

**SZILÁGYI László****Producția științifică**

|             | Lucrări | Punctaj |
|-------------|---------|---------|
| Categorie A | 46      | 281,33  |
| Categorie B | 18      | 59,46   |
| Categorie C | 24      | 35,23   |
| TOTAL       | 88      | 376,02  |

**Lucrări categoria A**

$$29 \times 8 + 6 \times (8/2) + 5 \times (8/3) + 6 \times (8/4) = 281,33 \text{ puncte}$$

| Nr. curent | Lucrare  | Autori | Justificare                                | Punctaj |
|------------|--|--------|--|---------|
| A.01.      | <b>Szilágyi L, Szilágyi SM:</b> Generalization rules for the suppressed fuzzy c-means algorithm. NEUROCOMPUTING 139:298-309 (2014), ISSN: 0925-2312, IF: 2.083   | 2      | Pozitia 234, lista jurnale 2013            | 8       |
| A.02.      | <b>Szilágyi L:</b> Lessons to learn from a mistaken optimization. PATTERN RECOGNITION LETTERS 36(1):29-35 (2014), ISSN: 0167-6855, IF: 1.551   | 1      | Pozitia 243, lista jurnale 2013            | 8       |
| A.03.      | <b>Szilágyi L:</b> Robust spherical shell clustering using fuzzy-possibilistic product partition. INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS 28(6):524-539 (2013), ISSN: 1098-111X, IF: 1.411  | 1      | Pozitia 169, lista jurnale 2013            | 8       |
| A.04.      | <b>Szilágyi L, Medvés L, Szilágyi SM:</b> A modified Markov clustering approach to unsupervised classification of protein sequences. NEUROCOMPUTING 73(13-15):2332-2345 (2010), ISSN: 0925-2312, IF: 1.429                                 | 3      | Pozitia 234, lista jurnale 2013            | 8       |
| A.05.      | <b>Szilágyi L, Szilágyi SM, Benyó Z:</b> Analytical and numerical evaluation of the suppressed fuzzy c-means algorithm: a study on the competition in c-means clustering models. SOFT COMPUTING, 14(5):495-505, ISSN: 1432-7643, IF: 1.512 | 3      | Pozitia 260, lista jurnale 2013            | 8       |
| A.06.      | <b>Szilágyi L, Szilágyi SM, Hirsbrunner B:</b> A fast and memory-efficient hierarchical graph clustering algorithm. In: Kiong LC, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 8834, pp. 247–254 (2014)                | 3      | ICONIP, pozitia 217, lista conferinte 2013 | 8       |

