

**Fișa de verificare a standardelor minimale necesare și obligatorii pentru conferirea titlurilor didactice din învățământul superior și a gradelor profesionale de cercetare – dezvoltare**

Candidat: **Prof. dr.ing. Gacsádi Alexandru**

Data: 01.03.2017

Grila - Profesor universitar  
Comisia electronică, telecomunicații și nanotehnologie OM 6560/2012

Nr. crt.	Domeniul activităților			Subcategorii	Indicatori	Număr	Punctaj	
1	Activitatea didactică și profesională (A1)	Cărți și capitole în cărți de specialitate în edituri recunoscute	Cărți/ monografii/ capitole ca autor	A1.1.1	internaționale	25	0	0
				A1.1.2	naționale	20	6	120
		Material didactic / Lucrări didactice	Manuale didactice	A1.2.1		10	4	40
<b>Total (A1)</b>							<b>160</b>	
2	Activitatea de cercetare (A2)	Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI Proceedings		A2.1		(25+20 * factor impact) / nr. de autori	28	284.86
						Factor de impact cumulat pentru publicații		8.52
		Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale (BDI)		A2.2		20 / nr. de autori	24	178.67
		Proprietate intelectuală, brevete de invenție, certificate ORDA		A2.3.1	internaționale	35/ nr. de autori	0	0
				A2.3.2	naționale	25 / nr. de autori	0	0
		Granturi / proiecte câștigate prin competiție	Director/ responsabil partener	A2.4.1.1	internaționale	20 * ani de desfășurare	1	20
				A2.4.1.2	naționale	10 * ani de desfășurare	4	70
			Membru în echipa	A2.4.2.1	internaționale	4 * ani de desfășurare	4	24
A2.4.2.2	naționale			2 * ani de desfășurare	3	16		
<b>Total (A2)</b>							<b>593.53</b>	
3	Recunoașterea și impactul activității (A3)	Citări în cărți, reviste și volume ale unor manifestări științifice		A3.1.1	cărți, ISI	8 / nr. aut. art. citat	38	142.67
				A3.1.2	BDI	4 / nr. aut. art. citat	90	154.60
		Prezentări invitate în plenul unor manifestări științifice naționale și internaționale; Profesor invitat		A3.2.1	internaționale	10	2	20
				A3.2.2	naționale	5	0	0
		Membru în colectivele de redacție sau comitete științifice al revistelor, organizator de manifestări științifice, internaționale indexate ISI		A3.3.1	ISI	10	1	10
				A3.3.2	BDI	6	1	6
				A3.3.3	naționale și internaționale neindexate	3	1	3
		Premii în domeniu		A3.4.1	Academia Română, ASTR, academii de ramură, premii internaționale	15	0	0
A3.4.2	Premii naționale în domeniu			5	0	0		
<b>Total (A3)</b>							<b>336.27</b>	
<b>TOTAL GENERAL = Total (A1) + Total (A2) + Total (A3) = 1089.80</b>								

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	<b>Condiții minimale - Profesor</b>	<b>Necesar</b>	<b>Realizat</b>	<b>Îndeplinit</b>
Nr. crt.	Domeniul de activitate			
<b>A1</b>	Activitate didactică/profesională	100	<b>160.00</b>	DA
<b>A2</b>	Activitate cercetare	500	<b>593.53</b>	DA
<b>A3</b>	Recunoașterea impactului activității	100	<b>336.27</b>	DA
<b>TOTAL (A)</b>		700	<b>1089.80</b>	DA
	<b>Condiții minimale obligatorii pe subcategorii - Profesor</b>	<b>Necesar</b>	<b>Realizat</b>	<b>Îndeplinit</b>
<b>A1.1.1 - A1.1.2</b>	Cărți și capitole în cărți de specialitate	4 cărți/capitole	<b>6</b>	DA
<b>A1.2.1-A1.2.2</b>	Material didactic/Lucrări didactice	2 materiale/lucrări didactice	<b>4</b>	DA
<b>A2.1</b>	Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI Proceedings	12 lucrări ISI	<b>28</b>	DA
<b>A2.4.1</b>	Granturi/proiecte câștigate prin competiție (Director/responsabil)	2 granturi ca director	<b>5</b>	DA
<b>A3.1.1 - A3.1.2</b>	Număr de citări în cărți, reviste și volume ale unor manifestări științifice ISI sau BDI	20 de citări	<b>128</b>	DA
	Factor de impact cumulat pentru publicații	6	<b>8.52</b>	DA

**FIȘA DE VERIFICARE A STANDARDELOR MINIMALE NECESARE ȘI OBLIGATORII  
PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂȚĂMÂNTUL SUPERIOR ȘI A  
GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE**

Candidat: **Prof. dr.ing. Gacsádi Alexandru**

Data: **01.03.2017**

Grila - Profesor universitar

Comisia electronică, telecomunicații și nanotehnologie - OM 6560 / 2012

**1. Activitatea didactică și profesională (A1)**

Cărți și capitole în cărți de specialitate în edituri recunoscute

Cărți/monografii/capitole ca autor

A1.1.1. Internaționale

Punctaj

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A1.1.2. Naționale

[\(vezi Anexa A1.1.2\)](#)

Punctaj

1	I. Gavriluț, <b>A. Gacsádi</b> , L. Țepelea, <i>Informatică aplicată în electronică: teorie și aplicații</i> , Editura Universității din Oradea, ISBN 978-606-10-1629-7, 139 pag., 2015.	20
2	R. Dogaru, I. Dogaru, <b>A. Gacsádi</b> , I. Gavriluț, <i>Structura și dinamica rețelelor dinamice complexe. Rețele neliniare celulare</i> , Editura Matrixrom, ISBN 978-973-755-947-0, 174 pag., 2013.	20
3	V. Tîponuț, I. Gavriluț, <b>A. Gacsádi</b> , <i>Roboți mobili autonomi - Conducere cu rețele neuronale artificiale</i> , Editura Politehnica din Timișoara, ISBN 978-606-554-167-2, 286 pag., 2010.	20
4	<b>A. Gacsádi</b> , V. Tîponuț, <i>Sisteme de achiziții de date</i> , Editura Universității din Oradea, ISBN 973-613-868-2, 178 pag., 2005.	20
5	<b>A. Gacsádi</b> , V. Tîponuț, <i>Rețele neuronale celulare. Aplicații</i> , Editura Universității din Oradea, ISBN 973-613-144-0, 189 pag., 2002.	20
6	<b>A. Gacsádi</b> , <i>Bazele televiziunii</i> , Editura Universității din Oradea, ISBN 973-613-145-9, 176 pag., 2002.	20

**Total A1.1.2 = 120**

Material didactic/Lucrări didactice

Manuale didactice

A1.2.1 [\(vezi Anexa A1.2.1\)](#)

Punctaj

1	<b>A. Gacsádi</b> , I. Gavriluț, <i>Bazele televiziunii</i> , îndrumător de laborator, Editura Universității din Oradea, ISBN 978-973-759-657-4, 106 pag., 2008.	10
2	I. Gavriluț Ioan, T. Barabás, <b>A. Gacsádi</b> , <i>Bazele roboticii</i> , îndrumător de laborator, Editura Universității din Oradea, ISBN (10) 973-759-214-X, 92 pag., 2006.	10
3	N.D. Trip, <b>A. Gacsádi</b> , D. Scurtu, <i>Electronică industrială</i> , îndrumător de laborator, Editura Universității din Oradea, ISBN 973-613-756-2, 66 pag., 2005.	10
4	<b>A. Gacsádi</b> , <i>Sisteme de achiziție a datelor</i> , îndrumător de laborator, Editura Universității din Oradea, ISBN 973-613-100-9, 70 pag., 2002.	10

