

# Chemmat221

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1.  
Abbaschian R, Abbaschian L. Physical metallurgy principles. Fifth edition. Mason, Ohio: Cengage; 2025.
  
  2.  
Abbaschian R, Abbaschian L, Reed-Hill RE. Physical metallurgy principles. 4th ed. Stamford, CT: Cengage Learning; 2009.
  
  3.  
Callister WD. Materials science and engineering: an introduction. 7th ed. Hoboken, NJ: John Wiley & Sons; 2007.
  
  4.  
Cullity BD, Stock SR. Elements of x-ray diffraction. 3rd ed. Upper Saddle River, NJ: Prentice Hall;
  
  5.  
Porter DA, Easterling KE, Sherif MY. Phase transformations in metals and alloys. 3rd ed. Boca Raton, FL: CRC Press; 2009.
  
  6.  
Dieter GE, Bacon DJ. Mechanical metallurgy. SI metric ed. Vol. McGraw-Hill series in materials science and engineering. London: McGraw-Hill; 1988.

7.

Askeland DR, Wright WJ, Bhattacharya DK, Chhabra RP. The science and engineering of materials. 7th edition, SI. Boston, Mass: Cengage Learning; 2016.

8.

Hull D, Bacon DJ. Introduction to dislocations [Internet]. 5th ed. Vol. Materials science and technology (New York, N.Y.). Oxford: Butterworth-Heinemann; 2011. Available from: <http://ebookcentral.proquest.com/lib/auckland/detail.action?docID=680874>

9.

Van Vlack LH. Elements of materials science and engineering. 6th ed. Vol. Addison-Wesley series in metallurgy and materials. Reading, Mass: Addison-Wesley Pub. Co; 1990.

10.

Porter DA, Easterling KE. Phase transformations in metals and alloys. 2nd ed. London: Chapman & Hall; 1992.

11.

Courtney TH. Mechanical behavior of materials. 2nd ed. Vol. McGraw-Hill series in materials science. Boston: McGraw Hill; 2000.

12.

Hertzberg RW, Vinci RP, Hertzberg JL. Deformation and fracture mechanics of engineering materials. Fifth edition. Hoboken, N.J.: John Wiley & Sons, Inc;

13.

Ashby MF, Jones DRH. Engineering materials 1: an introduction to properties, applications, and design. 4th ed. Boston, Mass: Butterworth-Heinemann; 2012.

14.

Ashby MF, Jones DRH. Engineering materials 2: an introduction to microstructures, processing, and design [Internet]. Repr. with corrections. Vol. v. 39. Oxford [Oxfordshire]: Pergamon Press; 1988. Available from: <http://www.sciencedirect.com/science/book/9780080325323>

15.

Dieter GE, Bacon D. Mechanical Metallurgy. Student metric ed of 3rd revised ed. London: McGraw-Hill Education - Europe; 1989.

16.

Collins JA, Busby HR, Staab GH. Mechanical design of machine elements and machines: a failure prevention perspective. 2nd ed. Hoboken, NJ: Wiley;

17.

Collins JA. Failure of Materials in Mechanical Design: Analysis, Prediction, Prevention. 2nd Revised edition. New York: John Wiley and Sons Ltd; 1993.

18.

Callister WD, Rethwisch DG. Materials science and engineering: an introduction. 8th ed. Hoboken, N.J.: John Wiley & Sons; 2010.

19.

Meyers MA, Chawla KK. Mechanical behavior of materials. 2nd ed. Cambridge: Cambridge University Press; 2009.

20.

Gilmore CM. Materials science and engineering properties. SI edition. Stamford, CT: Cengage Learning; 2014.

21.

Shackelford JF. Introduction to materials science for engineers. Eighth edition. Boston: Pearson; 2015.

22.

Fulay P, Wright W, Askeland DR. The Science and Engineering of Materials. 6th Revised edition. Florence, KY: Cengage Learning, Inc; 2011.

23.

