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**Bocîi C. Sevastian Liviu**

**Ph.D. engineer since 1997/Prof.univ. since 2003**

## **LIST OF WORKS**

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[Scopus Author ID: 15727241300](https://www.scopus.com/authid/detail.url?authorID=15727241300)

<https://www.webofscience.com/wos/author/record/C-8796-2011>

<https://scholar.google.com/citations?user=M9BwMF4AAAAJ&hl=en>

### **(A) Doctoral thesis:**

A1 **Bocîi Sevastian Liviu**, *Contributions to the braking of high-speed passenger wagons*, doctoral thesis, doctoral field: Mechanical Engineering, thesis defended on 05.12.1997 at the Faculty of Mechanics, Polytechnic University of Timișoara, (scientific supervisor: Prof.univ.dr.ing. Vasile Hoancă).

### **(B) Books**

#### **B1 Books published in prestigious international publishing houses**

##### **B1.1**

#### **B2 Specialized books published in national publishing houses, recognized by CNCSIS**

B2.1. **Bocîi, L.S.**, Nicanor Ursua Lezaun, **2009**, *Methodology of self-learning and self-evaluation in the area of study: Railway Engineering*, Editura Mirton Timișoara, ISBN: 978-973-52-0705-2, 246 pages.

B2.2. **Bocîi, L.S.** , **2006**, *Braking Systems for Railway and Urban Vehicles*, Second Edition, Mirton Publishing House, Timișoara, ISBN: 973-661-504-9, 334 pages.

B2.3. **Bocîi, L.S.** (coordonator), **2003**, *High Speed Railway Vehicles (Traction and Braking Systems). Theoretical, Practical and Social Aspects*, Editura Mirton Timișoara, ISBN: 973-661-131-0, 196 pag.

B2.4. **Bocîi, L.S.** (coordonator), **2002**, *High Speed Railway Vehicles. Theoretical, Practical and Social Aspects*, Editura Mirton Timișoara, ISBN: 973-585-729-4, 164 pag.

- B2.5. Hoancă, V., **Bocîi, L.S., 2000**, *Railway Vehicles with Thermal Engines*, Mirton Publishing House, Timișoara, ISBN 973-585-207-1, 321 pages.
- B2.6. **Bocîi, L.S., 1999**, *The Technique of High Speeds. Braking Systems for High-Speed Railway Vehicles*, Mirton Publishing House, Timișoara, ISBN: 973-5578-968-X, 192 pages.
- B2.7. **Bocîi, L.S. 1993**, *Structure and Properties of Metals (Laboratory Guide)*, "Aurel Vlaicu" University Publishing House of Arad, 50 pages.
- B2.8. Francisc Lammert, **Bocîi, L.S., 1993**, *Structure and Properties of Metals (course)*, "Aurel Vlaicu" University Publishing House of Arad, 150 pages.

## (C) Articles

### C.1 Articles published in ISI journals

- C1.1. J J Vásquez-Sanjuan, **S L Bocîi**, T M Espinosa, M A Alonso, J A Arízaga Silva, E M Yescas, M C Portillo, *Experimental Passivity-based Control for PMSM*, The 32nd International Congress of SIAR of Automotive and Transport Engineering, IOP Conf. Series: Materials Science and Engineering 1311 (2024) 012031, <https://doi.org/10.1088/1757-899X/1311/1/012031>.
- C1.2. **Liviu Sevastian Bocîi**,., Nicanor Ursua, **2023**, *Artificial Intelligence and its impact on the Smart world of work (La inteligencia artificial y el impacto en el mundo laboral inteligente)*, Eikasía Revista de Filosofía, no. 118 (2023), pp. 247-269, ISSN: 1885-5679 (printed version), **WOS:001099844600010**, ISSN: 1885-5679 (online version), <https://doi.org/10.57027/eikasía.118.744/>.
- C1.3. López De Luise, D., Ernesto, L., Bel, W., **Bocîi, L.S. (2023)**. *Risk Evaluation: Traffic Zone Patterns by Means of Harmonic Systems*. In: Balas, V.E., Jain, L.C., Balas, M.M., Baleanu, D. (eds) Soft Computing Applications. SOFA 2020. Advances in Intelligent Systems and Computing, vol 1438. Springer, Cham. pp.436-447, [https://doi.org/10.1007/978-3-031-23636-5\\_33](https://doi.org/10.1007/978-3-031-23636-5_33).
- C1.4. Daniela López De Luise, Pablo Pescio, Ben Raul Saad, Christian Saliwonzcyk, Tiago Ibacache, Lucas Soria and **Liviu Sevastian Bocîi**, **2023**, *Autistic Verbal Behaviour Parameters*, In: Balas, V.E., Jain, L.C., Balas, M.M., Baleanu, D. (eds) Soft Computing Applications. SOFA 2020. Advances in Intelligent Systems and Computing, vol 1438. Springer, Cham., pp. 66-77, [https://doi.org/10.1007/978-3-031-23636-5\\_6](https://doi.org/10.1007/978-3-031-23636-5_6).

- C1.5. Rad, D., Dughi, T., Costin, A., Rad, G., **Bocîi, L.S.**, Mircea, I.I. (2023). *A Network Analysis of the Basic Psychological Needs, A Self-determination Theory Application Under the Cognitive Systems Engineering Paradigm*. In: Balas, V.E., Jain, L.C., Balas, M.M., Baleanu, D. (eds) Soft Computing Applications. SOFA 2020. Advances in Intelligent Systems and Computing, vol 1438. Springer, Cham., pp. 448-461, [https://doi.org/10.1007/978-3-031-23636-5\\_34](https://doi.org/10.1007/978-3-031-23636-5_34)
- C1.6. Luisa Izabel Dungan, **Liviu Sevastian Bocîi**, Mircea Adrian Dungan, 2022, *Analysis of the behavior of the connection system between locomotive body and the bogie at CFR 060 EA 5100KW locomotive*, Acta Technica Napocensis, series Applied Mathematics, Mechanics and Engineering, **WOS:000889997300002**, ISSN: 1221 – 5872, vol. 65, issue 3, 2022, pp. 303-314.
- C1.7. **Liviu Sevastian Bocîi**, Jacob Javier Vázquez Sanjuán, 2022, *Determination of the braking characteristics in case of the variation depending on the temperature of the material properties of the friction coupling of the disc brake of railway vehicles*, Acta Technica Napocensis, series Applied Mathematics, Mechanics and Engineering, <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1798>, **WOS:000838236300002**, ISSN: 1221 – 5872, vol. 65, issue II, 2022, pp. 125-134.
- C1.8. **Liviu Sevastian Bocîi**, 2022, *Determination of the wheel temperature, during stopping braking of railway vehicles, at points located at the distance  $x_R$  from the wheel-shoe friction surface*, Acta Technica Napocensis, series Applied Mathematics, Mechanics and Engineering, **WOS:000832312500003**, ISSN: 1221 – 5872, vol. 65, issue I, 2022, pp. 17-22.
- C1.9. **Liviu Sevastian Bocîi**, 2021, *Influence of the brake disc friction surface dimension on the thermal regime of the disc brake of high speed railway vehicles*, Acta Technica Napocensis, series Applied Mathematics and Mechanics, **WOS:000694719400003**, <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1549>, ISSN: 1221 – 5872, vol. 64, issue I, pp. 27-34.
- C1.10. **Liviu Sevastian Bocîi**, Luigi Pio Di Noia, Renato Rizzo, 2019, *Optimization of Energy Storage of Series-Hybrid Propelled Aircraft by means of Integer Differential Evolution*, Aerospace, **WOS:000472661800011**,6(5), 59; <https://doi.org/10.3390/aerospace6050059>.
- C1.11. Iosif Lazăr, Ilare Bordeaşu, Adrian Cîrciumaru, Ion Mitelea, **Liviu Sevastian Bocîi**, 2018, *Behaviour of polymer thin films deposited on bronze surfaces at cavitation erosion*, Chemistry Magazine (<http://www.revistadechimie.ro>), **WOS:000451925300066**, volume 10, October 2018, pp. 2921-2927, ISSN 2537-5733, ISSN-L 1582-9049, FI 1,412 (2018).