**Total A1.2.1 = 40**

**TOTAL A1 160**

## 2. Activitatea de cercetare (A2)

Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI proceedings

A2.1 [\(vezi Anexa A2.1\)](#)

		Punctaj	Nr. autori	Factor de impact
1	I. Buciu, A. Gacsádi, <i>Biometrics Systems and Technologies: A survey</i> , International Journal. of Computers, Communications & Control, Publisher Agora University Editing House CCC Publications, Vol. 11, No. 3, pp. 315-330, June, 2016, ISSN:1841-9836, E-ISSN:1841-9844.	18.70	2	0.62
2	I. Gavrilut, L. Tepelea, A. Gacsádi, <i>Path Planning based on Intermediate Targets using Cellular Neural Networks</i> , 13th International Conference on Engineering of Modern Electric Systems (EMES), pp.1-4, 11-12 June, 2015, Oradea, Romania, ISBN:978-1-4799-7649-2, DOI:10.1109/EMES.2015.7158452.	10.00	3	0.25
3	L. Tepelea, V. Tiponut, P. Szolgay, A. Gacsádi, <i>Multicore Portable System for Assisting Visually Impaired People</i> , 14th International Workshop on Cellular Nanoscale Networks and their Applications, pp. 1-2, University of Notre Dame, USA, July 29-31, 2014, ISBN:978-1-4799-6007-1, ISSN:2165-0179, DOI:10.1109/CNNA.2014.6888646.	7.50	4	0.25
4	Z. Kincses, Zs. Vörösházi, Z. Nagy, P. Szolgay, T. Laviniu, A. Gacsádi, <i>Investigation of area and speed trade-offs in FPGA implementation of an image correlation algorithm</i> , Proceedings of 13th International Workshop on Cellular Nanoscale Networks and their Applications, pp.1-5, August 29-31, 2012, Turin, Italy, ISBN:978-1-4673-0289-0, ISSN:2165-0179, DOI:10.1109/CNNA.2012.6331455.	5.00	6	0.25
5	I. Buciu, A. Gacsádi, <i>Directional features for automatic tumor classification of mammogram images</i> , Biomedical Signal Processing and Control Volume 6, Issue 4, pp.370-378, ISSN:1746-8094, October 2011, doi:10.1016/j.bspc.2010.10.	22.50	2	1.00
6	I. Buciu, A. Gacsádi, <i>Spatiotemporal Facial Features Encoding for Facial Expression Analysis in Image Sequences</i> , IEEE Proceedings of the International Symposium on Signals Circuits and Systems (ISSCS 2011), pp. 161-164, June 30 2011-July 1, 2011, Iasi, Romania, ISBN:978-1-4577-0201-3, DOI:10.1109/ISSCS.2011.5978684.	15.00	2	0.25
7	C. Grava, A. Gacsádi, I. Buciu, <i>A Homogeneous Algorithm for Motion Estimation and Compensation by Using Cellular Neural Networks</i> , International Journal. of Computers, Communications & Control, Publisher Agora University Editing House CCC Publications, Vol. V, No. 5, pp. 719-726, 2010, ISSN:1841-9836, E-ISSN:1841-9844.	12.67	3	0.65
8	I. Buciu, A. Gacsádi, <i>Gabor Wavelet Based Features for Medical Image Analysis and Classification</i> , IEEE International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL 2009), pp. 8-11, November 24-27, 2009, Bratislava, Slovakia, ISBN:978-1-4244-4640-7.	15.00	2	0.25
9	A. Gacsádi, P. Szolgay, <i>Variational Computing Based Images Denoising Methods by using Cellular Neural Networks</i> , Proceedings of the European Conference on Circuit Theory and Design (ECCTD 2009), pp. 85-88, August 23-27, 2009, Antalya Turkey, ISBN:978-1-4244-3895-2, DOI:10.1109/ECCTD.2009.5274972.	15.00	2	0.25
10	A. Gacsádi, C. Grava, O. Straciuc, I. Gavrilut, <i>PDE-Based Medical Images Denoising Using Cellular Neural Networks</i> , IEEE Proceedings of the International Symposium on Signals Circuits and Systems (ISSCS 2009), Vol. 2, pp. 397-400, July 9-10, 2009, Iasi, Romania, ISBN:978-1-4244-3784-9 DOI:10.1109/ISSCS.2009.5206128.	7.50	4	0.25
11	I. Gavrilut, V. Tiponut, A. Gacsádi, <i>Mobile Robot Navigation based on CNN Images Processing – An Experimental Setup</i> , Proceedings of the WSEAS International Conference on Systems, pp. 220-225, July 22-24, 2009, Rodos Island, Greece, ISBN:978-960-474-097-0, ISSN 1790-2769.	10.00	3	0.25

12	A. Gacsádi, V. Tiponut, E. Gergely, I. Gavriluț, <i>Variational Based Image Enhancement Method by using Cellular Neural Networks</i> , Proceedings of the WSEAS International Conference on Systems, pp. 396-401, July 22-24, 2009, Rodos Island, Greece, ISBN:978-960-474-097-0, ISSN:1790-2769.	7.50	4	0.25
13	I. Gavriluț, V. Tiponut, A. Gacsádi, L. Tepelea, <i>Wall-following Method for an Autonomous Mobile Robot using Two IR Sensors</i> , New Aspects of Systems, Proceedings of the WSEAS International Conference on Systems, pp.205-209, July 22-24, Heraklion, Crete Island, Greece, 2008, ISBN:978-960-6766-83-1, ISSN:1790-2769.	7.50	4	0.25
14	I. Gavriluț, V. Tiponut, A. Gacsádi, C. Grava, <i>CNN Processing Techniques for Multi-robot Coordination</i> , Proceedings of International Symposium on Signals, Circuits and Systems, (ISSCS 2007), Vol. 1, pp.269-272, July 12-13, 2007, Iași, Romania, ISBN: 978-1-4244-0968-6, DOI:10.1109/ISSCS.2007.4292703.	7.50	4	0.25
15	C. Grava, A. Gacsádi, C. Gordan, A. M. Grava, I. Gavriluț, <i>Applications of the Iterated Conditional Modes Algorithm for Motion Estimation in Medical Image Sequences</i> , Proceedings of International Symposium on Signals, Circuits and Systems, (ISSCS 2007), Vol. 1, pp. 373-376, July 12-13, 2007, Iași, Romania, ISBN:978-1-4244-0968-6, DOI:10.1109/ISSCS.2007.4292740.	6.00	5	0.25
16	I. Gavriluț, V. Tiponut, A. Gacsádi, <i>An Integrated Environment for Mobile Robot Navigation based on CNN Images Processing</i> , Proceedings of the 11-th WSEAS International Conference on Systems, pp.81-86, Agios Nikolaos, Crete Island, Greece, July 23-25, 2007, ISBN:978-960-8457-90-4, ISSN:1790-5117.	10.00	3	0.25
17	I. Gavriluț, A. Gacsádi, C. Grava, V. Tiponut, <i>Vision based algorithm for path planning of a mobile robot by using cellular neural networks</i> , Proceedings of the IEEE International Conference on Automation, Quality&Testing, Robotics (AQTR 2006) pp. 306-311, May 25-28, 2006, Cluj-Napoca, Romania, ISBN:1-4244-0360-X, DOI:10.1109/AQTR.2006.254650.	7.50	4	0.25
18	I. Gavriluț, V. Tiponut, A. Gacsádi, <i>Path Planning of Mobile Robots by Using Cellular Neural Networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2006), pp.108-113, August 28-30, Istanbul, Turkey, 2006, ISBN: 978-1-4244-0639-5, DOI:10.1109/CNNA.2006.341613.	10.00	3	0.25
19	A. Gacsádi, C. Grava, V. Tiponut, P. Szolgay, <i>A CNN Implementation of the Horn &amp; Schunck Motion Estimation Method</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2006), pp. 120-124, August 28-30, Istanbul, Turkey, 2006, ISBN:978-1-4244-0639-5, DOI:10.1109/CNNA.2006.341615.	7.50	4	0.25
20	A. Gacsádi, C. Grava, A. Grava, <i>Medical image enhancement by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Computing in Cardiology, pp. 821-824, September 25-28, 2005 Lyon, France, 2005, ISBN:0-7803-9337-6, ISSN:0276-6574, DOI:10.1109/CIC.2005.1588231.	10.00	3	0.25
21	C. Grava, V. Buzuloiu, A. Gacsádi, A. Grava, <i>Mean field annealing for motion estimation in medical image sequences</i> , Proceedings of the IEEE International Symposium on Signals, Circuits and Systems (ISSCS 2005), Vol. I, pp. 35-38, July 14-15, 2005, Iași, Romania, ISBN:0-7803-9029-6, DOI:10.1109/ISSCS.2005.1509844.	7.50	4	0.25
22	I. Gavriluț, A. Gacsádi, L. Tepelea, V. Tiponut, <i>Motion planning for two mobile robots in an environment with obstacles by using cellular neural networks</i> , Proceedings of the IEEE International Symposium on Signals, Circuits and Systems (ISSCS 2005), pp. 801-804, July 14-15, Iași, Romania, 2005, ISBN:0-7803-9029-6, DOI:10.1109/ISSCS.2005.1511362.	7.50	4	0.25
23	C. Gordan., A. Gacsádi, C. Grava, R. Reiz, <i>Using Mathematical Morphology Elements for the Ridges Extraction of a Polynomial FM Signal Covered by a Low-Pass Filtered Gaussian Noise</i> , Proceedings of the 7th World Multiconference on Systemics, Cybernetics and Informatics, pp.84-87, July 31-August 02, 2003, Orlando, Florida, USA, ISBN:980-6560-05-1.	7.50	4	0.25

