

Prof. Dr. Jurij SIDOR, DSc
Eötvös Loránd University, Faculty of Informatics,
Savaria Institute of Technology,
9700 Szombathely, Károlyi Gáspár tér 4.
Tel: +36 94 504 318
E-mail: js@inf.elte.hu

EDUCATION AND ACADEMIC DEGREE

2019/09 **Professor in the field of Materials Science and Technology.**
2018/01 **Dr.habil. degree in the field of Engineering, Materials Science and Technology.**
Habilitation work: *Texture Evolution in Metals During Conventional and Innovative Processing*
University of Miskolc, Miskolc, Hungary
2004/02 PhD in the field of Materials Science and Engineering and Critical States of Materials
Title of dissertation: *Microstructure development in isotropic electrical steels*
Institute of Materials Research, Slovak Academy of Sciences, Kosice, Slovakia
1999/06 Engineer – physicist
Title of diploma work: *Effect of contact type on mechanism of charge carrying in heterostructures*
Ge₃₃As₁₂Se₅₅-Si
Uzhgorod National University, Faculty of Physics, Uzhgorod, Ukraine

WORK EXPERIENCE

2022/08 **Vice-Dean: Research and Development**
Eötvös Loránd University, Faculty of Informatics
2020/11 **Deputy Director of the Savaria Institute of Technology**
Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology
2019 – **Full Professor**
Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology
2018 – Hungarian Academy of Sciences, Veszprém Academic Committee (VEAB), member of a metallurgical workgroup.
2018 – **Member of Doctoral School, PhD supervisor**
Eötvös Loránd University, ELTE Doctoral School of Physics
2017 –2019 **Associate Professor**
Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology
2015 –2017 **Member of Doctoral School**
University of West Hungary, Kitaibel Pál Doctoral School
2015 –2017 **Associate Professor**
University of West Hungary, Faculty of Natural Sciences, Savaria Institute of Technology
2010 – 2015 **Doctor-assistant**
Ghent University, Faculty of Engineering and Architecture, Department of Materials Science and Engineering, Ghent, Belgium
2009 – 2010 **PostDoctoral Researcher**
Ghent University, Faculty of Engineering and Architecture, Department of Materials Science and Engineering, Ghent, Belgium
2006 – 2009 **PostDoctoral Researcher**
Materials Innovation Institute (M2i), Delft, Holland
2004 – 2006 **Research Associate**
Institute of Materials Research, Slovak Academy of Sciences, Department of Microstructural Engineering of Steels, Kosice, Slovakia
2000 – 2003 **PhD Student**
Institute of Materials Research, Slovak Academy of Sciences, Department of Microstructural Engineering of Steels, Kosice, Slovakia

RESEARCH FIELDS

Materials Science and Technology field: thermomechanical processing of polycrystalline materials: experimental investigation and numerical modelling

- Modelling the deformation flow by finite element models.
- Modelling the deformation processes by the flow-line method and analytical models.
- Materials characterization by means of Orientation Imaging Microscopy (OIM): Electron Backscattering Diffraction Technique (EBSD) and X-Ray diffraction, Mechanical Testing.
- Modelling the texture evolution during deformation employing Taylor-type crystal plasticity homogenization schemes: Full Constraints Taylor model, Visco-Plastic Self-Consistent model, Advanced Lamel model, Cluster V model.
- Investigation of mesoscopic changes in metals during thermomechanical processing: Optical Microscopy (OM), Scanning Electron Microscopy (SEM), EDX.
- Prediction of crystallographic changes in metals during recrystallization by principles of continuum mechanics and crystal plasticity theory: REX model.
- Modelling the plastic anisotropy in metals: Prediction of plastic strain ratio by various crystal plasticity approaches.

LECTURING AND PRACTICAL CLASSES

Ghent University, Belgium (2009-2015)

- Fracture and deformation behavior of metals
- Non-ferrous metals
- Materials Characterization
- Physical Materials Science
- Microstructural characteristics of materials
- Metals Science
- Technological aspects of metals processing

University of West Hungary, Hungary (2015-2017)

- Materials Science 1 (Structure of Materials)
- Materials Science 2 (Materials Characterization)
- Materials Science 3 (Materials Technology I and Materials Technology II)
- Materials Science and Technology

Eötvös Loránd University, Hungary (2017-Present)

- Materials Science 1 (Structure of Materials)
- Materials Science 2 (Materials Characterization)
- Materials Science 3 (Materials Technology)

LANGUAGES

- Ukrainian: mother tongue
- Slovak: mother tongue
- English: C1
- Hungarian: B2/C1
- Russian: C1
- Dutch: A2

SOFTWARES

I. Finite element Modelling:

Deform 2D;

II. Crystal Plasticity Modelling:

Taylor model (MTM-TAYLOR software package);
Visco-plastic self-consistent model (VPSC6 and VPSC7 software packages);
Lamel and ALAMEL crystal plasticity models;
Cluster V model;
GIA model;

III. Modelling the Recrystallization textures:

RX model (self-designed);

MEMBERSHIP IN SCIENTIFIC AND ACADEMIC ORGANIZATIONS

- Hungarian Academy of Sciences, Veszprém Academic Committee (VEAB), Metallurgical workgroup.

Membership in the editorial boards

- Guest Editor (Special Issue Editor).
- International peer-reviewed journal: Metals, impact factor 2.26.

Link: http://www.mdpi.com/journal/metals/special_issues/Modelling_Deformation_Recrystallization

Reviewer for the following journals

- Acta Materialia;
- Applied Mathematical Modelling;
- Metals;
- Materials Characterization;
- Journal of Materials Research and Technology;
- Materials Science and Engineering A;
- Journal of Materials Science;
- Materials Characterization;
- Journal of Alloys and Compounds;
- Journal of Magnetism and Magnetic Materials;
- Journal of Materials Engineering and Performance;
- International Journal of Mechanical Sciences;
- Acta Metallurgica Slovaca.

Committees of trust

- Review and Scientific Evaluation of a research project for Czech Science Foundation.
(<https://gacr.cz/en/>)

Organization of international scientific events

- Co-organizer of GLADD symposiums in Ghent, Belgium. (The GLADD symposium is a consortium of 4 groups: MTM-KULeuven, RWTH-Aachen, MPIE-Düsseldorf, MSE-UGent, TUDelft).
- Chairman and organizer of Workshops on Innovative Materials Processing, Applications in Energy Engineering and System Control. Savaria Institute of Technology, Eötvös Loránd University, Hungary.