- C1.12. **Bocîi, L.S.**, Müller, V.D., **2013**, *Mathematical model of three-phase induction machine connected to advanced inverter for traction system for electric trolley*, Annals of the Brazilian Academy of Sciences, **WOS:000321395300036**, no. 85(2), ISSN: Print: 0001-3765, Online: 1678-2690, pag. 849 – 858, <http://dx.doi.org/10.1590/S0001-37652013005000028>.
- C1.13. GHEORGHE SIMA, GHEORGHE HUȚIU, **LIVIU SEVASTIAN BOCÎI\***, **2012**, *Technological aspects of assembling and processing narrow tubes*, REVISTA FACULTAD de INGENIERIA, no. 64, 195-199, 2012, **WOS:000310722100018**, Universidad de Antioquia Columbia, ISSN 0120 – 6230, <http://ingenieria.udea.edu.co>.
- C1.14. **Bocîi, L.S.**, **2011**, *Determination of the friction surface temperature by the Hasselgruber method using brake disc with different physical properties*, revista **Metalurgia Internațional**, **WOS:000294516300009**, [www.metalurgia.ro/metalurgia\\_int.html](http://www.metalurgia.ro/metalurgia_int.html), vol. XVI, no. 8 (2011), ISSN: 1582-2214, pag. 42 – 47.
- C1.15. **Bocîi, L.S.**, **2011**, *The influence of the braking time on heat flow through the friction surfaces of the friction elements of disk brakes for railway vehicles*, magazine **TRANSPORT** **WOS:000289268600009**, [www.transport.vgtu.lt](http://www.transport.vgtu.lt), volume 26, Issue 1, <https://doi.org/10.3846/16484142.2011.563494>, Online ISSN: 1648-3480, Print ISSN: 1648-4142, pag. 75 -78.
- C1.16. Igreț, S.V., Negrilă, R.I., **Bocîi, L.S.**, **2011**, *Study of the materials used in the manufacturing of a tubular camshaft*, revista **Metalurgia Internațional**, **WOS:000292950400011** [www.metalurgia.ro/metalurgia\\_int.html](http://www.metalurgia.ro/metalurgia_int.html), vol. XVI, no. 9 (2011), ISSN: 1582-2214, pag. 46 – 52.
- C1.17. **Bocîi, L.S.**, **2010**, *The influence of temperature variation of the physical properties of the materials of the elements of the friction coupling on a disk brake, upon the characteristics of braking in the braking stopping*, magazine **Metallurgy International**, **WOS:000278729700001**, [www.metalurgia.ro/metalurgia\\_int.html](http://www.metalurgia.ro/metalurgia_int.html), Special Issue nr. 8 (2010), ISSN: 1582-2214, pag. 5-14.

## **C.2 Articles in journals indexed in other international reference databases for the field, which make a selection process based on performance criteria**

- C2.1. Bălaș Marius, Bălaș Valentina, **Liviu Sevastian Bocîi**, Ioan Radu, Koles, **2002**, *The real-time evaluation of the weariness of the disk brake*, 8-th Mini Conference on Vehicle System Dynamics, Identification and Anomalies, VSDIA 2002, Budapest, Hungary, pag. 241-246, ISBN: 963 420 8177, (<http://www.scopus.com>).

- C2.2. **Bocîi, L.S., 2003**, *Program for calculating the temperature of railway wheels during braking*, **ENGINEERING** (journal indexed in: *Latindex*, (<http://www.latindex.unam.mx>)), *Periodical* (<http://www.dgbiblio.unam.mx/periodica.html>), **CREDI**([http://www.oei.es/indice\\_cred\\_i.htm](http://www.oei.es/indice_cred_i.htm)), **DOAJ** (*Directory of Open Access Journals*), (<http://www.doaj.org/bpguide>), **Dialnet** (<http://dialnet.unirioja.es>), *Actualidad Iberoamericana* (<http://www.citchile.cl/b2c.htm>), **LivRe**, ISSN:1405-0676, Universidad Autónoma de Nuevo León México vol. VI, no. 21, 25 – 32, October – December 2003.
- C2.3. Bele, I., **Bocîi, L.S., 2003**, *The modernization of electric traction with rheostatic regulation of a metropolitan train*, **REVISTA FACULTAD de INGENIERÍA**, ISSN 0120 – 6230, <http://ingenieria.udea.edu.co/grupos/revista/revistas/nro024/index.html>, **indexed in: SCOPUS** (<http://www.scopus.com>), nr. 24, 115-120, University of Antioquia Columbia.
- C2.4. Bele, I., **Bocîi, L.S., 2003**, *Modifications required in parallel with the change of the Bucharest metro drive system*, **REVISTA FACULTAD de INGENIERIA**, ISSN 0120 – 6230, <http://ingenieria.udea.edu.co/grupos/revista/revistas/nro026/index.html>, **indexed in: SCOPUS** (<http://www.scopus.com>), no. 26, 153-158, Universidad de Antioquia Columbia.
- C2.5. Tiberiu Mănescu, **Liviu Sevastian Bocîi**, Ion Copaci, Camelia Pinca Bretotean, 2003, *Study of stresses in butterfly-type biplane valves*, **REVISTA FACULTAD de INGENIERIA**, ISSN 0120 – 6230, <http://ingenieria.udea.edu.co/grupos/revista/revistas/nro030/index.html>, (**indexed in: SCOPUS** (<http://www.scopus.com>)), nr. 30, December 2003, 125-130, Universidad de Antioquia Columbia.
- C2.6. Bele, I., **Bocîi, L.S., 2003**, *The transformation of an electric vehicle, with the regulation with VTC (direct voltage variator) into a vehicle with frequency inverter and asynchronous electric motor*, **REVISTA FACULTAD de INGENIERIA**, ISSN 0120 – 6230, <http://ingenieria.udea.edu.co/grupos/revista/revistas/nro030/index.html>, (**indexed in: SCOPUS** (<http://www.scopus.com>)), no. 30, December 2003, 148-154, Universidad de Antioquia Columbia.
- C2.7. Gabriela Cristescu, **Liviu Sevastian Bocîi**, Laurențiu Jitaru, **2008**, *Assessing the ecologic-economic efficiency of an investment policy*, **Creative, Math. & Inf.** 17(2008), No. 3, 381 – 391, and online version at: <http://creative-mathematics.ubm.ro/>, (**Zentralblatt MATH**), (Print Edition: ISSN 1584-286X; Online Edition: ISSN 1843-441X).

