

## DAFTAR PUSTAKA

- Alexander H., Brunski J.B., Cooper S.L., Hench L.L., Hergenrother R.W., Hoffman A.S., Kohn J., Langer R., Peppas N.A., Ratner B.D., Shalaby S.W., Visser S.A., Yannas I.V., 1996, *Classes of materials used in medicine: Metals, Biomaterials Science, An Introduction to Materials in Medicine*, editors: Ratner, B.D., Hoffman, A.S., Schoen, F.J., Lemons, J.E., Academic Press, USA.
- Altan T., 1998, *Metal Forming Handbook*, Schuler Springer-Verlag Berlin Heidelberg.
- Argon A.S., 2008, *Strengthening Mechanism in Crystal Plasticity*, Oxford University Press, New York.
- Arifvianto B., Suyitno, Mahardika M., Dewo P., Iswanto P.T. dan Salim U.A., 2011, Effect of surface mechanical attrition treatment (SMAT) on microhardness, surface roughness and wettability of AISI 316L, *Materials Chemistry and Physics*, Vol. 125, pp. 418–426.
- Arora P.R. dan Simha K.R.Y., 1996, Analytical and experimental evaluation of cold working process for strain hardening materials, *Engineering Fracture Mechanics*, Vol. 53(3), pp. 371–385.
- ASM Handbook, 2005, Volume 1: Properties and Selection: Irons, Steels, and High Performance Alloys, ASM International.
- ASTM F138, 2005, Standard Specification for Wrought 18 Chromium-14 Nickel-2.5 Molybdenum Stainless Steel Bar and Wire for Surgical Implants (UNS S31673), Vol. 13.01.
- ASTM F139, 2005, Standard Specification for Wrought-18 Chromium-14 Nickel-2.5 Molybdenum Stainless Steel Sheet and Strip for Surgical Implants (UNS S31673), Vol.13.01.
- Black J., 1994, Biological performance of tantalum, *Clinical Materials* Vol. 16(3), pp. 167–173.
- Bombač D., Brojan M., Krkovic M., Turk R. dan Zalar A., 2007, Characterization of Titanium and Stainless Steel Medical Implants Surfaces, *Materials and Geoenvironment*, Vol. 54(2), pp. 151-164.
- Bordiji K., Jouzeau J., Mainard D., Payan E., Delagoutte J. dan Netter P., 1996, Evaluation of the effect of three surface treatments on the biocompatibility of 316L stainless steel using human differentiated cells, *Biomaterials*, Vol. 17, pp. 491–500.
- Bronzino J.D., 2000, *The Biomedical Engineering HandBook*, 2<sup>nd</sup> Edition, CRC Press LLC.
- Brooks C.R., 1979, *Heat Treatment of Ferrous Alloys*, McGraw-Hill, USA.