Chair of Sessions at International Conferences

- Session: Alain JACQUES Honorary Symposium. The 19th International Conference on Strength of Materials (ICSMA 2022). **Metz, France**, June 26-July 1, 2022.
- Session: Modelling on texture formation and property estimation. The 19th International Conference on Textures of Materials ICOTOM 19. **Osaka, Japan**. March 1-4, 2021.
- Session: 8C Non-Ferrous. 7th International Conference on Recrystallization and Grain Growth. **Ghent, Belgium**, August 4-9, 2019.
- Session: Materials and Mechanical Engineering. 9th Int. Conference On Mechanical and Aerospace Engineering (ICMAE 2018). **Budapest, Hungary**. July 10-13, 2018.

- Session: ALU 3 - Aluminium based materials: processing, microstructure, properties, and recycling. AMPT 2015. Advances in Materials & Processing Technologies Conference. **Madrid, Spain**, December 14-17, 2015.
- Session: Deformation Textures. International Conference on Texture of Materials, ICOTOM-17. **Dresden, Germany**. 24-29 August, 2014.
- Session: Physics of plasticity and strength. International Conference on Contemporary Problems of Metal Physics. **Kyiv, Ukraine**. 7–9 October, 2008.

Scientific Responsibilities

- 2022 (November): Opponent of Dr. Gonda Viktor habilitation work in **Óbudai University, Hungary**.
- 2021 (July 5): Opponent of Hlávác Adrién's PhD dissertation in **University of Miskolc, Hungary**.
- 2021 (January) Opponent of Dr. Benke Márton habilitation work in **University of Miskolc, Hungary**.
- 2020 (November): Opponent of Tuan Nguyen Minh PhD defense. **Delft University of Technology, Holland**
- 2020: Chair of BSc thesis defense committee at the Savaria Institute of Technology, **Eötvös Loránd University, Hungary**.
- 2019: Jury member of PhD defense of Vida Ádám in **Eötvös Loránd University, Hungary**.
- 2018: Opponent of Szilvia Kalácska's PhD dissertation in **Eötvös Loránd University, Hungary**.
- 2015: Opponent of Linsey Lapeire's PhD dissertation in **Ghent University, Belgium**.
- Member of a PhD thesis Defense Committee at the Department of Materials Science and Engineering, **Ghent University, Belgium**.
 - 2014: Jury member of PhD defense of Kyooyoung Lee.
 - 2011: Jury member of PhD defense of Koenraad Decroos.
- Member of master Department of Materials Science and Engineering, Ghent University
 - 2014: Jury member of master thesis defense of Athina Puype and Gonzalo Trigo Gil.
 - 2013: Jury member of master thesis defense of Sebastian Pelman.
 - 2011: Jury member of master thesis defense of: José Pablo Arribas de Santos, Alba Madrid Montoya, Fernando V. Ramos Saz, Luis Miguel del Castillo Garcia, Arturo Moreno Sanchez, Eva Gomez Rigueiro, Daniel Ezama Gonzalez, Miguel Fernandez Mendez.

Keynote Lecture

1. Sidor, J. - Petrov, R.H. – Xie, Q, - Van Houtte, P. - Kestens, L. “Evaluation of crystallographic changes in thermomechanical processing of Al alloys by means of crystal plasticity and continuum mechanics” AMPT 2015. Advances in Materials and Processing Technologies. Madrid, Spain. December 14-17, 2015.

Invited lectures:

1. Sidor, J. “Evolution of dislocations and texture in cold-rolled and annealed aluminum alloys” The 19th International Conference on Strength of Materials (ICSMA 2022). **Metz, France**, June 26-July 1, 2022.
2. Sidor, J. ”Tailoring the thermomechanical processing of Al alloys by numerical approaches”. Advanced Materials Lecture Series. Organized by the International Association of Advanced Materials, Sweden (online lecture). 30 October 2020.
3. Sidor, J. “Effect of thermomechanical processing parameters on recrystallization texture and plastic strain ratio in Al alloys”. 7th International Conference on Recrystallization and Grain Growth. **Ghent, Belgium**, August 4-9, 2019.
4. Sidor, J. “Deformation and Recrystallization In Textured Materials: Mean And Full-Field Modelling”. 26th Assembly of Advanced Materials Congress, Conference Centre, M/S Mariella, **Stockholm, Sweden**, June 10–13, 2019.
5. Sidor, J. - Petrov, R.H. – Decroos, K. Kestens, L.A.I. “Simulation of recrystallization textures in Al alloys after different deformations” Thermec’ 2013. International conference on processing and manufacturing of advanced materials. **Las Vegas, USA**. December 2-6, 2013.
6. Sidor, J. “Crystal plasticity based modelling of recrystallization textures in Al alloys”. International symposium on “Textures, microstructures and plastic anisotropy. A tribute to Paul Van Houtte”. **Leuven, Belgium**. May 13-14, 2013.
7. Sidor J. “Modelling the Texture Evolution after Cold Rolling and Annealing of Hot Rolled Materials” MEFORM 2011, **Freiberg, Germany**, March 30 - April 1, 2011.
8. Sidor, J.J. - Petrov, R.H. - Kestens, L.A.I. “Crystal-plasticity based through-process texture modeling in aluminum alloys” 15th International Symposium on Metallography, Metallography ‘013, **Stará Lesná, Slovak Republic**, 24 – 26 April 2013.

9. Petrov, R. – Hajyakbary, F. – Sidor, J. – Santofimia, M.J. – Sietsma, J. – Kestens, L. “Ultra-fast annealing of high strength steel” 9th International Congress on Machines, Technologies, Materials 2012. **Varna, Bulgaria**, September 19-21, 2012.
10. Kestens, L.A.I. - Sidor, J. - Petrov, R.H. - “Texture Control in Metal Sheet Processing by Innovative Processing Strategies“ International Conference on Processing&Manufacturing of Advanced Materials - Thermec’ 2011, **Quebec City, Canada** August 1-5, 2011.
11. Van Houtte P. - Sidor J. - Xie Q. - Delannay L. - Van Bael A. - Kestens L. “First evaluation of ALAMEL-predictions of texture-induced plastic anisotropy” Symposium Polycrystal Modelling with Experimental Integration: A Symposium Honoring Carlos Tome. TMS 2011. **San Diego, California, USA**. February 27 - March 3, 2011.
12. Kestens, L. - Sidor, J. – Petrov, R. – Minh, T. “Texture Control in Steel and Aluminium Alloys by Rolling and Recrystallization in Non-conventional Sheet Manufacturing”. 4th International Conference on Recrystallization and Grain Growth. **Sheffield, UK**. July 4-9, 2010.
13. Kestens, L. - Sidor, J. “Texture control in current and future grades of steel sheet for automotive applications”. International Conference on Contemporary Problems of Metal Physics. **Kyiv, Ukraine**. October 7-9, 2008.