- C2.8. **Liviu Sevastian Bocîi, 2002**, *The influence of the number of brake discs per axle on braking power in high-speed trains* magazine Engineering (*journal indexed in: Latindex*, (<http://www.latindex.unam.mx>)*Periodical* (<http://www.dgbiblio.unam.mx/periodica.html>)*BELIEVE*([http://www.oei.es/indice\\_credi.htm](http://www.oei.es/indice_credi.htm)), *DOAJ (Directory of Open Access Journals)*, (<http://www.doaj.org/bpguide>), *Dialnet* (<http://dialnet.unirioja.es>), *Ibero-American News* (<http://www.citchile.cl/b2c.htm>)*Book*), ISSN:1405-0676, Universidad Autónoma de Nuevo León Mexico vol. V, no. 14, 14 – 18, January – March 2002.
- C2.9. **Liviu Sevastian Bocîi, 2021**, *Theoretical and experimental determination of the forcé generated by the pressure of the friction pad in the brake disc of railway vehicles*, Indian Journal of Engineering, SCOPUS, ISSN: 2174-5676, vol. 50, issue 18, 2021, pp. 446-452.
- C2.10. **Liviu Sevastian Bocîi, Ioan Bele, 2022**, *Experimental investigation to change the type of excitation of the generator (independent with series) in the case of the electric braking system*, Proceedings of the 8th International E-Conference on Advances in Engineering, Technology and Management –ICETM 2022, (<https://proceedings.theired.org/2022/dec/ICETM-22-132.html>), ISBN: 978-1-63248-195-5, <https://doi.org/10.15224/978-1-63248-195-5-12>, 11 December 2022, pp. 74-78.

### C.3 Articles in national journals of categories B+ and B, in the CNCSIS rating

- C3.1. **L.S. Bocîi, M.C. Dungan, 1999**, *Analysis of the temperature-dependent variation of the specific heat of the materials of the friction coupling elements: brake disc – friction lining*, Buletinul Ştiinţific al Universităţii "Politehnica" din Timişoara, secţiunea Mecanică, TOM 44(58), pp. 153 – 156.
- C3.2. **L.S. Bocîi, V. Hoancă, 1999**, *La variation de la densité et la conductivite thermique en fonction de la temperature des materiaux des elements de l'attelege de friction disque de frein – garniture de friction*, Buletinul Ştiinţific şi al Universiei "Politehnica" din Timişoara, sezione Mecanică, TOM 44(58), pp. 161 – 164.
- C3.3. **L.S. Bocîi, M.C. Dungan, 1999**, *The influence of the temperature-dependent variation of the physical properties of the materials of the friction coupling elements: brake disc - friction lining on the average temperature of the friction surface of these elements*, Buletinul Ştiinţific şi al Universităţii "Politehnica" din Timişoara, secţiunea Mecanică, TOM 44(58), 157 – 160.

- C3.4. Ioan Bele, **Liviu Sevastian Bocîi**, 2000, *Etude sur le changement du systeme d'actionnement électrique au métro en Roumanie*, Scientific Bulletin of the "Politehnica" University of Timișoara, Mechanics section, TOM 44(59), 121 -126
- C3.5. **Liviu Sevastian Bocîi**, Ioan Velescu, Ioan Bele, 2000, *Disîtifs pour la mesure de la capacité de brainage pour les wagons équipés de frein à disque*, Buletinul Științific al Universităţii "Politehnica" din Timișoara sezione Meccanica, TOM 44(59), 127 – 130
- C3.6. Ioan Bele, **Liviu Sevastian Bocîi**, 2000, *The importance of experimental tests with the DC actuation system with VTC for the metro*, Buletinul Științific al Universităţii "Politehnica" din Timișoara secțiunea Mecanica, TOM 44(59), 115 – 120
- C3.7. Ioan Bele, **Liviu Sevastian Bocîi**, 2003, *Turning the bus body in to a low floor trolley*, Scientific Bulletin of the "Politehnica" University of Timișoara, Volume 48 (62) Mechanics, Fascicle 2, ISSN 1224-6077, 91-94.
- C3.8. Ioan Bele, **Liviu Sevastian Bocîi**, 2003, *Building a low floor tram, driven by an asynchronous engine and speed adjustment with frequency inverter*, Buletinul științific al Universităţii "Politehnica" Timișoara, Tom 48 (62) Mecanică, Fascicula 2, ISSN 1224-6077, 95-98.
- C3.9. Ioan Bele, **Liviu Sevastian Bocîi**, Valentin Müller, Mihaela Popa, 2008, *The traction behaviour of the three-phase induction machine at power-supply time modulation*, Scientific symposium „Transport and Logistics – Post adhering Development”, Timișoara, 16-17 October 2008, Scientific Bulletin of the Polytechnic University of Timișoara, Romania, Transactions on MECHANICS, Tom 53 (67), Fascicola S2, ISSN 1224 – 6077, pag. 37-40.
- C3.10. Adrian Tănase, Mihai Olariu, Aurel Pădureanu, **Liviu Sevastian Bocîi**, 2008, *Researches on Diagnosis Methods for Carriages in Order to Increase the Railway Transport Safety and Security*, Bulletin of the Polytechnic Institute of Jassy, Tomul LIV (LVIII), Fasc. 3, secția Construcții de Mașini, pag. 217-222.
- C3.11. Ioan Bele, **Liviu Sevastian Bocîi**, Valentin Müller, Mihaela Popa, 2008, *Insertion regime for synchronous three-phase machine permanent magnetes, used in electric traction*, International Symposium Research and Education in Innovation Era, 2nd Edition, Section III, *Engineering Sciences*, Arad, November 20-21, 2008.

