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Научном већу
Института Техничких Наука САНУ
Кнез Михаилова 35, 11080 Београд

М о л б а

Молим Научно веће Института Техничких Наука САНУ да у складу са
Правилником о поступку и начину вредновања и квантитативном
исказивању научно-истраживачких резултата покрене поступак за избор
др Александра Митрашиновића у звање научни сарадник.

За чланове комисије за припрему извештаја Научном већу предлажем:

1. Академик Професор Др Дејан Поповић, Председник Управног Одбора ИТН-САНУ
2. Академик Професор Др Зоран Ђурић, Директор ИТН-САНУ
3. Академик Професор Др Велимир Радмиловић, Редовни професор Технолошко-металуршког факултета

У прилогу достављам:

1. Стручну биографију
2. Библиографију
3. Листу цитата
4. Диплому о стеченом звању доктора наука

У Београду, 09.01.2018.

Подносилац захтева

др Александар Митрашиновић

Стручна биографија

др. Александар Митрашиновић

Др Александар Митрашиновић је завршио Прву Београдску гимназију на смеру Техничар за неорганску хемију. Дипломирао је на Технолошко Металуршком Факултету Универзитета у Београду 1997. године са темом „Numerical modeling and computer simulation of the BOF process using mass and energy balance” и стекао звање дипломирани металург. Магистрирао је на Факултету за машинство, материјале и аутоапликације Универзитета у Виндзору 2004. године, са темом „Development of thermal analysis and analytical techniques for the assessment of porosity and metallurgical characteristics in 3XX aluminum alloys” и стекао звање магистар наука. Докторирао је на Факултету за науке о материјалима и инжињерство Универзитета у Торонту 2010. године, са темом „Characterization of the Copper-Silicon System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications” и промовисан у доктора наука о материјалима.

Током студија (1995-1997) је био ангажован у Српском хемијском друштву и катедри за металургију гвожђа и челика Универзитета у Београду на пословима помоћи у организовању конференција и објављивању часописа Српског Хемијског Друштва. Од 1997 до 1999. године је био запослен у Ливници Вршац као руководилац производње. Током 1999-те је неколико месеци провео у Железари Смедерево на имплементацији свог дипломског рада у погону челичане. Затим је од 1999 до 2001 радио у ливници уметничког лива Симком из Београда на организацији производње уметничког лива и продаје Morganite Thermal Ceramics ливачких лонаца. Од 2005 је запослен на Универзитету Торонту, где је ангажован на припреми и реализацији пројекта финансираних од стране Natural Sciences and Engineering Research Council of Canada (NSERC), Ontario Centre of Excellence (OCE), Mathematics of Information Technology and Complex Systems (MITACS) and the Southern Ontario Development Program (SODP) као и од независно финансираних удружења. У периоду од 2010 до 2013 је био запослен од Универзитета Ватерлоо као координатор између два универзитета на пројектима везаним за рециклирање отпада, производњу наночестица и добијању енергије из биомасе.

Мултидисциплинарна истраживачка делатност др. Митрашиновића захвата области металуршких процеса, карактеризације материјала, математичког моделовања природних процеса, конверзије енергије и размене топлоте. У овом тренутку, највећа пажња је усмерена ка пројектима везаним за израду фотонапонских материјала, анализе одрживости конверзије биомасе у енергију и издавање метала из електронског отпада. Такође, кандидат активно учествије у програмима за развој напредних размењивача топлоте, материјала и премаза високе чврстоће и други пројекти весани за железнице и одбрамбене индустрије.

Др Митрашиновић је до сада као аутор или коаутор израдио преко 50 радова у научним часописима, конференцијским објавама, индустриским и консултантским извештајима. Четири рада припадају у барем једној облати међународним часописима изузетних вредности, седам радова врхунским међународним часописима и шест истакнутим међународним часописима.

Стечене дипломе и историја запослења

др. Александар Митрашиновић

Дипломе:

University of Toronto, (2005-2010)

Ph.D. in Materials Science and Engineering received 2010.

Dissertation: Characterization of the Copper-Silicon System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications

University of Windsor, (2001-2004)

M.S. in Mechanical, Automotive and Materials Sci. Engineering received 2004.

Thesis: Development of thermal analysis and analytical techniques for the assessment of porosity and metallurgical characteristics in 3XX aluminum alloys

University of Belgrade, (1991-1997)

B.S with honors in Metallurgy and Materials Science received 1997.

Thesis: Numerical modeling and computer simulation of the BOF process using mass and energy balance

Прва Београдска Гимназија, 1989

Техничар за неорганску хемију

Историја запослења:

Founding director and Chief Technology Officer, (2014-present)
SuperSilicon Ltd

Materials Scientist at the University of Toronto, (2010-2014)
Materials, Mechanical and Industrial Engineering

Research Fellow and Waste-to-Energy Program Coordinator at the University of Waterloo,
(2010-2013)
Mechanical and Mechatronics Engineering

PhD Candidate at the University of Toronto, (2005-2010)
Applied Science & Engineering

Research Fellow and Quality Control Engineer
FORD/Nemak Industrial Research Chair, University of Windsor, (2001-2004)
Automotive, Mechanical and Materials Engineering

Production Manager and Area Sales Manager
Simcom Co. & Morganite Thermal Ceramics Ltd, (1999-2001)

Production Engineer – BOF Specialist
Sartid 1913, Steel Plant, (1999)

Plant Manager
Hagetec-Vrsac Foundry, (1997-1999)

Библиографија
др Александар Митрашиновић на дан 09. Јануар 2018.

M21a

1. A. M. Mitrašinović
Photo-catalytic Properties of Silicon and Its Future in Photovoltaic Applications,
Renewable & Sustainable Energy Reviews, (2011) 15:3603–3607.
<http://dx.doi.org/10.1016/j.rser.2011.05.017>
M21a, 4/81 Energy & Fuels IF:6.018 (2011)

M21

2. L. Pershin, A. Mitrasinovic and J. Mostaghimi
Treatment of Refractory Powders by a Novel, High Enthalpy DC Plasma,
Journal of Physics D: Applied Physics, (2013) 46(22), 224019.
<http://dx.doi.org/10.1088/0022-3727/46/22/224019>

M21, 26/125 Physics, Applied IF=2,544 (2011)

3. A. M. Mitrašinović, R. D'Souza and T. Utigard
Impurity Removal and Overall Rate Constant during Low Pressure Treatment of Liquid Silicon
Journal of Materials Processing Technology, (2012) 212:78-82.
<http://dx.doi.org/10.1016/j.jmatprotec.2011.08.006>
M21a, 4/43 Engineering, Industrial IF:1.78)2011=
M21, 66/241 Materials Science, Multidisciplinary, IF=1,953 (2012)
4. A. M. Mitrašinović and F. Robles Hernandez
Determination of the Growth Restriction Factor and Grain Size for Aluminum Alloys by a Quasi-Binary Equivalent Method,
Materials Science and Engineering A, (2012) 540:63–69.
<http://dx.doi.org/10.1016/j.msea.2012.01.072>
M21a, 6/76 Metallurgy & Metallurgical Engineering IF:2.11 (2012)
M21, 60/241 Materials Science, Multidisciplinary, IF=2,108 (2012)

M22

5. A. M. Mitrašinović and A. Wolf
Separation and Recovery of Valuable Metals from Nickel Slags Disposed in Landfills,
Separation Science and Technology, (2015) 50(16), 2553-2558.
<http://dx.doi.org/10.1080/01496395.2015.1056360>
M23, 246/260 Materials Science, Multidisciplinary IF:0,38 (2014)
M22, 88/148 Chemistry, Multidisciplinary IF=1,200 (2013)!
6. A. M. Mitrašinović and F. Robles Hernandez
Comparison of solar Si feedstock,
Journal of Thermal Analysis and Calorimetry, (2014) 115(1), 177-183.
<http://dx.doi.org/10.1007/s10973-013-3245-6>
M22, 33/76 Chemistry, Analytical IF: 2.206 (2014)
7. K. Visnovec, C. Variawa, T. Utigard and A. M. Mitrašinović
Elimination of impurities from the surface of silicon particles using hydrochloric and nitric acid,
Materials Science in Semiconductor Processing, (2013) 16, 106-110.
<http://dx.doi.org/10.1016/j.mssp.2012.06.009>
M22, 76/248 Engineering, Electrical & Electronic IF: 1.76 (2013)
M22, 88/251 Materials Science, Multidisciplinary, IF=1,761
8. A. M. Mitrašinović, R. D'Souza, T. Utigard and J. Z. Wen
Modeling of high temperature low pressure silicon refining process,
Mineral Processing and Extractive Metallurgy Review, (2013) 34(5) 331-339.
<http://dx.doi.org/10.1080/08827508.2012.684191>
M22, 33/75 Metallurgy&Metallurgical Engineering IF:0.690 ili 10/21 Mining&MineralProcessing (2013)