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| A.07. | <b>Szilágyi L</b> , Kovács L, Szilágyi SM: Synthetic test data generation for hierarchical graph clustering methods. In: Kiong LC, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 8835, pp. 303-310 (2014)   | 3 | ICONIP, poziția 217, lista conferințe 2013    | 8 |
| A.08. | <b>Szilágyi L</b> , Nagy LL, Szilágyi SM: Recent advances in improving the memory efficiency of the TRIBE MCL algorithm. In: Arik S, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 9490, pp. 28-35 (2015)   | 3 | ICONIP, poziția 217, lista conferințe 2013    | 8 |
| A.09. | Iclanzan D, <b>Szilágyi L</b> : Neural population coding of stimulus features. In: Arik S, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 9492, pp. 263-270 (2015)   | 2 | ICONIP, poziția 217, lista conferințe 2013    | 8 |
| A.10. | Iantovics BL, <b>Szilágyi L</b> , Pintea CM: Societal intelligence – a new perspective for highly intelligent systems. In: Arik S, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 9490, pp. 606-614 (2015)   | 3 | ICONIP, poziția 217, lista conferințe 2013    | 8 |
| A.11  | <b>Szilágyi L</b> , Dénesi G, Szilágyi SM: Fast color reduction using approximative c-means clustering models. IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2014, Beijing), pp. 194-201 (2014), ISBN: 978-1-4799-2073-0   | 3 | FUZZ-IEEE, poziția 133, lista conferințe 2013 | 8 |
| A.12. | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: A Unified Approach to c-Means Clustering Models. IEEE Conference on Fuzzy Systems, Jeju Island (S. Korea), pp. 456-461 (2009), ISBN 978-1-4244-3597-5  | 3 | FUZZ-IEEE, poziția 133, lista conferințe 2013 | 8 |
| A.13. | Szilágyi SM, <b>Szilágyi L</b> , Hirsbrunner B: Modeling the Influence of High Fibroblast Level on Arrhythmia Development and Obstructed Depolarization Spread. Computers in Cardiology 40:45-48 (2013)  | 3 | CINC, poziția 75, lista conferințe 2013       | 8 |
| A.14. | Szilágyi SM, <b>Szilágyi L</b> , Hirsbrunner B: Simulation of Arrhythmia using Adaptive Spatio-temporal Resolution. Computers in Cardiology 40:365-368 (2013)  | 3 | CINC, poziția 75, lista conferințe 2013       | 8 |
| A.15. | Szilágyi SM, <b>Szilágyi L</b> , Enăchescu C: Hypoxia modeling using Luo-Rudy II cell model. Computers in Cardiology 39:885-888 (2012)   | 3 | CINC, poziția 75, lista conferințe 2013       | 8 |
| A.16. | Szilágyi SM, <b>Szilágyi L</b> : Study of self maintaining spatial spiral waves in ventricular tissue. Computers in Cardiology 39:853-856 (2012)   | 2 | CINC, poziția 75, lista conferințe 2013       | 8 |
| A.17. | <b>Szilágyi L</b> , Szilágyi SM: Efficient Markov clustering algorithm for protein sequence grouping. 35th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Osaka, pp. 639-642 (2013), ISBN 978-1-4577-0214-3  | 2 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8 |
| A.18. | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: Sensibility Analysis of the Arruda Localization Method and Modifications in Left Ventricle Analysis. 28th Annual International Conference of IEEE Engineering in Medicine and Biology Society, New York 3998–4001 (2006), ISBN 1-4244-0033-3.      | 3 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8 |
| A.19. | <b>Szilágyi L</b> , Benyó Z, Szilágyi SM: Brain image segmentation for virtual endoscopy. 26th Annual International Conference of IEEE Engineering in Medicine and Biology Society, San Francisco 1730–1732 (2004), ISBN: 0-7803-8439-3.   | 3 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8 |
| A.20. | <b>Szilágyi L</b> , Benyó Z, Szilágyi SM: A new method for epileptic waveform recognition using wavelet decomposition and artificial neural networks. 24th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Houston 2025–2026 (2002), ISBN 0-7803-7612-9 | 3 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8 |