- C3.12. Ioan Bele, **Liviu Sevastian Bocîi**, Valentin Müller, Mihaela Popa, **2009**, *The performances of the synchronous motor with permanent magnets using in trolley-bus traction*, AFASES 2009 (Scientific Research and Education in the Air Force), Air Force Academy "Henri Coandă", Braşov 20-22 may 2009, Electrical and Electronical Engineering, ISBN: 978-973-8415-67-6, pag. 669-673, ([www.afahc.ro/sesiune/program.pdf](http://www.afahc.ro/sesiune/program.pdf)).
- C3.13. Valentin Dan Müller, **Liviu Sevastian Bocîi**, **2012**, *The modelling and the simulation of the electric driving system synchronous generator-induction motor*, Scientific Bulletin of the „Politehnica” University of Timişoara, Transaction on Mechanics, vol. 57(71), Issue 2 , ISSN: 1224 – 6077, pp 17-22.
- C3.14. **Bocîi, L.S.**, **2019**, *Wind influence on high speed train resistance*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, Tome XVII (2019), Fascicule 1 (February), pp. 53 – 56, ISSN: 1584-2665 (printed version), ISSN: 2601-2332 (online), <http://annals.fih.upt.ro/pdf-full/2019/ANNALS-2019-1-07.pdf>.
- C3.15. Nicanor Ursua, **Liviu Sevastian Bocîi**, **2022**, *New Teaching-Learning processes. Online teaching*, Quality Assurance Review for Higher Education, vol. 12, nr. 1 & 2, pp. 146-156, ISSN: 2066 – 9119 (printed version), ISSN: 2069 - 2188 (online version), <https://www.aracis.ro/en/qar-magazine-current-issue/>

#### **C4. Articles published in recognized journals other than B and B+**

- C4.1. **Liviu Sevastian Bocîi**, Vasile Hoancă, Mircea Corneliu Dungan, **1995**, *The influence of the time of filling the brake cylinder on the braking space in the case of using the disc brake for braking at high speeds*, Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Series B, no. 2, pp. 147 – 152.
- C4.2. **Liviu Sevastian Bocîi**, Ioan Bele, Ion Copaci, **2000**, *The influence of the braked mass and of the friction coefficient between the friction lining and the brake disc on the braking power in the case of high-speed passenger wagons*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, pp. 51 – 56.
- C4.3. **Liviu Sevastian Bocîi**, Ioan Bele, Ion Copaci, **2000**, *The influence of the braked mass and the coefficient of friction between the friction lining and the brake disc on the unitary thermal flux of the friction surface of the brake disc*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 57 - 60



- C4.4. Ion Copaci, **Liviu Sevastian Bocîi, 2000**, *Experimental study on the potential energy of deformation stored and dissipated at the shock caused by the collision of railway vehicles*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 61-68.
- C4.5. Ion Copaci, **Liviu Sevastian Bocîi, 2000**, *Experimental determination by the method of buffering railway vehicles of the dynamic damping characteristics of the central coupling shock absorbers*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 69 – 78.
- C4.6. Ioan Bele, **Liviu Sevastian Bocîi, 2000**, *Actuation of the alternating current compressor instead of the direct current compressor in the subway*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 19 – 22.
- C4.7.. Ioan Bele, **Liviu Sevastian Bocîi, 2000**, *Protection device against accidental touches at the table*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 23 – 26.
- C4.8. Ioan Bele, **Liviu Sevastian Bocîi, 2000**, *Diagram for connecting and disconnecting the battery to the trolleybus*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 27 – 30.
- C4.9. Ioan Bele, **Liviu Sevastian Bocîi, 2000**, *Control of the heating of the driver's cabin and passenger lounge*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Series, Fascicle: Resistance of Materials, Railway Rolling Stock, Physics, Arad, 31 - 34
- C4.10. Stelian Olaru, **Liviu Sevastian Bocîi, Ioan Bele, Ion Copaci, 2002**, *Criteria for defining the variation of the adhesion coefficient (between the wheel and rail) vs. the running speed of the railway vehicle*, Analele Universităţii "Aurel Vlaicu" din Arad, Fascicola Mecanica, Seria: Material Rulant, Rezistenţa Materialelor, Fizică, 181-188, ISSN: 1582 – 3407.
- C4.11. Ioan Velescu, **Liviu Sevastian Bocîi, Ioan Geicu, Valeriu Crişan, Gheorghe Dumitru, 2002**, *Tensometric device for determining the coefficient of friction between the shoe and the wheel*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Fascicle, Series: Rolling Stock, Resistance of Materials, Physics, 241-246, ISSN: 1582 – 3407.

- C4.12. Ioan Bele, **Liviu Sevastian Bocîi**, Ion Copaci, **2002**, *Research on the change of the electric braking system of the generator with independent excitation into a generator with series excitation*, Annals of the "Aurel Vlaicu" University of Arad, Fascicola Mecanica, Series: rolling stock, resistance of materials, physics, 35-38, ISSN: 1582 – 3407.
- C4.13. **Liviu Sevastian Bocîi**, Ioan Bele, Ion Copaci, **2002**, *Modernization of the pneumatic installation at the subway*, Annals of the "Aurel Vlaicu" University of Arad, Fascicola Mecanica, Series: rolling stock, resistance of materials, physics, 49-54, ISSN: 1582 – 3407.
- C4.14. **Liviu Sevastian Bocîi**, Ioan Bele, Ion Copaci, **2002**, *Implementation of the programmable logic controller for electric traction on an existing vehicle*, Annals of the "Aurel Vlaicu" University of Arad, Mechanical Fascicle, Series: Rolling Stock, Resistance of Materials, Physics, 39-43, ISSN: 1582 – 3407.
- C4.15. Ioan Bele, **Liviu Sevastian Bocîi**, Ion Copaci, **2002**, *Study on ensuring the microclimate in the passenger lounge and driver's cabins*, Annals of the "Aurel Vlaicu" University of Arad, Fascicola Mecanica, Series: rolling stock, resistance of materials, physics, 44-48, ISSN: 1582 – 3407.
- C4.16. **Liviu Sevastian Bocîi**, Ioan Bele, **2002**, *The influence of the pressure force on the wear of the friction torque elements of the disc brake*, Annals of the "Aurel Vlaicu" University of Arad, Fascicola Mecanica, Series: rolling stock, resistance of materials, physics, 63-68, ISSN: 1582 – 3407.
- C4.17. Copaci, I., Bele, I., **Bocîi, L.S.**, Olaru, S., **2002**, *Study on the lifespan of the side pillars of the four-axle "gondola" wagons*, Annals of the "Aurel Vlaicu" University of Arad, Fascicola mecanica, series: rolling stock, resistance of materials, physics, 99-104, ISSN: 1582 – 3407.