Conference lectures/oral presentations:

1. Sidor, J. “Modelling the evolution of crystallographic texture and plastic strain ratio in Al alloys” 9th International Conference on Mechanical and Aerospace Engineering. **Budapest, Hungary**. 10-13 July, 2018.
2. Sidor, J.J. “Texture Evolution In Al Alloys: Crystal Plasticity And Continuum Mechanics Based Modelling Strategies” 16th Conference On Plastic Deformation (XVI. Képlékenyalakító Konferencia). **Miskolc, Hungary**. 7-9 February, 2018.
3. Sidor, J.J. “Texture Evolution In Al Alloys: Crystal Plasticity And Continuum Mechanics Based Modelling Strategies” International Conference On Textures Of Materials, ICOTOM-18. **St. George, Utah, USA**. 5-10 November, 2017.
4. Sidor, J.J. - Petrov, R.H. –Decroos, K. - Kestens, L.A.I. “Crystal Plasticity-Based Assessment Of Texture Evolution In Thermo-Mechanical Processing Of Al Alloys” International Conference On Textures Of Materials, ICOTOM-17. **Dresden, Germany**. 24-29 August, 2014.
5. Sidor, J.J. - Petrov, R.H. –Decroos, K. - Kestens, L.A.I. “Modeling The Recrystallization Textures In Particle Containing Al Alloys After Various Rolling Reductions” 13th International Conference On Aluminum Alloys (ICAA13), **Pittsburgh, PA, USA**, June 3-7, 2012.
6. Sidor, J.J. - Petrov, R.H. - Kestens, L.A.I. “Recrystallization Textures In Aluminum Alloys: Experimental Study And Modelling “ Int. Conference On Textures Of Materials – ICOTOM-2011, **Mumbai, India**, December 12-17, 2011.
7. Sidor, J.J. - Petrov, R.H. - Kestens, L.A.I. “Microstructure And Texture Evolution In Severely Deformed Aluminum Alloys“ International Conference On Processing&Manufacturing Of Advanced Materials - Thermec’ 2011, **Quebec City, Canada**, August 1-5, 2011.
8. Sidor, J. - Petrov, R. - Kestens, L. “Recrystallization In Severely Deformed Aluminum“ 4th International Conference On Recrystallization And Grain Growth. **Sheffield, UK**. July 4-9, 2010.
9. Petrov, R. - Sidor, J. – Kaluba, W. - Kestens, L. “Grain Refinement Of A Cold Rolled TRIP Assisted Steel After Ultra Short Annealing” 4th International Conference On Recrystallization And Grain Growth. **Sheffield, UK**. July 4-9, 2010.
10. Sidor, J. - Petrov, R. - Kestens, L. “Modeling The Recrystallization Textures And Plastic Response In Aluminum Alloys” 3rd International Conference On Texture And Anisotropy Of Polycrystals (ITAP-3). **Göttingen, Germany**. 23-25 September, 2009.
11. Bennett, T.A. - Sidor, J. - Petrov, R.H. - Kestens, L.A.I. “Roping Phenomena In Aluminium Alloy 6016: A Microstructural Investigation”. International Conference On Processing & Manufacturing Of Advanced Materials. Thermec’ 2009. **Berlin, Germany**, August 25-29, 2009.
12. Sidor, J. - Kestens, L. - Miroux, A. - Petrov, R. “Recrystallization Texture Development Under Various Thermo-Mechanical Conditions In Aluminium Alloys” TMS 2009 Conference, 138 Annual Meeting. **San Francisco, California, USA**. February 15-19, 2009.
13. Ghosh, M.- Miroux, A. - Sidor, J. - Kestens, L. “Deformation Textures And Plastic Anisotropy Of AA6XXX At Warm Temperature”. TMS 2009 Conference, 138 Annual Meeting. San Francisco, **California, USA**. February 15-19, 2009.
14. Ghosh M., - Miroux A., - Sidor J., - Kestens L. “Changes In Deformation Texture And Plastic Anisotropy With Temperature For AA6016”. International Symposium On Research Scholars On Metallurgy, Materials Science & Engineering. ISRS 2008. **Chennai, India**. December 10 – 12. 2008.
15. Sidor, J. – Miroux, A. - Petrov, R. - Kestens, L. “Texture Modification In Asymmetrically Rolled Aluminum Sheets”. The 15th International Conference On Textures Of Materials (ICOTOM 15). **Pittsburgh, Pennsylvania, USA**. June 1-6, 2008.
16. SIDOR, J. Et Al. “Deformation And Recrystallization Texture Control In 6016 Al Alloy” International Conference On Aluminum Alloys (ICAA 11). **Aachen, Germany**. September 26-28, 2008.

17. Sidor, J. - Kestens, L. "Through-Process Texture Simulation In Aluminum Alloy Grades For Automotive Industry". International Conference On Contemporary Problems Of Metal Physics. **Kyiv, Ukraine**. October 7-9, 2008.
18. Sidor, J. – Miroux, A. - Petrov, R. - Kestens, L. "Modeling The Deformation Texture Development Under Various Strain Path In Aluminum Alloys" Euromat 2007. **Nürnberg, Germany**. September 10-13, 2007.
19. Sidor, J. – Petrov, R. - Miroux, A. - Kestens, L. "Simulation Of Crystallographic Changes In Conventionally And Asymmetrically Rolled Aluminum Alloys" M2i Conference 'Building Bridges In Metallurgy'. **Noordwijkerhout, The Netherlands**. December, 2008.
20. Stoyka, V. - Kováč, F. - Sidor, J.: The Effect Of Temperature On Grain Growth Character In 3% Si Grain Oriented Steels. 1st Afro-Asian Conference On Advanced Materials Science And Technology. Amsat 06. **Cairo, Egypt**. November 13-16, 2006.
21. Sidor, Y. - Kovac, F.- Dzubinsky M.: Microstructure And Favorable Texture Development In Non-Oriented Electrical Steels. 2nd Int. Conference On Thermomechanical Processing Of Steels-2004. **Liege, Belgium**, June 15-17, 2004.
22. Kovac, F. - Dzubinsky, M. - Sidor, Y. - Predmersky, M.: Columnar Grain Growth In Non-Oriented Electrical Steels. 21st Annual Conference On Properties And Application Of Magnetic Materials. **Chicago, USA**, May 13-15, 2002. Chicago: Illinois Inst.Technology 2002.
23. Sidor, Y. - Kovac, F.: Columnar Grain Growth In Non-Oriented Electrical Steels. Semdok-2003. International Conference. **Zilina - Sulov, Slovakia**. January 21-22, 2003.
24. Sidor, Y.: Contribution To Modelling Of Decarburization Process In Non-Oriented Electrical Steels. Eureka-2003. Int. Conf. Of Young Scientists. **Lviv, Ukraine**. May 21-23, 2003.
25. Petrychka, V. - Sidor, Y.: Grain Boundary Motion In Non-Oriented Electrical Steels. Eureka-2003. Int. Conf. Of Young Scientists. **Lviv, Ukraine** May 21-23, 2003.
26. Sidor, Y. - Kovac, F.: Influence Of Heat Treatment On Magnetic Properties Of Electrical Steels. Metallurgy Junior-2002. 7th International Conference. **Kosice, Slovakia**, November 6-7, 2002.
27. Sidor, Y.: Description Of Homogeneity And Evaluation Of Average Grain Size In Microstructure With Heterogeneous Grain Size Distribution. Metallurgy Junior-2001. 6th International Conference. **Kosice, Slovakia**, October 10-11, 2001.

