

## Publication list

**Cumulative impact factor: 44,978**

Number of journal papers: 21

Number of conference proceeding papers: 21

Number of D1/Q1 papers: 2

Number of Q1 papers: 10

Number of Q2 papers: 5

Number of co-authors: 41

### Refereed journals:

- **G. Kocsis, I. Varga,**  
*gtfs2net: Extraction of General Transit Feed Specification Data Sets to Abstract Networks and Their Analysis,*  
*Big Data*, **13** (1) pp. 30-41 (2025).  
DOI: 10.1089/big.2022.0269 (12 pages)  
Impact factor: ??? [Q2]
- **U. Vadadokhau, I. Varga, M. Káplár, M. Emri, É. Csősz,**  
*Examination of the Complex Molecular Landscape in Obesity and Type 2 Diabetes,*  
*International Journal of Molecular Sciences*, **25** (9), p. 4781 (2024).  
DOI: 10.3390/ijms25094781, (13 pages)  
Impact factor: 5.6<sup>2022</sup> [Q1]
- **L. R. Kolozsvári, T. Bérczes, A. Hajdu, R. Gesztelyi, A. Tiba, I. Varga, A. B. Al-Tammemi, G. J. Szöllősi, 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: 6.114<sup>2021</sup> [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] <sup>2017</sup>
- 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*,  
 Physical Review E **90**, 062811 (2014).  
 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,  
*Approach to failure in porous granular materials under compression*,  
 Physical Review E **88**, 062207, (2013).  
 DOI: 10.1103/PhysRevE.88.062207, (11 pages).  
 Impact factor: 2.326 [Q1]
  - G. Pál, F. Kun, **I. Varga**, D. Sohler, S. Gang,  
*Attraction-driven aggregation of dipolar particles in an external magnetic field*,  
 Physical Review E **83**, 061504 (2011).

DOI: 10.1103/PhysRevE.83.061504, (6 pages).  
Impact factor: 2.255 [Q1]

- **I. Varga**, F. Kun, N. Ito, W. Wen,  
*Molecular crystalline states in binary dipolar monolayers*,  
Journal of Statistical Mechanics: Theory and Experiment P11014 (2007).  
DOI: 10.1088/1742-5468/2007/11/P11014, (11 pages).  
Impact factor: 2.418 [Q3]
- **I. Varga**, N. Yoshioka, F. Kun, S. Gang, N. Ito,  
*Structure and kinetics of heteroaggregation in binary dipolar monolayer*,  
Journal of Statistical Mechanics: Theory and Experiment P09015 (2007).  
DOI: 10.1088/1742-5468/2007/09/P09015, (12 pages).  
Impact factor: 2.418 [Q3]
- **I. Varga**, F. Kun,  
*Pattern formation in binary colloids*,  
Philosophical Magazine **86**, Issue 13-14, 2011 (2006).  
DOI: 10.1080/14786430500311733, (21 pages).  
Impact factor: 1.354 [Q1]
- N. Yoshioka, **I. Varga**, F. Kun, S. Yukawa, N. Ito,  
*Attraction-limited cluster-cluster aggregation of Ising dipolar particles*,  
Physical Review E **72**, 061403 (2005).  
DOI: 10.1103/PhysRevE.72.061403, (6 pages).  
Impact factor: 2.418 [Q1]
- **I. Varga**, H. Yamada, F. Kun, H.-G. Matuttis, N. Ito,  
*Structure formation in a binary monolayer of dipolar particles*,  
Physical Review E **71**, 051405 (2005).  
DOI: 10.1103/PhysRevE.71.051405, (7 pages).  
Impact factor: 2.418 [Q1]
- **I. Varga**, F. Kun, K. F. Pál,  
*Structure formation in binary colloids*,  
Physical Review E **69**, 030501(R) (2004).  
DOI: 10.1103/PhysRevE.69.030501, (4 pages).  
Impact factor: 2.352 [Q1]

#### Not refereed journals:

- **I. Varga**,  
*Betekintés a komplex hálózatok világába*,  
Híradástechnika **LXXIII**, pp. 27-30 (2018).  
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).  
DOI: - (8 pages)

**Book:**

- **I. Varga**,  
*Structure formation in binary dipolar monolayers*,  
Verlag Dr. Müller, Saarbrücken, (ca. 140.000 characters),  
ISBN: 3639116437 (2009).

