F. Kun,
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- **Varga I.**,
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  Online, 2021. december 10.
- **Varga I.**,
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  Online, 2021. október 16.
- I. Bordán, **I. Varga**,
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  Conference on Information Technology and Data Science, CITDS 2020
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- A. Ilyés, T. Kovács, G. Tisza, **I. Varga**,
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  Mintatantervek és a hálózattudomány, vagyis az előfeltételi hálók tulajdonságai,

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- **I. Varga**,
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  Proceedings of the 2nd International Conference on Complexity, Future Information Systems and Risk,
  Porto, Portugal, 24-26 April 2017.
- **I. Varga**,
  Scale-free network topologies with clustering similar to online social,
  Social Modeling and Simulations + Econophysics Colloquium 2014,
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- **Varga I.**,
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- **I. Varga**, G. Kocsis,
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  Linz, Austria, 02-08 June 2014.
- **I. Varga,** F. Kun,
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  Budapest, Hungary, 25 April 2014.
- **I. Varga**, G. Kocsis,
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- **I. Varga**, A. Németh, G. Kocsis,
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- **I. Varga**, F. Kun,
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- **Varga I.,**
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  Gyires Béla Informatikai Nap, Debrecen,
  13 December 2019.
- **Varga I.,**
  Hálózatok a nagyvilágban,
  Science&Cake, University of Debrecen, Faculty of Informatics, Debrecen,
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- **Varga I.,**
  Információterjedés modellezése szociális hálózatokon,
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- **Varga I.**
  Látványos kísérletek,
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  Debrecen-Józsa, Hungary, 06 July 2016.
- **Varga I.**
  Fizikai kísérletek az óvodában,
  'Gyermek és Nevelés' szakmai műhely,
  Hajdúböszörmény, Hungary, 07 May 2009.
- **Varga I.,**

Az ERŐ legyen veletek,
Tudomány napja 2007,
Hajdúböszörmény, Hungary, 07 November 2007.

- **Varga I.,**
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- **I. Varga,**
Computer simulation and modeling of complex systems and networks,
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- **I. Varga**,
Structure formation in binary dipolar monolayers
University of Debrecen, Faculty of Science and Technology, Ph.D. Dissertation, 109 pages (2008)

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- **I. Varga**
Algorithms and basics of programming,
University of Debrecen, Faculty of Informatics, 100 pages (2020).
- **Varga I.**
Rendszerközeli programozás,
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- **Varga I.**,
Környezeti nevelés és módszertana
University of Debrecen, Faculty of Child and Adult Education, 63 pages (2009)
- **Varga I.**,
Természettudományos szemlélet
University of Debrecen, Faculty of Child and Adult Education, 41 pages (2008)