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|-------|--|---|--|-------|
| A.21. | Szilágyi SM, Benyó Z, <b>Szilágyi L</b> : Comparison of malfunction diagnosis sensibility for direct and inverse ECG signal processing methods. 24th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Houston 244–245 (2002), ISBN 0-7803-7612-9                           | 3 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.22. | Szilágyi SM, <b>Szilágyi L</b> : Efficient ECG signal compression using adaptive heart model. 23rd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Istanbul 2125–2128 (2001), ISBN: 0-7803-7211-5.  | 2 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.23. | Nagy L, <b>Szilágyi L</b> : Catheter calibration using template matching line interpolation algorithm. 23rd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Istanbul 387–389 (2001), ISBN: 0-7803-7211-5.   | 2 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.24. | Szilágyi SM, <b>Szilágyi L</b> : Wavelet transform and neural-network-based adaptive filtering for QRS detection. 22nd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Chicago 1267–1270 (2000), ISBN: 0-7803-6465-1.   | 2 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.25. | Várady P, Nagy L, <b>Szilágyi L</b> : On-line detection of sleep apnea during critical care monitoring. 22nd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Chicago 1299–1301 (2000), ISBN: 0-7803-6465-1.   | 3 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.26. | <b>Szilágyi L</b> : Wavelet-transform-based QRS complex detection in on-line Holter systems. 21st Annual International Conference of IEEE Engineering in Medicine and Biology Society, Atlanta 271 (1999), ISBN: 0-7803-5674-8.  | 1 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.27. | <b>Szilágyi L</b> : Application of the Kalman filter in cardiac arrhythmia detection. 20th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Hong Kong 98–100 (1998), ISBN: 0-7803-5167-3.  | 1 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.28. | Szilágyi SM, <b>Szilágyi L</b> , Dávid L: ECG signal compression using adaptive prediction. 19th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Chicago 101–104 (1997).  | 3 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.29. | Szilágyi SM, <b>Szilágyi L</b> , Dávid L: Comparison between neural-network-based adaptive filtering and wavelet transform for ECG characteristic points detection. 19th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Chicago 272–274 (1997).                          | 3 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8     |
| A.30. | Szalay P, <b>Szilágyi L</b> , Benyó Z, Kovács L: Sensor drift compensation using fuzzy interference system and sparse-grid quadrature filter in blood glucose control. In: Kiong LC, el al (Eds): Neural Information Processing, Springer, LNCS, vol. 8835, pp. 445-453 (2014)                                 | 4 | ICONIP, poziția 217, lista conferințe 2013   | 8/2=4 |
| A.31. | Haidegger T, Nagy M, Lehotsky Á, <b>Szilágyi L</b> : Digital imaging for the education of proper surgical hand disinfection. In: Fichtinger G, Martel AL, Peters TM (Eds.): Medical Image Computing and Computer-Assisted Intervention, Springer, LNCS vol. 6893, pp. 619-626 (2011), ISBN: 978-3-642-23625-9. | 4 | MICCAI, poziția 282, lista conferințe 2013   | 8/2=4 |
| A.32. | Szilágyi SM, Benyó Z, Dávid L, <b>Szilágyi L</b> : Adaptive wavelet-transform-based ECG waveforms detection. 25th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Cancún (Mexico) 2412–2415 (2003), ISBN: 0-7803-7789-3.  | 4 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8/2=4 |