**(D) Papers/studies published (presented) at international scientific events with a program committee**

- D1. Lucian Mădăras, Mircea Corneliu Dungan, **Liviu Sevastian Bocîi**, **1992**, *The braking moment of the disc brake used on railway wagons*, Symposium VI of Machine Parts Timișoara 1992, vol. 3, pag. 390-395.
- D2. Mircea Corneliu Dungan, Lucian Mădăras, **Liviu Sevastian Bocîi**, **1992**, *Comparative Study of the Effectiveness of Brake with Clogs and Disc Brake in Railway Vehicles*, VI Symposium on Machine Parts Timișoara 1992, vol. 3, pag. 381-388.

- D3. **Liviu Sevastian Bocîi, 1993**, *Considerations on the evolution of the braking systems of high-speed passenger wagons*, Scientific Communications Session of the "Constantin Brâncuși" University of Târgu-Jiu, May 14-16, 1993, vol II, sect. Mechanics, p. 451 – 458.
- D4. **Liviu Sevastian Bocîi, Mircea Corneliu Dungan, 1994**, *Braking Systems of Railway Vehicles at High and Very High Speeds*, Scientific Communications Session of the "Aurel Vlaicu" University of Arad, May 1994, pag. 81-87.
- D5. **Liviu Sevastian Bocîi, Francisc Lammert, Mircea Adrian Dungan, 1994**, *Materials used at friction couplings of the mechanical braking system of high-speed railway vehicles*, Scientific Communications Session of the "Aurel Vlaicu" University of Arad, May 1994, pag. 88-103.
- D6. Ioan Velescu, **Liviu Sevastian Bocîi, Mircea Corneliu Dungan, 1997**, *Experimental determination of the friction coefficient between the brake disc and the friction lining*, Scientific Communications Session "25 years of higher technical education in Arad", vol. IX, Arad, 30 – 31 October 1997, pag. 115 –120.
- D7. **Liviu Sevastian Bocîi, Mircea Corneliu Dungan, 1997**, *Determination of the temperature of the friction surface of the brake disc*, Scientific Communications Session "25 years of higher technical education in Arad", vol. IX, Arad, 30 – 31 October 1997, pag. 121 –126.
- D8. Bele, I., **Bocîi, L.S.**, 2001, *Simplifying the braking system at the subway*, International Scientific Symposium "UNIVERSITARIA ROPET 2001" Petroșani, 18 - 20 October 2001, Mechanical Engineering, ISBN 973-85398-5-4, pp. 89 – 92.
- D9. Bele, I., **Bocîi, L.S.**, 2001, *Determination of the power of traction motors in the subway*, International Scientific Symposium "UNIVERSITARIA ROPET 2001" Petroșani, 18 - 20 October 2001, Electrical Engineering, ISBN 973-85398-7-0, p. 257 - 262.
- D10. **Bocîi, L.S.**, Bele, I., 2001, *Characteristics of the synchronous traction generator for railway vehicles with internal combustion engines*, International Scientific Symposium "UNIVERSITARIA ROPET 2001" Petroșani, 18 - 20 October 2001, Electrical Engineering, ISBN 973-85398-7-0, pp. 252 – 256.
- D11. Ioan Bele, **Liviu Sevastian Bocîi, 2002**, *The energy calculation of the drive with the DC car and methods of reducing it to the metro. Part I*, International Scientific Symposium "UNIVERSITARIA ROPET 2002" Petroșani, Electrical Engineering, ISBN 973-8435-23-4, p.15-18.

- D12. Ioan Bele, **Liviu Sevastian Bocîi, 2002**, *The energy calculation of the drive with the DC car and methods of reducing it to the metro. Part II*, International Scientific Symposium "UNIVERSITARIA ROPET 2002" Petroșani, Electrical Engineering, ISBN 973-8435-23-4, pag. 19-22.
- D13. **Liviu Sevastian Bocîi, Ioan Bele, 2002**, *Characteristics of the synchronous generator at alternating current-direct current transmissions. Control and regulation schemes*, International Scientific Symposium "UNIVERSITARIA ROPET 2002" Petroșani, Electrical Engineering, ISBN 973-8435-23-4, pag. 27-30.
- D14. Ioan Bele, **Liviu Sevastian Bocîi, 2002**, *Improvement of the electric drive system in the subway*, International Scientific Symposium "UNIVERSITARIA ROPET 2002" Petroșani, Electrical Engineering, ISBN 973-8435-23-4, pag. 23-26.
- D15. Copaci, I., **Bocîi, L.S., Bele, I., Olaru, S., 2003**, *Study on the forces acting on the vehicle during the shock caused by collision*, International Scientific Symposium "UNIVERSITARIA ROPET 2003" Petroșani, Mechanical Engineering, pp. 81-84, ISBN 973-8260-37-X.
- D16. Copaci, I., **Bocîi, L.S., Bele, I., Olaru, S., 2003**, *Study on the experimental determination of the characteristics of shock insulators intended for equipping railway vehicles*, International Scientific Symposium "UNIVERSITARIA ROPET 2003" Petroșani, Mechanical Engineering, pp. 85-90, ISBN 973-8260-37-X.
- D17. Bele, I., Copaci, I., **Bocîi, L.S., 2003**, *Transformation of the fuel heating system into an electric heating system at the trolleybus*, International Scientific Symposium "UNIVERSITARIA ROPET 2003" Petroșani, Mechanical Engineering, pp. 155-159, ISBN 973-8260-37-X.
- D18. Copaci, I., **Bocîi, L.S., Bele, I., Olaru, S., 2004**, *On the behavior in the operation of freight wagons at the shock requests that occur due to collision*, International Scientific Symposium "UNIVERSITARIA ROPET 2004" Petroșani, 15 - 16 October 2004, Mechanical Engineering, pp. 31-36, ISBN: 973-8260-69-8.
- D19. Ioan Bele, **Liviu Sevastian Bocîi, Ion Copaci, Camelia Petrescu, Ion Étrangerescu, Cristian Gavra, 2004**, *Study on the placement of devices and aggregates on the solo trolleybus with chopper in accordance with internal and European norms*, International Scientific Symposium "UNIVERSITARIA ROPET 2004" Petroșani, 15 - 16 October 2004, Mechanical Engineering, pages 23-25, ISBN: 973-8260-69-8.

