

# Dr. Szidor György (Sidor Jurij)

Egyetemi docens

Eötvös Loránd Tudományegyetem, Informatikai Kar

Savaria Műszaki Intézet

9700 Szombathely, Károlyi Gáspár tér 4.

Tel: +36 94 504 318

E-mail: sj@inf.elte.hu

## VÉGZETTSÉG ÉS FOKOZATOK

---

- 2004/02**      **Ph.D. Mérnöki és Anyagtudományokban**  
Title of dissertation: *Microstructure development in isotropic electrical steels*  
Institute of Materials Research, Slovak Academy of Sciences, Kosice, Slovakia
- 1999/06**      **Okleveles Mérnök-fizikus**  
Diplomaterv címe: *Effect of contact type on mechanism of charge carrying in heterostructures*  
*Ge<sub>33</sub>As<sub>12</sub>Se<sub>55</sub>-Si*  
Ungvári Állami Egyetem – Fizika Kar: Szilárdtest-fizikai Tanszék, Ungvár, Ukrajna

## MUNKAHELYEK

---

- 2017 -**      **Egyetemi docens**  
Eötvös Loránd Tudományegyetem, Informatikai Kar:  
Savaria Műszaki Intézet
- 2015 – 2017**      **Egyetemi docens**  
Nyugat-magyarországi Egyetem, Természettudományi és Műszaki Kar:  
Savaria Műszaki Intézet, Gépészeti Intézeti Tanszék
- 2010 – 2015**      **Doktor-asszisztens**  
Ghent University, Faculty of Engineering and Architecture, Department of Materials Science and Engineering, Ghent, Belgium
- 2009 – 2010**      **Kutató**  
Ghent University, Faculty of Engineering and Architecture, Department of Materials Science and Engineering, Ghent, Belgium
- 2006 – 2009**      **Kutató**  
Materials Innovation Institute (M2i), Delft, Holland
- 2003 – 2006**      **Kutató**  
Institute of Materials Research, Slovak Academy of Sciences, Department of Microstructural Engineering of Steels, Kosice, Slovakia
- 2000 – 2003**      **Doktorandusz**  
Institute of Materials Research, Slovak Academy of Sciences, Department of Microstructural Engineering of Steels, Kosice, Slovakia

## **KUTATÁSI TERÜLETEK**

---

**A kutatási terület vonatkozik az anyagtudományi és fém technológiára.** Ez magába vonja a kísérleti vizsgálatokat és a fémek termo-mechanikai folyamatok modellezést különböző numerikus módszerekkel:

- A fém deformáció folyamat modellezése véges-elem módszerrel.
- A deformáció mezők szimuláció az anyag vonal megfolyási modellel és analitikai módszerekkel.
- A mikro-szerkezeti és kristály változás kísérleti megfigyelése a deformáció és hőkezelés alatt a röntgen és Electron visszaszórásos diffrakcióval (EBSD).
- Crystal plaszticitás modellezése a textúra változása a fémek deformáció során.
- A kristály/szemcse nukleáció és növekedés jelenségek vizsgálata a kristály textúra szempontból a termikusan kezelt anyagokban.
- A fémek kristály textúra evolúció numerikus szimulációja újrakristályosodás során.

## **OKTATOTT TANTÁRGYAK**

---

### **Előadóként és Gyakorlatvezetőként a Genti Egyetemen**

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

## **NYELVISMERET**

---

- Angol: felsőfokon ír, olvas és beszél (C1)
- Ukrán: Anyanyelvi (C2)
- Slovák: felsőfokon ír, olvas és beszél (C1)
- Magyar: felsőfokon ír, olvas és beszél (C1/C2)
- Czech: középfokon ír, olvas és beszél (B2)
- Orosz: felsőfokon ír, olvas és beszél (C1)
- Holland: Alapfokon ír, olvas és beszél (A2)

## **SOFTWARE ISMERETEK**

---

### **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);

## **TUDOMÁNYOS ÉS SZAKMAI SZERVEZETEK BEN VÉGZET TEVÉKENYSÉG**

### **Bíráló a következő nemzetközi tudományos folyóiratokban**

- Materials Characterization;
- Journal of Alloys and Compounds;
- Journal of Materials Science and Technology;
- Materials Science and Engineering A;
- Journal of Materials Science;
- Journal of Magnetism and Magnetic Materials;
- Modelling and Simulation in Materials Science and Engineering;
- Journal of Materials Engineering and Performance;
- Acta Metallurgica Slovaca.