**International conference proceedings:**

- **I. Varga**,  
*A Case Study of Genealogical Networks from Network Science Perspective*,  
Proceedings of the 8th International Conference on Complexity, Future  
Information Systems and Risk, SCITEPRESS, ISBN: 978-989-758-644-6, pp.  
47-52 (2023).  
DOI: 10.5220/0011723800003485 (6 pages), acceptance ratio: ???%
- **G. Kocsis, I. Varga**,  
*Extracting Mass Transportation Networks from General Transit Feed  
Specification Datasets*,  
Proceedings of the 7th International Conference on Complexity, Future  
Information Systems and Risk, SCITEPRESS, ISBN: 978-989-758-565-4, pp.  
85-91 (2022).  
DOI: 10.5220/0000159400003197 (7 pages), acceptance ratio: 19%
- **A. Ilyés, T. Kovács, G. Tisza, I. Varga**,  
*Spatial characteristics of communication in urban vehicular system*,  
Proceedings of the 5th International Conference on Complexity, Future  
Information Systems and Risk, SCITEPRESS, ISBN: 978-989-758-427-5, pp.  
108-112 (2020).  
DOI: 10.5220/0009464001080112 (5 pages), acceptance ratio: 50%
- **A. Bérczes, T. Bérczes, I. Varga, A. Tiba, J. Zsuga**,  
*Using Laplacian spectrum to analyse 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*,  
13th International Conference Cellular Automata for Research and Industry,  
Lecture Notes in Computer Science, Volume 11115,  
Springer International Publishing Switzerland, ISBN: 978-3-319-99812-1, pp.

166-174 (2018).

DOI: 10.1007/978-3-319-99813-8\_15 (9 oldal), acceptance ratio: 57%

- **I. Varga,**  
*Comparison of Network Topologies by Simulation of Advertising,*  
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,*  
Proceedings of the International Conference on Social Modeling and Simulation, plus Econophysics Colloquium 2014  
Springer Proceedings in Complexity,  
Springer International Publishing, ISBN: 978-3-319-20590-8, pp. 323-333 (2015).  
DOI: 10.1007/978-3-319-20591-5\_29 (11 pages)
- **I. Varga, G. Kocsis,**  
*Novel model of social networks with tunable clustering coefficient,*  
9th International Conference on Applied Informatics,  
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,**  
*The effect of dynamic active-inactive agents on spreading phenomena,*  
9th International Conference on Applied Informatics,  
Eger, Hungary, ISBN: 978-615-5297-19-9, Vol. 2, pp. 139-144 (2015).  
DOI: 10.14794/ICAI.9.2014.2.139 (6 pages)
- **G. Kocsis, I. Varga,**  
*Agents based simulation of spreading in social-systems of temporarily active actors,*  
Cellular Automata for Research and Industry 2014,  
Lecture Notes in Computer Science, Volume 8751,  
Springer International Publishing Switzerland, ISBN: 978-3-319-11519-1, pp. 330-338 (2014).  
DOI: 10.1007/978-3-319-11520-7\_34 (9 pages)
- **I. Varga, A. Németh, G. Kocsis,**  
*A novel method of generating tunable underlying network topologies for social simulation,*  
4th IEEE International Conference on Cognitive InfoCommunications,  
Budapest, Hungary, ISBN: 978-1-4799-1543-9, pp. 71-74 (2014).  
DOI: 10.1109/CogInfoCom.2013.6719189, (4 pages)
- **G. Kocsis, I. Varga,**  
*Information spreading on declining social networks,*  
9th International Conference on Applied Mathematics,  
Baia Mare, Romania, ISBN: 978-606-93094-8-3, pp. 88-90, (2013).  
DOI: - (3 pages)

- **I. Varga, F. Kun,**  
*Computer methods for modeling the microstructure of aerogels,*  
19<sup>th</sup> International Conference on Computer Methods in Mechanics,  
Warsaw, Poland, ISBN: 978-83-7207-943-5, p. 503, (2011).  
DOI: - (5 pages)
- **I. Varga, F. Kun,**  
*Computer modeling of binary dipolar monolayers,*  
8th International Conference on Applied Informatics,  
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,**  
*Aggregation of particles in a binary dipolar monolayer,*  
microCAD 2005 International Scientific Conference,  
Miskolc, Hungary, ISBN: 963 661 654 X, pp. 43-48 (2005).  
DOI: - (6 pages)