PARTICIPATION IN RESEARCH PROJECTS

NATIONAL PROJECTS (HUNGARIAN):

- 2017: EFOP-3.6.1-16-2016-00018: "Innovative processing technologies, applications of energy engineering and implementation of wide range techniques for microstructure investigation" (<https://sek.elte.hu/content/efop-3-6-1-16-2016-00018.t.1722>)
 - ✓ Responsibility: project leader.
- 2016: OTKA. Modelling and complex experimental evaluation of texture dependent solid phase reaction in metallic systems (Project nr.: 119566)
 - ✓ Responsibility: Senior Researcher.
- 2016: Industrial project. "Microstructural investigation of MnZn ferrite".
 - ✓ Responsibility: project leader.
 - ✓ Participants: Savaria Institute of Technology and EPCOS Kft., TDK Group Company (industrial partner).

INTERNATIONAL PROJECTS (ABROAD):

- FWO Odysseus Program (Research Foundation -Flanders): "Engineering of 3D microstructures in metals: bridging ten length scales of functionality" Project Period: 1/10/2008 – 30/09/2016.
 - ✓ Responsibility: active research participation and daily supervision of PhD students dealing with issues related to the project.
- Interuniversity Attraction Poles Program (IUAP) of the Federal Science Policy Office of Belgium – IUAP-VII project P7/21. "Multi-scale mechanics of interface dominated materials". Project Period: 1/11/2012 – 31/12/2017.
 - ✓ Responsibility: active research participation and daily supervision of PhD students dealing with issues related to the project.
- Industrial project: „Formability improvement of 6XXX alloys for automotive applications”.
 - ✓ Responsibility: project supervisor.
 - ✓ Participants: Ghent University and Aleris as an industrial partner (Belgium).
- Industrial project: „Through-process texture characterization in 6XXX alloys for automotive applications”.
 - ✓ Responsibility: project supervisor.

- ✓ Participants: Ghent University and Aleris as an industrial partner (Belgium).
- Industrial project: „Microstructural characteristic of high strength steel”.
 - ✓ Responsibility: project supervisor.
 - ✓ Participants: Ghent University (Belgium), Tata Steel (Holland), Materials Innovation Institute (Holland).

AWARDS AND RECOGNITIONS

2019: Elsevier Reviewer Recognition – 2019. Journal Of Magnetism And Magnetic Materials.
2019: Elsevier Reviewer Recognition – 2019. Applied Mathematical Modelling.
2019: Reviewer Recognition – 2019. Metals.
2019: Elsevier Reviewer Recognition – 2019. Journal of Materials Research and Technology.
2018: Outstanding Elsevier Reviewer Recognition-2018. Journal Of Alloys And Compounds.
2018: Elsevier Reviewer Recognition - 2018. Materials Science & Engineering A.
2018: Elsevier Reviewer Recognition - 2018. Materials Characterization.
2017: Outstanding Elsevier Reviewer Recognition - 2017. Materials Characterization.
2017: Elsevier Reviewer Recognition - 2017. Journal Of Alloys And Compounds.
2016: Outstanding Elsevier Reviewer Recognition - 2016. Materials Science & Engineering A.
2016: Outstanding Elsevier Reviewer Recognition - 2016. Materials Characterization.
2016: Elsevier Reviewer Recognition - 2016. Materials Characterization.
2015: Elsevier Reviewer Recognition - 2015. International Journal of Mechanical Sciences.
2015: Elsevier Reviewer Recognition - 2015. Materials Science & Engineering A.
2015: Elsevier Reviewer Recognition - 2015. Journal Of Alloys And Compounds.
2014: Elsevier Reviewer Recognition - 2014. Journal Of Magnetism And Magnetic Materials.
2008: Hans Wilfried Wagener Endowment Prize: “ISRS 2008 Conference – Best Paper”.
2006: 1st prize in the competition of Young Scientists of the Slovak Academy of Sciences in 2005.
2006: Award in the competition “Scientist of the Year 2005” in Slovak Republic.

FELLOWSHIPS

- **2012: July-August:** Guest researcher at State Key Laboratory for Advanced Metals and Materials, University of Science and Technology, Beijing, **China**.
- **2009: February:** Winter School on Work Hardening, Catholic University of Leuven, Leuven, **Belgium**.
- **2007: August:** 9th International Summer School on Aluminium Alloy Technology, The Norwegian University of Science and Technology and SINTEF Materials and Chemistry, Trondheim, **Norway**.

PUBLICATIONS AND CITATIONS (2003- June, 2022)

- **4 book chapters;**
- **41 journal papers with impact factor;**
- **23 journal papers with impact factor, where J. Sidor is a first author (corresponding author);**
- **h-index: 18;**
- **h10-index: 25 (number of papers with min. 10 citations);**
- **Number of citations in Scopus, total/independent: 1179/942;**
- **Scopus link: <https://www.scopus.com/authid/detail.uri?authorId=23969497000>**

Book chapters

1. Sidor, J. “Modelling the Deformation, Recrystallization and Microstructure-Related Properties in Metals” MDPI. Pages: 144, published: november 2021, ISBN 978-3-0365-2384-2 (HBK); ISBN 978-3-0365-2385-9 (PDF), <https://doi.org/10.3390/books978-3-0365-2385-9>, <https://www.mdpi.com/books/pdfview/book/4559>.
 2. Sidor, J. - Petrov, R. - Kestens, L. “Texture Control in Aluminum Sheets by Conventional and Asymmetric Rolling” in *Comprehensive Materials Processing*. Editor in Chief: S Hashmi. Elsevier Science & Technology (2014). Volume 3.17, Pages: 447-498. ISBN-10: 0080965326, ISBN-13: 978-0080965321.