24	C. Gordan., <b>A. Gacsádi</b> , C. Grava, R. Reiz, <i>Using Wavelet Transform for the Ridges Extraction of a Polynomial Frequency Modulated Signal Covered with a Zero-Mean Gaussian Noise</i> , Proceedings of the International Conference on Computer, Communication and Control Technologies (CCCT'03), pp. 37-40, July 27-30, 2003, Orlando, Florida, USA, ISBN:980-6560-01-9.	7.50	4	0.25
25	<b>A. Gacsádi</b> , T. Maghiar, V. Tiponut, <i>A CNN path planning for a mobile robot in an environment with obstacles</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications, (CNNA 2002), pp. 188-194, July, 22-24, Frankfurt/Main, Germany, 2002, ISBN:981-238-121-X.	10.00	3	0.25
26	<b>A. Gacsádi</b> , P. Szolgay, <i>An analogic CNN algorithm for following continuously moving objects</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications, (CNNA 2000), pp. 99-104, May 23-25, Catania, Italy, 2000, ISBN:0-7803-6344-2.	15.00	2	0.25
27	L. Ţepelea, <b>A. Gacsádi</b> , I. Gavriluţ, V. Tiponut, <i>A CNN Based Correlation Algorithm to Assist Visually Impaired Persons</i> , IEEE Proceedings of the International Symposium on Signals Circuits and Systems (ISSCS 2011), pp.169-172, June 30, 2011-July 1, 2011, Iasi, Romania, ISBN:978-1-4577-0201-3, DOI:10.1109/ISSCS.2011.5978686.	7.50	4	0.25
28	V. Tiponut, <b>A. Gacsádi</b> , I. Gavriluţ, <i>Applications of Artificial Neural Networks in mobile robots navigation</i> , Proceedings of the 9-th WSEAS International Conference on Automation and Information, Book Series: Recent Advances in Electrical Engineering, pp. 236-241, 2008, ISBN:978-960-6766-77-0.	10.00	3	0.25

**Total A2.1 = 284.86**

Factor de impact cumulat pentru publicatii = **8.52**

Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI proceedings= **28**

Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale (BDI)

A2.2 [\(vezi Anexa A2.2\)](#)

		Punctaj	Nr. autori
1	<b>A. Gacsádi</b> , P. Szolgay, L. Ţepelea, R. Reiz, I. Gavriluţ, <i>Scalar Parameters Optimization in PDE Based Medical Image Denoising by using Cellular Wave Computing</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp. 25-30, Vol. 9, Number 2, October, 2016, ISSN:1844-6035. Scopus	4.00	5
2	L. Ţepelea, I. Gavriluţ, V. Tiponut, P. Szolgay, <b>A. Gacsádi</b> , <i>OCR application on smartphone for visually impaired people</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp. 153-156, Vol. 7, Issue 1, 2014, ISSN:1844-6035. Scopus	4.00	5
3	L. Ţepelea, I. Gavriluţ, <b>A. Gacsádi</b> , <i>Exploration algorithm for a mobile robot based on two infrared sensors</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp. 255-258, Vol.5, Issue 1, 2012, ISSN:1844-6035. Scopus	6.67	3
4	<b>A. Gacsádi</b> , L. Ţepelea, I. Gavriluţ, O. Straciuc, <i>Energy Based Medical Imaging Segmentation Methods by using Cellular Neural Networks</i> , Proceedings of the WSEAS International Conference on Systems, Recent Researches in System Science, pp.190-195, July 14-16, 2011, 2011, Corfu Island, Greece, ISSN:1792-4235. ISBN:978-1-61804-023-7. Scopus	5.00	4
5	I. Gavriluţ, L. Ţepelea, <b>A. Gacsádi</b> , <i>CNN Processing Techniques for Image-Based Path Planning of a Mobile Robot</i> , Proceedings of the WSEAS International Conference on Systems, Recent Researches in System Science, pp.259-263, July 14-16, 2011, Corfu Island, Greece, ISSN:1792-4235, ISBN:978-1-61804-023-7. Scopus	6.67	3
6	I. Buciu, <b>A. Gacsádi</b> , <i>Noise Suppression Methods for Low Quality Images with Application to Face Recognition</i> , IEEE Proceedings of the International Symposium (ELMAR 2011), pp.21-24, September 14-16, 2011, Zadar, Croatia, ISSN:1334-2630, E-ISBN:978-953-7044-12-1, Print-ISBN:978-1-61284-949-2. IEEE Xplore Digital Library. Scopus	10.00	2