### **Tudományos bizottságokban betöltött szerepei**

- Áttekintés és tudományos értékelése a Cseh Tudományos Alapítvány kutatási projekteknek (<http://review.grant.gacr.cz>)
- Áttekintés és tudományos értékelése az Európai Regionális Fejlesztési Alap projekteknek
- Tagja a PhD védés bizottságnak a Genti egyetemen, Belgiumba  
2014: Zsúri tagja a Kyooyoung Lee PhD védés bizottságnak  
2011 : Zsúri tagja a Koen Decroos PhD védés bizottságnak
- Tagja a magister védés bizottságnak a Genti egyetemen, Belgiumba  
2014: Zsúri tagja az Athina Puype és Gonzalo Trigo Gil magisteri védés bizottságnak.  
2013: Zsúri tagja a Sebastian Peelman magisteri védés bizottságnak.  
2011: Zsúri tagja a 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 és Miguel Fernandez Mendez magisteri védés bizottságnak.

### **Szekció elnöke a nemzetközi konferenciákon**

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

## **ELNYERT DÍJAK**

- 2008:** Hans Wilfried Wagener díj: “ISRS 2008 International Conference – Best Paper”.
- 2006:** Első helyezés a fiatal tudományos munkatársak körében a Szlovák Tudományos Akadémian – 2005-ben.
- 2006:** Különdíj a 2005 év tudományos munkatársa pályázatban Szlovákiába

## **ÖSZTÖNDÍJAK**

**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:** 9<sup>th</sup> International Summer School on Aluminium Alloy Technology, The Norwegian University of Science and Technology and SINTEF Materials and Chemistry, Trondheim, **Norway.**

## PUBLIKÁCIÓK

---

### Könyv, könyvfejezet, monográfia

1. 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. ISBN-10: 0080965326, ISBN-13: 978-0080965321 (Released: May, 2014). <http://store.elsevier.com/Comprehensive-Materials-Processing/isbn-9780080965321/>
2. Petrov, R.H. - Sidor, J. - Kestens, L.A.I. “Microstructure and Texture Evolution in Advanced High Strength Steels” Encyclopedia of Iron, Steel, and Their Alloys, Editors R. Colas and G.E. Totten., Accepted for publication in 2013. Taylor & Francis LLC Encyclopedia Program, U.S.A. (Expected release: September 15, 2015). ISBN 13: 9781466511040, ISBN 10: 1466511044 <http://www.bookdepository.com/Encyclopedia-Iron-Steel-Their-Alloys-George-E-Totten/9781466511040>

### Lektorált, impact factor-ral rendelkező, cikkek:

1. Sidor, J. – Decroos, K. - Petrov, R. - 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. 2014 (<http://dx.doi.org/10.1016/j.ijplas.2014.08.009>) (IF=5.971).
2. 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=2.163)
3. 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=3.940)
4. 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=1.627)
5. 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)
6. 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)
7. Sidor, J.J. – Verbeke, K – Gomes, E. – Schneider, J. – Calvillo, P.R. - Kestens L.A.I. “Through process texture evolution and magnetic properties of high Non-oriented electrical steels” Materials Characterization. 71, 2012, pp. 49-57. (IF= 1.496).
8. 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)
9. 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= 2.0)
10. Sidor, J. - Petrov, R. - Kestens, L.A.I. “Microstructural Changes in Severely Deformed Aluminum Alloys” Materials Characterization Vol. 62, 2011, pp. 228-236. (IF= 1.488)
11. 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= 2.21)
12. 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= 2.0)
13. 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=3.624)
14. 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=1.486)
15. 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=1.457)
16. 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)

17. 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)
18. 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)
19. 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)
20. Sidor, Y. - Kovac, F. - Petrychka, V: Secondary recrystallization in non-oriented electrical steels. *Metallurgy (Metalurgija)*. 44/3, 2005, pp.169-174. (IF=0.208)
21. 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)
22. 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)
23. 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)
24. 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)
25. 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)
26. 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=0.1)
27. 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)

#### **Konferencia cikkek**

1. 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.
2. 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.
3. 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)
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.

10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. Sidor, J., Zhuang, L., Van der Winden, M., Kestens, L. "Effect of asymmetric rolling on texture and anisotropy of AA6016 alloy 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.
18. 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.
19. Stoyka, V., Kovac, 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.
20. 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. Lamberichts. Stahleisen. (ISBN: 3-514-00704-7) 514-522.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.

27. 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.
28. 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.

#### **Meghívott konferencia Előadások:**

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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.