

Instituția de învățământ superior: UNIVERSITATEA TEHNICA DIN CLUJ-NAPOCA

Facultatea: INGINERIE ELECTRICA

Domeniul de licență: Stiinte Ingineresti Aplicate

Programul de studii de licență: Inginerie Medicala Bistrita

Perioada evaluării:

TABEL PRIVIND INDEPLINIREA INDICATORULUI
Activitatea științifică în domeniul disciplinelor

„Cadrele didactice titulare* au pregătirea inițială, sunt doctori / doctoranzi și cercetează în domeniul în care se includ disciplinele din postul ocupat.”

Nr. crt.	Gradul didactic, numele și prenumele titularului vârsta / vechimea în învățământul superior	Disciplinele din cadrul programului de studii incluse în postul didactic și tipul activității desfășurate (curs, seminar, lucrări, proiect)	Competența cadrului didactic titular în disciplinele din postul didactic			Constatări privind îndeplinirea indicatorului conform Anexei 4.1
			Universitatea/facultatea/specializarea absolvită	Specializarea la masterat/doctorat	Numărul de cărți, numărul de lucrări științifice, numărul de brevete în domeniul disciplinelor din postul didactic (conform Anexelor 4.1.)	
0	1	2	3	4	5	6
1.	S.l. dr. ing. Angela LUNGU 38 / 12	Aplicatii ale inteligenței artificiale în medicina, laborator	Universitatea Tehnică din Cluj / Facultatea de Inginerie Electrica/ Inginerie Medicala	Doctorat în științe ingineresti aplicate	teza (A); 3 lucrări indexate ISI/BDI (C2, C3, C10)	Îndeplinit

* Din statul de funcții cumulativ al tuturor disciplinelor și tuturor activităților didactice desfășurate în cadrul programului de studii evaluat.

Rector

Persoana de contact

A N E X A 4 . 1

Nume Prenume: Lungu Angela

Gradul didactic: Sef Lucrari

Instituția unde este titular: Universitatea Tehnica din Cluj-Napoca

Facultatea: Inginerie Electrica

Departamentul: Electrotehnica si Masurari

L I S T A**lucrărilor științifice în domeniul disciplinelor din postul didactic****A. Teza de doctorat**

A. Lungu, MR image based measurement, modelling and diagnostic interpretation of pressure and flow in the pulmonary arteries: applications in pulmonary hypertension, <http://etheses.whiterose.ac.uk/12138/>

B. Cărți si capitole în cărți publicate în ultimii 10 ani

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C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Baraikan, A. A., Czechowicz, K., Morris, P. D., Halliday, I., Gosling, R. C., Gunn, J. P., Narracott, A. J., Williams, G., Garg, P., Malawski, M., Vosse, F. v. d., **Lungu, A.**, Rafiroiu, D., & Hose, D. R. (2023). Modelling The Hemodynamics of Coronary Ischemia. Fluids, 8(5), 159. (ISI journal)
2. Ianovici, M., Vlad, S., **Lungu, A.**, Classification of Hemorrhagic Stroke Lesions Based on CT Images and Machine Learning Algorithms. A Study on a Highly Imbalanced Dataset. In: Vlad, S., Roman, N.M. (eds) 8th International Conference on Advancements of Medicine and Health Care Through Technology. MEDITECH 2022. IFMBE Proceedings, vol 102. Springer (Scopus Conference Proceeding)
3. Grzeszczyk, Michal K., Satława Tadeusza, **Lungu Angela**, Swift, Andrew, Narracott, Andrewc, Hose, Rod, Trzcinski, Tomasz, Sitek, Arkadiusz, Noninvasive Estimation of Mean Pulmonary Artery Pressure Using MRI, Computer Models, and Machine Learning, Lecture Notes in Computer Science, vol. 13352, Pages 14 – 27, 2022, 22nd Annual International Conference on Computational Science, ICCS 2022 (Scopus Conference Proceeding)
4. Kiely, DG; Levin, DL; Hassoun, PM; Ivy, D; Jone, PN; Bwika, J; Kawut, SM; Lordan, J; **Lungu, A**; Mazurek, JA; Moledina, S; Olschewski, H ; Peacock, AJ ; Puri, GD ; Rahaghi, FN ; Schafer, M; Schiebler, M ; Screaton, N; Tawhai, M; van Beek, EJR ; Vonk-Noordegraaf, A; Vandepool, R; Wort, SJ; Zhao, L; Wild, JM ; Vogel-Claussen, J; Swift, AJ, .Statement on imaging and pulmonary hypertension from the Pulmonary Vascular Research Institute (PVRI), Pulmonary Circulation, vol. 9, iss 3, 2019 (ISI journal article)
5. Rafiroiu, D, Molnar, I, **Lungu, A**, Error Analysis in Patient-Specific Blood Flow Modeling of Coronary Artery Disease, 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), ISSN 1843-8571, 2019 (ISI Conference Proceeding)