7	I. Gavriluț, L. Țepelea, A. Gacsádi, <i>A CNN Based Nonlinear Wave Metric for CT Images</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.29-32, Vol.4, Issue 2, 2011, ISSN:1844-6035. Scopus	6.67	3
8	<b>A. Gacsádi</b> , <i>Variational Computing Based Image inpainting Methods by Using Cellular Neural Networks</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.104-109, June 13-15, 2010, Iași, Romania, ISBN 978-960-474-193-9, ISSN 1790-5117. Scopus	20.00	1
9	I. M. Neamțu, <b>A. Gacsádi</b> , <i>Formalism in Coding the Genetic Information</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.98-103, June 13-15, 2010, Iași, Romania, ISBN:978-960-474-193-9, ISSN:1790-5117. Scopus	10.00	2
10	E. I. Gergely, L. Coroiu, <b>A. Gacsádi</b> , <i>Design of Safe PLC Programs by Using Petri Nets and Formal Methods</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.86-91, June 13-15, 2010, Iași, Romania, ISBN 978-960-474-193-9, ISSN 1790-5117. Scopus	6.67	3
11	I. Buciu, <b>A. Gacsádi</b> , C. Grava, <i>Vision Based Approaches for Driver Assistance Systems</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.92-97, June 13-15, 2010, Iași, Romania, ISBN:978-960-474-193-9, ISSN:1790-5117. Scopus	6.67	3
12	L. Țepelea, R.Reiz, I. Gavriluț, <b>A. Gacsádi</b> , <i>A CNN Computing Algorithm for Image Correlation</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.217-220, Vol.3, Issue 2, 2010, ISSN:1844-6035. Scopus	5.00	4
13	<b>A. Gacsádi</b> , P. Szolgay, <i>Variational Computing Based Segmentation Methods for Medical Imaging by using CNN</i> , Proceedings of the 12th International Workshop on Cellular Neural Nanoscale and their Applications (CNNA), Towards Megaprocessor Computing, pp. 418-423, February 3-5, 2010, Berkeley, California, USA, Print ISBN:978-1-4244-6679-5 DOI:10.1109/CNNA.2010.5430256. IEEE Xplore Digital Library. Scopus	10.00	2
14	I. Buciu, <b>A. Gacsádi</b> , <i>Non-negative Dimensionality Reduction for Mammogram Classification</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.121-124, Vol.2, Issue 1, 2009, ISSN:1844-6035. Scopus	10.00	2
15	C. Grava, <b>A. Gacsádi</b> , I. Gavriluț, <i>Arterial elasticity maps obtained by using basic block-matching methods</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.151-154, Vol.2, Issue 1, 2009, ISSN:1844-6035. Scopus	6.67	3
16	I. Gavriluț, <b>A. Gacsádi</b> , C. Grava, O. Straciuc, L. Țepelea, <i>Analysis methods of noise extraction from CT images</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.146-149, Vol.2, No.2, 2009, ISSN:1844-6035. Scopus	4.00	5
17	I. Gavriluț, V. Tîponuț, <b>A. Gacsádi</b> , <i>Mobile Robot Navigation based on CNN Images Processing – An Experimental Setup</i> , WSEAS Transactions on Systems, Issue 8, Volume 8, pp. 947-956, 2009. ISSN: 1109-2777 948 Scopus	6.67	3
18	I. Gavriluț, <b>A. Gacsádi</b> , <i>Multi-robot coordination by using Cellular Neural Networks</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.190-193, Vol.1, Issue 1, 2009, ISSN:1844-6035. Scopus	10.00	2
19	I. Gavriluț, V. Tîponuț, <b>A. Gacsádi</b> , L. Țepelea, <i>Obstacles avoidance method for an autonomous mobile robot using two IR sensors</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.194-197, Vol.1, 2008, Issue 1, ISSN:1844-6035. Scopus	5.00	4
20	V. Tîponuț, I. Gavriluț, C. Căleanu, <b>A. Gacsádi</b> , <i>Development of a neural network guided mobile robot collectivity</i> , WSEAS Transactions on Circuits and Systems, pp. 805-812, Vol. 5, Issue 6, June 2006. ISSN:1109-2734. Scopus	5.00	4
21	<b>A. Gacsádi</b> , P. Szolgay, <i>Image mage inpainting methods by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2005), pp. 198-201, 2005, Hsinchu, Taiwan, ISBN:0780391853. Scopus	10.00	2

22	C. Grava, <b>A. Gacsádi</b> , C. Gordan, T. Maghiar, A. Grava, R. Reiz, <i>3D Interpolation using Cellular Neural Networks</i> , Proceedings of Progress in Electromagnetics Research Symposium, (PIERS), pp. 341-344, Pisa, Italy, 2004, ISBN:88-8492-268-2. Scopus	3.33	6
23	L. Țepelea, I. Gavriluț, <b>A. Gacsádi</b> , <i>Edge Based CNN Image Segmentation Methods for Medical Imaging</i> , Journal of Computer Science and Control Systems, University of Oradea Publisher, pp.95-98, Vol. 3, Issue 2, 2010, ISSN:1844-6043. Google Scholar.	6.67	3
24	I. M. Neamțu, <b>A. Gacsádi</b> , <i>Cryptology as Mathematical Model</i> , Journal of Computer Science and Control Systems, University of Oradea Publisher, pp.147-150, Vol. 3, Issue 1, 2010, ISSN :1844-6043. Google Scholar.	10.00	2

**Total A2.2 =178.67**

Proprietate intelectuală, brevete de invenție, certificate ORDA

A2.3.1 Internaționale

Nr.  
autori

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A2.3.2. Naționale

Nr.  
autori

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Granturi/proiecte câștigate prin competiție

Director/responsabil

A2.4.1.1. Internaționale

Ani de  
Punctaj desfășu-  
rare

[\(vezi Anexa\\_A2.4.1.1\)](#)

1	Domus Hungarica Scientiarum et Artium, Hungarian Academy of Sciences, <i>Adaptive image enhancement by using cellular neural network</i> , Image Processing and Neurocomputing Department, University of Veszprém, 2002.	20	1
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**Total A2.4.1.1 =20.00**

A2.4.1.2. Naționale

Ani de  
Punctaj desfășu-  
rare

[\(vezi Anexa\\_A2.4.1.2\)](#)

1	PN II - IDEI - Proiect de Cercetare Exploratorie, ID- 668/2008, Contract Nr. 645/19.01.2009, <i>Dezvoltarea unor metode de prelucrare și analiză a imaginilor computer tomografice utilizând rețele neuronale celulare și integrarea acestora într-un sistem de asistare a diagnozei medicale</i> , 2009-2011.	30	3
2	Grant CNCSIS A 473/2006-2007, <i>Utilizarea tehnologiei rețelelor neuronale celulare pentru navigația roboților mobili autonomi</i> , 2006-2007.	20	2
3	Contract de cercetare Nr. 1120/2005, Institutul programelor de Cercetare al Fundației Sapientia, Cluj-Napoca, <i>Implementarea unor metode de îmbunătățire a imaginilor pe chip CNN-UM emulat digital</i> , 2005.	10	1
4	Contract de cercetare Nr. 1446/2004, Institutul programelor de Cercetare al Fundației Sapientia, Cluj-Napoca, <i>Proiectarea unor metode de prelucrare a imaginilor utilizând rețele neuronale celulare și aplicații ale acestora</i> , 2004.	10	1

**Total A2.4.1.2 =70.00**

Granturi/proiecte castigate prin competitie (Director/ responsabil)= 5

Membri în echipă

A2.4.2.1. Internaționale

Ani de  
Punctaj desfășu-  
rare

[\(vezi Anexa\\_A2.4.2.1\)](#)

1	HURO/0901/028, <i>Laboratory Practical Teaching for Applied Engineering Sciences</i> , EPRAS, 2011- 2012.	8	2
2	HURO/0802/100, <i>Realization of Hungarian-Romanian R&amp;D Laboratory for the Development of Major Projects in Polluted Terrain Cleaning</i> , MICROMODEL, 2011-2012.	8	2



3	HURO/1101/191/2.2.1., <i>Hungarian-Romanian Research Platform for Smart Materials Project Support</i> , SMARTMAT, 2013.	4	1
4	A4. Phare CBC RO-HU 2004/940.01.01.15, <i>Centru de integrare științifică euroregională Oradea - Debrecen</i> , 2004.	4	1