3. Petrov, R.H. - Sidor, J. - Kestens, L.A.I. “Advanced High-Strength Steels: Microstructure and Texture Evolution” *Encyclopaedia of Iron, Steel, and Their Alloys*, Editors Rafael Colas and G.E. Totten., CRC Press, Taylor & Francis Group, New York, (2015). Pages: 70-99. Print ISBN: 9781466511040, eBook ISBN: 978146651105-7.
4. Cicalé, S. - Cesile, C. - Lubrano, M. - Albini, L. - Sperl, J. - Nguyen Minh, T. - Sidor, J. - Petrov, R. - Kestens, L. - Bazzaro, G. “Electrical Steel With Improved Magnetic Characteristics By Asymmetric Hot And Cold Rolling“. Luxembourg: Publications Office of the European Union (2013), 148 pages. ISBN: 978-92-79-29318-4, ISSN: 1831-9424, ISSN 1018-5593 (print), DOI: 10.2777/97481.

Journal papers with impact factor

1. CHAKRAVARTY, P. – PÁL, GY. – SIDOR, J.J. The dependency of work hardening on dislocation statistics in cold rolled 1050 aluminum alloy. **Materials characterization**. 191 Paper: 112166 (2022). <https://doi.org/10.1016/j.matchar.2022.112166> (IF=4.537).
2. XIE, Q. - SIDOR, J.J.- Lian, J - Yin, S. – Wang Y. Self-equilibrated backstresses induce compensation between hardening and softening: Micromechanical and microstructural features. **Materials Science & Engineering A**. 843, 2022, 143145 (<https://doi.org/10.1016/j.msea.2022.143145>). (IF=5.234)
3. SIDOR, J.J. - CHAKRAVARTY, P. - BÁTORFI, J. GY. - NAGY, P. - XIE, Q. – GUBICZA, J. Assessment of dislocation density by various techniques in cold rolled 1050 Aluminum Alloy. **Metals**. Vol. 11(10), 2021, 1571 (<https://doi.org/10.3390/met11101571>) (IF=2.351).
4. SIDOR, J.J. “Modelling the Deformation, Recrystallization, and Microstructure-Related Properties in Metals” **Metals**. Vol. 11(11), 2021, 1759 (<https://doi.org/10.3390/met11111759>) (IF=2.351).
5. SIDOR, J.J. “Effect of Hot Band on Texture Evolution and Plastic Anisotropy in Aluminium Alloys” **Metals**. Vol. 11(8), 2021, 1310, 17 pages (<https://doi.org/10.3390/met11081310>) (IF=2.351).
6. XIE, Q. - LIAN, J - SIDOR, J.J. - SUN, F - YAN, X. - CHEN, C. - LIU, T - CHEN, W – YANG, P – AN, K – WANG, Y. “Crystallographic orientation and spatially resolved damage in a dispersion-hardened Al alloy” **Acta Materialia**. Vol. 193, 2020, pp. 138-150. (DOI: 10.1016/j.actamat.2020.03.049) (IF=7.3)
7. SIDOR, J.J. “Assessment of Flow-Line Model in Rolling Texture Simulations”. **Metals**. 2019, 9(10), 1098, 21 pages (doi:10.3390/met9101098) (IF=2.259).
8. SIDOR, J.J. “Deformation texture simulation in Al alloys: continuum mechanics and crystal plasticity aspects”. **Modelling and Simulation in Materials Science and Engineering**. Vol. 26, nr. 8, 2018, 085011 (DOI: <https://doi.org/10.1088/1361-651X/aae886>) (IF=1.793).
9. XIE, Q. - VAN BAEL, A.- AN, Y.G. - LIAN, J. - SIDOR, J.J. “Effects of the isotropic and anisotropic hardening within each grain on the evolution of the flow stress, the r-value and the deformation texture of tensile tests for AA6016 sheets”. **Materials Science and Engineering A**. Vol. 721, 2018, pp. 154-164. (DOI: <https://doi.org/10.1016/j.msea.2018.02.053>) (IF=3.094).
10. XIE, Q. - GORTI, S.- SIDOR, J.J. - AN, Y.G. – WANG, Y.D., - LIAN, J. - LAN, H, - AN, K. “Grain orientation dependence of the residual lattice strain in a cold rolled interstitial-free steel”. **Steel Research International**. (2018) (DOI: 10.1002/srin.201700408) 89(3), 2018, 1700408 (IF=1.235).
11. SHORE, D. - KESTENS, L.A.I.- SIDOR, J. - VAN HOUTTE, P. - VAN BAEL - A. “Process Parameter Influence on Texture heterogeneity in Asymmetric Rolling of Aluminium Sheet Alloys”. **International Journal of Material Forming**. 11(2), 2018, pp. 297-309. (DOI: 10.1007/s12289-016-1330-7) (IF=1.978)
12. SIDOR, J.J. - PETROV, R. - XIE, Q.- VAN HOUTTE, P.- KESTENS L. “Evaluation of crystallographic changes and plastic strain ratio in Al alloys”. **Materials Science and Technology**. 33, 2017, 667-677 (DOI: 10.1080/02670836.2016.1180742). (IF=0.995)
13. GERVASYEV, A. – CARRETERO OLALLA, V. - SIDOR, J. - SANCHEZ MOURINO, N. - KESTENS L.A.I. - PETROV, R.H. “An approach to microstructure quantification in terms of impact properties of HSLA pipeline steels”. **Materials Science and Engineering A**. vol. 667, 2016, 163-170. (IF=2.647)
14. LAPEIRE, L. - SIDOR, J. - VERLEYSSEN, P. - VERBEKEN, K. - DE GRAEVE, I. - TERRYN, H. - KESTENS, L.A.I. “Texture comparison between room temperature rolled and cryogenically rolled pure copper”. **Acta Materialia**. Vol. 95 (2015) 224–235. (IF=4.465)
15. SIDOR, J.J. – DECROOS, K. - PETROV, R.H. - KESTENS, L.A.I. “Evolution of recrystallization textures in particle containing Al alloys after various rolling reductions: experimental study and modeling” **International Journal of Plasticity**. Vol. 66, 2015, 119–137 (IF=5.623)
16. SIDOR, J.J. - PETROV, R.H. - KESTENS, L.A.I. “Modeling the crystallographic changes in processing of Al alloys“ **Journal of Materials Science**. Vol.9, 2014, 3529-3540. (IF=2.371)
17. XIE, Q. - VAN BAEL, A. - SIDOR, J. - MOERMAN, J. - VAN HOUTTE, P. “A new cluster type model for the simulation of textures of polycrystalline metals”. **Acta Materialia**. Vol.69, 2014, 175–186. (IF=4.465)

