

Dr.habil. SIDOR Jurij

PERSONAL DATA

YEAR OF BIRTH: 1977

CONTACT: JS@inf.elte.hu

EDUCATION

Year	Institution	Title of qualification awarded
2000/03	Institute of Materials Research, Slovak Academy of Sciences	Ph.D. in Materials Engineering and Critical State of Materials
1994/99	Uzhgorod National University, Faculty of Physics, Ukrainian Ministry of Education	Engineer in physics and technology of materials and components of electronic technique (honours diploma)

PhD THESIS: “MICROSTRUCTURE DEVELOPMENT IN ISOTROPIC ELECTRICAL STEELS”, **Kosice, Slovakia - 2004.**












HABILITATION WORK: “TEXTURE EVOLUTION IN METALS DURING CONVENTIONAL AND INNOVATIVE PROCESING”, **Miskolc, Hungary - 2018.**

WORK EXPERIENCE

- Dates (from – to) **1.02.2017- present**
- Name and address of employer **Eötvös Loránd University**
Károlyi Gáspár tér 4, 9700 Szombathely, Hungary
- Type of business or sector Department of Materials Science and Engineering
- Occupation or position held **Associate Professor.**
Teaching, Research and Management
- Main activities and responsibilities
- Dates (from – to) **1.01.2015- 31.01.2017**
- Name and address of employer **University of West Hungary**
Károlyi Gáspár tér 4, 9700 Szombathely, Hungary
- Type of business or sector Department of Materials Science and Engineering
- Occupation or position held **Associate Professor.**
Teaching, Research and Management
- Main activities and responsibilities

- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
 - Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
 - Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
 - Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- 1.05.2009- 31.12.2014**
Ghent University
 Technologiemark 903, B-9052 Zwijnaarde, Belgium
 Department of Materials Science and Engineering
Research Associate. Doctor Assistant from 1.09.2010.
 Investigation of microstructural and crystallographic changes during thermo-mechanical processing in metallic materials
- 1.05.2006- 1.05.2009**
Materials Innovation Institute (M2i) and Delft University of Technology
 Mekelweg 2, 2628 CD Delft, The Netherlands
 Department of Materials Science
PostDoctoral Researcher
 Investigation of microstructural changes in asymmetrically rolled aluminum alloys
- 1.09.2003- 1.05.2006 (unpaid leave until 1.09.2013)**
Institute of Materials Research, Slovak Academy of Sciences, Watsonova 47, Kosice 043 53, Slovak Republic
 Department of Microstructural Engineering of Steel
Scientific Researcher (Research Associate)
 Steel investigation and development of new steel types/qualities
- 1.09.2000-1.09.2003**
Institute of Materials Research, Slovak Academy of Sciences, Watsonova 47, Kosice 043 53, Slovak Republic
 Research in the material science field
PhD Researcher
 Steel investigation and development of new steel types/qualities

AWARDS

-  **Outstanding Elsevier Reviewer Recognition - 2017. Materials Characterization.**
-  **Elsevier Reviewer Recognition - 2017. Journal Of Alloys And Compounds.**
-  **Outstanding Elsevier Reviewer Recognition - 2016. Materials Science & Engineering A.**
-  **Outstanding Elsevier Reviewer Recognition - 2016. Materials Characterization.**
-  **Elsevier Reviewer Recognition - 2016. Materials Characterization.**
-  **Elsevier Reviewer Recognition - 2015. International Journal of Mechanical Sciences.**
-  **Elsevier Reviewer Recognition - 2015. Materials Science & Engineering A.**
-  **Elsevier Reviewer Recognition - 2015. Journal Of Alloys And Compounds.**
-  **Elsevier Reviewer Recognition - 2014. Journal Of Magnetism And Magnetic Materials.**
-  **Hans Wilfried Wagener Endowment Prize: “ISRS 2008 Conference – Best Paper”.**
-  **1st prize in the competition of Young Scientists of the Slovak Academy of Sciences in 2005.**

PARTICIPATION IN RESEARCH PROJECTS

Year	Institution	Project
2015- Present	ELTE, Hungary	“Innovative processing technologies, applications of energy engineering and implementation of wide range techniques for microstructure investigation” within the Széchenyi 2020 program.
2009/2015	Ghent University, Belgium	<p>“Multiscale mechanics of interface dominated Materials ” within Inter University Attraction Poles Programm.</p> <p>Formability improvement of 6xxx alloys for automotive applications.</p> <p>Engineering of 3D microstructures in metals: bridging ten length scales of functionality.</p> <p>Microstructure and texture control in severely deformed metals.</p> <p>Microstructural characteristic of high strength steel (in collaboration with M2i).</p> <p>Electrical Steel with improved magnetic characteristics by asymmetric hot and cold rolling (in collaboration with TU Delft).</p>
2006/09	Materials Innovation Institute (M2i), Delft, The Netherlands	Texture control in aluminium sheet for automotive applications by asymmetric rolling.
2004/05	Institute of Materials Research, Kosice, Slovakia	Microstructural design of columnar structures with cubic texture in isotropic electrical steels.
2003/04	Institute of Materials Research, Kosice, Slovakia	<p>Simulation of rolling process for alternative rolling regime of IF and vacuum degassed non-oriented steels.</p> <p>Theoretical and experimental verification of slab reheating regime of grain-oriented steels.</p>
2003	Institute of Materials Research, Kosice, Slovakia	<p>Segregation in electrical steels and its influence on utilitarian properties of sheets.</p> <p>Physical and metallurgical aspects of the production of non-oriented strips from degassed steel.</p>
2001/03	Institute of Materials Research, Kosice, Slovakia	Precipitation and Restoring Processes Interaction During Recrystallization Annealing.
2000/01	Institute of Materials Research, Kosice, Slovakia	Secondary Recrystallization and Microstructure Design of Electrotechnical Steels.

