

# CHEM0031: Inorganic Rings, Chains and Clusters

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Atkins, P.W. (2010) Shriver & Atkins' inorganic chemistry. 5th ed. Oxford: Oxford University Press.

Bar-Sadan, M., Kaplan-Ashiri, I. and Tenne, R. (2007) 'Inorganic fullerenes and nanotubes: Wealth of materials and morphologies', *The European Physical Journal Special Topics*, 149(1), pp. 71–101. Available at: <https://doi.org/10.1140/epjst/e2007-00245-1>.

Choy, K. (2003) 'Chemical vapour deposition of coatings', *Progress in Materials Science*, 48(2), pp. 57–170. Available at: [https://doi.org/10.1016/S0079-6425\(01\)00009-3](https://doi.org/10.1016/S0079-6425(01)00009-3).

Cotton, F.A. (1999) *Advanced inorganic chemistry*. 6th ed. New York: Wiley.

De, M., Ghosh, P.S. and Rotello, V.M. (2008) 'Applications of Nanoparticles in Biology', *Advanced Materials*, 20(22), pp. 4225–4241. Available at: <https://doi.org/10.1002/adma.200703183>.

Falenty, A., Hansen, T.C. and Kuhs, W.F. (2014) 'Formation and properties of ice XVI obtained by emptying a type sII clathrate hydrate', *Nature*, 516(7530), pp. 231–233. Available at: <https://doi.org/10.1038/nature14014>.

Feher, F.J. and Budzichowski, T.A. (1995) 'Silasesquioxanes as ligands in inorganic and organometallic chemistry', *Polyhedron*, 14(22), pp. 3239–3253. Available at: [https://doi.org/10.1016/0277-5387\(95\)85009-0](https://doi.org/10.1016/0277-5387(95)85009-0).

Gillespie, R.J. (1979) 'Nyholm Memorial Lecture. Ring, cage, and cluster compounds of the main group elements', *Chemical Society Reviews*, 8(3). Available at: <https://doi.org/10.1039/cs9790800315>.

Greenwood, N.N. and Earnshaw, A. (1997a) *Chemistry of the elements*. 2nd ed. Oxford: Butterworth-Heinemann.

Greenwood, N.N. and Earnshaw, A. (1997b) *Chemistry of the elements*. 2nd ed. Oxford: Butterworth-Heinemann.

Housecroft, C.E. (1994) *Boranes and metallaboranes: structure, bonding and reactivity*. 2nd ed. Hemel Hempstead: Ellis Horwood.

Housecroft, C.E. (1996) *Metal-metal bonded carbonyl dimers and clusters*. Oxford: Oxford University Press.

- Huber, D. (2005) 'Synthesis, Properties, and Applications of Iron Nanoparticles', *Small*, 1(5), pp. 482–501. Available at: <https://doi.org/10.1002/sml.200500006>.
- Huheey, J.E., Keiter, E.A. and Keiter, R.L. (1993a) *Inorganic chemistry: principles of structure and reactivity*. 4th ed. New York, NY: HarperCollins College Publishers.
- Huheey, J.E., Keiter, E.A. and Keiter, R.L. (1993b) *Inorganic chemistry: principles of structure and reactivity*. 4th ed. New York, NY: HarperCollins College Publishers.
- Inokuma, Y. et al. (2013) 'X-ray analysis on the nanogram to microgram scale using porous complexes', *Nature*, 495(7442), pp. 461–466. Available at: <https://doi.org/10.1038/nature11990>.
- Kauzlarich, S.M. (1996) *Chemistry, structure, and bonding of Zintl phases and ions*. New York: VCH.
- Kawasumi, M. (2004) 'The discovery of polymer-clay hybrids', *Journal of Polymer Science Part A: Polymer Chemistry*, 42(4), pp. 819–824. Available at: <https://doi.org/10.1002/pola.10961>.
- Mingos, D.M.P. and Wales, D.J. (1990) *Introduction to cluster chemistry*. Englewood Cliffs, N.J.: Prentice Hall.
- Ormerod, R.M. (2003) 'Solid oxide fuel cells', *Chemical Society Reviews*, 32(1), pp. 17–28. Available at: <https://doi.org/10.1039/b105764m>.
- Ozin, G.A., Arsenault, A.C. and Cademartiri, L. (no date) *Nanochemistry: a chemical approach to nanomaterials*. 2nd ed. Cambridge: Royal Society of Chemistry. Available at: <https://app.knovel.com/hotlink/toc/id:kpNACANE01/nanochemistry-a-chemical?kpromoter=marc>.
- Perez, C. et al. (2012) 'Structures of Cage, Prism, and Book Isomers of Water Hexamer from Broadband Rotational Spectroscopy', *Science*, 336(6083), pp. 897–901. Available at: <https://doi.org/10.1126/science.1220574>.
- Qin, Y., Wang, X. and Wang, Z.L. (2009) 'Microfibre–nanowire hybrid structure for energy scavenging', *Nature*, 457(7227), pp. 340–340. Available at: <https://doi.org/10.1038/nature07628>.
- Qu, L. et al. (2008) 'Carbon Nanotube Arrays with Strong Shear Binding-On and Easy Normal Lifting-Off', *Science*, 322(5899), pp. 238–242. Available at: <https://doi.org/10.1126/science.1159503>.
- Rao, C.N.R., Müller, A. and Cheetham, A.K. (2004) *The chemistry of nanomaterials: synthesis, properties and applications*. Weinheim: Wiley-VCH.
- Shriver, D.F., Kaesz, H.D. and Adams, R.D. (1990) *The Chemistry of metal cluster complexes*. Cambridge: VCH.
- Smith, A.M. and Nie, S. (2010) 'Semiconductor Nanocrystals: Structure, Properties, and Band Gap Engineering', *Accounts of Chemical Research*, 43(2), pp. 190–200. Available at:

<https://contentstore.cla.co.uk/secure/link?id=29f27d07-800d-f011-81a2-842121568115>.

Tenne, R. (2006) 'Inorganic nanotubes and fullerene-like nanoparticles', *Nature Nanotechnology*, 1(2), pp. 103–111. Available at: <https://doi.org/10.1038/nnano.2006.62>.  
Thanh, N.T.K. and Green, L.A.W. (2010) 'Functionalisation of nanoparticles for biomedical applications', *Nano Today*, 5(3), pp. 213–230. Available at: <https://doi.org/10.1016/j.nantod.2010.05.003>.

Wagner, V. et al. (2006) 'The emerging nanomedicine landscape', *Nature Biotechnology*, 24(10), pp. 1211–1217. Available at: <https://doi.org/10.1038/nbt1006-1211>.

West, R. and Stone, F.G.A. (1996) *Multiply bonded main group metals and metalloids*. San Diego: Academic Press.

Woollins, J.D. (1988) *Non-metal rings, cages, and clusters*. Chichester: Wiley.