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| A.33. | <b>Szilágyi L</b> , Benyó Z, Szilágyi SM, Adam HS: MR brain image segmentation using an enhanced fuzzy c-means algorithm. 25th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Cancún (Mexico) 724–726 (2003), ISBN: 0-7803-7789-3.  | 4 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/2= 4     |
| A.34. | <b>Szilágyi L</b> , Szilágyi SM, Dávid L, Benyó Z: Inhomogeneity compensation for MR brain image segmentation using a multi-stage FCM-based approach. 30th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Vancouver 3896–3899, ISBN 978-1-4244-1814-5, ISSN 1557-170X, (2008)   | 4 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/2= 4     |
| A.35. | <b>Szilágyi L</b> , Szilágyi SM, Fördös G, Benyó Z: Quick ECG analysis for on-line Holter monitoring systems. 28th Annual International Conference of IEEE Engineering in Medicine and Biology Society, New York 1678–1681 (2006), ISBN 1-4244-0033-3.  | 4 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/2= 4     |
| A.36. | <b>Szilágyi L</b> , Lefkovits L, Iantovics BL, Iclanzen D, Benyó B: Automatic brain tumor segmentation in multispectral MRI volumetric records. In: Arik S, et al (Eds): Neural Information Processing, Springer, LNCS, vol. 9492, pp. 174-181 (2015)   | 5 | ICONIP, poziția 217, lista conferințe 2013    | 8/3= 2,666 |
| A.37. | <b>Szilágyi L</b> , Iclanzen D, Szilágyi SM, Dumitrescu D, Hirsbrunner B: A Generalized C-Means Clustering Model Using Optimized Via Evolutionary Computation. IEEE Conference on Fuzzy Systems, Jeju Island (S. Korea), pp. 451-455 (2009), ISBN 978-1-4244-3597-5   | 5 | FUZZ-IEEE, poziția 133, lista conferințe 2013 | 8/3= 2,666 |
| A.38. | Benyó B, <b>Szilágyi L</b> , Haidegger T, Kovács L, Dobó-Nagy Cs: Detection of the Root Canal's Centerline from Dental Micro-CT Records, 31st Annual International Conference of IEEE Engineering in Medicine and Biology Society, Minneapolis, pp. 3517-3520 (2009), ISBN 978-1-4244-3296-7  | 5 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/3= 2,666 |
| A.39. | Csernáth G, <b>Szilágyi L</b> , Szilágyi SM, Fördös G, Benyó Z: A Novel ECG Telemetry and Monitoring System Based on Z-Wave Communication. 30th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Vancouver 2361-2364, ISBN 978-1-4244-1814-5, ISSN 1557-170X, (2008)  | 5 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/3= 2,666 |
| A.40. | <b>Szilágyi L</b> , Benyó Z, Szilágyi SM, Szlávecz Á, Nagy L: On-line QRS complex detection using wavelet filtering. 23rd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Istanbul 1872–1874 (2001), ISBN: 0-7803-7211-5.  | 5 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/3= 2,666 |
| A.41. | Szilágyi SM, <b>Szilágyi L</b> , Luca CT, Cozma D, Ivănică G, Enăchescu C: Spatial modeling of the Wolff-Parkinson-White syndrome induced ventricular fibrillation. Computers in Cardiology 39:753-756 (2012)   | 6 | CINC, poziția 75, lista conferințe 2013       | 8/4= 2     |
| A.42. | Ferenci T, Kovács L, Almássy Zs, <b>Szilágyi L</b> , Benyó B, Benyó Z: Differences in the laboratory parameters of obese and healthy Hungarian children and their use in automatic classification. 32nd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Buenos Aires, pp. 3883-3886 (2010), ISBN 978-1-4244-4123-5, ISSN 1557-170X | 6 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/4= 2     |
| A.43. | <b>Szilágyi L</b> , Lehotsky Á, Nagy M, Haidegger T, Benyó B, Benyó Z: Steryl-Hand: a new device to support hand disinfection. 32nd Annual International Conference of IEEE Engineering in Medicine and Biology Society, Buenos Aires, pp. 4756-4759 (2010), ISBN 978-1-4244-4123-5, ISSN 1557-170X   | 6 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/4= 2     |
| A.44. | Szilágyi SM, <b>Szilágyi L</b> , Frigy A, Görög LK, László SE, Benyó Z: 3D heart simulation and recognition of various events. 27th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Shanghai 4038–4041 (2005), ISBN 0-7803-8741-4.   | 6 | IEEE EMBS, poziția 53, lista conferințe 2013  | 8/4= 2     |

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|-------|--|---|--|-------|
| A.45. | <b>Szilágyi L</b> , Szilágyi SM, Frigy A, László SE, Görög LK, Benyó Z: Quick QRS complex detection for on-line ECG and Holter systems. 27th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Shanghai 3906–3908 (2005), ISBN 0-7803-8741-4.                 | 6 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8/4=2 |
| A.46. | Benyó Z, Benyó B, Várady P, <b>Szilágyi L</b> , Kovács L, Somogyi P: Biomedical engineering education and related research activity in Hungary. 25th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Cancún (Mexico) 3533–3535 (2003), ISBN: 0-7803-7789-3. | 6 | IEEE EMBS, poziția 53, lista conferințe 2013 | 8/4=2 |

**Lucrări categoria B**

$$13 \times 4 + 3 \times (4/2) + 1 \times (4/5) + 1 \times (4/6) = 59,46 \text{ puncte}$$

| Nr. curent | Lucrare  | Autori | Justificare                              | Punctaj |
|------------|--|--------|--|---------|
| B.01.      | Szilágyi SM, <b>Szilágyi L</b> : A fast hierarchical clustering algorithm for large-scale protein sequence data sets. COMPUTERS IN BIOLOGY AND MEDICINE 48:94-101 (2014), ISSN: 0010-4825 IF: 1.475  | 2      | Poziția 326, lista jurnale 2013          | 4       |
| B.02.      | <b>Szilágyi L</b> , Szilágyi SM, Benyó B: Efficient inhomogeneity compensation using fuzzy c-means clustering models. COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, 108(1):80-89 (2012), ISSN: 0169-2607, IF: 1.555  | 3      | Poziția 315, lista jurnale 2013          | 4       |
| B.03.      | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: A Patient Specific Electro-Mechanical Model of the Heart. COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, 101(2):183-200 (2011), ISSN: 0169-2607, IF: 1.516  | 3      | Poziția 315, lista jurnale 2013          | 4       |
| B.04.      | <b>Szilágyi L</b> : A unified theory of fuzzy c-means clustering models with improved partition. In: Torra V, Narukawa Y (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 9321, pp. 129-140 (2015), ISBN: 978-3-319-23239-3   | 1      | MDAI, poziția 310, lista conferințe 2013 | 4       |
| B.05.      | <b>Szilágyi L</b> , Varga ZsR, Szilágyi SM: Application of the fuzzy-possibilistic product partition in elliptic shell clustering. In: Torra V, Narukawa Y, Endo Y (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 8825, pp. 158-169 (2014), ISBN: 978-3-319-12053-9 | 3      | MDAI, poziția 310, lista conferințe 2013 | 4       |
| B.06.      | <b>Szilágyi L</b> , Szilágyi SM: Fast implementations of Markov clustering for protein sequence grouping. In: Torra V, Narukawa Y, Navarro-Arribas G, Megías D (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 8234, pp. 214-225 (2013), ISBN: 978-3-642-41549-4.    | 2      | MDAI, poziția 310, lista conferințe 2013 | 4       |
| B.07.      | <b>Szilágyi L</b> : Fuzzy-Possibilistic Fuzzy Partition: a novel robust approach to c-means clustering. In: Torra V, Narukawa Y, Yin JP, Long J (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 6820, pp. 150-161 (2011), ISBN: 978-3-642-22588-8.                   | 1      | MDAI, poziția 310, lista conferințe 2013 | 4       |