9. Z. Wang, A. Mitrašinović and J. Wen
 Investigation on Electrostatically Breaking-up of Bio-oil Droplet, Energies, (2012) 5:4323-4339.
<http://dx.doi.org/10.3390/en5114323>
M22, 35/81 Energy & Fuels IF:1.865 (2011)
10. A. M. Mitrašinović and T. Utigard
 Cu Removal from Hypereutectic Cu-Si Alloys by Heavy Liquid Media Separation,
 Metallurgical and Materials Transactions B, (2012) 43(2):379-387.
<http://dx.doi.org/10.1007/s11663-011-9614-2>
 M21, 16/76 Metallurgy & Metallurgical Engineering; IF:1.21 (2012)
M22, 124/241 Materials Science, Multidisciplinary, IF=1,212 (2012)
11. A. M. Mitrašinović and R. D'Souza
 Hydrogen effervescence from the aluminum alloy melts,
 JOM (2012), 64(12), 1448-1452.
<http://dx.doi.org/10.1007/s11837-012-0472-4>
 M21, 12/75 Metallurgy & Metallurgical Engineering; IF:1.42 (2011)
M22, 103/241 Materials Science, Multidisciplinary, IF=1,421 (2011)
12. A. Mitrasinovic, L. Pershin, J. Wen and J. Mostaghimi
 Recovery of Cu and Valuable Metals from E-waste Using Thermal Plasma Treatment
 JOM, (2011) 63(8):22-26.
<http://dx.doi.org/10.1007/s11837-011-0132-0>
 M21, 12/75 Metallurgy & Metallurgical Engineering; IF:1.42 (2011)
M22, 103/241 Materials Science, Multidisciplinary, IF=1,421 (2011)
13. A. M. Mitrašinović and T. Utigard
 Trace element distribution in Cu-Si alloys, Chemical Physics Letters, (2011) 515:72-77.
<http://dx.doi.org/10.1016/j.cplett.2011.08.080>
M22, 56/134 Chemistry, Physical IF:2.337 (2011)
14. M. Li, A. Mitrasinovic, G. Plascencia, A. Warczok and T. Utigard
 Silicon Rod Heat Generation and Current Distribution, Journal of Crystal Growth (2009) 312:141–145.
<http://dx.doi.org/10.1016/j.jcrysGro.2009.09.048>
M22, 8/25 Crystallography IF:1.95 (2007)
- M23
15. A. M. Mitrašinović
 On the assimilation mechanism of additives used in non-ferrous metals extraction processes
 Canadian Metallurgical Quarterly, (2015) 54(4), 494-49.
<http://dx.doi.org/10.1179/1879139515Y.0000000027>
M23, 55/73 Metallurgy&Metallurgical Engineering IF:0.509 (2014)
16. A. M. Mitrašinović and A. Wolf
 Effect of reductants on valuable metals recovery from Copper Cliff Converter Slag,
 High Temperature Materials and Processes, (2014) 33 (2), 123-129.
<http://dx.doi.org/10.1515/htmp-2013-0048>
M23, 246/260 Materials Sciences, Multidisciplinary IF=0,377 (2014)
- M71
17. A.Mitrasinovic, University of Toronto, Ph.D. in Materials Science and Engineering, 2010
 Dissertation: Characterization of the Copper-Silicon System and Utilization of Metallurgical
 Techniques in Silicon Refining for Solar Cell Applications.

Табела (2009. – 09. јануар 2018. год.)

Ознака групе	коригован број	вредност	кориговано укупно
M21a	1	10	10
M21	3	8	24
M22	10	5	50
M23	2	3	6
M71	1	6	6
	17	Укупно:	96

Списак цитираних радова

др. Александра Митрашиновића на дан 09. Јануар 2016.

Подаци прикупљени са Google Scholar и Scopus цитатних база. Укупан број цитата је 188 од којих су 163 хетероцитати и 25 аутоцитати. Списак научних радова дат је редоследом према опадајућим вредностима цитата.

Назив рада,

Часопис, број свеске, странице од-до

Година објављивања

Аутори

(Хетероцитати/Аутоцитати)

Списак:

Refining silicon for solar cell application by copper alloying, Silicon 1 (4), 239-248 AM Mitrašinović, TA Utigard	2010 (52/3)
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Хетероцитати:

1. Takeshi Yoshikawa , Kazuki Morita, An Evolving Method for Solar-Grade Silicon Production: Solvent Refining, JOM, August 2012, Volume 64, Issue 8, pp 946-951
2. Murray D. Johnston , Leili Tafaghodi Khajavi, Mark Li, Samira Sokhanvaran, Mansoor Barati, High-Temperature Refining of Metallurgical-Grade Silicon: A Review, August 2012, Volume 64, Issue 8, pp 935-945
3. Haruhiko Morito , Taiki Karahashi, Masahito Uchikoshi, Minoru Isshiki, Hisanori Yamane, Low-Temperature Purification of Silicon by Dissolution and Solution Growth in Sodium Solvent, Silicon, April 2012, Volume 4, Issue 2, pp 121-125
4. Zhao Ding, Wenhui Ma, , Kuixian Wei, Jijun Wu, Yang Zhou, Keqiang Xie, Boron removal from metallurgical-grade silicon using lithium containing slag, Journal of Non-Crystalline Solids, Volume 358, Issues 18–19, 15 September 2012, Pages 2708–2712
5. Lei Hu, Zhi Wang , Xuzhong Gong, Zhancheng Guo, Hu Zhang, Impurities Removal from Metallurgical-Grade Silicon by Combined Sn-Si and Al-Si Refining Processes, Metallurgical and Materials Transactions B, August 2013, Volume 44, Issue 4, pp 828-836
6. Yaqiong Li, Yi Tan, Jiayan Li, Qiang Xuc, Yao Liua, b, Effect of Sn content on microstructure and boron distribution in Si-Al alloy, Journal of Alloys and Compounds, Volume 583, 15 January 2014, Pages 85–90
7. Lei Hu, Zhi Wang, Xuzhong Gong, Zhancheng Guo, Hu Zhang, Purification of metallurgical-grade silicon by Sn-Si refining system with calcium addition, Separation and Purification Technology, Volume 118, 30 October 2013, Pages 699–703
8. Xiaodong Ma, , Takeshi Yoshikawa, Kazuki Morita, Purification of metallurgical grade Si combining Si-Sn solvent refining with slag treatment, Separation and Purification Technology, Volume 125, 7 April 2014, Pages 264–268
9. Jijun Wu , Yanlong Li, Wenhui Ma , Kai Liu, Kuixian Wei, Keqiang Xie, Bin Yang, Yongnian Dai, Impurities Removal From Metallurgical Grade Silicon Using Gas Blowing Refining Techniques, Silicon, January 2014, Volume 6, Issue 1, pp 79-85
10. Wen-zhou YU, Wen-hui MA, Guo-qiang LÜ, Yong-sheng REN, Hai-yang XUE, Yong-nian DAI, Si purification by enrichment of primary Si in Al-Si melt, Transactions of Nonferrous Metals Society of China, Volume 23, Issue 11, November 2013, Pages 3476–3481
11. Fumin Xu, Shenrui Wu, Yi Tan, Jiayan Li, Yaqiong Lia, Yao Liu, Boron Removal from Metallurgical Silicon using Si-Al-Sn Ternary Alloy, Separation Science and Technology, Volume 49, Issue 2, 2014, pp 305-310
12. Jijun Wu , Wenhui Ma, Bin Yang, Dachun Liu, Yongnian Dai, Silicon, Calculation and Characterization of Silicon-Boron Phases in Metallurgical Grade Silicon, October 2012, Volume 4, Issue 4, pp 289-295