- D20. Copaci, I., **Bocîi, L.S.**, Bele, I., Huţiu, Gh., **2005**, *Assesment and adjustment of pressure distribution on disk brakes*, Proceedings of the Scientific Conference, 10th edition, with International Participation, Constantin Brâncuşi University of Târgu-Jiu, section 2- Mechanical Engineering Technologies, November 4-5, 2005, pag. 27-32.
- D21. **Liviu Sevastian Bocîi**, Ion Copaci, Ioan Bele, Mihai Sârb, **2005**, *Diagnosing elements for railway cars*, Proceedings of the Scientific Conference, 10th edition, with International Participation, Constantin Brâncuşi University of Târgu-Jiu, section 2- Mechanical Engineering Technologies, November 4-5, 2005, pag. 33-38.
- D22. Ioan Sebeşan, Ion Copaci, **Liviu Sevastian Bocîi**, Mihai Sârb, **2005**, *Determinarea teoretică a forcelor exercitate sul sistema de couplamento la vehiculă largă en curbe cu petits radie*, Presented works, The First International Railway Vehicles Symposium, November 25-26, 2005, pag. 93-100.
- D23. Ion Copaci, **Liviu Sevastian Bocîi**, Mihai Sârb, **2005**, *Experimental determination of longitudinal force in railway vehicles equipped with central coupling*, Presented works, The First International Railway Vehicles Symposium, November 25-26, 2005, pag. 109-112.
- D24. Copaci Ion, Mănescu Tiberiu Ştefan, **Bocîi Liviu Sevastian**, Olaru Stelian, Hrâncu Aurora, **2005**, *On variable and shock stresses that occur in the exploitation of the Y25-LSDI bogie of 22.5t/axle*, Proceedings CDM 2005 the IV-th conference on the dynamics of machines with international participation, volume I, 27-28 May 2005, Braşov ISBN 973-635-511-X, pag. 125-130.
- D25. Copaci Ion, Mănescu Tiberiu Ştefan, **Bocîi Liviu Sevastian**, Olaru Stelian, Loga Caius, **2005**, *Study on the safety against derailment of the Y25-LSDI bogie with axle load of 22.5t/axle*, Proceedings CDM 2005 the IVth Conference on Machine Dynamics with International Participation, volume I, 27-28 May 2005, Braşov ISBN 973-635-511-X, pag. pp. 131-137.
- D26. Valentin Müller, **Liviu Sevastian Bocîi**, **2006**, *The Behavior of the Induction Machine at the Modification of the Power-Supply Frequency*, XIth International Conference, Man in the Knowledge Based Organization, Conference Proceedings VIII, Land Forces Academy Publishing House, pag. 67 – 72, Sibiu, 23 – 25 November, 2006.
- D27. Copaci, I., **Bocîi, L.S.**, **2006**, *Evaluation and adaptation of pressure distribution in disc brake systems*, JEF 2006 (5th European Braking Day), Proceedings of the European Conference on Braking, 8, 9th November, **2006**, Lille France, pag. 411- 418 (<http://www.jef2006.com>).

- D28. Ioan Bele, **Liviu Sevastian Bocîi**, Camelia Petrescu, Ilarion Hotea, **2006**, *The Transport System Situation Existing in European Union vs. Romania – a Comparative Study*, International Symposium Research and Education in Innovation Era, Section 3, *Engineering Processes and Technology, Railway and Railroad vehicles*, Arad, 16-18 November 2006, ISBN 978-973-752-110-1, pag. 29-34.
- D29. Mihai Sîrb, Ion Copaci, **Liviu Sevastian Bocîi**, Marius Spiroiu, Aurelia Tănăsioiu, Mihai Sebeşan, **2006**, *Studies upon the effect of railway profile upon longitudinal compression forces*, International Symposium Research and Education in Innovation Era, Section 3, *Engineering Processes and Technology, Railway and Railroad vehicles*, Arad, 16-18 November 2006, ISBN 978-973-752-110-1, pag. 107-114.
- D30. **Liviu Sevastian Bocîi**, Ioan Bele, Daniela Anișoara Bocîi, **2007**, *The influence of tunnel factor upon aerodynamics resistance at advancing of fast trains*, ICEM 2007, Annals of the University of Petroșani, Mechanical Engineering, vol. 9 (XXXVI), Part I, ISSN 1454-9166, pag. 33 – 38.
- D31. Ioan Bele, **Liviu Sevastian Bocîi**, **2007**, *Registering and Transmitting Data System for Traction Vehicle*, ICEM 2007, Annals of the University of Petroșani, Mechanical Engineering, vol. 9 (XXXVI), Part I, ISSN 1454-9166, pag. 15 – 20.
- D32. **Liviu Sevastian Bocîi**, Ion Copaci, Valentin Müller, Daniela Anișoara Bocîi, **2007**, *The influence of the wind upon the resistance at advancing of high speed trains*, The 12th International Conference: The Knowledge based Organization, Applied Mechanics, Military Technical Systems and Technologies (Conference Proceeding X), Sibiu, 11th – 14th June **2007**, Land Forces Academy Publishing House, pag. 216 – 224.
- D33. **Liviu Sevastian Bocîi**, Ion Copaci, **2007**, *Experimental Investigations on the Force given by the Pressure of the Friction Garniture on the Brake Disk*, Scientific symposium „Transport and Logistics – Post- E.U. Integration Development”, Timișoara, 2-3 November 2007, Scientific Bulletin of the Polytechnic University of Timișoara, Romania, Transactions on MECHANICS, Tom 52 (66), Fasc. 7, ISSN 1224 – 6077, pag. 81- 86.
- D34. Vasile Rădulescu, Ioan Străinescu, Emil Tudor, Ioan Bele, **Liviu Sevastian Bocîi**, Cristian Gavra, **2007**, *Testing Experimental Models for an Advanced Electrical Traction System with Frequency Inverters*, Scientific symposium „Transport and Logistics – Post- E.U. Integration Development”, Timișoara, 2-3 November 2007, Scientific Bulletin of the Polytechnic University of Timișoara, Romania, Transactions on MECHANICS, Tom 52 (66), Fasc. 7, ISSN 1224 – 6077, pag. 87-92.