ACADEMIC AND RESEARCH EXPERIENCES

LECTURING AND PRACTICAL CLASSES FOR THE COURSES:

Eötvös Loránd University (2017-present):

- Materials Science;
- Materials Characterization;
- Materials Technology.

University of West Hungary, Hungary (2015-2017):

- Materials Science;
- Materials Characterization;
- Materials Science and Technology;
- Materials Technology.

Ghent University, Belgium (2009-2015):

- Fracture and deformation behaviour of metals;
- Non-ferrous metals;
- Materials Characterization;
- Physical Materials Science;
- Microstructural characteristics of materials.

REVIEWER FOR THE FOLLOWING JOURNALS:

- Materials Characterization;
- Journal of Materials Science 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.

MODELLING EXPERIENCES

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;
- GIA model;

III. MODELLING THE RECRYSTALLIZATION TEXTURES:

- RX model (**self-designed**);

EXPERIMENTAL EXPERIENCES

- Heat treatments of metals and alloys;
- Optical metallography;
- X-ray diffraction;

- Scanning Electron Microscopy (advanced user: Philips, Jeol);
- Mechanical testing;
- Microstructure analyses;
- Texture analyses;
- Thin film deposition.

COMPUTER SKILLS AND COMPETENCES

- **OS:** Windows, DOS;
- **Microsoft Office** (advanced user);
- **Image editors:** Paintshop Pro, IrfanView, MS Photo Editor, Adobe Photoshop;
- **Drawing and analytical programs:** MS Excel, Origin, Statmost;
- **Image Analyzers:** DIPS-5; Image Pro Plus 4.5, ImageJ.
- **Programming Language: C++.**

LANGUAGES

MOTHER TONGUES: **UKRAINIAN, SLOVAK**

OTHER LANGUAGES: **ENGLISH, HUNGARIAN, CZECH, DUTCH, RUSSIAN**

HOBBIES

- History;
- Music;
- Traveling;
- Climbing;
- Hiking;
- Cycling;
- Microelectronics and Computers;
- Cooking.

DRIVING LICENCE: AM, B.

SCIENTIFIC OUTPUTS

CITATIONS FROM THE SCOPUS DATABASE

Total nr. of citations: 551

H-index: 14

More detailed info @: <http://www.scopus.com/authid/detail.url?authorId=23969497000>

PUBLICATIONS

BOOKS AND BOOK CHAPTERS:

1. 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.
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. <http://dx.doi.org/10.1016/B978-0-08-096532-1.00324-1>
<http://www.sciencedirect.com/science/article/pii/B9780080965321003241>
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
<http://www.tandfonline.com/doi/book/10.1081/E-EISA> <http://dx.doi.org/10.1081/E-EISA-120050410>

JOURNAL PAPERS (Publications in journals with impact factor):

PUBLISHED

1. 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).
2. 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).
3. 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)
4. SIDOR, 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)
5. 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)
6. 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)
7. 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)
8. 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)
9. 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)
10. 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)
11. 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)
12. NGUYEN-MINH T. – SIDOR, J.J. – PETROV, R.H. – KESTENS, L.A.I. "Occurrence of shear bands in rotated Goss ($\{110\}<110>$) orientations of metals with bcc crystal structure" **Scripta Materialia**. Vol. 67, 2012, pp. 935-938. (IF= 2.821)

13. 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)**.
14. 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)**
15. 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)**
16. 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)**
17. 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)**
18. 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)**
19. 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)**
20. 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)**
21. 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)**
22. 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)**
23. 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)**
24. 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)**
25. 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)**
26. SIDOR, Y. - KOVAC, F. – PETRYCHKA, V: Secondary recrystallization in non-oriented electrical steels. **Metallurgy** (Metalurgija). 44/3, 2005, pp.169-174. **(IF=0.208)**
27. 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)**
28. 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)**
29. 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)**
30. 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)**
31. 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)**
32. 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)**
33. 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. LAPEIRE, L. - SIDOR, J. - LOMBARDIA, E.M. - VERBEKEN, K. - DE GRAEVE, I. - TERRYN, 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.

2. VAN HOUTTE, P. - XIE, Q. - VAN BAEL, 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.
3. 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.
4. SHORE, D. -VAN BAEL - 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.
5. 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.
6. 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.
7. 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)
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. EYCKENS, P,- XIE, Q, - SIDOR, J.J. - DELANNAY, L. - VAN BAEL, 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.
15. 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.
16. 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.
17. 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.