18. DECROOS, K. - SIDOR, J. – SEEFELDT, M “A new analytical approach for the velocity field in rolling processes and its application in through-thickness texture prediction” **Metallurgical and Materials Transactions A**. Vol. 45A, 2014, pp 948-961. (IF=1.730)
19. SIDOR, J.J. – KESTENS, L.A.I. “Analytical description of Rolling textures in face centered cubic metals” **Scripta Materialia**. Vol. 68, 2013, 273-276. (IF= 2.968)
20. NGUYEN-MINH T. – SIDOR, J.J. – PETROV, R.H. – KESTENS, L.A.I. “Occurrence of shear bands in rotated Goss ($\{110\}\langle 110\rangle$) orientations of metals with bcc crystal structure” **Scripta Materialia**. Vol. 67, 2012, pp. 935-938. (IF= 2.821)
21. SIDOR, J.J. – VERBEKEN, K – GOMES, E. – SCHNEIDER, J. – CALVILLO, P.R. - KESTENS L.A.I. “Through process texture evolution and magnetic properties of high Si non-oriented electrical steels” **Materials Characterization**. 71, 2012, pp. 49-57. (IF= 1.880).
22. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Modeling the Crystallographic Changes in Aluminum Alloys During Recrystallization” **Acta Materialia** Vol. 59, 2011, pp. 5735–5748. (IF= 3.755)
23. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Texture Induced Anisotropy in Asymmetrically Rolled Aluminum Alloys” **Advanced Engineering Materials** Vol. 13, 2011, pp. 1-6. (IF= 1.185)
24. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Microstructural and Texture Changes in Severely Deformed Aluminum Alloys” **Materials Characterization** Vol. 62, 2011, pp. 228-236. (IF= 1.572)
25. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Deformation, Recrystallization and Plastic Anisotropy of Asymmetrically Rolled Aluminum Sheets” **Materials Science and Engineering A**. Vol. 528, 2010, 413–424. (IF= 2.090)
26. BENNETT, T.A. - SIDOR, J. - PETROV, R.H. - KESTENS, L.A.I. “The effect of intermediate annealing on texture banding in aluminium alloy 6016 that exhibits roping” **Advanced Engineering Materials** Vol. 12, 2010, pp.1018-1023. (IF= 1.738)
27. SIDOR, J. - MIROUX, A. - PETROV, R. - KESTENS, L. “Microstructural and crystallographic aspects of conventional and asymmetric rolling processes” **Acta Materialia**. Vol. 56, 2008, pp. 2495–2507. (IF=3.729)
28. SIDOR, J. - MIROUX, A. - PETROV, R. - KESTENS, L. “Controlling the plastic anisotropy in asymmetrically rolled aluminium sheets” **Philosophical Magazine**, Vol. 88, Nos. 30–32, 2008, pp. 3779–3792. (IF=1.384)
29. PIRGAZI, H. – AKBARZADEH, A. - PETROV, R. - SIDOR, J. - KESTENS, L. “Texture evolution of AA3003 aluminum alloy sheet produced by accumulative roll bonding” **Materials Science and Engineering A**. Vol. 492, 2008, pp. 110–117. (IF=1.806)
30. STOYKA, V. - KOVAC, F. - SIDOR, Y. : Effect of second phase particles topology on the onset temperature of abnormal grain growth in Fe - 3%Si steels. **Metallurgy** (Metalurgija). 47(1), 2008, pp. 37-41. (IF=0.216)
31. SIDOR, Y. - KOVAC, F. – KVACKAJ, T: Grain growth and heat transport in non-oriented electrical steels. **Acta Materialia**. 55, 2007, pp.1711-1722. (IF=3.624)
32. SIDOR, Y. - DZUBINSKY, M. - KOVAC, F.: Contribution to quantification of highly inhomogeneous microstructures. **Journal of Materials Science**. 40, 2005, pp.6257-6262. (IF=0.901)
33. SIDOR, Y. - KOVAC, F.: Microstructural aspects of grain growth kinetics in nonoriented electrical steels. **Materials Characterization**. 55/1, 2005, pp.1-11. (IF=0.982)
34. SIDOR, Y. - KOVAC, F. – PETRYCHKA, V.: Secondary recrystallization in non-oriented electrical steels. **Metallurgy** (Metalurgija). 44/3, 2005, pp.169-174. (IF=0.208)
35. SIDOR, Y. - KOVAC, F.: Effect of heat treatment conditions on the internal and external oxidation processes in non-oriented electrical steels. **Materials and Design**. 26/4, 2005, pp.297-304. (IF=0.785)
36. SIDOR, Y. - KOVAC, F. - DZUBINSKY, M.: Characterization of microstructures in non-oriented electrical steels utilising weighted sum of elementary data approach. **Czechoslovak Journal of Physics**. 54, 2004, pp. D105-108. (IF=0.292)
37. KOVAC, F. - DZUBINSKY, M. - SIDOR, Y.: Columnar Grain Growth in Non-Oriented Electrical Steel. **Journal of Magnetism and Magnetic Materials**, 269, 2004, pp.333-340. (IF=1.031)
38. DZUBINSKY, M. - SIDOR, Y. - KOVAC, F.: Kinetics of columnar abnormal grain growth in low-Si non-oriented electrical steel. **Material Science and Engineering A**. 385, 2004, pp.449-454. (IF=1.445)
39. DZUBINSKY, M. – PETRYCHKA, V. - SIDOR, Y. - KOVAC, F.: Microstructure design in non-oriented electrical steels. **Czechoslovak Journal of Physics**. 54, 2004, pp. D101-104. (IF=0.292)
40. SIDOR, Y. - KOVAC, F.: Quantification of Microstructure and Evaluation of Mechanical Properties in Non-Oriented Electrical Steels. **Metallurgy** (Metalurgija). 42, 2003, 3, pp.153-158. (IF=0.100)
41. SIDOR, Y. – DZUBINSKY, M. - KOVAC, F.: New Approach for the Quantification of Microstructure in Non-Oriented Electrical Steels. **Materials Characterization**, 51, 2003, pp.109-116. (IF=0.437)

