NS3017: Molecular Cell Biology and Nanoscience

View Online

[1]

Alberts, Bruce 2008. Molecular biology of the cell. Garland Science.

[2]

Atkins, P.W. and De Paula, J. 2014. Atkins' physical chemistry. Oxford University Press.

[3]

Berg, Jeremy M. et al. 2011. Biochemistry. W. H. Freeman.

[4]

Binns, Christopher 2010. Introduction to nanoscience and nanotechnology. Wiley.

[5]

Binns, Christopher 2010. Introduction to nanoscience and nanotechnology. Wiley.

[6]

Brooker, Robert J. 2010. Biology. McGraw-Hill Higher Education.

[7]

Bruchez, Marcel 1998. Semiconductor Nanocrystals as Fluorescent Biological Labels.

Science. 281, 5385 (Sep. 1998), 2013–2016.

[8]

Cooper, Geoffrey M. and Hausman, Robert E. 2013. The cell: a molecular approach. Sinauer Associates.

[9]

Daniel, M.-C. and Astruc, D. 2004. Gold Nanoparticles: Assembly, Supramolecular Chemistry, Quantum-Size-Related Properties, and Applications toward Biology, Catalysis, and Nanotechnology. Chemical Reviews. 104, 1 (Jan. 2004), 293–346. DOI:https://doi.org/10.1021/cr030698+.

[10]

DNA-RNA-Protein: http://www.nobelprize.org/educational/medicine/dna/index.html.

[11]

Immunogold Labelling in Scanning Electron Microscopy: http://www.ebsciences.com/papers/immusem.htm.

[12]

Jain, K.K. 2005. Nanotechnology in clinical laboratory diagnostics. Clinica Chimica Acta. 358, 1–2 (Aug. 2005), 37–54. DOI:https://doi.org/10.1016/j.cccn.2005.03.014.

[13]

Lee, J.-S. et al. 2007. Colorimetric Detection of Mercuric Ion (Hg2+) in Aqueous Media using DNA-Functionalized Gold Nanoparticles. Angewandte Chemie International Edition. 46, 22 (May 2007), 4093–4096. DOI:https://doi.org/10.1002/anie.200700269.

[14]

Life Cycle of an mRNA: http://www.sumanasinc.com/webcontent/animations/content/lifecyclemrna.html.

[15]

Lodish, Harvey F. 2013. Molecular cell biology. W.H. Freeman.

[16]

Mason, K.A. et al. 2017. Biology. McGraw-Hill Education.

[17]

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

[18]

Monoclonal antibodies: http://www.sumanasinc.com/webcontent/animations/content/monoclonalantibodies.html.

[19]

mRNA Splicing: http://www.sumanasinc.com/webcontent/animations/content/mRNAsplicing.html.

[20]

Nelson, David L. et al. 2013. Lehninger principles of biochemistry. W.H. Freeman.

[21]

Patricia Berger 1999. Preparation and properties of an aqueous ferrofluid. Journal of Chemical Education. 76, 7 (Jul. 1999).

[22]

Plasmid Cloning:

http://www.sumanasinc.com/webcontent/animations/content/plasmidcloning.html.

[23]

Polyribosomes:
http://www.sumanasinc.com/webcontent/animations/content/polyribosomes.html.

[24]

Protein Secretion:
http://www.sumanasinc.com/webcontent/animations/content/proteinsecretionmb.html.

[25]

Reece, Jane B. and Campbell, Neil A. 2011. Biology. Pearson Education.

[26]

Rodwell, V.W. and Bender, D.A. 2018. Harper's illustrated biochemistry. McGraw-Hill Education.

[27]

Schmid, Günter 2010. Nanoparticles: from theory to application. Wiley-VCH.

[28]

Shukla, R. et al. 2012. Laminin receptor specific therapeutic gold nanoparticles (198AuNP-EGCg) show efficacy in treating prostate cancer. Proceedings of the National Academy of Sciences. 109, 31 (Jul. 2012), 12426–12431. DOI:https://doi.org/10.1073/pnas.1121174109.

[29]

Tipler, Paul A. and Mosca, Gene P. 2008. Physics for scientists and engineers: with modern physics. W.H. Freeman.

[30]

Translation: http://www.sumanasinc.com/webcontent/animations/content/translation.html.

[31]

Virtual Cell Animation Collection: http://vcell.ndsu.nodak.edu/animations/.