- Brown C.C., Mcqueen M. dan Tornetta P., 2006, Trauma 1<sup>st</sup> edition, Orthopaedic Surgery Essentials, series editor Paul Tornetta III and Thomas A. Einhorn Lippincott Williams & Wilkins Philadelphia USA.
- Bunch J.O. dan Mitchell M.R., 2007, Residual Stress Effects on Fatigue and Fracture Testing and Incorporation of Results into Design, ASTM Stock Number: STP1497.
- Chen X.H., Lu J., Lu L. dan Lu K., 2005, Tensile properties of a nanocrystalline 316L austenitic stainless steel, Scripta Materialia, Vol. 52, pp. 1039–1044.
- Christiansen T. dan Somers M.A.J., 2006, Characterisation of low temperature surface hardened stainless steel, Structure: Journal of Materialography, Struers, Vol. 6, pp. 2–17.
- Davis J.R., 2003, Handbook of materials for medical devices, ASM International.
- Dewo P., Magetsari R., Busscher H.J., Horn J.R.V. dan Verkerke G.J., 2008, Treating natural disaster victims is dealing with shortages: An orthopaedics perspective. Technology and Health Care, Vol.16, pp. 255–259.
- Dutta E., 1998, Analytical, Numerical and Experimental Investigations of Elastic-Plastic Boundary and Residual Stress Field Around a Cold-expanded Hole, Texas Tech University, Dissertation, UMI United States.
- Field J.E., Walley S.M., Proud W.G., Goldrein H.T. dan Siviour C.R., 2004, Review of experimental techniques for high rate deformation and shock studies, International Journal of Impact Engineering, Vol. 30, pp. 725–775.
- Fujiwara H., Inomoto H., Sanada R. dan Ameyama K., 2001, Nano-ferrite formation and strain-induced-ferrite transformation in an SUS316L austenitic stainless steel, Scripta mater, Vol. 44, pp. 2039–2042.
- González F.A.R., 2009, Biomaterials in Orthopaedic Surgery, ASM International, Materials Park, Ohio, USA.
- Greger M., Vodárek V., Dobrzański L.A., Kander L., Kocich R. dan Kuřetová B., 2008, The structure of austenitic steel AISI 316 after ECAP and low-cycle fatigue, Journal of Achievements in Materials and Manufacturing Engineering, Vol. 28(2), pp. 151–158.
- Grimm M.J., 2009, Orthopedic Biomaterials, in Biomedical Engineering and Design Handbook, Vol. 1: Fundamental, editor Myer Kutz, 2<sup>nd</sup> ed., Mc Graw Hill.
- Hallab N.J., Jacobs J.J., Katz J.L., 2004, Application of Materials in Medicine, Biology, and Artificial Organs: Orthopedic Applications, Biomaterials Science, Elsevier Academic Press, Amsterdam.
- Hedström P., 2005, Deformation induced martensitic transformation of metastable stainless steel AISI 301, thesis at Division of Engineering Materials,

Department of Applied Physics and Mechanical Engineering, Luleå  
University of Technology, SE-971 87 Luleå, Sweden.

- Helgason B., Pálsson H., Rúnarssona T.P., Frossard L. dan Viceconti M., 2009, Risk of failure during gait for direct skeletal attachment of a femoral prosthesis: A finite element study, *Medical Engineering & Physics*, Vol. 31, pp. 595–600.
- Holt R.T. dan Wallace W., 1980, *Failure Analysis of Some Orthopedic Implants*, National Research Council of Canada (Ontario) Div of Mechanical Engineering, Canada.
- Huber N. dan Heerens J., 2008, On the effect of a general residual stress state on indentation and hardness testing, *Acta Materialia*, Vol. 56, pp. 6205–6213.
- Jeon Y.C., Kim C.S., Ki H., Kwun S.I. dan Byeon J.W., 2008, Strain-Induced Martensitic Phase Transformation by Low-Cycle Fatigue in AISI 316L Stainless Steel, *Materials Science Forum*, Vol. 580–582, pp. 597–600.
- Katz J.L., 1996, *Orthopedic applications in Biomaterials Science: An introduction to materials in medicine* edited by Ratner B.D., Hoffman A.S. Academic Press USA.
- Kim T.K., Bae C.S., Kim D.H., Jang J., Kim S.H., Lee C.B. dan Hahn D., 2008, Microstructural observation and tensile isotropy of an austenitic ODS steel, *Nuclear Engineering and Technology*, Vol. 40(4), pp. 305–310.
- Kozuh S., Gojic M. dan Kosec L., 2007, The effect of annealing on properties of AISI 316L base and weld metals, *RMZ–Materials and Geoenvironment*, Vol. 54(3), pp. 331–344.
- Kramer K.H., 2000, *Implants for Surgery – A Survey on Metallic Materials*, *Materials for Medical Engineering*, edited by H. Stallforth and P. Revell, *EUROMAT 99*, Vol. 2, Wiley-VCH Verlag GmbH, Weinheim.
- Kyriakongonas A.P., 2011, *3D Numerical Modeling of Austenitic Stainless Steel 316L Multi-pass Butt Welding and Comparison with Experimental Results*, Dissertation Master of Science in Marine Science and Technology, National Technical University of Athens.
- Lee W.S. dan Yeh G.W., 1997, The plastic deformation behaviour of AISI 4340 alloy steel subjected to high temperature and high strain rate loading conditions, *Journal of Materials Processing Technology*, Vol. 71, pp. 224–234.
- Leffler B., 1998, *Stainless Steel: Stainless Steels and Their Properties*, 2nd ed. ISBN 91-9720-216-9.
- Levin V.D., 1993, *Laves phase strengthening in a cold worked Fe-Cr-Ni-Mo austenitic stainless steel*, disertasi Doctoral, Case Western Reserve University.