Ashby M, Cebon D, Shercliff H. Materials: engineering, science, processing and design [Internet]. Oxford: Elsevier Butterworth-Heinemann; 2007. Available from: <http://site.ebrary.com/lib/auckland/Doc?id=10167080>

24.

Kalpakjian S, Schmid SR. Manufacturing engineering and technology. Seventh edition. Upper Saddle River, N.J.: Pearson; 2014.

25.

Groover MP. Fundamentals of modern manufacturing: materials, processes, and systems. 5th ed. Hoboken, N.J.: John Wiley & Sons, Inc; 2013.

26.

Prakash R, ebrary, Inc. Non-destructive testing techniques [Internet]. Tunbridge Wells: New Academic Science; 2012. Available from: <http://site.ebrary.com/lib/auckland/Doc?id=10595619>

27.

Raj B, Jayakumar T, Thavasimuthu M. Practical Non-Destructive Testing. 3rd Revised edition. Oxford: Alpha Science International Ltd; 2007.

28.

Budynas RG, Nisbett JK, Shigley JE. Shigley's mechanical engineering design. Tenth edition.

New York, NY: McGraw-Hill Education; 2015.

29.

Ashby MF, Jones DRH. Engineering Materials 1: An Introduction to Properties, Applications and Design. 4th edn. Butterworth-Heinemann; 2011.

30.

Kakani SL, Kakani A. Material science [Internet]. New Delhi: New Age International (P) Ltd., Publishers; 2004. Available from: <http://site.ebrary.com/lib/auckland/Doc?id=10318701>

31.

Tada H, Paris PC, Irwin GR, American Society of Mechanical Engineers. The stress analysis of cracks handbook [Internet]. 3rd ed. New York, N.Y. (ASME, Three Park Avenue. New York, NY 10016): American Society of Mechanical Engineers; 2000. Available from: <http://ebooks.asmedigitalcollection.asme.org/book.aspx?doi=10.1115/1.801535>

32.

Non-destructive testing [Internet]. Available from: [https://www.nde-ed.org/GeneralResources/IntroToNDT/Intro\\_to\\_NDT.ppt](https://www.nde-ed.org/GeneralResources/IntroToNDT/Intro_to_NDT.ppt)

33.

Non-destructive testing - An Introduction (ASNT) [Internet]. Available from: <https://www.asnt.org/MinorSiteSections/AboutASNT/Intro-to-NDT>

34.

Willcox M, Downes G. A Brief Description of NDT Techniques [Internet]. Available from: <https://www.insight-ndt.com/papers/technical/t001.pdf>

35.

Forsyth DS, Yolken HT, Matzkanin GA. A Brief Introduction to Nondestructive Testing [Internet]. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.383.7049&rep=rep1&>

type=pdf

36.

ASM Handbook Set [Internet]. Materials Park, OH: A S M International; 2010. Available from: <https://matdata-asminternational-org.ezproxy.auckland.ac.nz/hbk/index.jsp>

37.

Microhardness tester [Internet]. Available from: <http://www.omnitechind.com/>

38.

AS/NZS 4671:2001 Steel Reinforcing Materials [Internet]. 2001. Available from: <https://shop.standards.govt.nz/IPCheck/login.jsp?user=IPLogin&id=4671%3A2001%28AS%7CNZS%29&showProductPage=YES>

39.

Microhardness tester [Internet]. Available from: <http://www.omnitechind.com/>

40.

Intergranular corrosion [Internet]. Available from: [http://en.wikipedia.org/wiki/intergranular\\_corrosion](http://en.wikipedia.org/wiki/intergranular_corrosion)

41.

Failure cases [Internet]. Available from: [https://web.archive.org/web/20170923131308/http://www.tech.plym.ac.uk:80/sme/interactive\\_resources/tutorials/failurecases/sf2.html](https://web.archive.org/web/20170923131308/http://www.tech.plym.ac.uk:80/sme/interactive_resources/tutorials/failurecases/sf2.html)

42.

Failure case study [Internet]. Available from: [http://www.nytimes.com/2007/08/03/us/03safety.html?\\_r=0](http://www.nytimes.com/2007/08/03/us/03safety.html?_r=0)

43.

Failure case studies [Internet]. Available from:

[https://stonybrook.digication.com/weixiangfang/Additional\\_Material\\_and\\_Failure\\_Case\\_Study](https://stonybrook.digication.com/weixiangfang/Additional_Material_and_Failure_Case_Study)

44.

Failure case study [Internet]. Available from:

[http://www.nytimes.com/2007/08/03/us/03safety.html?\\_r=0](http://www.nytimes.com/2007/08/03/us/03safety.html?_r=0)

45.

Fatigue study [Internet]. Available from:

<https://ebookcentral.proquest.com/lib/auckland/detail.action?docID=1910705>

46.

Shot peening [Internet]. Available from:

[http://www.metalimprovement.com/shot\\_peening.php](http://www.metalimprovement.com/shot_peening.php)

47.

Laser peening [Internet]. Available from:

<http://www.metalimprovement.com/laserpeening.php>

48.

Fatigue failure case study [Internet]. Available from:

[http://met-tech.com/Fatigue\\_Failure\\_of\\_Light\\_Pole.html](http://met-tech.com/Fatigue_Failure_of_Light_Pole.html)

49.

Weld failure case study [Internet]. Available from:

<https://www.met-tech.com/fractured-crane-frame-weldment/>

50.

Mechanical equipment images [Internet]. Available from: <http://www.gwa-engineers.com/>

51.

Gas turbine blades [Internet]. Available from: <https://article4ever.wordpress.com/2010/04/04/gas-turbine-blade-metallurgy-and-fabrication>

52.

Borescope image [Internet]. Available from: [http://dellon.en.alibaba.com/product/1933413708-221514034/5\\_8\\_inch\\_NDT\\_borescope.html](http://dellon.en.alibaba.com/product/1933413708-221514034/5_8_inch_NDT_borescope.html)

53.

Franco Jr. AR, Pintaúde G, Sinatora A, Pinedo CE, Tschiptschin AP. The use of a vickers indenter in depth sensing indentation for measuring elastic modulus and vickers hardness. *Materials Research*. 2004 Sept;7(3):483-91.

54.

da Silva R. Analysis by Design of Experiments of Distortion Potentials in Drawn and Induction Hardened Wire. 2012; 15(2): 266-276. Available from: <https://doaj.org/article/53110cd1b75f4ecca228df2d490a62d5>

55.

Heinz S, Balle F, Wagner G, Eifler D. Ultrasonic Fatigue of Ti6Al4V in the Very High Cycle Fatigue Regime. In: TMS 2012 141st Annual Meeting and Exhibition: supplemental proceedings, Volume 2: Materials, properties, characterization, and modeling [Internet]. New York: John Wiley & Sons; 2012. p. 831-8. Available from: <http://doi.wiley.com/10.1002/9781118357002.ch103>

56.

There is no infinite fatigue life in metallic materials. *Fatigue & Fracture of Engineering Materials & Structures*. 1999 July;22(7):559-65.

57.

Non-destructive testing [Internet]. Available from:

[https://www.nde-ed.org/GeneralResources/IntroToNDT/Intro\\_to\\_NDT.ppt](https://www.nde-ed.org/GeneralResources/IntroToNDT/Intro_to_NDT.ppt)

58.

Chemmat 204 - past exams [Internet]. Available from:

[https://auckland.primo.exlibrisgroup.com/discovery/collectionDiscovery?vid=64UAUCK\\_INS  
T:NEWUI&collectionId=81367899230002091&query=any,contains,chemmat%20204](https://auckland.primo.exlibrisgroup.com/discovery/collectionDiscovery?vid=64UAUCK_INS<br/>T:NEWUI&collectionId=81367899230002091&query=any,contains,chemmat%20204)