13. Mark Li , Torstein Utigard, Mansoor Barati, Removal of Boron and Phosphorus from Silicon Using CaO-SiO₂-Na₂O-Al₂O₃ Flux, Metallurgical and Materials Transactions B, February 2014, Volume 45, Issue 1, pp 221-228
14. Yanlong Li, Jijun Wu, Wenhui Ma, Kinetics of Boron Removal from Metallurgical Grade Silicon using a Slag Refining Technique Based on CaO-SiO₂ Binary System, Separation Science and Technology, Volume 49, Issue 12, 2014
15. Yaqiong Li, Yi Tana, Jiayan Li, Kazuki Morita, Si purity control and separation from Si-Al alloy melt with Zn addition, Journal of Alloys and Compounds, Volume 611, 25 October 2014, Pages 267–272
16. J.C. Jie, Q.C. Zou, H.W. Wang, J.L. Sun, Y.P. Lu, T.M. Wang, T.J. Li, Separation and purification of Si from solidification of hypereutectic Al-Si melt under rotating magnetic field, Journal of Crystal Growth, Volume 399, 1 August 2014, Pages 43–48
17. TAN Yi, GUO Xiaoliang, SHI Shuang , DONG Wei, JANG Dachuan, LI Jiayan, Research Status and Development of Metallurgical Method for Solar Grade Silicon(SOG—Si), Materials engineering-R / 2013 3, 90-96. doi : 103969/jissn1001-4381.2013.03.017
18. Y. Li, Y. Tan, P. Cao, J. Li, P. Jia, Y. Liu, Study on redistribution of boron during silicon solidification refining process in Si-Al melts, Materials Research Innovations, Volume 19, Issue 2, 2015
19. Wenzhou Yu, Wenhui Ma, Guoqiang Lv, Haiyang Xue, Shaoyuan Li, Yongnian Dai, Effect of electromagnetic stirring on the enrichment of primary silicon from Al-Si melt, Journal of Crystal Growth, Volume 405, 1 November 2014, Pages 23–28
20. Jing-wei Li, Zhan-cheng Guo, Jun-cheng Li, Li-zhi Yu, Super Gravity Separation of Purified Si from Solvent Refining with the Al-Si Alloy System for Solar Grade Silicon, Silicon, July 2015, Volume 7, Issue 3, pp 239-246
21. C. H. Lu, M. Fang, H. X. Lai, L. Q. Huang, J. Chen, J. T. Li, Z.L. Sheng, J.N. Shen, X.T. Luo, "Purification of Silicon by Solvent Refining with Si-Sn Alloy", Advanced Materials Research, Vols. 690-693, pp. 962-966, 2013
22. Siddharth V. Patwardhan, Stephen J. Clarson, Biological and Bioactive Silicon Systems, Silicon, January 2012, Volume 4, Issue 1, pp 1-3
23. Yanlong Li, Jijun Wu , Wenhui Ma, Bin Yang, Boron Removal from Metallurgical Grade Silicon using a Refining Technique of Calcium Silicate Molten Slag Containing Potassium Carbonate, Silicon, July 2015, Volume 7, Issue 3, pp 247-252
24. Leili Tafaghodi Khajavi, , Kazuki Morita, Takeshi Yoshikawa, Mansoor Barati, Thermodynamics of boron distribution in solvent refining of silicon using ferrosilicon alloys, Journal of Alloys and Compounds, Volume 619, 15 January 2015, Pages 634–638
25. M Fang, C H Lu, H X Lai, L Q Huang, J Chen, W H Ma, Z L Sheng, J N Shen, J T Li, X T Luo, Effect of solidification rate on representative impurities distribution in Si-Cu alloy, Materials Science and Technology, Volume 29, Issue 7, 2013
26. Scott T. Iacono , Stephen J. Clarson, Silicon and Energy, Silicon, October 2014, Volume 6, Issue 4, pp 211-213
27. K. Y. Kim, J. Y. Cho, K. H. Seo, "Efficiency in the Extraction of Pure Silicon from Al-Si Alloy Melts by a Combined Process of Solvent Refining and Centrifugation for Solar Silicon Feedstock", Advanced Materials Research, Vols. 652-654, pp. 1153-1156, 2013
- 28.Q.C. Zou, J.C. Jie, J.L. Sun, T.M. Wang, Z.Q. Cao, T.J. Li, Effect of Si content on separation and purification of the primary Si phase from hypereutectic Al-Si alloy using rotating magnetic field, Separation and Purification Technology, Volume 142, 4 March 2015, Pages 101–107
29. Shaghayegh, Esfahani, Solvent Refining of Metallurgical Grade Silicon Using Iron, PhD Dissertation, 31-Dec-2010 <http://hdl.handle.net/1807/25570>
30. Yi Tan, Xiao-liang GUO, Shuang SHI, Wei Dong, Da-chuan JIANG, Jia-yan LI, Research Status and Development of Metallurgical Method for Solar Grade Silicon (SOG-Si), Cailiao Gongcheng/Journal of Materials Engineering 03/2013; 3(3).
31. Multi-crystal silicon refining in the refining process of aluminum-silicon alloys, low-temperature, electrolytic separation, the Chinese scientific and technological periodicals, database of engineering and technology: the materials engineering, 2013.11
32. LI Yaqiong, LI Jiayan, TAN Yi, WU Shenrui, LIU Yao, Research Developments of Metallurgical Grade Silicon Refining by Al—Si Alloying Process, Materials guide A: synthesis essay 2012 vol. 26, No. 5, 6-20.
33. A silicon-based alloy to pure multi-crystalline silicon research progress, The material Bulletin 2011, No. 17, 37-41.

34. Sokhanvaran Samira, Molten Salt Electrodeposition of Silicon in Cu-Si, PhD Dissertation, Nov-2014, <http://hdl.handle.net/1807/68320>
35. Liuqing Huang, Huixian Lai, Chenghao Lu, Ming Fang, Wenhui Ma, Pengfei Xing, Jintang Li, Xuetao Luo, Enhancement in extraction of boron and phosphorus from metallurgical grade silicon by copper alloying and aqua regia leaching, *Hydrometallurgy*, Volume 161, May 2016, Pages 14–21
36. Leili Tafaghodi Khajavi , Kazuki Morita, Takeshi Yoshikawa, Mansoor Barati, Removal of Boron from Silicon by Solvent Refining Using Ferrosilicon Alloys *Metallurgical and Materials Transactions B*, April 2015, Volume 46, Issue 2, pp 615-620
37. Y. H. Sun, B. Wang, T. Lin, X. Lang, H. Y. Chen, "Thermodynamic Study of Removing Boron from Metallurgical Silicon by Si – Al Melt Refining", *Advanced Materials Research*, Vols. 550-553, pp. 2621-2624, 2012
38. Xiaodong Ma, Yun Lei, Takeshi Yoshikawa, Baojun Zhao, Kazuki Morita, Effect of solidification conditions on the silicon growth and refining using Si–Sn melt, *Journal of Crystal Growth*, Volume 430, 15 November 2015, Pages 98–102
39. R. Y. Chen, X. B. Yang, R. Z. Chen, S. Qiu, C. H. Gan, X. Zeng, J. T. Li, X. T. Luo, "Boron Removal from MG-Si by Slag Treatment with Copper Addition", *Advanced Materials Research*, Vol. 968, pp. 31-35, 2014
40. Jingwei Li, Boyuan Ban, Yanlei Li, Xiaolong Bai, Taotao Zhang, Jian Chen, Removal of Impurities from Metallurgical Grade Silicon During Ga-Si Solvent Refining, *Silicon*, 2015, pp 1-7
41. MELTS, SILICONALUMINUM-TIN. "Yaqiong Li!.", Yi Tan", Kazuki Morita"School of Materials Science and Engineering, Dalian University of Technology, Dalian." In EPD Congress 2015, p. 201. John Wiley & Sons, 2015
42. Han, Xiaofei, Bin Zhou, and Meng Tao. "Low-cost ultrapure (> 99.9999%) solar-grade Si by electrorefining." In Photovoltaic Specialists Conference (PVSC), 2013 IEEE 39th, pp. 0506-0510. IEEE, 2013.
43. Tafaghodikhajavi, Leili. "Thermodynamics of Impurity Removal in Solvent Refining of Silicon." PhD diss., University of Toronto, 2015.
44. Wu, Shen Rui, Fu Min Xu, Jia Yan Li, Yi Tan, and Ya Qiong Li. "Purification Efficiency and B Removal of Polysilicon during its Solidification from a Si-Al-Sn Melt." In *Advanced Materials Research*, vol. 772, pp. 68-71. 2013.
45. Zou, Qingchuan, Jinchuan Jie, Jinling Sun, and Tingju Li. "Si Purity Control and Separation from Solidification of Al-30Si Melt under Pulse Electromagnetic Field." In *Materials Science Forum*, vol. 817. 2015.
46. Clarson, Stephen John. "On Energy and Materials." *Silicon* 7, no. 3 (2015): 235-238
47. Li, Yaqiong, Yi Tan, and Kazuki Morita. "Directional Growth of Bulk Silicon from Silicon-Aluminum-Tin Melts." In EPD Congress 2015, pp. 197-208. John Wiley & Sons, Inc.
48. Purification of Silicon by Si-Fe Alloy Refining-High Temperature Quenching-Acid Leaching Process, *The Chinese Journal of Process Engineering*, 2014, 14(1)
49. Industrial silicon, external furnace refining refining, and wet leaching research and development, Kunming Polytechnic University: Natural Science Edition, 40, no. 2 (2015): 1-11.
50. Aluminum-silicon melt in rich primary crystal silicon to pure silicon, China non-ferrous metals University: English Edition, 11 (2013): 3476-3481.
51. L Huang, H Lai, C Lu, M Fang, W Ma, P Xing, J Li. "Enhancement in extraction of boron and phosphorus from metallurgical grade silicon by copper alloying and aqua regia leaching". *Hydrometallurgy*, 161(2016):14-21.
52. L Huang, H Lai, C Gan, H Xiong, P Xing. "Separation of boron and phosphorus from Cu-alloyed metallurgical grade silicon by CaO-SiO₂-CaCl₂ slag treatment". *Separation and Purification Technology*, 170 (2016):408-416.