**Total A2.4.2.1 =24.00**

#### A2.4.2.2. Naționale

(vezi Anexa A2.4.2.2)

		Punctaj	Ani de desfășurare
1	Cod Proiect: 61756, Nr. Contract: POSDRU/86/1.2/S/61756, E 4863/28.06.2010, <i>Tehnici de analiza, modelare si simulare pentru imagistica, bioinformatica si sisteme complex, ITEMS; 2010-2013.</i>	8	4
2	Grant CNCIS A 639/2007, <i>Mediu integrat pentru deplasarea asistată a persoanelor cu handicap vizual, 2005-2007.</i>	6	3
3	Contract de cercetare Nr. K/449/2003, Institutul programelor de Cercetare al Fundației Sapienția, Cluj-Napoca, <i>Dezvoltarea unui model general de sistem sub aspectul inertialității și aplicațiile acestuia, 2003.</i>	2	1

**Total A2.4.2.2 =16.00**

**TOTAL A2 593.53**

### 3. Recunoașterea și impactul activității (A3)

Citări în cărți, reviste și volume ale unor manifestări științifice

A3.1.1. Cărți, ISI	Punctaj	Nr. autori articol citat	Nr. citari
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ISI	(vezi Anexa A3.1.1a)		
1.0	I. Buciu, A. Gacsádi, <i>Directional features for automatic tumor classification of mammogram images</i> , Biomedical Signal Processing and Control, Volume 6, Issue 4, pp.370-378, ISSN:1746-8094, October 2011, doi:10.1016/j.bspc.2010.10.	68.00	2
1.1	Rouhi, Rahimeh; Jafari, Mehdi, <i>Classification of benign and malignant breast tumors based on hybrid level set segmentation</i> , Expert Systems with Applications Volume: 46, pp.45-59, Published: Mar. 15, 2016.		
1.2	Casti, P.; Mencattini, A.; Salmeri, M.; et al., <i>Contour-independent detection and classification of mammographic lesions</i> , Biomedical Signal Processing and Control, Volume: 25, pp.165-177, Published: Mar. 2016.		
1.3	Bekker, Alan Joseph; Shalhon, Moran; Greenspan, Hayit; et al., <i>Multi-View Probabilistic Classification of Breast Microcalcifications</i> , IEEE Transactions on Medical Imaging Volume: 35, Issue: 2, pp.645-653, Published: Feb. 2016.		
1.4	Xie, Weiyong; Li, Yunsong; Ma, Yide, <i>Breast mass classification in digital mammography based on extreme learning machine</i> , Neurocomputing Volume: 173, pp.930-941, Published: Jan. 15 2016.		
1.5	Firmino, Macedo; Angelo, Giovanni; Morais, Higor; et al., <i>Computer-aided detection (CADE) and diagnosis (CADx) system for lung cancer with likelihood of malignancy</i> , Biomedical Engineering Online Volume: 15, Article Number: 2, Published: Jan. 6 2016.		
1.6	Diamant, Idit; Shalhon, Moran; Goldberger, Jacob; et al., Edited by: Styner, MA; Angelini, ED, <i>Mutual information criterion for feature selection with application to classification of breast microcalcifications</i> , Conference: Conference on Medical Imaging - Image Processing, San Diego, CA, Mar, 2016, Medical Imaging 2016: Image Processing Book, Series: Proceedings of SPIE, Volume: 9784 Article Number: 97841S, 2016.		
1.7	Madhusudhanarao, Telu V.; Setty, Sanaboina P.; Srinivas, Yarramalle, <i>Content Based Medical Image Retrieval System Based on Generalized Gamma Distribution and Feature Matching Methodology</i> , Current Medical Imaging Reviews Volume: 12, Issue: 1, pp. 28-35, Published: 2016.		
1.8	Thivya, K. S.; Sakthivel, P.; Sai, P. M. Venkata, <i>Analysis of framelets for breast cancer diagnosis</i> , Technology and Health Care, Volume: 24, Issue: 1, pp. 21-29, Published: 2016.		

1.9	Beura, Shradhananda; Majhi, Banshidhar; Dash, Ratnakar, <i>Mammogram classification using two dimensional discrete wavelet transform and gray-level co-occurrence matrix for detection of breast cancer</i> , Neurocomputing Volume: 154, pp.1-14. Published: Apr. 22 2015.			
1.10	Rahimeh Rouhi, Mehdi Jafari, Shohreh Kasaei, Peiman Keshavarzian, <i>Benign and malignant breast tumors classification based on region growing and CNN segmentation</i> , Expert Systems with Applications, Volume: 42, Issue: 3, pp.990-1002, Published: Feb.15 2015.			
1.11	Addioui, Abdelaziz; Benabbou, Faouzia; El Filali, Sanaa; et al., <i>A comparison of multi-resolution and multi-orientation for breast cancer diagnosis in the full-field digital mammogram</i> , Book Group Author(s): IEEEConference: 27th International Conference on Microelectronics, (ICM) Casablanca, Morocco, Dec 20-23, 2015, 27th International Conference on Microelectronics (ICM) Book Series: International Conference on Microelectronics-ICM, pp.257-260, Published: 2015.			
1.12	Pratiwi, Mellisa; Alexander; Harefa, Jeklin; et al., <i>Mammograms Classification using Gray-level Co-occurrence Matrix and Radial Basis Function Neural Network</i> , Conference: 1st International Conference on Computer Science and Computational Intelligence (ICCSCI) Location: Bina Nusantara Univ, Jakarta, Indonesia. Aug. 24-26. 2015.			
1.13	Ergin, Semih; Kilinc, Onur, <i>A new feature extraction framework based on wavelets for breast cancer diagnosis</i> , Computers in Biology and Medicine, Volume: 51, pp.171-182, Published: Aug. 1 2014.			
1.14	Apostolopoulos, George; Koutras, Athanasios; Christoyianni, Ioanna; et al. Edited by: Likas, A; Blekas, K; Kalles, D, <i>Computer Aided Classification of Mammographic Tissue Using Shapelets and Support Vector Machines</i> , Conference: 8th Hellenic Conference on Artificial Intelligence (SETN) Location: Ioannina, GREECE Date: MAY 15-17, 2014, Publicat Artificial Intelligence: Methods and Applications Book Series: Lecture Notes in Artificial Intelligence, Volume: 8445 pp. 510-520 Published: 2014			
1.15	Gorgel, Pelin; Sertbas, Ahmet; Ucan, Osman N., <i>Mammographical mass detection and classification using Local Seed Region Growing-Spherical Wavelet Transform (LSRG-SWT) hybrid scheme</i> , Computers in Biology and Medicine, Volume: 43, Issue: 6, pp.765-774, Published: Jul. 1 2013.			
1.16	Anand, S.; Kumari, R. Shantha Selva; Jeeva, S.; et al, <i>Directionlet transform based sharpening and enhancement of mammographic X-ray images</i> , Biomedical Signal Processing and Control, Volume: 8, Issue: 4, pp.391-399, Published: Jul. 2013.			
1.17	Deepak, K. Sai; Medathati, N. V. Kartheek; Sivaswamy, Jayanthi, <i>Detection and discrimination of disease-related abnormalities based on learning normal cases</i> , Pattern Recognition, Volume: 45, Issue: 10, pp.3707-3716, Published: Oct. 2012.			
2.0	<b>A. Gacsádi, P. Szolgay, <i>An analogic CNN algorithm for following continuously moving objects</i></b> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications, (CNNA 2000), pp. 99-104, May 23-25, Catania, Italy. 2000. ISBN:0-7803-6344-2.	32.00	2	8
2.1	Costantini, Giovanni; Todisco, Massimiliano; Carota, Massimo; et al., <i>A new kinematic sensor for human functional ability/disability classification</i> , Edited by: DiNatale, C; DAMico, A; Martinelli, E; et al., Proceedings of the 13th Italian Conference on Sensors and Microsystems, pp. 289-294, Rome, Italy, Feb. 19-21, 2008. Published: 2009.			
2.2	Benetti, M.; Cannata, D.; Di Pietrantonio, F.; et al., <i>Pressure sensor based on saw resonators</i> , Edited by: DiNatale, C; DAMico, A; Martinelli, E; et al., Proceedings of the 13th Italian Conference on Sensors and Microsystems, Rome, Italy Feb. 19-21, 2008. pp.313-325. Published: 2009.			
2.3	Costantini, G.; Casali, D.; Perfetti, R.; et al., <i>A binocular sensor interface for moving objects detection</i> , Book Group Author(s): IEEE, 2nd International Workshop on Advances in Sensors and Interface, Bari, Italy, Jun 26-27, 2007, pp.206-211. Published: 2007.			

