A N E X A 5

UNIVERSITATEA BABEŞ-BOLYAI
Facultatea de Fizică
Domeniul de licenţă: Ştiinţe Inginereşti Aplicate
Programul de studii: Fizică Tehnologică

TABEL PRIVIND INDEPLINIREA INDICATORULUI

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

Nr. crt.	Gradul didactic, numele şi prenumele titularului vârsta / vechimea în învăţământul superior	Disciplinele din cadrul programului de studii incluse în postul didactic şi tipul activităţii desfăşurate (curs, seminar, lucrări, proiect)	Competenţa cadrului didactic titular în disciplinele din postul didactic			Constatări privind îndeplinirea indicatorului
			Universitatea/ facultatea/ specializarea absolvită	Specializarea la masterat/ doctorat	Numărul de cărţi, numărul de lucrări ştiinţifice, numărul de brevete în domeniul disciplinelor din postul didactic ** conform Anexelor 5.1, 5.2 etc	
1.	Prof. dr. ing. Coriolan Viorel TIUSAN 53 / 30	Fizica și tehnologia materialelor și dispozitivelor spintronice mezoscopice / Physics and Technology of Mesoscopic Spintronic Materials and Devices	Universitatea Babes-Bolyai din Cluj-Napoca / Facultatea de Fizică / Fizică Tehnologică Universitatea Louis-Pasteur din Strasbourg / Facultatea de Fizică/ Fizica Stării Consensate	Masterat în Fizica Stării Consensate Doctorat în Fizică Abilitare în Fizică	47 lucrări indexate ISI/BDI (C1, C48); 2 brevete de invenţie (E1-E2), teza de doctorat (A1); teza de abilitare (A2).	îndeplinit
2						
3						
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* Din statul de funcţii cumulativ al tuturor disciplinelor şi tuturor activităţilor didactice desfăşurate în cadrul programului de studii evaluat.

** Se indică numărul pe următoarele tipuri de lucrări: A – teza de doctorat B – Cărţi şi capitole în cărţi publicate în ultimii XX ani C – Lucrări indexate ISI/BDI publicate în ultimii XX ani	D – Lucrări publicate în ultimii XX ani în reviste şi volume de conferinţe cu referenţi (neindexate); pentru lucrările publicate în volume de conferinţe se selectează de maximum 20 articole. E – Brevete acordate în întreaga activitate. Persoanele incluse în tabelul de mai sus anexează câte o listă de lucrări după modelul de mai jos.

A N E X A 5 . 1

(*Pentu următoarele cadre didactice se adaugă Anexele 5.2, 5.3. etc.*)

Universitatea Babeş-Bolyai
Facultatea de Fizică
Departamentului de Fizica Stării Condensate şi a Tehnologiilor Avansate
Prof. dr. ing. Coriolan Viorel TIUŞAN

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Magnetisme et transport polarise en spin dans des jonctions tunnel magnetiques. Utilisation du transport tunnel comme une sonde micromagnetique, C. Tiusan
Universitatea *Louis Pasteur* (Strasbourg I), Franța, (2000).
Echivalata in Romania prin Atestat MECTS Nr. 60099/16.10.2012.
Domeniul de specialitate: FIZICA
http://tel.archives-ouvertes.fr/docs/00/04/53/27/PDF/tel-00002763.pdf.

Teza de abilitare:

1) **Equilibrium and out-of-equilibrium electronic properties in magnetic thin film multilayer systems: spintronics of magnetic tunnelling devices , C. Tiusan**

Universitatea *Henri Poincaré*, Nancy, Franța (2006).
Drept conducere doctorate echivalat in Romania prin Atestat CNRED Nr. 83949/1/28.12.2011/A.N.
Domeniul de specialitate: FIZICA
http://tel.archives-ouvert.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

-

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

[1] A. Szatmari, R. Bortnic, T. Dragoiu, R. G. Hategan, L. Barbu-Tudoran, C. Tiusan, R. Lucacel-Ciceo, R. Dudric, and R. Tetean, "*XPS on Co0.95R0.05Fe2O4 Nanoparticles with R = Gd or Ho*," **Applied Sciences-Basel**, vol. 15, no. 15, Jul 25 2025, Art no. 8313, doi: 10.3390/app15158313.

[2] D. Sticlet, R. Tetean, and C. Tiusan, "*Skyrmionic qubits stabilized by Dzyaloshinskii-Moriya interaction as platforms for qubits and quantum gates*," **Physical Review B**, vol. 112, no. 19, Nov 26 2025, Art no. 195435, doi: 10.1103/wq2b-b9fq.

[3] R. G. Hategan, A. Aldea, R. D. Miclea, R. Hirian, I. Botiz, R. Dudric, L. Rasabathina, O. Hellwig, G. Salvan, D. R. T. Zahn, R. Tetean, and C. Tiusan, "*Magnetic, Electronic Structure*

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[7] G. Souca, R. Dudric, K. Kuepper, C. Tiusan, and R. Tetean, "*Band Structure Calculations, Magnetic Properties and Magnetocaloric Effect of GdCo1.8M0.2 Compounds with M = Fe, Mn, Cu, Al*," **Magnetochemistry**, vol. 10, no. 8, Aug 2024, Art no. 53, doi: 10.3390/magnetochemistry10080053.

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[9] V. Desbuis, D. Lacour, C. Tiusan, C. Vautrin, S. Migot, J. Ghanbaja, Y. Lu, W. Weber, and M. Hehn, "*Manipulation of low-energy spin precession in a magnetic thin film by tuning its molecular field*," **Physical Review B**, vol. 109, no. 2, Jan 3 2024, Art no. 024403, doi: 10.1103/PhysRevB.109.024403.

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D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

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- Selecţie cu maximum 20 lucrări în volume de conferinţe

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E. Brevete obţinute în întreaga activitate

1) Patent ULP/UHP N° 99 04 227 (Université Louis Pasteur Strasbourg/ Université Henri Poincaré Nancy) issue of 31 Mars 1999 "Dispositifs microélectroniques à jonctions tunnel et réseau de mémoires et capteur comprenant de tels dispositif".

2) Patents N°WO 97/41606 and GB0006142.4 by Clarendon Laboratory (Oxford).

Data:
29/02/2024

Semnătura:
Coriolan Viorel TIUSAN