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|-------|--|---|---|-----------|
| B.08. | <b>Szilágyi L</b> , Szilágyi SM, Kiss Cs: A generalized approach to the suppressed fuzzy c-means algorithm. In: Torra V, Narukawa Y, Dumas M (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 6408, pp. 140-151 (2010), ISBN: 978-3-642-16291-6.  | 3 | MDAI, poziția 310, lista conferințe 2013                | 4         |
| B.09. | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: Analytical and numerical evaluation of the suppressed fuzzy c-means algorithm. In: Torra V, Narukawa Y (Eds.): Modeling Decisions for Artificial Intelligence, Springer, LNCS vol. 5285, pp. 146-157 (2008), ISBN: 978-3-540-88268-8.  | 3 | MDAI, poziția 310, lista conferințe 2013                | 4         |
| B.10. | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: Spatial visualization of the heart in case of ectopic beats and fibrillation. In: Mery D, Rueda L (Eds.): Advances in Image and Video Technology, Springer, LNCS vol. 4872, pp. 548-561 (2007), ISBN: 978-3-540-77128-9.   | 3 | PSIVT, poziția 428, lista conferințe 2013               | 4         |
| B.11. | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: A modified fuzzy c-means classifier for fast segmentation of MR brain images. In: Melín P, Castillo O, Ramírez EG, Kaczprzyk J, Pedrycz W (Eds.): Analysis and Design of Intelligent Systems Using Soft Computing Techniques, Springer, Advances in Soft Computing vol. 41, pp. 119-127, ISBN: 978-3-540-72431-5 | 3 | IFSA, poziția 214, lista conferințe 2013                | 4         |
| B.12. | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: Spatial heart simulation and analysis using unified neural network. In: Melín P, Castillo O, Ramírez EG, Kaczprzyk J, Pedrycz W (Eds.): Analysis and Design of Intelligent Systems Using Soft Computing Techniques, Springer, Advances in Soft Computing vol. 41, pp. 346-354, ISBN: 978-3-540-72431-5           | 3 | IFSA, poziția 214, lista conferințe 2013                | 4         |
| B.13. | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: Support vector machine-based ECG compression. In: Melín P, Castillo O, Ramírez EG, Kaczprzyk J, Pedrycz W (Eds.): Analysis and Design of Intelligent Systems Using Soft Computing Techniques, Springer, Advances in Soft Computing vol. 41, pp. 737-745, ISBN: 978-3-540-72431-5                                 | 3 | IFSA, poziția 214, lista conferințe 2013                | 4         |
| B.14. | Magdás A, <b>Szilágyi L</b> , Belényi B, Incze A: Ambulatory monitoring derived blood pressure variability and cardiovascular risk factors in elderly hypertensive patients. BIO-MEDICAL MATERIALS AND ENGINEERING, 24(6):2563-2569, ISSN: 0959-2989, IF: 1.091  | 4 | Conform serviciului web, anul 2014 Domeniu: Engineering | 4/2= 2    |
| B.15. | <b>Szilágyi L</b> , Szilágyi SM, Benyó B, Benyó Z: Intensity inhomogeneity compensation and segmentation of MR brain images using hybrid c-means clustering models. BIOMEDICAL SIGNAL PROCESSING AND CONTROL, 6(1):3-12 (2011), ISSN: 1746-8094, IF: 1.000   | 4 | Pozitia 299, lista jurnale 2013                         | 4/2= 2    |
| B.16. | <b>Szilágyi L</b> , Szilágyi SM, Dávid L, Benyó Z: Multi-stage FCM-based intensity inhomogeneity correction for MR brain image segmentation. In: Kurková V, Neruda R, Koutník J (Eds.): Artificial Neural Networks, Springer, LNCS vol. 5164, pp. 527-536 (2008), ISBN: 978-3-540-85237-7.   | 4 | ICANN, poziția 250, lista conferințe 2013               | 4/2= 2    |
| B.17. | Lehotsky Á, <b>Szilágyi L</b> , Ferenci T, Kovács L, Pethecs R, Wéber G, Haidegger T: Quantitative impact of direct, personal feedback on hand hygiene technique. JOURNAL OF HOSPITAL INFECTION 91(1):81-84 (2015), ISSN: 0195-6701, IF: 2.544   | 7 | Conform serviciului web, anul 2014 Domeniu: Medicine    | 4/5= 0,80 |
| B.18. | <b>Szilágyi L</b> , Haidegger T, Lehotsky Á, Nagy M, Csonka EA, Sun XY, Ooi KL, Fisher D: A large-scale assessment of hand hygiene quality and the effectiveness of the “WHO 6-steps”. BMC INFECTIOUS DISEASES, 13(249):1-10 (2013), ISSN: 1471-2334, IF: 2.561  | 8 | Conform serviciului web, anul 2014 Domeniu: Medicine    | 4/6= 0,66 |

**Lucrări categoria C**

$$13 \times 2 + 7 \times (2/2) + 2 \times (2/3) + 1 \times (2/4) + 1 \times (2/5) = 35,23 \text{ puncte}$$

