

Metalurgija in materiali MAG

1. Letnik - obvezni predmeti

Termodinamika materialov 2

- V. Gontarev. Termodinamika materialov, učbenik, Univerza v Ljubljani, NTF, Ljubljana, 2005.
- V. Gontarev. Teorija metalurških procesov, učbenik, Univerza v Ljubljani, NTF, Ljubljana, 2005.
- D. R. Gaskell, D. E. Laughlin. Introduction to the Thermodynamics of Materials, Taylor & Francis Group, 2018.
- R. DeHoff. Thermodynamics in Materials Science, Second Edition, CRC Press, Taylor & Francis Group, 2006.
- M. Hillert: Phase equilibria Cambridge University Press, Cambridge, New York, 1998.
- S. Seetharaman. Fundamentals of metallurgy, Woodhead Publishing, 2005.

Fizikalna metalurgija 2

- David A. Porter, Kenneth E. Easterling, Mohamed Y. Sherif, Phase Transformations In Metals And Alloys, 3rd Edition, 2010.
- Marinković, V., Fizikalna metalurgija II, (OMM, NTF, UL, Ljubljana, 1999).
- R. Abbaschian, L. Abbaschian, R.E. Reed-Hill, Physical Metallurgy Principles, Fourth Edition, SI, CENGAGE Learning, 2010.
- Markoli, B., Fizikalna metalurgija I: ternarni in kvaterni sistemi. 2. izd. Ljubljana: Naravoslovnotehniška fakulteta, Oddelek za materiale in metalurgijo, 2009. ISBN 978-961-6047-67-8.

Računalniška znanost o materialih

- D. Raabe: Computational Materials Science: The Simulation of Materials Microstructures and Properties, Wiley-VCH, Weinheim, 1998.
- Z. H. Barber: Introduction to Materials Modelling, Maney, London, 2005.
- D. C. Rapaport: The Art of Molecular Dynamic Simulation, Cambridge University Press, 1995.
- D.P. Landau, K. Binder: A Guide to Monte Carlo Simulations in Statistical Physics, Cambridge University Press, Cambridge, 2000.
- B. Chopard, M. Droz: Cellular Automata modeling of Physical Systems, Cambridge University Press, Cambridge, 1998.
- K. Ohno, K. Esfarjani, and Y. Kawazoe: Introduction to computational materials science: from ab initio to Monte Carlo methods, Springer-Verlag: Berlin, New York, 1999.
- Handbook of Materials Modeling, edited by Sidney Yip, Springer, Berlin, New York, 2005.
- Znanstveni članki, ki jih bo razdelil predavatelj (scientific articles, provided by the instructor).

Industrijska ekologija in energetika

- BURKE, G., SINGH, B., THEODORE, L. Handbook of Environmental Management and Technology. New Jersey: John Wiley & Sons, 2005.
- MASTERS, G.M. Introduction to Environmental Engineering and Science. New York: Prentice – Hall, 1997.
- PRIBAKOVIĆ BORŠTNIK, A., ZORNIK, M., ŽAGAR, T. Odgovorno okoljsko delovanje – Sistemi ravnanja z okoljem. Ljubljana: SIQ, 2004.
- LUND, H.F. The McGraw – Hill Recycling Handbook. New York: McGraw – Hill, 2001.
- WHITELAW, W. ISO 14001 – Environmental System Handbook. London: Elsevier, 2004.
- GREADEL, T.E., ALLENBY, B.R. Industrial Ecology. New Jersey: Pearson Education, 2003.
- KUTZ, M. Environmentally Conscious Mechanical Design. New Jersey: John Wiley & Sons, 2007.
- ABELE, E., ANDERL, R., BIRKHOFER, H. Environmentally – Friendly Product Development – Methods and Tools. London: Springer Verlag, 2005.
- KUTZ, M. Environmentally Conscious Alternative Energy Production. New Jersey: John Wiley & Sons, 2007.
- BUDAK, I., KOSEC, B., HODOLIČ, J., KARPE, B., STEVIĆ, M., VUKELIĆ, D. Environmental labelling of products. Novi Sad: Fakultet tehniških nauka, 2009.