- D35. **Liviu Sevastian Bocîi**, Daniela Anișoara Bocîi, **2007**, *The influence of air density variation upon the resistance at advancing of high speed trains*, The 13th International Conference: The Knowledge based Organization, Applied Mechanics, Military Technical Systems and Technologies (Conference Proceedings 9), Sibiu, 22th – 25th November **2007**, Land Forces Academy Publishing House, pag. 198-203.
- D36. Ioan Bele, **Liviu Sevastian Bocîi**, Ilarion Hotea, Vasile Rădulescu, **2007**, *Studies an analysis regarding the transformation of a bus coachwork into a trolleybus coachwork*, The 13th International Conference: The Knowledge based Organization, Applied Mechanics, Military Technical Systems and Technologies (Conference Proceedings 9), Sibiu, 22th – 25th November **2007**, Land Forces Academy Publishing House, pag. 191-197.
- D37. Ioan Bele, **Liviu Sevastian Bocîi**, Ioan Étrangerescu, Valentin Müller, Mihaela Popa, **2008**, *Operating characteristics for the operating equipment of the trolleybus with asynchronous engine*, AFASES 2008, (Scientific Research and Education in the Air Force), Air Force Academy "Henri Coandă", Braşov 16-18 May 2008, ISBN: 978-973-8415-56-0, pag. 448-455.
- D38. Adrian Tănase, Mihai Olariu, Aurel Pădureanu, **Liviu Sevastian Bocîi**, **2008**, *Research with regard to the methods used for diagnosing the passenger cars in order to increase the safety and security in rail transport (diagnosis)*, COMEFIM '9, The 9th International Conference on Mechatronics and Precision Engineering, "Gh. Asachi" Technical University of Iasi, MECHANICAL ENGINEERING FACULTY, Department of Machine Design and Mechatronics, Session: Metrology – Measuring Instruments and Systems, 12th – 14th June 2008, Buletinul Institutului Politehnic din Iași, Tomul LIV (LVIII), fascicula 3, secția Construcții de mașini, pag. 217- 222 ([www.mec.tuiasi.ro/comefim08.html](http://www.mec.tuiasi.ro/comefim08.html)).
- D39. **Liviu Sevastian Bocîi**, Valentin Müller, Ioan Bele, **2010**, *Analysis of the electrical processes of starting railway vehicles with asynchronous traction motors*, ICITF 2010 (I International Congress of Railway Technology), 12 - 14 April 2010, Zaragoza, Spain, ISBN 978.84.614.2068.1, pp. 49-51 (<http://ctf2010.unizar.es>).
- D40. **Liviu Sevastian Bocîi**, Ioan Bele, **2010**, *Experiments concerning the replacement of an electrical braking system based on an independent excitation generator with a system based on a series excitation generator*, **JEF 2010 (6th European Conference on Braking)**, Proceedings of the European Conference on Braking, 24-25 November, **2010**, Lille, France, (<http://www.jef2010.com>).

- D41. **Liviu Sevastian Bocîi**, Valentin Müller, **2011**, *The determination of the coordinates of the oscillation center for the frame of a railway vehicle bogie*, ICRT 2011 (International Meeting on Rail Transport Technology), 13 - 16 June 2011, Zaragoza, Spain, (<http://railspain.unizar.es>).
- D42. Valentin Dan Müller, Ovidiu Gana, **Liviu Sevastian Bocîi**, Mihaela Popa, **2014**, *The Leading of the Aeolian Power Systems in Order to Maximize the Power and to Flatten the Fluctuations of the Generated Power*, The 20th International Conference: The Knowledge-Based Organization, Technical Sciences and Military Technology, 12 - 14 junio de 2014, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu, România, pag. 176 – 183, ([http://true1.armyacademy.ro/program\\_2014.pdf](http://true1.armyacademy.ro/program_2014.pdf)).
- D43. **Liviu Sevastian Bocîi**, Valentin Dan Müller, **2016**, *The characteristics of the synchronous generator traction for railway vehicles with heat engines*, International Symposium Research and Education in Innovation Era, 6th Edition, Section: *Engineering Processes and Technologies*, Arad, December 08-10, 2016, ISSN 2065-2569.

## (E) Patents

### E1.

## (F) R&D, innovation projects based on grant/contract

### F1. R&D and innovation projects based on grants

#### F1.1. R&D and innovation projects based on grant as director

- F1.1.1. **Bocîi Sevastian Liviu** (director), *Research on diagnostic methods of passenger wagons in order to increase safety and security in railway transport (DIAGNOSIS)*, CEEX – AMTRANS project (PC-D07-PT20-1077), financing contract no.: X1C13/03.10.2005, 2005-2008, partners: INCDMF Bucharest, SC ASTRA Vagoane Călători SA Arad, SC AEROFINA SA Bucharest, 2005-2008, UAV budget: **45000 RON**.
- F1.1.2. **Bocîi Sevastian Liviu** (director), *Advanced electric traction system with frequency inverters and alternating current motors for trolleybuses (INNOVATION)*, CEEX project (module I – Product-system development), 2007-2010, , no. 116/2007, partners: SC ASTRA BUS Arad, ICPE Bucharest, SAERP Bucharest, UAV budget: **147500 RON**,



F1.1.3 **Bocîi Sevastian Liviu** (director), *High Speed Railway Vehicles*, Program Intensiv ERASMUS nr. contract instituțional: 85956-IC-RO-ERASMUS-EPS, etapa I (*The building and computing of the high speed railway vehicles' carryng structures*), perioada: 01.10.2000 – 30.09.2001, etapa a II a (*The high speed railway vehicles' traction szstems*), perioada: 01.10.2001 – 30.09.2002, etapa a III a (*The high speed railway vehicles' braking szstems*), perioada: 01.10.2002 – 30.09.2003, parteneri: Universidad del Pais Vasco/EHU Bilbao, Spania, Universidad de Zaragoza, Spania, Universita degli Studi di Napoli Federico II, Politecnico di Torino, Italia, buget total: **26308 EURO** (2000 – 2001: **9100 EURO**; 2001 – 2002: **8568 EURO**; 2002 – 2003: **8640 EURO**).

### **F1.2. R&D and innovation projects based on grants as a member of the collective**

- F1.2.1. *Trolleybus for urban passenger transport "SOLO cu chopper" with energy recovery during braking and with ensuring the conditions of transport of people with major disabilities according to EC directives 85/2001, to ensure compatibility with the European system*, AMTRANS Project (2004-2006), contract no.: 7C18/09.09.2004-20.09.2006, partners: ICPE Bucharest, ICPE SAERP Bucharest, SC ASTRA BUS Arad, UAV budget: **144,000 RON**.
- F1.2.2. *Research on the development of high-performance systems for monitoring and control of running elements for improving the maintenance and safety of railway transport (MASPROF)*, CEEEX – INFOSOC project (PC-D03-PT20-1080), partners: INCDMF Bucharest, SC ASTRA Vagoane Călători SA Arad, SC AEROFINA SA Bucharest, 2005-2008, UAV budget: **45,000 RON**.
- F1.2.3. *Research on the implementation of an ecologically sealed, vacuum-sealed system of toilets for passenger wagons in railway transport (ECO-TOALETA)*, CEEEX – AMTRANS project (PC-D07-PT20-1078), partners: INCDMF Bucharest, SC ASTRA Vagoane Călători SA Arad, SC AEROFINA SA Bucharest, 2005-2008, UAV budget: **27,000 RON**.
- F1.2.4. *Social, economic and ecological impact of Romania's connection to the pan-European transport network (IMPACT)*, CEEEX project (module II), 2006-2007, partners: ICPE Bucharest, SC ASTRA BUS Arad, research collective member, UAV budget: **100,000 RON**.