2.4	Costantini, Giovanni; Casali, Daniele; Carota, Massimo; et al., <i>A CNN-based algorithm for moving object detection in stereovision applications</i> , Book Group Author(s): IEEE, Conference: 18th European Conference on Circuit Theory Design Seville, Spain, Aug. 26-30, 2007, VOLS 1-3 pp.500-503 Published: 2007.			
2.5	Costantini, G.; Casali, D.; Perfetti, R., <i>Detection of moving objects in a binocular video sequence</i> , Edited by: Tavsanoglu, V; Arik, S, Proceedings of the 2006 10th IEEE International Workshop on Cellular Neural Networks and Their Applications Location: Istanbul, Turkey, Aug 28-30, 2006, pp.281-285, Published: 2006.			
2.6	Pazienza, GE; Giangrossi, P; Tortella, S; et al., <i>Tracking for a CNN guided robot</i> , Edited by: O'Regan, F; Wegemer, C, Proceedings of the 2005 European Conference on Circuit Theory and Design, Cork, Ireland, Aug. 29-Sep. 02, 2005, Vol 3, pp. 77-80, Published: 2005.			
2.7	Costantini, G; Casali, D; Perfetti, R, Analogic CNN algorithm for estimating position and size of moving objects, International Journal of Circuit Theory and Applications Volume: 32, Issue: 6, pp. 509-522 Published: Nov.-Dec. 2004.			
2.8	Grassi, G; Grieco, LA, <i>Object-oriented image analysis via analogic CNN algorithms - Part I: Motion estimation</i> , Edited by: Tetzlaff, R , Conference: 7th IEEE International Workshop on Cellular Neural Networks and Their Applications Location: Frankfurt, Germany, Jul. 22-24, 2002, pp.172-179, Published: 2002.			
3.0	C. Grava, <b>A. Gacsádi</b> , I. Buciu, <i>A Homogeneous Algorithm for Motion Estimation and Compensation by Using Cellular Neural Networks</i> , International Journal. of Computers, Communications & Control, Publisher Agora University Editing House CCC Publications, Vol. V, No. 5, pp. 719-726, 2010, ISSN:1841-9836, E-ISSN:1841-9844.	2.67	3	1
3.1	Su, H.; Yang, F.; Song, J., Packet-Layer Quality Assessment for Networked Video, International Journal of Computers Communications & Control, Volume: 7, Issue: 3, pp.565-573, Published: Sep. 2012.			
4.0	<b>A. Gacsádi</b> , C. Grava, A. Grava, <i>Medical image enhancement by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Computing in Cardiology, pp. 821-824, September 25-28, 2005 Lyon, France, 2005, ISBN:0-7803-9337-6, ISSN:0276-6574, DOI:10.1109/CIC.2005.1588231.	5.33	3	2
4.1	Ling, Sim Choon; Abdullah, Azian Azanninni; Ahmad, Wan Khairunizam Wan, <i>Design of an Automated Breast Cancer Masses Detection in Mammogram Using Cellular Neural Network (CNN) Algorithm</i> , Conference: International Conference on Internet Services Technology and Information Engineering (ISTIE) Location: Bogor, Indonesia, May 11-12, 2013 Advanced Science Letters, Volume: 20, Issue: 1, Special Issue: SI pp.254-258, Published: Jan. 2014.			
4.2	Leonardi, Rosalia; Giordano, Daniela; Maiorana, Francesco, <i>An Evaluation of Cellular Neural Networks for the Automatic Identification of Cephalometric Landmarks on Digital Images</i> , Journal of Biomedicine and Biotechnology , Article Number: 717102, Published: 2009.			
5.0	I. Gavriluț, V. Tîponuț, <b>A. Gacsádi</b> , L. Țepelea, <i>Wall-following Method for an Autonomous Mobile Robot using Two IR Sensors</i> , New Aspects of Systems, Proceedings of the WSEAS International Conference on Systems, pp.205-209, July 22-24, Heraklion, Crete Island, Greece, 2008, ISBN:978-960-6766-83-1, ISSN:1790-2769	2.00	4	1
5.1	Li, Lingling; Lin, Cheng-Jian; Huang, Mei-Ling; et al., <i>Mobile robot navigation control using recurrent fuzzy cerebellar model articulation controller based on improved dynamic artificial bee colony</i> , Advances in Mechanical Engineering Vol. 8, Issue 11, Article Number 1687814016681234 Published:Nov. 2016.			
6.0	I. Gavriluț, <b>A. Gacsádi</b> , C. Grava, V. Tîponuț, <i>Vision based algorithm for path planning of a mobile robot by using cellular neural networks</i> , Proceedings of the IEEE International Conference on Automation, Quality&Testing, Robotics (AQTR 2006) pp. 306-311, May 25-28, 2006, Cluj-Napoca, Romania, ISBN:1-4244-0360-X, DOI:10.1109/AQTR.2006.254650.	2.00	4	1