| Nr. curent | Lucrare  | Autori | Justificare                               | Punctaj |
|------------|--|--------|---|---------|
| C.01.      | <b>Szilágyi L</b> , Lefkovits L, Benyó B: Automatic brain tumor segmentation in multispectral MRI volumes using a fuzzy c-means cascade algorithm. 12th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2015), pp. 310-316, 2015, ISBN 978-1-4673-7681-5   | 3      | FSKD, poziția 463, lista conferințe 2013  | 2       |
| C.02.      | Szilágyi SM, <b>Szilágyi L</b> , Hirsbrunner B: Study of electric and mechanic properties of the implanted artificial cardiac tissue using a whole heart model. In: Ruiz-Schulcloper J, Sanniti di Baja G (Eds.): Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications, Springer, LNCS vol. 8259, pp. 230-237 (2013), ISBN: 978-3-642-41826-6. | 3      | CIARP, poziția 250, lista conferințe 2013 | 2       |
| C.03.      | <b>Szilágyi L</b> , Dobó-Nagy Cs, Benyó B: Identification of the root canal from dental micro-CT records. In: San Martín C, Kim SW (Eds.): Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications, Springer, LNCS vol. 7042, pp. 339-346 (2011), ISBN: 978-3-642-25084-2.  | 3      | CIARP, poziția 250, lista conferințe 2013 | 2       |
| C.04.      | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: A thorough analysis of the suppressed fuzzy c-means algorithm. In: Ruiz-Schulcloper J, Kropatsch WG (Eds.): Progress in Pattern Recognition, Image Analysis and Applications, Springer, LNCS vol. 5197, pp. 203-210 (2008), ISBN: 978-3-540-85919-2.   | 3      | CIARP, poziția 250, lista conferințe 2013 | 2       |
| C.05.      | Szilágyi SM, <b>Szilágyi L</b> , Benyó Z: Adaptive ECG compression using support vector machine. In: Rueda L, Mery D, Kittler J (Eds.): Progress in Pattern Recognition, Image Analysis and Applications, Springer, LNCS vol. 4756, pp. 594-603 (2007), ISBN: 978-3-540-76724-4.   | 3      | CIARP, poziția 250, lista conferințe 2013 | 2       |
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| C.09.      | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: Efficient feature extraction for fast segmentation of MR brain images. In: Ersbøll BK, Pedersen KS (Eds.): Image Analysis, Springer, LNCS vol. 4522, pp. 611-620 (2007), ISBN: 978-3-540-73039-2.  | 3      | LNCS                                      | 2       |

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| C.11. | <b>Szilágyi L</b> , Szilágyi SM, Benyó Z: Medical image segmentation for virtual endoscopy. 16th IFAC World Congress, Prague 243–247 (2005).   | 3 | IFAC World Congress<br>Conform serviciului web,<br>anul 2014 | 2     |
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| C.13. | Szilágyi SM, Szilágyi L, Benyó Z: Risk estimation techniques in case of WPW syndrome. 16th IFAC World Congress, Prague 184–189 (2005).   | 3 | IFAC World Congress<br>Conform serviciului web,<br>anul 2014 | 2     |
| C.14. | <b>Szilágyi L</b> , Szilágyi SM, Benyó B, Benyó Z: A Novel Clustering Method for Quick Partial Volume Estimation in MR Brain Images. 17th IFAC World Congress, Seoul, pp. 9619-9624, ISBN 978-1-1234-7890-2 (2008).  | 4 | IFAC World Congress<br>Conform serviciului web,<br>anul 2014 | 2/2=1 |
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| C.20. | Szilágyi SM, Szilágyi L, Iclănan D, Benyó Z: A weighted patient specific electromechanical model of the heart. SACI 2009 Timișoara, pp. 111-116, ISBN 978-1-4244-4478-6 (2009)   | 4 | SACI, poziția 601, lista conferințe 2013                     | 2/2=1 |

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| C.22. | <b>Szilágyi L</b> , Dávid L, Szilágyi SM, Benyó B, Benyó Z: Improved Intensity Inhomogeneity Correction Techniques in MR Brain Image Segmentation. 17th IFAC World Congress, Seoul, pp. 9625-9630, ISBN 978-1-1234-7890-2 (2008).   | 5 | IFAC World Congress<br>Conform serviciului web,<br>anul 2014 | $\frac{2}{3} = 0,666$ |
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