Conference Proceedings

1. SIDOR, J.J. “Crystal plasticity and continuum mechanics-based modelling of deformation and recrystallization textures in aluminum alloys”. IOP Conf. Series: Materials Science and Engineering. Vol. 375, 2018, 012028. doi:10.1088/1757-899X/375/1/012028.
2. LAPEIRE, L. - SIDOR, J. - LOMBARDIA, E.M. - VERBEKEN, K. - DE GRAEVE, I. - TERRY, H. - KESTENS, L.A.I. “Texture comparison between cold rolled and cryogenically rolled pure copper”. IOP Conference Series: Materials Science and Engineering, Volume 82, Issue 1, 24 April 2015, Article number 012016.
3. VAN HOUTTE, P. - XIE, Q. - VAN BAELE, A. - SIDOR, J. - MOERMAN, J. “A new cluster-type statistical model for the prediction of deformation textures”. IOP Conference Series: Materials Science and Engineering, Volume 82, Issue 1, 24 April 2015, Article number 012015.
4. NGUYEN-MINH, T. - SIDOR, J.J. - PETROV, R.H. - KESTENS, L.A.I. “Shear banding and its contribution to texture evolution in rotated Goss orientations of BCC structured materials”. IOP Conference Series: Materials Science and Engineering, Volume 82, Issue 1, 24 April 2015, Article number 012023.
5. SHORE, D. - VAN BAELE - A. - SIDOR, J. - ROOSE, D. - VAN HOUTTE, P. - KESTENS, L. “Modelling the stored energy of plastic deformation for individual crystal orientations”. IOP Conference Series: Materials Science and Engineering, Volume 82, Issue 1, 24 April 2015, Article number 012052.
6. PETROV, R. – HAJYAKBARY, F. – SAZ F.R. – SIDOR, J. – SANTOFIMIA, M.J. – SIETSMA, J. – KESTENS, L. “Microstructure and Properties of Ultrafast Annealed High Strength Steel” In proc. of Vth International Conference on Recrystallization and Grain Growth, May 5-10, 2013, Sydney, Australia. Materials Science Forum Vol. 753 (2013) pp. 554-558.
7. PETROV, R. – HAJYAKBARY, F. – SIDOR, J. – SANTOFIMIA, M.J. – SIETSMA, J. – KESTENS, L. “Ultra-fast annealing of high strength steel” In proc. of 9th International Congress on Machines, Technologies, Materials 2012. September 19-21, 2012, Varna, Bulgaria. Volume 3 (ISSN 1310-3946), pp. 5-8.
8. SIDOR, J.J. - PETROV, R.H. – DECROOS, K. - KESTENS, L.A.I. “Modeling the recrystallization textures in particle containing Al alloys after various rolling reductions” In proceeding of 13th International Conference on Aluminum Alloys (ICAA13), June 3-7, 2012 • Pittsburgh, PA, USA. pp 299-304. (ISBN: 978-1-11845-804-4)
9. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Recrystallization in severely deformed aluminum” In proceeding of RX&GG conference, July 4-9, 2010, Sheffield, UK. Materials Science Forum Vols. 715-716 (2012) pp 267-272.
10. PETROV, R. - SIDOR, J. – KALUBA, W. - KESTENS, L. “Grain Refinement of a cold Rolled TRIP Assisted Steel after Ultra Short Annealing” In proceeding of RX&GG conference, July 4-9, 2010, Sheffield, UK Materials Science Forum Vols. 715-716 (2012) pp 661-666.
11. KESTENS, L.- SIDOR, J. - PETROV, R. – NGUYEN MINH, T. “Texture Control in Steel and Aluminium Alloys by Rolling and Recrystallization in Non-conventional Sheet Manufacturing” In proceeding of RX&GG conference, July 4-9, 2010, Sheffield, UK. Materials Science Forum Vols. 715-716 (2012) pp 89-95.
12. SIDOR, J.J. - PETROV, R.H. - KESTENS, L.A.I. “Recrystallization textures in aluminum alloys: experimental study and modelling” In proceeding of Int. Conference on Texture of Materials – ICOTOM-2011, December 12-17, 2011, Mumbai, India. Materials Science Forum Vols. 702-703 (2012) pp. 611-614.
13. PETROV, R.H. - SIDOR, J.J. - KESTENS, L.A.I. “Texture Formation in High Strength Low Alloy Steel Reheated with Ultrafast Heating Rates “ In proceeding of Int. Conference on Texture of Materials – ICOTOM-2011, December 12-17, 2011, Mumbai, India. Materials Science Forum Vols. 702-703 (2012) pp. 798-801.
14. NGUYEN MINH, T. - SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Texture Evolution During Asymmetrical Warm Rolling and Subsequent Annealing of Electrical Steel” In proceeding of Int. Conference on Texture of Materials – ICOTOM-2011, December 12-17, 2011, Mumbai, India. Materials Science Forum Vols. 702-703 (2012) pp. 758-761.
15. EYCKENS, P.- XIE, Q. - SIDOR, J.J. - DELANNAY, L. - VAN BAELE, A. - KESTENS, L. - MOERMAN, J, VEGTER, H. - VAN HOUTTE, P. “Validation of the texture-based ALAMEL and VPSC models by measured anisotropy of plastic yielding “ In proceeding of Int. Conference on Texture of

