

# NS3107: Molecular Cell Biology and Nanoscience

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Alberts, B. (2015) *Molecular biology of the cell* (Sixth Edition). Sixth edition. New York, NY: Garland Science, Taylor and Francis Group.

Atkins, P.W. and De Paula, J. (2014) *Atkins' physical chemistry*. Tenth edition. Oxford, United Kingdom: Oxford University Press.

Berg, Jeremy M., Tymoczko, John L., and Stryer, Lubert (2011) *Biochemistry*. 7th ed. New York: W. H. Freeman. Available at:  
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybcCl6liMvdmlldy9ib29rcy85NzgxMzE5MjQ4MDYyL2VwdWlvT0VCUFMveGh0bWwvYmVyXzk3ODEzMTkxMTQ2NzFfY29udGVudHMuaHRtbCJ9>.

Binns, Christopher (2010) *Introduction to nanoscience and nanotechnology*. Hoboken, N.J.: Wiley. Available at:  
[http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package\\_service\\_id=5663768710002746&institutionId=2746&customerId=2745](http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663768710002746&institutionId=2746&customerId=2745).

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

Bruchez, Marcel (1998) 'Semiconductor Nanocrystals as Fluorescent Biological Labels', *Science*, 281(5385), pp. 2013–2016. Available at:  
[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=Morone%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&paramdict=en-US](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=Morone%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&paramdict=en-US).

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

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), pp. 293–346. Available at:  
<https://doi.org/10.1021/cr030698+>.

DNA-RNA-Protein (no date). Available at:  
<http://www.nobelprize.org/educational/medicine/dna/index.html>.

Immunogold Labelling in Scanning Electron Microscopy (no date). Available at: <http://www.ebsciences.com/papers/immusem.htm>.

Jain, K.K. (2005) 'Nanotechnology in clinical laboratory diagnostics', *Clinica Chimica Acta*, 358(1-2), pp. 37-54. Available at: <https://doi.org/10.1016/j.cccn.2005.03.014>.

Lee, J.-S., Han, M.S. and Mirkin, C.A. (2007) 'Colorimetric Detection of Mercuric Ion (Hg<sup>2+</sup>) in Aqueous Media using DNA-Functionalized Gold Nanoparticles', *Angewandte Chemie International Edition*, 46(22), pp. 4093-4096. Available at: <https://doi.org/10.1002/anie.200700269>.

Life Cycle of an mRNA (no date). Available at: <http://www.sumanasinc.com/webcontent/animations/content/lifecyclemrna.html>.

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

Medical Histology -- Ultrastructure of the Cell (Electron Micrographs) (no date). Available at: [http://www.bu.edu/histology/m/t\\_electr.htm](http://www.bu.edu/histology/m/t_electr.htm).

Monoclonal antibodies (no date). Available at: <http://www.sumanasinc.com/webcontent/animations/content/monoclonalantibodies.html>.  
mRNA Splicing (no date). Available at: <http://www.sumanasinc.com/webcontent/animations/content/mRNAsplicing.html>.

Murray, Robert K. and Harper, Harold A. (2009) *Harper's illustrated biochemistry*. 28th ed. New York, N.Y.: McGraw-Hill Medical. Available at: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4657718>.

Nelson, David L., Cox, Michael M., and Lehninger, Albert L. (2013) *Lehninger principles of biochemistry*. 6th ed. New York, N.Y.: W.H. Freeman. Available at: <https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VyYbCl6liMvdmlldy9ib29rcy85NzgxMzE5MTUwODc3L2VwdWlVt0VCUFMveGh0bWwvbmVsXzk3ODE0NjQxODc5NTdfY29udC5odG1sIn0%3D>.

Patricia Berger (1999) 'Preparation and properties of an aqueous ferrofluid', *Journal of Chemical Education*, 76(7). Available at: [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&paramdict=en-US](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&paramdict=en-US).

Plasmid Cloning (no date). Available at: <http://www.sumanasinc.com/webcontent/animations/content/plasmidcloning.html>.

Polyribosomes (no date). Available at: <http://www.sumanasinc.com/webcontent/animations/content/polyribosomes.html>.

Protein Secretion (no date). Available at:

<http://www.sumanasinc.com/webcontent/animations/content/proteinsecretionmb.html>.

Raven, Peter H. et al. (2014) Biology. 10th ed. New York, NY: McGraw-Hill.

Reece, Jane B. and Campbell, Neil A. (2011) Biology. 9th ed. Boston: Pearson Education. Available at:

[http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package\\_service\\_id=5663610340002746&institutionId=2746&customerId=2745](http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663610340002746&institutionId=2746&customerId=2745).

Schmid, Günter (2010) Nanoparticles: from theory to application. 2nd ed. revised and updated. Weinheim: Wiley-VCH. Available at:

<http://ezproxy.lib.le.ac.uk/login?url=http://www.mylibrary.com?id=278389>.

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), pp. 12426-12431. Available at:

<https://doi.org/10.1073/pnas.1121174109>.

Tipler, Paul A. and Mosca, Gene P. (2008) Physics for scientists and engineers: with modern physics. 6th ed. New York, NY: W.H. Freeman. Available at:

<https://bibliu.com/app/#/view/books/9781319155988/pdf2html/index.html>.

Translation (no date). Available at:

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

Virtual Cell Animation Collection (no date). Available at:

<http://vcell.ndsu.nodak.edu/animations/>.