Livarstvo 2

- TRBIŽAN, M.: Livarstvo, skripta, Ljubljana 2003.
- MRVAR, P.: Livarski praktikum, skripta, Ljubljana 2006.
- CAMBELL, J.: Castings, OBE, Feng, Butterworth Heinemann Ltd, 1991.
- SAHM, P.R.: Giessereikunde, Aachen 2003.

Jeklarstvo 2

- Ghosh A., Chatterjee A.: Ironmaking and Steelmaking Theory and Practice, PHI, 2008.
- F. Oeters: Steelmaking Metallurgie ali Metallurgie der Stahlherstellung, Springer-Verlag Berlin, Heidelberg und Verlag Stahleisen, 1989.
- B. Deo, R. Boom: Fundamentals of Steelmaking Metallurgy, Prentice Hall International, UK, 1993.
- M. Jellinghaus: Stahlerzeugung im Lichtbogenofen, Verlag Stahleisen, Düsseldorf, 1994.
- U. K. Mudali, B. Raj: High Nitrogen Steels and Stainless Steels, Alpha Science International Ltd., UK, 2004.

Preiskava materialov

- Nondestructive Evaluation and Quality Control, 1991, ASM International.
- P.E. Mix: Introduction to nondestructive testing; A training guide; 1987, J. Wiley and Sons;
- Nondestructive Testing Handbook, Vol. 1-10, 1987, American Society for Nondestructive testing inc.
- J. Krautkrämär, H. Krautkrämär: Werkstoffprüfung mit Ultraschall; 1986, Springer-Verlag.
- Failure Analysis and Prevention, Metals Handbook, Vol. 11, 2002, ASM international.
- H. Chicos, T. Saito, L. Smith; Springer Handbook of Materials Measurement Methods, 2006, Springer-Verlag.

Preoblikovanje 2

- T. Rodič, Preoblikovanje II, Naravoslovnotehniška fakulteta, Oddelek za materiale in metalurgijo, 2005

Fizikalna metalurgija jekel

- H.K.D.H Bhadeshia; R.W.K. Honeycombe: Steels, Elsevier, Amsterdam, 2006.
- R.E. Smallman; A.H.W. Ngan: Physical metallurgy and advanced materials, Elsevier, Amsterdam, 2007.
- Metals Handbook, Vol. 1, Properties and selection: Iron Steels, High Performance Alloy, 1990, ASM.

Varjenje

- B. Zorc: Zapiski za predavanja.
- I. Rak: Tehnologija varjenja, Modrijan založba d.o.o., Ljubljana, 2008.
- Granjon H.: Metalurške osnove varjenja (prevod Štular P.) Ljubljana ZDVT, 1996.
- Zavarivanje u četiri knjige, Inženjersko tehnički priručnik, Rad Beograd, 1980.
- I. Hrivnak: Zavarljivost čelika, IRO "Građevinska knjiga", Beograd, 1982.
- I. Hrivnak: Theory of weldability of metals and alloys, Elsevier, 1992.
- D. Radaj: Heat effects of welding, Springer-Verlag, 1992

Termomehanska predelava materialov

- Verlinden B., Driver R., Samajdar I., Doherty R. D., Thermo-Mechanical processing of Metallic Materials, Elsevier, London 2007.
- Dieter G. E., Kuhn H. A., Semiatan S. L., Handbook of Workability and Process Design, ASM International, NY, 2003.
- Sheppard T., Extrusion of Aluminium Alloys, Dordrecht : Kluwer Academic Publishers, 1999.
- Lenard J. G., Primer on Flat Rolling, Elsevier, London 2007.
- A. Weronki, Thermo Fatigue of Metals, CRC Press, 2019,
- ASM Handbook Volume 19 : Fatigue and Fracture,
- Taylan Altan, Erman Tekkaya. Sheet Metal Forming: Process and Applications, ASM International, 2012,