Аутоцитати:

- Aleksandar M. Mitrašinović, Torstein A. Utigard, Trace elements distribution in Cu–Si alloys, *Chemical Physics Letters*, Volume 515, Issues 1–3, 17 October 2011, Pages 72–77
- Aleksandar M. Mitrašinović , Torstein A. Utigard, Copper Removal from Hypereutectic Cu-Si Alloys by Heavy Liquid Media Separation, *Metallurgical and Materials Transactions B*, April 2012, Volume 43, Issue 2, pp 379-387
- Characterization of the Cu-Si System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications
Author: Mitrasinovic, Aleksandar <http://hdl.handle.net/1807/26210>

On-line prediction of the melt hydrogen and casting porosity level in 319 aluminum alloy using thermal analysis

Materials Science and Engineering: A 428 (1), 41-46

2006

A Mitrasinovic, FCR Hernandez, M Djurdjevic, JH Sokolowski

(18/3)

Хетероцитати:

1. M. Mukherjee, F. Garcia-Moreno, and J. Banhart. "Solidification of metal foams." *Acta Materialia* 58.19 (2010): 6358-6370.
2. Zhang, Liqiang, Luoxing Li, and Biwu Zhu. "Simulation study on the LPDC process for thin-walled aluminum alloy casting." *Materials and Manufacturing Processes* 24.12 (2009): 1349-1353.
3. Mukherjee, Manas. "Evolution of metal foams during solidification." (2009).
4. Zhang, Liqiang, Luoxing Li, Shiuping Wang, and Biwu Zhu. "Optimization of LPDC process parameters using the combination of artificial neural network and genetic algorithm method." *Journal of materials engineering and performance* 21, no. 4 (2012): 492-499.
5. Zhu, Mingfang, et al. "Cellular Automaton Modeling of Microporosity Formation during Solidification of Aluminum Alloys." *ISIJ international* 54.2 (2014): 384-391.
6. Kumar GS Vinod, and Suresh Sundarraj. "A novel characterization technique to determine pore susceptibility of alloying elements in aluminum alloys." *Metallurgical and Materials Transactions B* 41.3 (2010): 495-499.
7. Zhengyang LI, Mingfang ZHU and Ting DAI. "Modeling of microporosity formation in an Al-7% Si alloy." *Acta Metall Sin* 49.9 (2013): 1032-1040.
8. "Al-7% Si alloy micro-pores to form a simulation study." *Metal Journal* 49.9 (2013): 1032-1040.
9. Brysch, C. N., E. Wold, M. Patterson, R. Ordoñez Olivares, J. F. Eberth, and FC Robles Hernandez, "Chitosan and chitosan composites reinforced with carbon nanostructures." *Journal of Alloys and Compounds* 615 (2014): S515-S521.
10. W Kasprzak, M Kasprzak, J Lin, J Mazurek, JH Sokolowski, "A NOVEL APPROACH FOR CAST COMPONENT POROSITY ASSESSMENT BASED ON CONTROLLED VACUUM RE-MELTING AND SOLIDIFICATION." 2001
11. D. Q. Shi, , H. Y. Tang, C. Li, G. L. Gao, D. Y. Li, and L. H. Wang. "The feasibility of acquiring a thermal analysis cooling curve by wet sample cup made of green sand." *JOM* 63, no. 5 (2011): 35-38.
12. Srivastava, Neeraj, and G. P. Chaudhari. "Strengthening in Al alloy nano composites fabricated by ultrasound assisted solidification technique." *Materials Science and Engineering: A* 651 (2016): 241-247.
13. Xu Zheng Bing, Yong Zhi Zou, Wen Chao Wang, and Jian Min Zeng. "An Investigation on the Hydrogen Content in Al-12Si Alloy Melt." In *Advanced Materials Research*, vol. 97, pp. 785-788. Trans Tech Publications, 2010.
14. PHETCHCRAI, Sompob, Supparit LUANKOSOLCHAI, Witthaya SAMIT, and Julathep KAJORNCHAIYAKUL. "EVALUATION OF HYDROGEN IN LIQUID ALUMINUM BY MEANS OF THERMAL ANALYSIS." 18. - 20. 5. 2010, Roznov pod Radhostem, Czech Republic, EU
15. Hernandez, Francisco C. Robles, and Anderson O. Okonkwo. "Laser Cladding of Welds to Improve Railroad Track Safety." (2015).
16. Silveira, Tânia Sofia Eiriz. "Estudo da variação da composição química, microestrutura e propriedades mecânicas da liga Al4, 5Cu submetida a fusão prolongada." (2013).
17. "Thermal analytical techniques for the detection of 319 aluminium alloy melt quality research." *Special casting and ferrous alloy*. 28, no. 5 (2008): 395-397.
18. Крушенко, Генрих Гаврилович. "ЭВОЛЮЦИЯ ТЕХНОЛОГИИ ИЗГОТОВЛЕНИЯ КОРПУСОВ НАСОСОВ ТУРБОНАСОСНОГО АГРЕГАТА ЖИДКОСТНОГО РАКЕТНОГО ДВИГАТЕЛЯ." *Вестник Сибирского государственного аэрокосмического университета им. академика МФ Решетнева* 5 (57) (2014).

Аутоцитати:

1. Mitrašinović, Aleksandar M., Ryan D'Souza, and Torstein A. Utigard. "Impurity removal and overall rate constant during low pressure treatment of liquid silicon." *Journal of Materials Processing Technology* 212.1 (2012): 78-82.
2. Mitrašinović, A. M., and FC Robles Hernández. "Determination of the growth restriction factor and grain size for aluminum alloys by a quasi-binary equivalent method." *Materials Science and Engineering: A* 540 (2012): 63-69.
3. Mitrašinović, Aleksandar M., and Ryan D'Souza. "Hydrogen Effervescence from Aluminum Alloy Melts." *JOM* 64, no. 12 (2012): 1448-1452.

Impurity removal and overall rate constant during low pressure treatment of liquid silicon

Journal of Materials Processing Technology 212 (1), 78-82

2012

AM Mitrašinović, R D'Souza, TA Utigard

(12/3)

Хетероцитати:

1. Wu, Jijun, Wenhui Ma, Binjie Jia, Bin Yang, Dachun Liu, and Yongnian Dai. "Boron removal from metallurgical grade silicon using a CaO–Li₂O–SiO₂ molten slag refining technique." *Journal of Non-Crystalline Solids* 358, no. 23 (2012): 3079-3083.
2. Huang Shuping, Wenhui Ma, Kuixian Wei, Shaoyuan Li, and Kazuki Morita. "A model for distribution of aluminum in silicon refined by vacuum directional solidification." *Vacuum* 96 (2013): 12-17.
3. Lee, Jun-Kyu, Jin-Seok Lee, Bo-Yun Jang, Joon-Soo Kim, Young-Soo Ahn, and Churl-Hee Cho. "Directional solidification behaviors of polycrystalline silicon by electron-beam melting." *Japanese Journal of Applied Physics* 52, no. 10S (2013): 10MB09.
4. Wei Kuixian, Damin Zheng, Wenhui Ma, Bin Yang, and Yongnian Dai. "Study on Al Removal from MG-Si by Vacuum Refining." *Silicon* 7, no. 3 (2015): 269-274.
5. Li Yanlong, Jijun Wu, Wenhui Ma, and Bin Yang. "Boron Removal from Metallurgical Grade Silicon using a Refining Technique of Calcium Silicate Molten Slag Containing Potassium Carbonate." *Silicon* 7, no. 3 (2015): 247-252.
6. "Real space refined in the refining industry silicon, among calcium studies." *Vacuum science and technology Journal* 9 (2014): 019.
7. Jiao Jianmeng, Wenhui Ma, Ying Sun, Dongping Tao, Xin Huang, Jijun Wu, and Yongnian Dai. "Application of molecular interaction volume model for predicting the Ca activity coefficients in Si Ca binary and Si Ca Pb ternary alloys." *Vacuum* 128 (2016): 106-111.
8. "Metallurgy law preparation of solar grade multi-crystalline silicon technology progress." *Materials guide: nano and new material album*, 29.1 (2015): 163-167.
9. Колобов, Г. А., Т. В. Критская, Ю. В. Мосейко, А. В. Карпенко, и К. А. Печерица. "Рафинирование металлургического кремния до чистоты сорта." *Металургія* 2 (2014): 118-126.
10. Lotto, André Alexandrino. Remoção de fósforo de silício por fusão a vácuo. Diss. Universidade de São Paulo, 2014.
11. TAN Yi, SHI Shuang, JIANG Da-Chuan, Progress in Research and Development of Solar-grade Silicon Preparation by Electron Beam Melting, *Journal of Inorganic Materials*, 08/2015; 30(8):785.
12. Bo Yun Jang, Jin Seok Lee, Joon Soo Kim, SiO_x Nanoparticles Synthesized by an Evaporation and Condensation Process Using Induction Melting of Silicon and Gas Injection, *Journal of Nanoscience and Nanotechnology* 13(5):3690-5, May 2013.

Автоцитати:

1. Mitrašinović, Aleksandar M., and Ryan D'Souza. "Hydrogen Effervescence from Aluminum Alloy Melts." *JOM* 64.12 (2012): 1448-1452.
2. Mitrašinović, Aleksandar M., Ryan JC D'Souza, Torstein A. Utigard, and John Z. Wen. "Modeling of High-Temperature Low-Pressure Silicon-Refining Process." *Mineral Processing and Extractive Metallurgy Review* 34, no. 5 (2013): 331-339.
3. Mitrašinović, Aleksandar M., and Francisco C. Robles Hernández. "Comparison of solar silicon feedstock." *Journal of Thermal Analysis and Calorimetry* 115, no. 1 (2014): 177-183.

Copper removal from hypereutectic Cu-Si alloys by heavy liquid media separation

Metallurgical and Materials Transactions B 43 (2), 379-387

2012

AM Mitrašinović, TA Utigard

(9/4)

Хетероцитати:

1. Johnston, Murray, Leili Tafaghodi Khajavi, Mark Li, Samira Sokhanvaran, and Mansoor Barati. "High-temperature refining of metallurgical-grade silicon: a review." *JOM* 64 (2012): 935-945.
2. Li Jing-wei, Zhan-cheng Guo, Jun-cheng Li, and Li-zhi Yu. "Super gravity separation of purified si from solvent refining with the Al-Si alloy system for solar grade silicon." *Silicon* 7, no. 3 (2015): 239-246.
3. Leili Tafaghodi Khajavi, Kazuki Morita, Takeshi Yoshikawa, and Mansoor Barati. "Thermodynamics of boron distribution in solvent refining of silicon using ferrosilicon alloys." *Journal of Alloys and Compounds* 619 (2015): 634-638.

4. Yu Wenzhou, Wenhui Ma, Guoqiang Lv, Yongsheng Ren, Yongnian Dai, and Kazuki Morita. "Low-Cost Process for Silicon Purification with Bubble Adsorption in Al-Si Melt." Metallurgical and Materials Transactions B 45, no. 4 (2014): 1573-1578.
5. Khajavi, Leili Tafaghodi, Kazuki Morita, Takeshi Yoshikawa, and Mansoor Barati. "Removal of Boron from Silicon by Solvent Refining Using Ferrosilicon Alloys." Metallurgical and Materials Transactions B 46, no. 2 (2015): 615-620.
6. J Li, Z Guo, J Li, L Yu. "Super gravity separation of purified si from solvent refining with the Al-Si alloy system for solar grade silicon". Silicon, 7(3) 2015:239-246.
7. T Tang, H Lai, Z Sheng, C Gan, P Xing, X Luo. "Effect of tin addition on the distribution of phosphorus and metallic impurities in Si-Al alloys". J. of Crystal Growth, 453(1) 2016:13-19.
8. "Industrial silicon, external furnace refining refining, and wet leaching research and development." Kunming Polytechnic University: Natural Science Edition, 40.2 (2015): 1-11.
9. W Yu, W Ma, G Lv, Y Ren, Y Dai, K Morita. "Low-cost process for silicon purification with bubble adsorption in Al-Si melt". Metallurgical and Materials Transactions B, 45(4) 1573-1578.

Англоситати:

1. Visnovec, Karl, Chirag Variawa, Torstein Utigard, and Aleksandar Mitrašinović. "Elimination of impurities from the surface of silicon using hydrochloric and nitric acid." Materials Science in Semiconductor Processing 16, no. 1 (2013): 106-110.
2. Mitrašinović, Aleksandar M., and Anton Wolf. "Effect of Reductants on Valuable Metals Separation and Recovery from Copper Cliff Converter Slag." High Temperature Materials and Processes 33, no. 2 (2014): 123-129.
3. Mitrašinović, Aleksandar M., and Francisco C. Robles Hernández. "Comparison of solar silicon feedstock." Journal of Thermal Analysis and Calorimetry 115, no. 1 (2014): 177-183.
4. Mitrašinovic, A. M. "On the assimilation mechanism of additives used in non-ferrous metal extraction processes." Canadian Metallurgical Quarterly (2015): 1879139515Y-0000000027.

Treatment of refractory powders by a novel, high enthalpy dc plasma

Journal of Physics D: Applied Physics 46 (22), 224019

2013

L Pershin, A Mitrasinovic, J Mostaghimi

(11/0)

Хетероситати:

1. H. L. Zhu, H. H. Tong, F. Z. Yang, Q. Wang, C. M. Cheng, "A Comparative Study on Radio-Frequency Thermal Plasma Spheroidization for Two Types of Alumina Ceramic Powder", Advanced Materials Research, Vol. 1058, pp. 221-225, 2014.
2. Mostaghimi, Javad, and Maher I. Boulos. "Thermal Plasma Sources: How Well are They Adopted to Process Needs?." Plasma Chemistry and Plasma Processing 35, no. 3 (2015): 421-436.
3. Rutberg, Ph G., Gh V. Nakonechny, A. V. Pavlov, S. D. Popov, E. O. Serba, and A. V. Surov. "AC plasma torch with a H2O/CO2/CH4 mix as the working gas for methane reforming." Journal of Physics D: Applied Physics 48, no. 24 (2015): 245204.
4. Safa, Sanaz, and Gervais Soucy. "Application of a Novel CO2 DC Thermal Plasma Torch Submerged in Aqueous Solution for Treatment of Dissolved Carboxylic Acid." Plasma Chemistry and Plasma Processing 35, no. 1 (2015): 21-43.
5. J Mostaghimi, MI Boulos - Plasma Chemistry and Plasma Processing, 2015 – Springer, Thermal plasma sources: how well are they adopted to process needs?
6. D Halder, PR Midya, S Das, NS Das, I Roy. "Amorphous carbon nanotubes incorporated MgO-graphite composite with enhanced properties for steel making furnaces". Ceramics International, 42(14) (2016):15826-15835.
7. H Saito, Y Nakane, T Fujino, H Takana... - The Abstracts of ATEM ..., 2015 - jstage.jst.go.jp, OS22-5 Three-dimensional Simulation of a Non-transferred DC Plasma Torch with a Mixture Gas of Carbon Dioxide and Methane (Plasma and ...
8. MI Boulos, P Fauchais, E Pfender - 2016 – Springer, "Electrode Phenomena in Plasma Sources". Handbook of Thermal Plasmas, 1-43.
9. J Mostaghimi, L Pershin, S Yugeswaran - Handbook of Thermal Science ..., 2017 – Springer, Heat Transfer in DC AND RF Plasma Torches
10. P Xu, J Mostaghimi, TW Coyle... - Advances in High ..., 2017 - John Wiley & Sons, Suspension Plasma Spray of Yttria Stabilized Zirconia Coatings
11. H Saito, Y Nakane, T Fujino, H Takana - Journal of Fluid Science and ..., 2016 - jstage.jst.go.jp, Numerical analysis of in-flight particles in plasma jet with an externally applied magnetic field

Elimination of impurities from the surface of silicon using hydrochloric and nitric acid
Materials Science in Semiconductor Processing 16 (1), 106-110 2013
K Visnovec, C Variawa, T Utigard, A Mitrašinović (9/0)

Хетероцитати:

1. Hu Lei, Zhi Wang, Xuzhong Gong, Zhancheng Guo, and Hu Zhang. "Purification of metallurgical-grade silicon by Sn–Si refining system with calcium addition." Separation and Purification Technology 118 (2013): 699-703.
2. Khalifa Marouan, Malek Atyaoui, Messaoud Hajji, Rachid Ouertani, and Hatem Ezzaouia. "Purification of metallurgical-grade silicon powder via chemical attack by hydrofluoric and nitric acids followed by thermal treatment." Materials Science in Semiconductor Processing 16, no. 6 (2013): 1742-1746.
3. Li Jiayan, Pengjun Jia, Yaqiong Li, Panpan Cao, Yao Liu, and Yi Tan. "Effect of Zn addition on primary silicon morphology and B distribution in Si-Al alloy." Journal of Materials Science: Materials in Electronics 25, no. 4 (2014): 1751-1756.
4. Li Jichao, Kai Huang, and Hongmin Zhu. "Phase separation of a microsized powder mixture of Si and SiC by Cu–Si alloying." Chemical Engineering Science 127 (2015): 25-30.
5. Lee Jun-Kyu, Jin-Seok Lee, Bo-Yun Jang, Joon-Soo Kim, Young-Soo Ahn, Gi-Hwan Kang, and Churl-Hee Cho. "A Modified Oxidative Refinement Process for Removing Boron from Molten Silicon Under Enhanced Electromagnetic Force." Journal of nanoscience and nanotechnology 15, no. 11 (2015): 8547-8552.
6. Fang M., C. H. Lu, H. X. Lai, L. Q. Huang, J. Chen, W. H. Ma, Z. L. Sheng, J. N. Shen, J. T. Li, and X. T. Luo. "Effect of solidification rate on representative impurities distribution in Si–Cu alloy." Materials Science and Technology 29, no. 7 (2013): 861-867.
7. Sokhanvaran Samira. Molten Salt Electrodeposition of Silicon in Cu-Si. Diss. 2014.
8. Huang Liuqing, Huixian Lai, Chenghao Lu, Ming Fang, Wenhui Ma, Pengfei Xing, Jintang Li, and Xuetao Luo. "Enhancement in extraction of boron and phosphorus from metallurgical grade silicon by copper alloying and aqua regia leaching." Hydrometallurgy (2016).
9. "Industrial silicon, external furnace refining refining, and wet leaching research and development." Kunming Polytechnic University: Natural Science Edition, 40.2 (2015): 1-11.

Silicon rod heat generation and current distribution
Journal of Crystal Growth 312 (1), 141-145 2010
M Li, A Mitrasinovic, T Utigard, G Plascencia, A Warczok (9/0)

Хетероцитати:

1. Cavallotti, Carlo, and Maurizio Masi. "Kinetics of SiHCl₃ chemical vapor deposition and fluid dynamic simulations." Journal of nanoscience and nanotechnology 11, no. 9 (2011): 8054-8060.
2. Huang Zhe Qing, Hao Ding, Xiao Jing Wang, and Chun Jiang Liu. "Numerical Solution for Radiative Heat Transfer in a Novel Polysilicon CVD Reactor." Numerical Heat Transfer, Part A: Applications 64, no. 9 (2013): 744-758.
3. Vallerio Mattia, Dries Telen, Lorenzo Cabianca, Flavio Manenti, Jan Van Impe, and Filip Logist. "Robust multi-objective dynamic optimization of chemical processes using the Sigma Point method." Chemical Engineering Science 140 (2016): 201-216.
4. Nie Zhifeng, Yanqing Hou, Gang Xie, Yan Cui, and Xiaohua Yu. "Electric heating of the silicon rods in Siemens reactor." International Journal of Heat and Mass Transfer 90 (2015): 1026-1033.
5. Huang, Zheqing, Siyuan Qie, Xiaoyu Quan, Kai Guo, and Chunjiang Liu. "Numerical simulation of multiple polysilicon CVD reactors connected in series using CFD method." The Canadian Journal of Chemical Engineering 93, no. 10 (2015): 1721-1729.
6. Z.-F. Nie, G. Xie, Y.-Q. Hou, X.-H. Yu, Heat transport model of silicon rods in siemens reactor, Journal of Synthetic Crystals 44(2):497-502, 2015
7. Kirill A. Kozin, Alexey G. Goryunov, Flavio Manenti, Siemens-Reactor's High-Frequency Power Supply, A publication of the Italian Association of Chemical Engineering, CHEMICAL ENGINEERING TRANSACTIONS, VOL. 39, 2014
8. Z Nie, Y Hou, J Deng, PA Ramachandran. "The combined effect of heat transfer and skin effect on Joule heating for silicon rod in Siemens reactor". Applied Thermal Engineering, 125 (2017):856-869.
9. Z Nie, J Deng, Y Zhou, S Wen, Y Hou. "Prediction of thermal and electrical behavior of silicon rod for a 48-rod Siemens reactor by direct current power". International Communications in Heat and Mass Transfer, 88 (2017): 148-159.

Recovery of Cu and valuable metals from E-waste using thermal plasma treatment

JOM 63 (8), 24-28

2011

AM Mitrasinovic, L Pershin, JZ Wen, J Mostaghimi

(9/0)

Хетероцитати:

1. Cayumil, R., R. Khanna, M. Ikram-Ul-Haq, R. Rajarao, A. Hill, and V. Sahajwalla. "Generation of copper rich metallic phases from waste printed circuit boards." *Waste Management* 34, no. 10 (2014): 1783-1792.
2. Mostaghimi, Javad, and Maher I. Boulos. "Thermal Plasma Sources: How Well are They Adopted to Process Needs?." *Plasma Chemistry and Plasma Processing* 35, no. 3 (2015): 421-436.
3. Gezelius, Marcus, Ashley Childs, Colin Hristow, Haley Williams, and Madeleine Wilson. "E-Waste and Battery Recycling at Dalhousie University." ENVS 3502 Final Report (2012).
4. Zhu, Jian Xin, and Shaoguo Kang. "Development and Application of Plasma Technology for POPs Waste Treatment in China." In *Advanced Materials Research*, vol. 878, pp. 638-644. 2014.
5. Li O. L., Y. Guo, J. S. Chang, and N. Saito. "Thermal plasma treatment of stormwater sediments: comparison between DC non-transferred and partially transferred arc plasma." *Environmental technology* 36, no. 13 (2015): 1672-1679.
6. Chaverra Arias, Dairo Ernesto. "Extracción de cobre a partir de tarjetas de circuito impreso de residuos electrónicos." PhD diss., Universidad Nacional de Colombia Sede Medellín.
7. De Sousa, Matthias. "Contribution à la purification des déchets de silicium solaire oxydé à l'aide d'un procédé assisté par plasma thermique." PhD diss., Limoges, 2014.
8. BI Abdulkarim, MA Abu-Hassan. "Thermal Plasma Treatment of Wastes: A Review". *Australian Journal of Basic and Applied Sciences*, 9(31) (2015):322-333.
9. M Das, S Goswami, AA Pradhan. "Recovery of Metal values from E-Wastes: An Overview". International Symposium on AMMME IATES, Bhubaneswar, India, 2014 .

Determination of the growth restriction factor and grain size for aluminum alloys by a quasi-binary equivalent method

Materials Science and Engineering: A 540, 63-69

2012

AM Mitrašinović, FCR Hernández

(9/0)

Хетероцитати:

1. Toda-Caraballo Isaac, Enrique I. Galindo-Nava, and Pedro EJ Rivera-Díaz-del-Castillo. "Understanding the factors influencing yield strength on Mg alloys." *Acta Materialia* 75 (2014): 287-296.
2. Fabrizi, Alberto, Stefano Ferraro, and Giulio Timelli. "The influence of Sr, Mg and Cu addition on the microstructural properties of a secondary AlSi9Cu3 (Fe) die casting alloy." *Materials Characterization* 85 (2013): 13-25.
3. Timelli Giulio, Giordano Camicia, Stefano Ferraro, and Roberto Molina. "Effects of grain refinement on the microstructure, mechanical properties and reliability of AlSi7Cu3Mg gravity die cast cylinder heads." *Metals and Materials International* 20, no. 4 (2014): 677-686.
4. C Slater, N Hollyhoke, C Davis. "The influence of alloy composition on the as-cast grain structure in near net shape low-density steels". *Ironmaking & Steelmaking*, (2017):1-6.
5. SH Allameh, M Emamy. "The Effect of Ca Content on the Microstructure, Hardness and Tensile Properties of AZ81 Mg Cast Alloy". *Journal of Materials Engineering and Performance*, 26(5) (2017):2151-2161.
6. Li, J. H., C. Promer, A. Jahn, B. Oberdorfer, S. Wurster, F. Martin, and P. Schumacher. "Thermodynamics-Based Computational Approach to Al-Cu Alloys: Grain Refinement." In *Shape Casting: 5th International Symposium 2014*, pp. 75-87. John Wiley & Sons, Inc., 2013.
7. Liu, Zhilin. "Novel approach to grain refinement of cast Zn alloys." PhD Thesis, The University of Queensland (2015).
8. MOHAMMED, ABDULLAHI. "Effects of Ni Additions on the Mechanical Properties and Corrosion Resistance of Al-Cu-Si Alloy." PhD diss., 2014.
9. Pitchayya Pillai, G., Seenivasan Kannan, P.. "MCMC: A comparative analysis of various parts HTC computing using SUTCAST ".*International Journal of Applied Engineering Research*, 75(15) (2014):287-296. 9 (2014):28229-28244.

Modeling of casting processes parameters for the 3xx series of aluminum alloys
using the silicon equivalency algorithm

Metalurgija 9 (2), 91-106

2003

MB Đurđević, B Đurić, A Mitrašinović, JH Sokolowski

(9/0)

Хетероцитати:

1. Ibrahim, M. F., E. Samuel, A. M. Samuel, A. M. A. Al-Ahmari, and F. H. Samuel. "Metallurgical parameters controlling the microstructure and hardness of Al–Si–Cu–Mg base alloys." *Materials & Design* 32, no. 4 (2011): 2130-2142.
2. Tang, Zhuo, and Frank Vollertsen. "Influence of grain refinement on hot cracking in laser welding of aluminum." *Welding in the World* 58, no. 3 (2014): 355-366.
3. IBRAHIM, MOHAMED FAWZY. "Effets du magnésium et des conditions de vieillissement sur la résilience des alliages Al-Si-Cu-Mg de type 319." (2010).
4. Qiu, Ke, Richu Wang, Chaoqun Peng, Xingxu Lu, and Naiguang Wang. "Polynomial regression and interpolation of thermodynamic data in Al–Si–Mg–Fe system." *Calphad* 48 (2015): 175-183.
5. GH Garza-Elizondo, AM Samuel... - ... *Journal of Materials* ..., 2017 - hanser-elibrary.com, "Phase precipitation in transition metal-containing 354-type alloys".
6. J Fu - 2016 - docs.lib.purdue.edu. "Uncertainty quantification on industrial high pressure die casting process".
7. MKU Alam - 2014 - scholar.uwindsor.ca. "Thermal and Microstructural Analysis of the A356 Alloy Subjected to High Pressure in the Squeeze Casting (SC) UMSA Technology Platform".
8. CE Roberts - 2016 - repositories.lib.utexas.edu. "Selective laser melting of elemental aluminum silicon mixtures".
9. A Ibrahim - 2017 - constellation.uqac.ca. "On the effects of ambient temperature and high temperature on the performance of Al-Cu and Al-Si-Cu alloys".

Photo-catalytic properties of silicon and its future in photovoltaic applications

Renewable and Sustainable Energy Reviews 15 (8), 3603-3607

2011

A Mitrasinovic

(5/3)

Хетероцитати:

1. Venkatraman Vishwesh, Per-Olof Åstrand, and Bjørn Kåre Alsberg. "Quantitative structure–property relationship modeling of Grätzel solar cell dyes." *Journal of computational chemistry* 35, no. 3 (2014): 214-226.
2. Hu Yuejiao, Xin Wang, Jiusan Xiao, Jungang Hou, Shuqiang Jiao, and Hongmin Zhu. "Electrochemical Behavior of Silicon (IV) Ion in BaF₂-CaF₂-SiO₂ Melts at 1573K." *Journal of The Electrochemical Society* 160, no. 3 (2013): D81-D84.
3. Tsutsum Ken, Naoko Kashimura, and Kenji Tabata. "Photo-Assisted Hydrogen Evolution in Aqueous Solution of Formic Acid with Silicon which is Supported with Noble Metals." *Silicon* 7, no. 1 (2015): 43-48.
4. Navickas J., and A. Bargelis. "Consideration and Forecasting of Technological Manufacturing Methods." *Mechanika* 18, no. 2 (2012).
5. Leijing Yang, Sheng Wang, Qingsheng Zeng, Zhiyong Zhang, Lian-Mao Peng, Carbon Nanotube Photoelectronic and Photovoltaic Devices and their Applications in Infrared Detection, *Small* 2013, 9, No. 8, 1225–1236.

Аутоцитати:

1. Visnovec, Karl, Chirag Variawa, Torstein Utigard, and Aleksandar Mitrašinović. "Elimination of impurities from the surface of silicon using hydrochloric and nitric acid." *Materials Science in Semiconductor Processing* 16, no. 1 (2013): 106-110.
2. Mitrašinović, Aleksandar M., and Anton Wolf. "Effect of Reductants on Valuable Metals Separation and Recovery from Copper Cliff Converter Slag." *High Temperature Materials and Processes* 33, no. 2 (2014): 123-129.
3. Mitrašinović, Aleksandar M., and Francisco C. Robles Hernández. "Comparison of solar silicon feedstock." *Journal of Thermal Analysis and Calorimetry* 115, no. 1 (2014): 177-183.

Trace elements distribution in Cu-Si alloys

Chemical Physics Letters 515 (1), 72-77

2011

AM Mitrašinović, TA Utigard

(3/5)

Хетероцитати:

1. Zhang, L., Y. Tan, F. M. Xu, J. Y. Li, H. Y. Wang, and Z. Gu. "Removal of boron from molten silicon using Na₂O-CaO-SiO₂ slags." *Separation Science and Technology* 48, no. 7 (2013): 1140-1144.
2. Sokhanvaran, Samira. "Molten Salt Electrodeposition of Silicon in Cu-Si." PhD diss., 2014.
3. "Industrial silicon, external furnace refining refining, and wet leaching research and development." Kunming Polytechnic University: Natural Science Edition, 40.2 (2015): 1-11.

Аутоцитати:

1. Visnovec, Karl, Chirag Variawa, Torstein Utigard, and Aleksandar Mitrašinović. "Elimination of impurities from the surface of silicon using hydrochloric and nitric acid." *Materials Science in Semiconductor Processing* 16, no. 1 (2013): 106-110.
2. Mitrašinović, Aleksandar M., and Anton Wolf. "Effect of Reductants on Valuable Metals Separation and Recovery from Copper Cliff Converter Slag." *High Temperature Materials and Processes* 33, no. 2 (2014): 123-129.
3. Mitrašinović, Aleksandar M., Ryan JC D'Souza, Torstein A. Utigard, and John Z. Wen. "Modeling of High-Temperature Low-Pressure Silicon-Refining Process." *Mineral Processing and Extractive Metallurgy Review* 34, no. 5 (2013): 331-339.
4. Mitrašinović, Aleksandar M., and Francisco C. Robles Hernández. "Comparison of solar silicon feedstock." *Journal of Thermal Analysis and Calorimetry* 115, no. 1 (2014): 177-183.
5. Aleksandar Mitrasinovic, S.R. Stopić, Silicon growth in slow cooled Si-Cu mixtures, Metall-Rubrik 1-2/2011 65. Jahrgang METALL Forschung

Investigation on Electrostatic Breakup of Bio-Oil Droplets

Energies 5 (11), 4323-4339

2012

ZT Wang, AM Mitrašinović, JZ Wen

(3/0)

Хетероцитати:

1. Zhentao Wang, Q. Dong, J. Wang, L. Gu, Effect of induced surface charges on droplets breakup in electrostatic field, *High Voltage Engineering* 41(1):300-305, 2015.
2. "Diesel, the Netherlands e-fog drops, slivers, Stripping forms a broken model to study." *Internal combustion engine engineering* 35.3 (2014): 94-99.
3. "Static positions of the fog drop of the surface-induced electrical charge on the fog droplets shattered by impact." *High-voltage technology* 41.1 (2015): 300-205.

Characterization of the Cu-Si System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications

PhD Dissertation, University of Toronto

2010

A Mitrašinović

(2/1)

Хетероцитат:

1. Tanai Marin, COUPLED THERMODYNAMIC AND MULTIPHYSICS MODELLING IN PYROMETALLURGICAL PROCESS SIMULATION, Conference: COM 2015 Conference of Metallurgists - Torstein Utigard Symposium, At Toronto
2. Visnovec, Karl. "Refining of Silicon During its Solidification from a Cu-Si Melt." PhD diss., 2012.

Аутоцитат:

1. Mitrašinović, Aleksandar. "Photo-catalytic properties of silicon and its future in photovoltaic applications." *Renewable and Sustainable Energy Reviews* 15, no. 8 (2011): 3603-3607.

Effect of Reductants on Valuable Metals Separation and Recovery from Copper Cliff Converter Slag		
High Temperature Materials and Processes 33 (2), 123-129	2014	
AM Mitrašinović, A Wolf	(0/2)	
Аутоцитати:		

- 1. Mitrašinovic, A. M. "On the assimilation mechanism of additives used in non-ferrous metal extraction processes." Canadian Metallurgical Quarterly (2015): 1879139515Y-0000000027.
- 2. Aleksandar M. Mitrasinovic, Anton Wolf, Separation and Recovery of Valuable Metals from Nickel Slags Disposed in Landfills,

Development of thermal analysis and analytical techniques for the assessment of porosity and metallurgical characteristics in 3 XX aluminum alloys		
Masters Abstracts International 46 (03)	2004	
A Mitrasinovic	(1/0)	

Хетероцитат:

- 1. Bhowmik Snehashish. "Simultaneous modification and grain refinement of the aluminum-silicon-copper alloy using a Magnesium Matrix Alumina Composite as the Master Alloy." (2007).

Modeling of High-Temperature Low-Pressure Silicon-Refining Process		
Mineral Processing and Extractive Metallurgy Review 34 (5), 331-339	2013	
AM Mitrašinović, RJC D'Souza, TA Utigard, JZ Wen	(0/1)	

Хетероцитат:

- 1. Hydrogen Effervescence from Aluminum Alloy Melts, JOM: the journal of the Minerals, Metals & Materials Society 64 (12) (2012).

Electronic Waste Treatment by High Enthalpy Plasma Jet		
20th International Symposium on Plasma Chemistry, Philadelphia, 2011	2011	
AM Mitrašinović, RJC D'Souza, TA Utigard, JZ Wen	(1/0)	

Хетероцитат:

- 1. Sanaz Safa, Alireza Hekmat-Ardakan, Gervais Soucy, Experimental and thermodynamic comparison between a novel CO₂/CH₄ and an oxygen submerged DC thermal plasma for treatment of sebacic acid in basic aqueous solution, Journal of Environmental Chemical Engineering 2(4) December 2014.

Letter to the Editor: "The Promise of Silicon"		
Silicon, (3) 1	2011	
AM Mitrasinovic	(1/0)	

Хетероцитат:

- 1. Scott Iacono, Stephen J. Clarson, Silicon and Energy, Silicon 6(4):211-213, 2014.



UNIVERSITY OF
TORONTO

This is to certify that

Aleksandar Mitrasinovic

has fulfilled the requirements of the University of Toronto and has been admitted
under the authority of the Governing Council of the University of Toronto to the degree of

Doctor of Philosophy

In witness whereof we have hereto subscribed our names and affixed the academic seal of the University

November 9, 2010



Conway

President

Louise Fairt

Secretary of the Governing Council

Bru Cur

Dean of the School of Graduate Studies



**Република Србија
МИНИСТАРСТВО ПРОСВЕТЕ,
НАУКЕ И ТЕХНОЛОШКОГ РАЗВОЈА**

Број: 612-01-02218/2016-06

Датум: 02.02.2017. године

Немањина 22-26

Б е о г р а д

JK

На основу члана 105б. став 4. Закона о високом образовању („Службени гласник РС”, бр. 76/05, аутентично тумачење – 100/07, 97/08, 44/10, 93/12, 89/13, 99/14, 45/15 – аутентично тумачење и 68/15), члана 192. став 1. Закона о општем управном поступку („Службени гласник СРЈ”, бр. 33/97 и 31/01, „Службени гласник РС”, број 30/10) и члана 23. став 2. Закона о државној управи („Службени гласник РС”, бр. 79/05, 101/07, 95/10 и 99/14), решавајући по захтеву Александра Митрашиновића из Земуна, Република Србија, за признавање високошколске исправе издате у Канади, ради запошљавања,

министар просвете, науке и технолошког развоја доноси

РЕШЕЊЕ

Диплома коју је 09.11.2010. године на име Александар Митрашиновић издао Универзитет у Торонту (University of Toronto), Торонто, Онтарио, Канада, о завршеним докторским академским студијама, студијски програм: Наука о материјалима и инжењерству (Department of Materials Science & Engineering), звање/квалификација: Doctor of Philosophy, признаје се као диплома докторских академских студија трећег степена високог образовања (180 ЕСПБ), у оквиру образовно-научног поља Техничко-технолошких наука, научна, односно стручне области Металуршко инжењерство, ради запошљавања.

Ово решење омогућава имаоцу општи приступ тржишту рада у Републици Србији, али га не ослобађа од испуњавања посебних услова за бављење професијама које су регулисане законом или другим прописом.

Образложење

Овом министарству обратио се Александар Митрашиновић из Земуна, Република Србија захтевом за признавање дипломе Универзитета у Торонту (University of Toronto), Торонто, Онтарио, Канада, о завршеним докторским академским студијама, студијски програм: Наука о материјалима и инжењерству (Department of Materials Science & Engineering), звање/квалификација: Doctor of Philosophy, ради запошљавања.

Уз захтев, подносилац захтева доставио је:

- 1) оверену копију дипломе издате 09.11.2010. године, коју је издао Универзитет у Торонту ((University of Toronto), Торонто, Онтарио, Канада, студије трећег степена високог образовања (180 ЕСПБ), студијски програм Наука о материјалима и инжењерству (Department of Materials Science & Engineering), звање/квалификација: Doctor of Philosophy,
- 2) оверени превод дипломе на српски језик,
- 3) наставни план и програм - истраживачки докторат на српском и италијанском језику,

- 4) уверење о положеном завршном испиту за стицање звања доктора наука на српском и италијанском језику,
- 5) апстракт рада на енглеском језику,
- 6) листу радова на енглеском језику,
- 7) транскрипт оцена на српском и енглеском језику,
- 8) примерак докторске дисертације на извornom језику,
- 9) радну биографију на српском језику,
- 10) пријавни формулар и
- 11) доказ о уплати таксе за професионално признавање.

Чланом 105 б. став 4. прописано је да Министар доноси решење о професионалном признавању у року од 90 дана од дана пријема уредног захтева.

Одредбама члана 192. Закона о општем управном поступку прописано је да на основу одлучних чињеница утврђених у поступку орган надлежан за решавање доноси решење у управној ствари која је предмет поступка.

Одредбама члана 23. став 2. Закона о државној управи прописано је да Министар представља Министарство, доноси прописе и решења у управним и другим појединачним стварима и одлучује о другим питањима из делокруга Министарства.

Чланом 104. став 1. Закона о високом образовању, прописано је да признавање стране високошколске исправе јесте поступак којим се имаоцу те исправе утврђује право на наставак образовања, односно на запошљавање. Поступак признавања стране високошколске исправе спроводи се у складу са одредбама овог закона, ако међународним уговором није предвиђено другачије.

Сходно одредбама члана 105. став 1. и 6. Закона о високом образовању и васпитању, ENIC/NARIC центар при Министарству просвете, науке и технолошког развоја, прибавио је релевантне информације о студијском програму на ком је стечена диплома из става 2. тачка 1) образложења овог решења.

У складу са чланом 105. став 4. Закона о високом образовању, комисија коју је именовао министар извршила је прво вредновање студијског програма на коме је стечена диплома из става 2. тачка 1) образложења овог решења, и дала предлог за признавање дипломе ради запошљавања.

Подносилац захтева је доставио доказ о уплати таксе у складу са чланом 2. став 1. Правилника о висини таксе за професионално признавање страних високошколских исправа („Службени гласник РС”, број 83/2015).

Имајући у виду наведено, решено је као у диспозитиву овог решења.

Упутство о правном средству: Ово решење је коначно у управном поступку и против истог може се покренути управни спор. Тужба се подноси Управном суду у року од 30 дана од дана пријема овог решења.

Решење доставити:

- Александар Митрашиновић, ул. Загорска бр. 36, 11080 Земун и
- Архива.