18. SIDOR, J. - KESTENS, L. - MIROUX, A. - PETROV, R. "Recrystallization texture development under various thermo-mechanical conditions in aluminium alloys" Light Metals. Edited by Geoff Bearn., TMS, 2009. USA, (ISBN Number 978-0-87339-731-5, ISSN Number 109-9586), pp. 1221-1224.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.

CONFERENCE PRESENTATIONS

KEYNOTE LECTURES:

1. SIDOR, J. - PETROV, R. – 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 & Processing Technologies Conference. Madrid, Spain, December 14-17, 2015.

INVITED LECTURES:

1. SIDOR, J. - PETROV, R.H. – DECROOS, K. KESTENS, L.A.I. “Simulation of recrystallization in 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.
2. 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.
3. SIDOR J. “Modelling the Texture Evolution after Cold Rolling and Annealing of Hot Rolled Materials” MEFORM 2011, Freiberg, Germany, March 30 - April 1, 2011.
4. 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.

CO-AUTHORSHIP OF INVITED LECTURES:

1. 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.
2. 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.
3. 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.
4. KESTENS, L. - SIDOR, J. – PEROV, 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.
5. 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.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.
2. 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.
3. 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.
4. 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.
5. 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,.

6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. SIDOR, Y. - KOVAC, F.: Columnar Grain Growth in Non-Oriented Electrical Steels. SEMDOK-2003. International conference. **Zilina - Sulov, Slovakia**. January 21-22, 2003.
23. 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.
24. 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.
25. 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.
26. 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.

CHAIR OF SESSIONS:

1. **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.
2. **Section: Deformation Textures.** International Conference on Texture of Materials, ICOTOM-17. Dresden, Germany. 24-29 August, 2014.
3. **Session: Physics of plasticity and strength.** International Conference on Contemporary Problems of Metal Physics. Kyiv, Ukraine. 7–9 October, 2008.

CONFERENCE POSTER PRESENTATIONS:

1. NGUYEN MINH, T., - SIDOR J., - PETROV, R., KESTENS, L. A texture simulation of electrical steel after Asymmetrical Hot Rolling. "WMM'10 - 4th International Conference on Magnetism and Metallurgy". **Freiberg, Germany**. June 9 – 11, 2010.
2. SIDOR, J. - PETROV, R. – MIROUX, A., - KESTENS, L. Modelling the Recrystallization texture in Aluminum Alloys. "Building Bridges in Metallurgy – M2I International conference". **Nordwijkerhout, The Netherlands**. December 7-8, 2008.
3. SIDOR, J. - PETROV, R. – MIROUX, A., - KESTENS, L. Controlling the Plastic Anisotropy in Al alloys by Asymmetric Rolling. "Building Bridges in Metallurgy – M2I International conference". **Nordwijkerhout, The Netherlands**. December 10-11, 2007.
4. SIDOR, J. - PETROV, R. – MIROUX, A., - KESTENS, L. Texture Control in Al Alloys by Asymmetric Rolling Process. "Building Bridges in Metallurgy - NIMR conference". **Nordwijkerhout, The Netherlands**. December 11-12, 2006.
5. SIDOR, Y. - KOVAC, F.- PETRYCHKA, V - DZUBINSKY M.: Heat transport and grain growth in non-oriented electrical steels. "Soft Magnetic Materials 17". 17th Int. Conference. **Bratislava, Slovakia**. September 7-9, 2005.
6. SIDOR, Y. - KOVAC, F. - PETRYCHKA, V. Modelling of ferrite grain growth in non-oriented electrical steels. "Metallography 2004", 12th International Symposium on Metallography. **Stara Lesna, Slovakia**, April 28-30, 2004.
7. PETRYCHKA, V. - KOVAC, F. - SIDOR, Y. Grain boundary engineering in non-oriented electrical steels. "Metallography 2004", 12th International Symposium on Metallography, **Stara Lesna, Slovakia**, April 28-30, 2004.
8. SIDOR, Y. - KOVAC, F. - DZUBINSKY, M.: Modelling of Decarburization in Electrical Steels. "Soft Magnetic Materials 16". 16th Int. Conference. **Düsseldorf, Germany**. September 9-12, 2003.
9. SIDOR, Y. - KOVAC, F.: Grain Boundary Oxidation in Non-Oriented Electrical Steels. "Fractography 2003". International Conference. **Stara Lesna, Slovakia**. November 9-12, 2003.
10. SIDOR, Y. - KOVAC, F.: Quantification of Microstructure and Evaluation of Mechanical Properties in Non-Oriented Electrical Steels. "5th International Symposium of Croatian Metallurgical Society -Materials and Metallurgy". **Šibenik, Croatia**. June 22-27. 2002.
11. SIDOR, Y. - KOVAC, F.: Microstructure Quantification and Prediction of Mechanical Properties of Non-Oriented Electrical Steels. Junior Euromat 2002. International Conference. **Laussane, Switzerland**. September 2-5, 2002.