6. P. Morris, DA Silva Soto, J Feher, D Rafiroiu, **A. Lungu**, S. Varma, P Lawford, DR Hose, JP Gunn, Fast virtual fractional flow reserve based upon steady-state computational fluid dynamics analysis: results from the VIRTU-Fast study, JACC: Basic to Translational Science, vol 2, iss 4, pp: 434-446, 2017, (Scopus journal article)
7. J. Weese; **A. Lungu**; J. Peters, FM. Weber, I. Waechter-Stehle, DR Hose, CFD- and Bernoulli based pressure drop estimates: A comparison using patient anatomies from heart and aortic valve segmentation of CT images., Medical physics, vol. 44, iss: 6, pp: 2281-2292, 2017 (ISI (journal article))
8. **A. Lungu**, DR Hose, DG Kiely, D. Capener, JM Wild, AJ Swift, Three Element Windkessel Model to Non-Invasively Assess PAH Patients: One Year Follow-up, International Conference on Advancements of Medicine and Health Care through Technology; 12th - 15th October 2016, Cluj-Napoca, Romania. IFMBE Proceedings, vol 59. Springer, pp 151-154, 2017, (ISI Conference Proceeding)
9. . L. Luong , H. Duckles , T. Schenkel , M. Mahmoud , J. L. Lopez-Tremoleda , M. Wylezinska Arridge, M. Ali , N. P. Bowden, M. Villa-Uriol, K. van der Heiden, R. Xing, F. J. Gijssen, J. Wentzel, A. Lawrie, S. Feng, N. Arnold, W. Gsell, **A. Lungu**, R. Hose, T. Spencer, I. Halliday, V. Ridger , P. C. Evans, Heart rate reduction with ivabradine promotes shear stress-dependent anti-inflammatory mechanisms in arteries, Thrombosis and Haemostasis, vol. 116, iss: 1, pp: 181- 190, 2016, (ISI journal article)
10. **A. Lungu**, A. Swift, D. Capener, D. Kielly, D.R. Hose, J. Wild, Diagnosis of Pulmonary Hypertension from MR image based computational models and decision tree analysis, Pulmonary Circulation, vol. 6, pp. 181-190, 2016, (ISI journal article)
11. P Morris, A Narracott, H Teng-Kobligk, DA Silva Soto, S. Hsiao, **A. Lungu**, P. Evans, NW Bressloff, P. Lawford, DR Hose, J. Gunn, Computational fluid dynamics modelling in cardiovascular medicine, HEART, vol. 102 , iss: 1, pp: 18-28, 2016, (ISI journal article)
12. Swift, A; **Lungu, A**; Walker, H; Capener, D; Hammerton, C; Elliot, C; Condliffe, R; Kiely, D; Wild, J , Estimation of mPAP with MRI in pulmonary hypertension subgroups: Comparison with echocardiography, European Respiratory Journal, vol. 46, 2015, (ISI Conference Proceeding)
13. **A. Lungu**, J. Wild, A. Swift, D. Capener, D. Kielly, D.R. Hose, MRI model-based non-invasive differential diagnosis in pulmonary hypertension, Journal of Biomechanics, vol. 47, iss 12, 2014, pp 2941-2947, 2014, (ISI journal article)
14. **A. Lungu**, J. Wild, A. Swift, D. Capener, D. Kielly , D.R. Hose, Automatic, simultaneous, non-invasive measurements of flow and area in the human pulmonary arteries from MRI images, IFMBE Proceedings v. 44, 2014, pp 259-264, 2014, (Scopus Conference Proceeding)
15. J. Peters, **A. Lungu**, F.M. Weber, I. Waechter-Stehle, D.R. Hose, J. Weese, Comparison of CFD Based and Bernoulli-Based Pressure Drop Estimates across the Aortic Valve Enabled by Shape-Constrained Deformable Segmentation of Cardiac CT Images, Lectures Notes in Computer Science, v. 8789, 2014, pp 211-219, 2014, (ISI Conference Proceedings)

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

1. DR Hose, PV Lawford, I Halliday, D Rafiroiu, A Lungu, Challenges and progress in the application of physiological models for clinical decision support in cardiovascular medicine, IOP Conference Series: Materials Science and Engineering, vol. 1254, 2022 1 (Google Scholars)
2. Swift A., A. Lungu, D.Capener, C. Hammerton, A. Rothman, A. Lawrie, C. Elliot, R. Condliffe, D. Kiely, J. Wild, Age is independently associated with pulmonary arterial compliance in health and in patients with pulmonary vascular disease, European Respiratory Journal, vol 48 (suppl 60), 2016 (Google Scholars)
3. A Lungu, DR. Hose, D. Capener, D. Kielly, J. Wild, A. Swift, Response to treatment assessment in patients with PAH by MRI based computational modelling, European Respiratory Journal, vol 48 (suppl 60), 2016 (Google Scholars)
4. Swift A., A. Lungu, D.Capener, C. Hammerton, A. Rothman, A. Lawrie, C. Elliot, R. Condliffe, D. Kiely, J. Wild, Age is independently associated with pulmonary arterial compliance in health and in patients with pulmonary vascular disease, European Respiratory Journal, vol 48 (suppl 60), 2016 (Google Scholars)
5. A. Lungu, A. Swift, D. Capener, D. Kielly, D.R. Hose, J. Wild, Diagnosis of pulmonary hypertension from MR image based computational models of pulmonary vascular haemodynamics and decision tree analysis, European Respiratory Journal, vol 46 (suppl 59), 2015 (Google Scholars)
6. Le Luong, H. Duckles, T. Schenkel, N. Arnold, W. Gsell, A. Lungu, T. Spencer, D.R. Hose, I. Halliday, P. C. Evans, A pharmacological approach to promote shear stress-dependent anti-inflammatory mechanisms in arteries- Arteriosclerosis, Thrombosis, and Vascular Biology, 2014. 34(Suppl 1): p. A258- A258, 2014 (Google Scholars)

E. Brevete obținute în întreaga activitate**Data:**

Februarie 2025

Semnătura: