

NS3017: Molecular Cell Biology and Nanoscience

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1.

Reece, Jane B., Campbell, Neil A. Biology [Internet]. 9th ed. Boston: Pearson Education; 2011. Available from:
http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663610340002746&institutionId=2746&customerId=2745

2.

Brooker, Robert J. Biology. 2nd ed. New York: McGraw-Hill Higher Education; 2010.

3.

Mason KA, Losos JB, Singer SR, Raven PH, Johnson GB. Biology. Eleventh edition. New York, NY: McGraw-Hill Education; 2017.

4.

Alberts, Bruce. Molecular biology of the cell. 5th ed. New York: Garland Science; 2008.

5.

Lodish, Harvey F. Molecular cell biology. 7th ed. New York: W.H. Freeman; 2013.

6.

Cooper, Geoffrey M., Hausman, Robert E. The cell: a molecular approach. 6th ed. Sunderland, Mass: Sinauer Associates; 2013.

7.

Berg, Jeremy M., Tymoczko, John L., Stryer, Lubert. Biochemistry [Internet]. 7th ed. New York: W. H. Freeman; 2011. Available from:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybyCI6liMvdmlldy9ib29rcy85NzgxMzE5MjQ4MDYyL2VwdWlvt0VCUFMveGh0bWwvYmVyXzk3ODEzMTkxMTQ2NzFfY29udGVudHMuaHRtbCJ9>

8.

Nelson, David L., Cox, Michael M., Lehninger, Albert L. Lehninger principles of biochemistry [Internet]. 6th ed. New York, N.Y.: W.H. Freeman; 2013. Available from:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybyCI6liMvdmlldy9ib29rcy85NzgxMzE5MTUwODc3L2VwdWlvt0VCUFMveGh0bWwvbmVsXzk3ODE0NjQxODc5NTdfY29udC5odG1sIn0%3D>

9.

Rodwell VW, Bender DA. Harper's illustrated biochemistry. Thirty-first edition. New York: McGraw-Hill Education; 2018.

10.

Immunogold Labelling in Scanning Electron Microscopy [Internet]. Available from:
<http://www.ebsciences.com/papers/immusem.htm>

11.

Monoclonal antibodies [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/monoclonalantibodies.html>

12.

Plasmid Cloning [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/plasmidcloning.html>

13.

Life Cycle of an mRNA [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/lifecyclemrna.html>

14.

mRNA Splicing [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/mRNAsplicing.html>

15.

Translation [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/translation.html>

16.

Polyribosomes [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/polyribosomes.html>

17.

Protein Secretion [Internet]. Available from:
<http://www.sumanasinc.com/webcontent/animations/content/proteinsecretionmb.html>

18.

Tipler, Paul A., Mosca, Gene P. Physics for scientists and engineers: with modern physics [Internet]. 6th ed. New York, NY: W.H. Freeman; 2008. Available from:
<https://bibliu.com/app/#/view/books/9781319155988/pdf2htmllex/index.html>

19.

Atkins PW, De Paula J. Atkins' physical chemistry. Tenth edition. Oxford, United Kingdom: Oxford University Press; 2014.

20.

Binns, Christopher. Introduction to nanoscience and nanotechnology [Internet]. Hoboken, N.J.: Wiley; 2010. Available from:

http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663768710002746&institutionId=2746&customerId=2745

21.

Binns, Christopher. Introduction to nanoscience and nanotechnology [Internet]. Hoboken, N.J.: Wiley; 2010. Available from:
<http://ezproxy.lib.le.ac.uk/login?url=http://www.myilibrary.com?id=268684>

22.

Schmid, Günter. Nanoparticles: from theory to application [Internet]. 2nd ed. revised and updated. Weinheim: Wiley-VCH; 2010. Available from:
<http://ezproxy.lib.le.ac.uk/login?url=http://www.myilibrary.com?id=278389>

23.

Patricia Berger. Preparation and properties of an aqueous ferrofluid. Journal of Chemical Education [Internet]. American Chemical Society; 1999 Jul 1;76(7). Available from:
http://gl9sn3dh2u.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%253Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=Preparation+and+properties+of+an+aqueous+ferrofluid&rft.jtitle=Journal+of+Chemical+Education&rft.au=Patricia+Berger&rft.au=Nicholas+B+Adelman&rft.au=Katie+J+Beckman&rft.au=Dean+J+Campbell&rft.date=1999-07-01&rft.pub=American+Chemical+Society&rft.issn=0021-9584&rft.eissn=1938-1328&rft.volume=76&rft.issue=7&rft.spage=943&rft.externalDocID=42639843¶mdict=en-US

24.

Bruchez, Marcel. Semiconductor Nanocrystals as Fluorescent Biological Labels. Science [Internet]. American Association for the Advancement of Science; 1998 Sep 25;281(5385):2013-2016. Available from:
http://gl9sn3dh2u.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%253Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=Semiconductor+Nanocrystals+as+Fluorescent+Biological+Labels&rft.jtitle=Science&rft.au=Bruchez%252C+Marcel&rft.au=Moronne%252C+Mario&rft.au=Gin%252C+Peter&rft.au=Weiss%252C+Shimon&rft.date=1998-09-25&rft.pub=American+Association+for+the+Advancement+of+Science&rft.issn=0036-8075&rft.eissn=1095-9203&rft.volume=281&rft.issue=5385&rft.spage=2013&rft.epage=2016&rft.externalDocID=10.2307%252F2895733¶mdict=en-US

25.

Jain KK. Nanotechnology in clinical laboratory diagnostics. Clinica Chimica Acta. 2005 Aug;358(1-2):37-54.

26.

Medical Histology -- Ultrastructure of the Cell (Electron Micrographs) [Internet]. Available from: http://www.bu.edu/histology/m/t_electr.htm

27.

DNA-RNA-Protein [Internet]. Available from: <http://www.nobelprize.org/educational/medicine/dna/index.html>

28.

Virtual Cell Animation Collection [Internet]. Available from: <http://vcell.ndsu.nodak.edu/animations/>

29.

Lee JS, Han MS, Mirkin CA. Colorimetric Detection of Mercuric Ion (Hg^{2+}) in Aqueous Media using DNA-Functionalized Gold Nanoparticles. Angewandte Chemie International Edition. 2007 May 25;46(22):4093-4096.

30.

Daniel MC, Astruc D. Gold Nanoparticles: Assembly, Supramolecular Chemistry, Quantum-Size-Related Properties, and Applications toward Biology, Catalysis, and Nanotechnology. Chemical Reviews. 2004 Jan;104(1):293-346.

31.

Shukla R, Chanda N, Zambre A, Upendran A, Katti K, Kulkarni RR, Nune SK, Casteel SW, Smith CJ, Vimal J, Boote E, Robertson JD, Kan P, Engelbrecht H, Watkinson LD, Carmack TL, Lever JR, Cutler CS, Caldwell C, Kannan R, Katti KV. Laminin receptor specific therapeutic gold nanoparticles (198AuNP-EGCg) show efficacy in treating prostate cancer. Proceedings of the National Academy of Sciences. 2012 Jul 31;109(31):12426-12431.