6.1	Cheng, Chi-Cheng; Chou, Chin-Chuan, Edited by: MartinGonzalez, A; UcCetina, V, <i>Fuzzy-Based Visual Servo with Path Planning for a Ball-Plate System</i> , Conference: 1st International Symposium on Intelligent Computing Systems (ISICS) Location: Merida, MEXICO, Mar 16-18, 2016, Intelligent Computing Systems Book Series:Communications in Computer and Information Science Volume:597, pp. 97-107. Published: 2016. Springer, capitole în cărți ISI <a href="#">(vezi Anexa A3.3.1b)</a>			
1.0	<b>A. Gacsádi</b> , P. Szolgay, <i>Variational Computing Based Segmentation Methods for Medical Imaging by using CNN</i> , Proceedings of the 12th International Workshop on Cellular Neural Nanoscale and their Applications (CNNA), Towards Megaprocessor Computing, pp. 418-423, February 3-5, 2010, Berkeley, California, USA, Print ISBN:978-1-4244-6679-5 DOI:10.1109/CNNA.2010.5430256. IEEE Xplore Digital Library	4.00	2	1
1.1	Mario I. Chacon-Murguia, David Urias-Zavala, <i>A DTCNN Approach on Video Analysis: Dynamic and Static Object Segmentation</i> , Chapter Recent Advances on Hybrid Approaches for Designing Intelligent Systems Volume 547 of the series Studies in Computational Intelligence pp. 315-336, 27 March 2014.			
2.0	<b>A. Gacsádi</b> , P. Szolgay, <i>Image mage inpainting methods by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2005), pp. 198-201, 2005, Hsinchu, Taiwan, ISBN:0780391853. Scopus	4.00	2	1
2.1	Sathit Prasomphan, Hisashi Aomori, Mamoru Tanaka, <i>Design of DT-CNN for Imputing Data at Unobserved Location of Geostatistics Image Dataset</i> , Chapter Signal Processing, Image Processing and Pattern Recognition, Communications in Computer and Information Science, Volume 260, pp.225-233, 2011.			
3.0	<b>A. Gacsádi</b> , P. Szolgay, <i>A variational method for image denoising, by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2004), ISBN 963-311-357-1, pp. 213-218, Budapest, Hungary, 2004.	4.00	2	1
3.1	Bartosz Jablonski, <i>Geometric Structure Filtering Using Coupled Diffusion Process and CNN-Based Approach</i> , Chapter Artificial Intelligence and Soft Computing – ICAISC, Volume 5097 of the series Lecture Notes in Computer Science pp. 794-805, 2008.			
4.0	I. Buciu, <b>A. Gacsádi</b> , <i>Directional features for automatic tumor classification of mammogram images</i> , Biomedical Signal Processing and Control Volume 6, Issue 4, pp.370-378, ISSN:1746-8094, October 2011, doi:10.1016/j.bspc.2010.10.	4.00	2	1
4.1	Amit Kamra, V K Jain, Sukhwinder Singh, Sunil Mittal, <i>Characterization of Architectural Distortion in Mammograms Based on Texture Analysis Using Support Vector Machine Classifier with Clinical Evaluation</i> , Published online: 3 July 2015, Society for Imaging Informatics in Medicine 2015, J Digit Imaging 29, pp.104-114, 2016.			
5.0	I. Buciu, <b>A. Gacsádi</b> , C. Grava, <i>Vision Based Approaches for Driver Assistance Systems</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.92-97, June 13-15, 2010, Iași, Romania, ISBN:978-960-474-193-9, ISSN:1790-5117. Scopus	2.67	3	1
5.1	C. Ramya, S. Subha Rani, <i>Rain Removal in Image Sequence Using Sparse Coding</i> , Chapter Trends in Intelligent Robotics, Automation, and Manufacturing Communications in Computer and Information Science, Volume 330, pp 361-370, 2012.			
6.0	I. Buciu, <b>A. Gacsádi</b> , <i>Gabor Wavelet Based Features for Medical Image Analysis and Classification</i> , IEEE International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL 2009), pp. 8-11, November 24-27, 2009, Bratislava, Slovakia, ISBN:978-1-4244-4640-7.	12.00	2	3

6.1	Vamsidhar Enireddy and Reddi Kiran Kumar, <i>Improved cuckoo search with particle swarm optimization for classification of compressed images</i> , Sadhana Vol. 40, Part 8, pp. 2271–2285, Indian Academy of Sciences, December 2015.			
6.2	Tarek Elguebaly, Nizar Bouguila, <i>A hierarchical nonparametric Bayesian approach for medical images and gene expressions classification</i> , Methodologies and Application Soft Computing January 2015, Volume 19, Issue 1, pp. 189-204, First online: 21 February 2014.			
6.3	Simily Joseph, Kannan Balakrishnan, <i>Local Binary Patterns, Haar Wavelet Features and Haralick Texture Features for Mammogram Image Classification Using Artificial Neural Networks</i> , Chapter Advances in Computing and Information Technology, Communications in Computer and Information Science, Volume 198, pp. 107-114, 2011.			

**Total A3.1.1 =142.67**

**Total citări Cărți, ISI =38**

#### A3.1.2. BDI

		Punctaj	Nr. autori articol citat	Nr. citari
	IEEE Xplore Digital Library			
	<a href="#">(vezi Anexa A3.1.2a)</a>			
1.0	<b>A. Gacsádi</b> , P. Szolgay, <i>Variational Computing Based Segmentation Methods for Medical Imaging by using CNN</i> , Proceedings of the 12th International Workshop on Cellular Neural Nanoscale and their Applications (CNNA), Towards Megaprocessor Computing, pp. 418-423, February 3-5, 2010, Berkeley, California, USA, Print ISBN:978-1-4244-6679-5 DOI:10.1109/CNNA.2010.5430256. IEEE Xplore Digital Library	6.00	2	3
1.1	C. Botoca, M. Botoca, Cellular neural network processing of CEUS examination. A pilot study, 12th IEEE International Symposium on Electronics and Telecommunications (ISETC), 27-28 Oct. 2016.			
1.2	Sarhan, E.; Khalifa, E.; Nabil, A.M., <i>Road extraction framework by using cellular neural network from remote sensing images</i> , International Conference on Image Information Processing (ICIIP), 2011, pp.1 - 5.			
1.3	Chacon-Murguia, M.I.; Urias-Zavala, J.D., <i>A comparison between a DTCNN and SOM like approach for dynamic object detection in videos</i> , Fuzzy Information Processing Society (NAFIPS), Annual Meeting of the North American, pp.1 - 6, 2012.			
2.0	I. Buciu, <b>A. Gacsádi</b> , <i>Gabor Wavelet Based Features for Medical Image Analysis and Classification</i> , IEEE International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL 2009), pp. 8-11, November 24-27, 2009, Bratislava, Slovakia, ISBN:978-1-4244-4640-7.	16.00	2	8
2.1	El Margae, S.; Sanae, B.; Mounir, A.K.; Youssef, F., <i>Traffic Sign Recognition based on multi-block LBP features using SVM with normalization</i> , 2014 9th International Conference on Intelligent Systems: Theories and Applications (SITA-14), pp.1 - 7.			
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14.1	El Beqqal, M., Kasmi, M.A., Azizi, M., <i>Access control system in campus combining RFID and biometric based smart card technologies</i> , Advances in Intelligent Systems and Computing, 520, pp. 559-569, 2017.			
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15.1	Liu, K.-C., Wu, C.-H., Tseng, S.-Y., Tsai, Y.-T., <i>Voice helper: A mobile assistive system for visually impaired persons</i> , 2015 Proceedings - 15th IEEE International Conference on Computer and Information Technology, CIT 2015, 14th IEEE International Conference on Ubiquitous Computing and Communications, IUCC 2015, 13th IEEE International Conference on Dependable, Autonomic and Secure Computing, DASC 2015 and 13th IEEE International Conference on Pervasive Intelligence and Computing, PICom 2015, 7363253, pp. 1400-1405, 2015.			
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16.1	Ovatman, T., Aral, A., Polat, D., Ünver, A.O., <i>An overview of model checking practices on verification of PLC software</i> , Software and Systems Modeling, 15 (4), pp. 937-960, 2016.			
17.0	I. Gavriluț, <b>A. Gacsádi</b> , C. Grava, O. Straciuc, L. Țepelea, <i>Analysis methods of noise extraction from CT images</i> , Journal of Electrical and Electronics Engineering, University of Oradea Publisher, pp.146-149, Vol.2, No.2, 2009, ISSN:1844-6035. Scopus	0.80	5	1
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	<a href="#">(vezi Anexa_A3.1.2e)</a>			
1.0	<b>A. Gacsádi</b> , P. Szolgay, <i>An analogic CNN algorithm for following continuously moving objects</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications, (CNNA 2000), pp. 99-104, May 23-25, Catania, Italy, 2000. ISBN:0-7803-6344-2.	2.00	2	1
1.1	C. Botoca, <i>Some aspects of cellular neural networks and their applications</i> , Transactions on Electronics and Communications, 2003, Tom 48 (62), Fascicola 1, 2003. hermes.etc.upt.ro			
2.0	<b>A. Gacsádi</b> , C. Grava, A. Grava, <i>Medical image enhancement by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Computing in Cardiology, pp. 821-824, September 25-28, 2005 Lyon, France, 2005, ISBN:0-7803-9337-6, ISSN:0276-6574, DOI:10.1109/CIC.2005.1588231.	2.67	3	2
2.1	Fadi Al Machot, Mouhannad Ali, Ahmad Haj Mosa, Christopher Schwarzmüller, Markus Gutmann, Kyandoghene Kyamakya, <i>Real-time raindrop detection based on cellular neural networks for ADAS</i> , 26 March pp.1–13, 2016.			
2.2	A Fasih, C Schwarzmüller, JC Chedjou, M Kafunda, <i>An Ultra-fast and Adaptive Framework for FPGA-Based Real-Time Machine Vision for Advanced Driver Assistance Systems: a CNN-Based Processing Architecture</i> , lakeside-conference.at			
3.0	<b>A. Gacsádi</b> , P. Szolgay, <i>A variational method for image denoising, by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2004), ISBN 963-311-357-1, pp. 213-218, Budapest, Hungary, 2004.	2.00	2	1