#### **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).  
DOI: - (7 pages)
- **Varga I., Szilágy Sz.,**  
*Mintatantervek és a hálózattudomány, vagyis az előfeltételi hálók tulajdonságai,*  
Informatika a felsőoktatásban 2017  
Debrecen, Magyarország, ISBN 978-963-473-213-6, pp. 167-173 (2017).  
DOI: - (7 pages)
- **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).  
DOI: - (7 pages)
- **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*,  
IV International Conference on Particle-Based Methods – Fundamentals and Applications,  
Barcelona, Spain, 28-30 September 2015.
- 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.
- G. Pál, **I. Varga**, F. Kun,  
*Energy dependence in the fragmentation of heterogeneous materials*,  
40th Conference of the Middle European Cooperation in Statistical Physics,  
Esztergom, Hungary, 23-25 March 2015, pp. 60-61.
- **I. Varga**, F. Kun, S. Lennartz-Sassinek, I. G. Main,  
*Discrete element modelling of rupture cascades during the compression of porous rocks*,  
International Conference Smart Functional Materials for Shaping our Future  
Debrecen, Hungary, 19-20 September 2014.
- **I. Varga**,  
*Application of HPC during study of graphs*,  
PRACE Spring School 2014  
Hagenberg im Mühlkreis, Austria, 15-17 April 2014.
- **I. Varga**, F. Kun,  
*Crackling noise during the compressive failure of porous rocks*,  
5th Hungary-Japan Bilateral Workshop on Statistical Physics of Breakdown Phenomena,  
Debrecen, Hungary, 09-12 September 2013.
- G. Kocsis, **I. Varga**,  
*Information spreading on real network topologies of humans*,  
5th Hungary-Japan Bilateral Workshop on Statistical Physics of Breakdown Phenomena,  
Debrecen, Hungary, 09-12 September 2013.
- G. Pál, **I. Varga**, F. Kun,  
*Mass-velocity Correlation in Impact Fragmentation*,  
7th International Conference on Materials Structure and Micromechanics of

Fracture,  
Brno, Czech Republic, 01-03 July 2013.

- F. Kun, **I. Varga**, G. Pál, S. Lennartz-Sassinek, I.G., Main,  
*Crackling Noise in a Discrete Element Model of Heterogeneous Materials*,  
Third International Conference on Computational Modeling of Fracture and  
Failure of Materials and Structures, p 71,  
Prague, Czech Republic, 05-07 June 2013.
- F. Kun, **I. Varga**, G. Pál, S. Lennartz-Sassinek, I. Butler, I.G. Main,  
*Spatial structure and temporal fluctuations of damage in a discrete element  
model of geomaterials*,  
European Geosciences Union General Assembly,  
Wien, Austria, 07-12 April 2013.
- **I. Varga**, F. Kun,  
*Colloidal molecular crystals in dipolar monolayers*,  
31st Conference of the Middle European Cooperation in Statistical Physics,  
Primošten, Croatia, 23-26 April 2006.
- **I. Varga**, F. Kun,  
*Cluster discrimination in binary dipolar monolayers*,  
30th Conference of the Middle European Cooperation in Statistical Physics,  
Cortona, Italy, 03-06 April 2005.
- **I. Varga**, F. Kun,  
*Aggregation and crystallization in binary colloids*,  
3rd Graduate School on Condensed Matter Physics,  
Debrecen, Hungary, 6-11 September 2004.
- **I. Varga**, F. Kun, K. F. Pál,  
*Structure formation in binary colloids*,  
29th Conference of the Middle European Cooperation in Statistical Physics,  
Bratislava, Slovakia, 28 March-01 April 2004.
- **I. Varga**, F. Kun, K. F. Pál,  
*Ordered structures in a binary monolayer of dipolar particles*,  
1st Szeged International Workshop on Advances in Nanoscience,  
Szeged, Hungary, 26-28 October 2003.

**Talks:**

- **I. Varga**,  
*A Case Study of Genealogical Networks from Network Science Perspective*,  
8th International Conference on Complexity, Future Information Systems and  
Risk,  
Prague, Czech Republic, 22-23 April 2023
- **Varga I.**,  
*Komplex terjedési modell ad hoc hálózatokban*,  
24. Gyires Béla Informatikai Nap,  
Online, 10 December 2021

- **Varga I.,**  
*Járműforgalom és információterjedés szimuláció,*  
XXII. Energetika-Elektrotechnika és XXXI. Számítástechnika és Oktatás Multi-konferencia,  
Online, 16 October 2021
- **I. Bordán, I. Varga,**  
*Genealogical networks: a case study from the perspective of network science*  
Conference on Information Technology and Data Science, CITDS 2020  
Online, November 6–8, 2020
- **A. Ilyés, T. Kovács, G. Tisza, I. Varga,**  
*Spatial characteristics of communication in urban vehicular system,*  
5th International Conference on Complexity, Future Information Systems and Risk,  
Online, 8-9 May 2020.
- **I. Varga, A. Némethy, G. Kocsis,**  
*Agent-based simulation of information spreading in VANET,*  
13th International Conference Cellular Automata for Research and Industry,  
Como, Italy, 17-21 September 2018.
- **Varga I.,**  
*Betekintés a komplex hálózatok világába,*  
4. Magyar Jövő Internet Konferencia,  
Budapest, Hungary, 08. november 2017.
- **Varga I., Szilágyi Sz.,**  
*Mintatantervek és a hálózattudomány, vagyis az előfeltételi hálók tulajdonságai,*  
Informatika a felsőoktatásban 2017,  
Debrecen, Hungary, 29-31 August 2017.
- **I. Varga,**  
*Comparison of Network Topologies by Simulation of Advertising,*  
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,  
Kobe, Japan, 04-06 November 2014.
- **Varga I.,**  
*Hardverközeli programozás oktatása a DIY Calculator segítségével,*  
Informatika a felsőoktatásban 2014  
Debrecen, Hungary, 27-29 August 2014.
- **I. Varga, G. Kocsis,**  
*Spreading phenomena on social networks,*  
International Workshop on Advances in Future Internet Research, Services and Technology,  
Debrecen, Hungary, 03-04 July 2014.

- **I. Varga, G. Kocsis,**  
*Social network model with tunable clustering coefficient,*  
ERASMUS programme,  
Linz, Austria, 02-08 June 2014.
- **I. Varga, F. Kun,**  
*Repedési lavinák üledékes közetekben,*  
Statisztikus Fizika Nap 2015,  
Budapest, Hungary, 25 April 2014.
- **I. Varga, G. Kocsis,**  
*Novel model of social networks with tunable clustering coefficient,*  
9th International Conference on Applied Informatics,  
Eger, Hungary, 29 January-01 February 2014.
- **I. Varga, A. Németh, G. Kocsis,**  
*A novel method of generating tunable underlying network topologies for social simulation,*  
4th IEEE International Conference on Cognitive InfoCommunications,  
Budapest, Hungary, 02-05 December 2013.
- **I. Varga, F. Kun,**  
*Crackling noise during the compressive failure of porous rocks,*  
5th Hungary-Japan Bilateral Workshop on Statistical Physics of Breakdown Phenomena,  
Debrecen, Hungary, 9-12 September 2013.
- **Varga I.,**  
*A Logo a funkcionális paradigma szemszögéből,*  
Informatika a felsőoktatásban 2011  
Debrecen, Hungary, 24-26 August 2011.
- **I. Varga, F. Kun,**  
*Computer methods for modeling the microstructure of aerogels,*  
1<sup>9th</sup> International Conference on Computer Methods in Mechanics  
Warsaw, Poland, 9-12 May 2011.
- **I. Varga, F. Kun,**  
*Void expansion method for the microstructure of aerogel,*  
2nd Debrecen Workshop on Statistical Physics of Fracture and other Complex Systems,  
Debrecen, Hungary, 13-15 September 2010.
- **I. Varga, F. Kun,**  
*Computer modeling of binary dipolar monolayers,*  
8th International Conference on Applied Informatics,  
Eger, Hungary, 27-30 January 2010.
- **I. Varga, F. Kun,**  
*Aggregation of particles in a binary dipolar monolayer,*  
microCAD 2005 International Scientific Conference,  
Miskolc, Hungary, 10-11 March 2005.

**Science popularizing and other talks:**

- **Varga I.,**  
*EFOP-3.4.3 az Informatikai Karon*  
Gyires Béla Informatikai Nap, Debrecen,  
13 December 2019.
- **Varga I.,**  
*Hálózatok a nagyvilágban,*  
Science&Cake, University of Debrecen, Faculty of Informatics, Debrecen,  
01 December 2016.
- **Varga I.,**  
*Információterjedés modellezése szociális hálózatokon,*  
Celebration of the Hungarian Science, University of Debrecen, Faculty of  
Informatics, Debrecen, 24 November 2016.
- **Varga I.**  
*Látványos kísérletek,*  
DMJV Családsegítő és Gyermekjóléti Központ gyermektábor,  
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.,**  
*Mágneses részecskék síkbeli rendeződése,*  
Tudomány napja 2004,  
Hajdúböszörmény, Hungary, 03 November 2004.

#### **Dissertation**

- **I. Varga,**  
*Computer simulation and modeling of complex systems and networks,*  
University of Debrecen, Faculty of Informatics, habilitation dissertation (2016)
- **I. Varga,**  
*Structure formation in binary dipolar monolayers*  
University of Debrecen, Faculty of Science and Technology, Ph.D. Dissertation,  
109 pages (2008)

#### **Lecture notes:**

- **I. Varga**  
Algorithms and basics of programming,  
University of Debrecen, Faculty of Informatics, 100 pages (2020).
- **Varga I.**  
Rendszerközeli programozás,  
University of Debrecen, Faculty of Informatics, 32 pages (2020).

- **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)