- Liu G., Lu J. dan Lu K., 2000, Surface nanocrystallization of 316L stainless steel induced by ultrasonic shot peening, *Materials Science and Engineering A*, Vol. 286, pp. 91–95.
- Llewellyn D.T. dan Hudd R.C., 1998, *Steel: Metallurgy and Application*, 3rd ed., Butterworth Heinemann.
- Lu K. dan Lu J., 2004, Nanostructured surface layer on metallic materials induced by surface mechanical attrition treatment, *Materials Science and Engineering A*, Vol. 38, pp. 375–377.
- Ma Z.S., Zhou Y.C., Long S.G. dan Lu C., 2012, Residual stress effect on hardness and yield strength of Ni thin film, *Surface & Coatings Technology*, Vol. 207, pp. 305–309.
- Maximov J.T., Duncheva G.V. dan Kuzmanov, 2008, Modelling of hardening behaviour of cold expanded holes in medium-carbon steel, *Journal of Constructional Steel research*, Vol. 64, pp. 161–167.
- McGuire M.F., 2008, *Stainless steel for design engineers*, ASM International, Materials Park, Ohio, USA.
- Messerschmidt U., 2010, *Dislocation Dynamics during Plastic Deformation*, Springer Heidelberg Dordrecht London New York.
- Mudali U.K., Shrida, T.M. dan Raj B., 2003, Corrosion of Bio Implants, *Sadhana*, Vol. 28(3-4), pp. 601-637.
- Newson T., 2002, *Stainless Steel, A Family of Medical Devices*, Business Briefing: Medical Device Manufacturing & Technology, World Markets Research Centre, London.
- Ogbemudia A.O. dan Umebese P.F.A., 2006, Implant failure in osteosynthesis of fracture of long bones, *JMBR: A Peer-review Journal of Biomedical Sciences*, Vol. 5(2), pp. 75-78.
- Pavier M.J., Poussard C.G.C. dan Smith D.J., 1999, Effect of residual stress around cold worked holes on fracture under superimposed mechanical load, *Engineering Fracture Mechanics*, Vol. 63, pp. 751–773.
- Pelletier H., Muller D., Mille P., Cornet A. dan Grob J.J., 2002, Dose effect on mechanical properties of high-energy nitrogen implanted 316L stainless steel, *Surface and Coating Technology*, Vol. 151, pp. 377–382.
- Qin B., Wang Z.Y. dan Sun Q.S., 2008, Effect of tempering temperature on properties of 00Cr16Ni5Mo stainless steel, *Materials Characterization*, Vol. 59, pp. 1096–1100.
- Rawers J. dan Grujicic M., 1996, Effect of metal composition and temperature on the yield strength of nitrogen strengthened stainless steels, *Material Science and Engineering A*, Vol. 207, pp.188–194.
- Reith M., Falkenstein A., Graf P., Heger S., Jantsch U., Klimiankou M., Morris E.M. dan Zimmermann H., 2004, Creep of the austenitic steel AISI

- 316L(N): Experiments and Models, Program Kernfusion, Forschungszentrum Karlsruhe GmbH, Karlsruhe.
- Roland T., Retraint D., Lu K. dan Lu J., 2006, Fatigue life improvement through surface nanostructuring of stainless steel by means of surface mechanical attrition treatment, *Scripta Materialia*, Vol. 54, pp. 949–954.
- Roland T., Retraint D., Lu K. dan Lu J., 2007, Enhanced mechanical behavior of a nanocrystallised stainless steel and its thermal stability, *Materials Science and Engineering A*, Vol. 445–446, pp. 281–288.
- Rüedi T. P. dan Murphy W. M., 2000, *AO Principles of Fracture Management*, Thieme, Stuttgart-New York.
- Salim U.A., Suyitno, Arifvianto B., Magetsari R. dan Dewo P., 2009, Design of Dynamics Compression Plate for Indonesian Femoral Diaphysis, The 2<sup>nd</sup> ASEAN University Network/ SAEEDN, Regional Conference on Manufacturing Engineering, Bandung, pp. B62–B65.
- Shimko D.A., Shimko V.F., Sander E.A., Dickson K.F. dan Nauman E.A., 2005, Effect of porosity on the fluid flow characteristics and mechanical properties of Tantalum scaffolds, *Journal of Biomedical Materials Research B Application of Biomaterials*, Vol. 73(2), pp. 315–324.
- Suyitno, Ishak, Dewo P., Dharmastiti R., Magetsari R., Salim U.A. dan Hidayat L., 2015, The effect of sandblasting and electropolishing on the surface roughness and corrosion rate of AISI 316L stainless steel, *Advanced Materials Research*, Vol. 1123, pp. 192–195.
- Takakuwa O., Kawaragi Y. dan Soyama H., 2013, Estimation of the Yield Stress of Stainless Steel from the Vickers Hardness Taking Account of the Residual Stress, *Journal of Surface Engineered Materials and Advanced Technology*, Vol. 3, pp. 262–268.
- Timoshenko S. dan Goodier J.N., 1951, *Theory of Elasticity*, McGraw-Hill Book.
- Tosangthum N., Coovattanachai O., Krataitong R., Morakotjinda M., Daraphan A., Vetayanugul B. and Tongsri R., 2006, Density and Strength Improvement of Sintered 316L Stainless Steel, *Chiang Mai Journal of Science*, Vol. 33(1), pp. 53–66.
- Triantafyllidis G.K., Kazantzis A.V. dan Karageorgiou K.T., 2007, Premature fracture of a stainless steel 316L orthopaedic plate implant by alternative episodes of fatigue and cleavage decoherence, *Engineering Failure Analysis*, Vol. 14, pp. 1346–1350.
- Ucok I., Ando T. dan Grant N.J., 1991, Property enhancement in type 316L stainless steel by spray forming, *Materials Science Engineering A*, Vol. 133, pp. 284–287.
- Urevc J., Koc P., dan Stok B., 2009, Numerical Simulation of Stress Relieving of an Austenite Stainless Steel, *Journal of Mechanical Engineering*, Vol. 55(10), pp. 590–599.

- Wang L. dan Li D.Y., 2003, Mechanical, electrochemical and tribological properties of nanocrystalline surface of brass produced by sandblasting and annealing, *Surface and Coatings Technology*, Vol. 167, pp. 188–196.
- Weng Y., 2009, *Ultra-Fine Grained Steels*, Metallurgical Industry Press, Beijing and Springer-Verlag GmbH Berlin Heidelberg.
- Zardiackas L.D., Parsell D.E., Dillon L.D., Mitchell D.W., Nunnery L.A. dan Poggie R., 2001, Structure, metallurgy, and mechanical properties of a porous tantalum foam, *Journal of Biomedical Materials Research*, Vol. 58(2), pp.180–187.
- Zhu Y.T., Liao X.Z. dan Wu X.L., 2012, Deformation twinning in nanocrystalline materials, *Progress in Materials Science*, Vol. 57, pp. 1–62.

<http://www.totalmateria.com/page.aspx?ID=CheckArticle&site=kts&NM=199>