- F1.2.5. *Trolleybus driven with three-phase inverter and alternating current motor, with low floor, according to the European Union standards (TAITMA-NE)*, CEEEX project (module I – Product-system development), 2007-2010, partners: Bucharest Equipment and Power Rectifier Actuators Company; Institute for Research and Design in Electrotechnics Bucharest; Satu Mare Commercial Academy Foundation; Romanian Electrotechnical Committee; SC Astrabus SRL Arad, nr. contract: 31-085/14.06.2007-26.04.2010, UAV budget: **285.600 RON**.
- F1.2.6. *The naturalization of philosophy: A metaphilosophical reflection in the context of contemporary culture (EHU09-03)*, research project, funding body: University of the Basque Country/Euskal Herriko Unibertsitatea Bilbao, Spain; principal investigator: José Ignacio Galparsoro (UPV-EHU); duration: 03.12.2009 – 03.12.2011.
- F1.2.7. *Sustainability as a post-Kuhnian paradigm: Knowledge distribution systems, social responsibility and ethics of climate change*, research project, funding body: UNESCO Chair in Sustainable Development and Environmental Education of the University of the Basque Country/Euskal Herriko Unibertsitatea Bilbao and the Basque Government; principal investigator: Ignacio Ayestarán (UPV-EHU); duration: 05.03.2009 – 04.03.2011.

**F2. Research-development-innovation contracts on a contract basis with companies or other social partners**

**F2.1. Research-development-innovation contracts based on contract with companies or other social partners as director**

F2.1.1.

**F2.2. Research-development-innovation contracts based on a contract with companies or other social partners as a member of the collective**

- F2.2.1. *Urban vehicles driven with asynchronous motors*, contract no. 80/09.04.1998, beneficiary: IJTL Timiș, no currencies were found.
- F2.2.2. *Research, design, methodology of stand tests of the motor coupling – traction shaft – gear to RES 2720 and assembly instructions*, contract no. 81/04.04.1998, beneficiary: IJTL Timiș, no foreign currency was found.
- F2.2.3. *Study, research and elaboration of finite element resistance calculations, according to an Algor program, on the casing of the AVA 200 passenger wagon*, research contract no. 58/28.11.2003, beneficiary SC ASTRA Vagoane Călători SA Arad, budget: **18,020 RON**.

**(G) Other scientific works and contributions****G1. Specialized studies**

- G1. **Bocîi, L.S., 1997**, *Technical Expertise Report – Evaluation for SEMA 14M Self-Propelled Combine Harvester and Eacs Type Freight Wagons*, Evaluation Expertise Report – National Agency for Agricultural Products Arad Branch, 18.03.1997, Arad.
- G2. **Liviu Sevastian Bocîi, 2001**, *A comparative analysis of brakes constructives applied to high speed railway vehicles*, **STOL (Spanish Trains On Line – Trenes Españoles enInternet)** <http://www.cuerpo8.es/STOL/tecnico/STOLcomparative.html>
- G3. **Liviu Sevastian Bocîi, 2001**, *Some Considerations about Technical Higher Education in the Third Millennium (Spanish - Euskara)*, Euskonews & Media nr. 116, ISSN 1139 – 3629, ([www.euskonews.com/0116zbnk/gaia11601eu.html](http://www.euskonews.com/0116zbnk/gaia11601eu.html)).
- G4. **Liviu Sevastian Bocîi, 2001**, *Parameters of analysis of braking systems. Coefficient of absorption of the kinetic energy of the high-speed rail vehicle*, **STOL (Spanish Trains On Line – Trenes Españoles en Internet)**, [www.cuerpo8.es/STOL/tecnico/imgtecnicas/frenado.pdf](http://www.cuerpo8.es/STOL/tecnico/imgtecnicas/frenado.pdf).
- G5. Ioan Bele, **Liviu Sevastian Bocîi, 2001**, *Determination of the inductivities of metro branches with VTC*, **STOL (Spanish Trains On Line – Trenes Españoles en Internet)** [www.cuerpo8.es/STOL/tecnico/imgtecnicas/inductiv.pdf](http://www.cuerpo8.es/STOL/tecnico/imgtecnicas/inductiv.pdf).
- G6. Nicolae Horodniceanu, Liliana Preda, Aurel Pădureanu, **Liviu Sevastian Bocîi, 2007**, *Research on diagnostic methods of passenger wagons in order to increase safety and security in rail transport (Diagnosis)*, CEEEX, Research Program of Excellence 2005 – 2008, UCP AMTRANS (IPA SA Consortium – SIAT SA), Scientific Contributions, Bucharest 2007, pag. 35-38.
- G7. **Bocîi, L.S., 2008**, *The High Speed Railway. Brief History*, Part I, Section in Time and Space, Engineering Universe (bimonthly opinion and information of the General Association of Engineers in Romania), no. 12 (418), pp. 4-5, ISSN 1223 – 0294, ([www.agir.ro/.../marea\\_viteza\\_feroviara\\_2156.html](http://www.agir.ro/.../marea_viteza_feroviara_2156.html)).
- G8. **Bocîi, L.S., 2008**, *The High Speed Railway. Brief History*, Part II, Section in Time and Space, Engineering Universe (bimonthly opinion and information of the General Association of Engineers in Romania), no. 13 (419), pp. 4-5, ISSN 1223 – 0294 ([www.agir.ro/.../marea\\_viteza\\_feroviara\\_2156.html](http://www.agir.ro/.../marea_viteza_feroviara_2156.html)).

- G9. Valentin Dan Müller, **Liviu Sevastian Bocîi, 2011**, *The modelling and the simulation of the electric driving system synchronous generator-induction motor*, **Timiș Academic Days**, XII th Edition, Polytechnic University of Timișoara, Faculty of Electrotechnics and Electroenergetics, 2 Vasile Pârvan Blvd., room D104.

**Data: 20.09.2024**

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