- Materials – ICOTOM-2011, December 12-17, 2011, Mumbai, India. Materials Science Forum Vols. 702-703 (2012) pp. 233-236.
16. SIDOR, J.J. - DECROOS, K. - PETROV, R.H. - KESTENS, L.A.I. “Particle Stimulated Nucleation in Severely Deformed Aluminum Alloys“ In proceeding of Int. Conference on Processing&Manufacturing of Advanced Materials - Thermec’ 2011, August 1-5, 2011, Quebec City, Canada. Materials Science Forum Vols. 706-709 (2012) pp 389-394.
 17. SIDOR, J. - PETROV, R. - KESTENS, L.A.I. “Improved plastic anisotropy in asymmetrically rolled 6xxx alloy”. 3rd International Conference on Texture and Anisotropy of Polycrystals (ITAP-3). Göttingen, Germany. 23-25 September, 2009. Solid State Phenomena. Vol.160 (2010) pp.165-170.
 18. BENNETT, T.A. - SIDOR, J. - PETROV, R.H. - KESTENS, L.A.I. “Roping phenomena in aluminium alloy 6016: A microstructural investigation” Proceeding of International Conference on Processing & Manufacturing of Advanced Materials. Thermec’ 2009. Berlin, Germany, August 25-29, 2009. Materials Science Forum. Vol. 638-642 (2010), pp. 396-400.
 19. SIDOR, J. - KESTENS, L. - MIROUX, A. - PETROV, R. “Recrystallization texture development under various thermo-mechanical conditions in aluminium alloys” Light Metals. Edited by Geoff Bearne., TMS, 2009. USA, (ISBN Number 978-0-87339-731-5, ISSN Number 109-9586), pp. 1221-1224.
 20. GHOSH, M.- MIROUX, A. - SIDOR, J. - KESTENS, L. “Deformation Textures And Plastic Anisotropy of AA6XXX At Warm Temperature” Aluminum Alloys: Fabrication, Characterization and Applications II. Edited by Weimin Yin, Subodh K. Das and Zhengdong Long, TMS, 2009, USA. (ISBN Number 978-0-87339-735-3), pp.101-106.
 21. SIDOR, J. - MIROUX, A. - PETROV, R. - KESTENS, L. “Texture Modification in Asymmetrically Rolled Aluminum Sheets”, ”, In APPLICATIONS OF TEXTURE ANALYSIS Ceramic Transactions, Volume 201A, Collection of Papers Presented at the 15th International Conference on Texture in Materials (ICOTOM 15) June 1-6, 2008 Pittsburgh, Pennsylvania Edited by A. Rollet, (ISBN: 978-0-470-40835-3), pp.547-554.
 22. SIDOR, J. - ZHUANG, L. - VAN DER WINDEN, M. – KESTENS, L. “Effect of asymmetric rolling on texture and anisotropy of AA6016alloy for automotive applications” Proc. of TMS – 2008 Conference. March 9-13, 2008. New Orleans, USA. Editors: Y. Yin, S.K. Das. (ISBN 978-0-87339-712-4) pp. 113-118.
 23. SIDOR, J. - KESTENS, L. - PETROV, R. - MIROUX, A. - ZHUANG, L. - VAN DER WINDEN, M. - DE SMET, P. – RATCHEV, P. “Deformation and Recrystallization Texture Control in 6016 Al alloy” Proceeding of Int. Conference ICAA-11. Edited by J. Hirsch, B. Skrotzki, G. Gottstein. Wiley-VCH Verlag GmbH&Co. KGaA, Weinheim-2008. (ISBN: 978-3-527-32367-8) Vol.2, pp.1149-1155.
 24. STOYKA, V. - KOVÁČ, F. - SIDOR, J.: The Effect of Temperature on Grain Growth Character in 3% Si Grain Oriented Steels. In: 1st Afro-Asian Conference on Advanced Materials Science and Technology. AMSAT 06. Proceeding of the conference. Cairo, Egypt. November 13-16, 2006, pp.425-434.
 25. SIDOR, Y. - KOVAC, F.- DZUBINSKY M.: Microstructure and favorable texture development in non-oriented electrical steels. In: 2nd Int. Conference on Thermomechanical Processing of Steels-2004. Liege 15-17 June, 2004. Ed. M. Lamberights. Stahleisen. (ISBN: 3-514-00704-7) 514-522.
 26. SIDOR, Y. - KOVAC, F. - PETRYCHKA, V. Modelling of ferrite grain growth in non-oriented electrical steels. Collection of Papers Presented at the “*Metallography 2004*”, 12th International Symposium on *Metallography, Stara Lesna.*, Slovakia, 28-30 April 2004. Acta metallurgica Slovaca. 10, 2004, (ISSN 1335 - 1532) pp. 698-701.
 27. PETRYCHKA, V. - KOVAC, F. - SIDOR, Y. Grain boundary engineering in non-oriented electrical steels. Collection of Papers Presented at the “*Metallography 2004*”, 12th International Symposium on *Metallography, Stara Lesna, Slovakia, April 28-30, 2004.* Acta metallurgica Slovaca. 10, 2004, (ISSN 1335 - 1532) pp. 702-705.
 28. SIDOR, Y. - KOVAC, F. - DZUBINSKY, M.: Modelling of Decarburization in Electrical Steels. In: Soft Magnetic Materials. In: Soft Magnetic Materials. 16th Int. Conference. Düsseldorf, 9.-12.9.2003. Max-Planck Inst.Eisenforschung, 2003. Ed. D. Raabe. Stahleisen. pp.475-480.
 29. SIDOR, Y. - KOVAC, F.: Grain Boundary Oxidation in Non-Oriented Electrical Steels. In: Fractography 2003. International Conference. Stara Lesna, Slovakia. November 9-12, 2003. Ed. L.Parilak. Kosice : UMV SAV 2003, pp.373-379.

30. SIDOR, Y, KOVAC, F: "Contribution to Modelling of Decarburization Process in Non-Oriented Electrical Steels". EUREKA-2003. Int. conf. of young scientists. Lviv, Ukraine. May 21-23, 2003. Visnyk of Lviv University. Series Physical, 2005, No8 (ISSN 2078-7669) pp. 8-17.
31. SIDOR, Y, KOVAC, F: "Microstructure quantification of non-oriented electrical steels". EUREKA-2002. Int. conf. of young scientists. Lviv, Ukraine. May 22-24, 2002. Visnyk of Lviv University. Series Physical, 2004, No37 (ISSN 2078-7669) pp. 74-84.
32. SIDOR, Y. - KOVAC, F. - NOVAK, L. - KRAVCAK, J.: "Influence of Heat Treatment Parameters on Magnetic Properties of Non-Oriented Electrical Steels". Collection of Papers Presented at the International Conference "Physics 2002" on occasion of 50th Anniversary of Physical Department in Technical University Košice. Acta Electrotechnica et Informatica, 2, 2002, 3, (ISSN 1335-8243) pp. 96-101.
33. STOYKA, V. - PETRYCHKA, V. - SIDOR, Y. - KOVAC, F.: Effect of Second Phase Particles on Grain Growth in Electrical Steels. SEMDOK-2005. International conference. Zilina - Sulov, Slovakia. January 27-28, 2005, Ed. P. Surovec, pp. 137-140.