

Scientific vocabulary <b>electron microscope</b>	A microscope that uses a beam of accelerated electrons as a source of illumination for higher resolution (as the wavelength of an electron can be up to 100,000 times shorter than that of visible light photons).
Scientific vocabulary <b>non-crystalline</b>	A solid that lacks the long-range order that is characteristic of a crystal. In older books the term is used synonymously with glass.
Scientific vocabulary <b>single-particle analysis</b>	Single particle analysis averages many particles from a sample, allowing for computer algorithms to process the individual images into a combined "representative" image.
Scientific vocabulary <b>cryo-electron microscopy</b>	A form of transmission electron microscopy (TEM) where the sample is studied at cryogenic temperatures (generally liquid-nitrogen temperatures).

<p>Scientific vocabulary</p> <p><b>cryogenics</b></p>	<p>In physics, cryogenics is the study of the production and behaviour of materials at very low temperatures. Scientists assume a gas to be cryogenic if it can be liquefied at or below <math>-150\text{ }^{\circ}\text{C}</math> (123.15K).</p>
<p>Scientific vocabulary</p> <p><b>Angstrom (<math>\text{\AA}</math>)</b></p>	<p>angstrom is a unit of length equal to <math>10^{-10}\text{ m}</math> (one ten-billionth of a metre) or 0.1 nanometre.</p>
<p>Scientific vocabulary</p> <p><b>crystallography</b></p>	<p>The experimental science of determining the arrangement of atoms in crystalline solids.</p>
<p>Scientific vocabulary</p> <p><b>vitrification</b></p>	<p>The transformation of a substance into a glass, i.e. a non-crystalline amorphous solid.</p>
<p>Scientific vocabulary</p> <p><b>Dalton (Da)</b></p>	<p>Alternate name for the atomic mass unit, and kilodalton (kDa) is 1,000 daltons.</p>

Scientific vocabulary <b>tomographic</b>	A high-resolution (~4 nm) imaging technique used to produce a series of 2D images which are combined to produce a 3D reconstruction.
Scientific vocabulary <b>high-resolution</b>	The detail an image holds. Higher resolution means more image detail.
Scientific vocabulary <b>amorphous ice</b> (non-crystalline "vitreous" ice)	An amorphous solid form of water, distinguished by a lack of long-range order in its molecular arrangement.
Scientific vocabulary <b>prefix "cryo"</b>	Used in scientific vocabulary to mean "cold."