3.1	Eleonora Bilotta and Pietro Pantano, <i>Cellular Non-linear Networks as a New Paradigm for Evolutionary Robotics</i> , In: Iba, H. (ed.) <i>Frontiers in Evolutionary Robotics</i> , I-Tech Education and Publishing, Vienna, Austria, pp. 87-108, 2008.			
4.0	<b>A. Gacsádi</b> , P. Szolgay, <i>Image mage inpainting methods by using cellular neural networks</i> , Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA 2005), pp. 198-201, 2005, Hsinchu, Taiwan. ISBN:0780391853. Scopus	2.00	2	1
4.1	CM Palomero and M Soriano, <i>Neural Network for the Digital Cleaning of an Oil Painting, Conference Paper, Digital Image Processing and Analysis</i> , Tucson, Arizona United States, June 7-8, 2010, ISBN: 978-1-55752-892-6, Digital Image Processing and Analysis (DMD), 2010. opticsinfobase.org			
5.0	<b>A. Gacsádi</b> , P. Szolgay, <i>Variational Computing Based Segmentation Methods for Medical Imaging by using CNN</i> , Proceedings of the 12th International Workshop on Cellular Neural Nanoscale and their Applications (CNNA), Towards Megaprocessor Computing, pp. 418-423, February 3-5, 2010, Berkeley, California, USA, Print ISBN:978-1-4244-6679-5 DOI:10.1109/CNNA.2010.5430256. IEEE Xplore Digital Library	4.00	2	2
5.1	Mostafa Jabarouti Moghaddam and Hamid Soltanian-Zadeh, <i>Medical Image Segmentation Using Artificial Neural Networks</i> , pp: 121-138, Artificial Neural Networks - Methodological Advances and Biomedical Applications Edited by Kenji Suzuk.			
5.2	OS Taiwo, AI Adepoju, <i>Medical image segmentation (MIS) using cellular neural network (CNN)</i> , International Journal of Advance Research, IJOAR.org Volume 1, Issue 4, April 2013, ISSN 2320-9119.			
6.0	<b>A. Gacsádi</b> , <i>Variational Computing Based Image Inpainting Methods by Using Cellular Neural Networks</i> , Proceedings of the WSEAS International Conference on Automation & Information (ICAI'10), pp.104-109, June 13-15, 2010, Iasi, Romania, ISBN 978-960-474-193-9, ISSN 1790-5117. Scopus	12.00	1	3
6.1	Firas A. Jassim, <i>Image Inpainting by Kriging Interpolation Technique</i> , World of Computer Science and Information Technology Journal (WCSIT), ISSN: 2221-0741, Vol. 3, No. 5, 91-96, 2013.			
6.2	S Chinna Penchalaiah, M Ravi Kishore, <i>Kriging Interpolation Technique Bases Image Inpainting</i> , e-ISSN 2277-2685, p-ISSN 2320-976, IJESR/July 2014/ Vol-4/Issue-7/533-540S Chinna Penchalaiah et. al./ International Journal of Engineering & Science Research.			
6.3	Padya Raja Singh, M.KattaSwamy, <i>A Novel on Image inpainting Algorithm for Text Removal Using Kriging Interpolatin Technique</i> , International Journal & Magazine of Engineering, Technology, Management and Research, ISSN No: 2348-4845, Volume No: 1(2014), Issue No: 11 (November), pp.219-223, 2014.			
7.0	<b>A. Gacsádi</b> , V. Tiponut, P. Szolgay, <i>Image-Based Visual Servo Control of a Robotic Arm by Using Cellular Neural Networks</i> , Proceedings of the 15th International Workshop on Robotics in Alpe-Adria-Danube Region, (RAAD 2006), ISBN 9637154 48 5, CD-Rom, Balatonfüred, Hungary, 2006.	1.33	3	1
7.1	Eleonora Bilotta and Pietro Pantano, <i>Cellular Non-linear Networks as a New Paradigm for Evolutionary Robotics</i> , In: Iba, H. (ed.) <i>Frontiers in Evolutionary Robotics</i> , I-Tech Education and Publishing, Vienna, Austria, pp.87-108, 2008.			

**Total A3.1.2=154.60**

**Total citări BDI=90**

**Total A3.1=297.27**

**Total citări =128**

Prezentări invitate în plenul unor manifestări științifice naționale și internaționale; Profesor invitat

Punctaj unic pentru fiecare activitate

#### A3.2.1. Internaționale

[\(vezi Anexa\\_A3.2.1\)](#)

Punctaj

1	Prezentare invitată la „ <i>Enhancing scientific research at the Pázmány Péter Catholic University</i> ”, Ref.No.: TÁMOP-4.2.1.B-11/2/KMR-2011-0002, “Social Mobility Operative Programme ”-ITK-BIONIKA, Budapest, October 25, 2013.	10
2	Invited Plenary Lecture ” <i>Variational Based Image inpainting Methods by using Cellular Neural Networks</i> ”, 11th WSEAS International Conference on Recent Advances Automation & Information, (ICAI '10), Iasi, Romania, June 13-15, 2010.	10

**Total A3.2.1=20.00**

#### A3.2.2. Naționale

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Membri în colectivele de redacție sau comitete științifice al revistelor, organizator de manifestări științifice, internaționale indexate ISI

Punctaj unic pentru fiecare activitate

#### A3.3.1. ISI

Punctaj

[\(vezi Anexa\\_A3.3.1\)](#)

1	13th International Conference on Engineering of Modern Electric Systems (EMES'2015), ISBN 978-1-4799-7650-8, Oradea, Romania, 11-12 June 2015.	10
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#### A3.3.2. BDI

[\(vezi Anexa\\_A3.3.2\)](#)

1	Journal of Electrical and Electronics Engineering, Scopus, ISSN 1844-6035.	6
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#### A3.3.3. Naționale și internaționale neindexate

[\(vezi Anexa\\_A3.3.3\)](#)

1	Journal International Review of Applied Sciences and Engineering, Publisher Akadémiai Kiadó ISSN 2062-0810.	3
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**Total A3.3=19.00**

Premii în domeniu

A3.4.1. Academia Română, ASTR, academii de ramură, premii internaționale

A3.4.2. Premii naționale în domeniu

**TOTAL A3 336.27**

**TOTAL GENERAL = TOTAL A1 + TOTAL A2 + TOTAL A3= 1089.80**