

# University of Leeds Classification of Books

## Physics

### [A General]

- A-0.01 Periodicals
- A-0.02 Series
- A-0.03 Collected essays, Festschriften etc.
- A-0.04 Bibliographies and guides to literature
- A-0.05 Philosophy, scientific method
- A-0.06 Study and teaching
- A-0.09 Tables
- A-0.19 Dictionaries
- A-1 General textbooks
- A-2 Mathematics for physics *Prefer Mathematics J-1*

### [B History of Physics and Natural Philosophy]

- B-1 General *No longer used : see History of Science F-4*
- B-2 Biography & works of particular scientists  
*No longer used : see History of Science C-9*

### [C General Physical Properties of Matter]

- C-0 General texts
- C-1 Mechanics of rigid bodies, vibrations and waves in rigid bodies
- C-2 Properties of fluids, viscosity, rheology  
*Industrial applications: see Chemical Engineering B*
- C-2.1 Properties of solids *See also Chemistry E-34*
- C-2.2 Properties of liquids *See also Chemistry E-20*
- C-2.3 Properties of gases, high pressure and vacuum physics  
*See also Chemistry E-10*

### [D Solid State Physics]

- D-0 General solid state physics
- D-1 Structure, group theory
- D-2 Properties (elastic, thermal)
- D-2.1 Lattice dynamics and phonons
- D-2.2 Surface physics
- D-2.3 Diffusion
- D-2.4 Thin films
  - D-2.41 Creation of thin films (epitaxy, sputtering, etc.)
  - D-2.42 Magnetic and electrical properties/effects of thin films
- D-3 General crystallography (and applied X-ray physics)
- D-4 Structural analysis
  - D-4.1 X-ray diffraction *See also General Biology D-3.4*
  - D-4.2 Neutron diffraction
  - D-4.3 Electron diffraction
  - D-4.4 Spectroscopy and spectrometry  
*See also Physics H-2 (Optics), Astronomy G-7, Chemistry D*  
*NMR spectroscopy : see E-6.1*
- D-5 Defects and impurities

<b>[E</b>	<b>Quantum Physics]</b>	
E-0	Quantum physics – general	<i>Quantum computers: Computer Studies L-1</i>
E-1	Quantum mechanics	
E-1.1	Group theory and quantum mechanics	
E-1.2	Quantum field theory	
E-1.22	Gauge theory	
E-1.3	Quantum electrodynamics and radiation	
E-1.4	Scattering theory	
E-1.5	Quantum optics (including wave/particle duality, quantum light theory)	
E-1.6	Quantum chromodynamics	
E-1.7	Quark models	
E-2	Nuclear physics	
E-3	Particle physics	
E-3.1	Elementary particles	
E-3.2	High energy particles	
E-3.3	Mossbauer effect	
E-3.4	Particle collisions	
E-4	Radioactivity and isotopes (including fission)	
	<i>Fusion : see Mechanical Engineering D-5</i>	
	<i>Containment of fusion : see Physics N-0</i>	
E-4.1	Damage to solids, crystals, etc.	
E-4.2	Protection, effects, dosage and other health issues	
	<i>Agricultural aspects : see Applied Biology C-39</i>	
	<i>Historical aspects : see History of Science L-10</i>	
	<i>Political aspects : see History of Science Q-2</i>	
E-5	Detectors	
E-6	Magnetic resonance and nuclear moments	<i>See also Chemistry D-3</i>
E-6.1	NMR spectroscopy	<i>See also Chemistry D-2</i>
[E-6.2	MRI - Magnetic resonance imaging]	<i>No longer used : see Health Sciences WN 185</i>
E-7	Lasers and masers : theory and creation of lasers	<i>Applications : see H-4.2</i>
E-8	Neutrons	

<b>[G</b>	<b>Acoustics]</b>	
	<i>Architectural aspects: Civil Engineering R-5</i>	
	<i>Musical aspects: Music A-1.4</i>	
	<i>Acoustical engineering : Electrical Engineering P-2</i>	
G-0	General	

<b>[H</b>	<b>Optics]</b>	
H-0	General (light and phenomena associated with its generation, transmission and detection, including nonlinear optics)	
H-1	Geometrical and wave optics (includes reflection and refraction)	
H-2	Spectroscopy	<i>See also Chemistry D ; Physics D-4.4</i>
H-3	Raman effect, luminescence	<i>See also Chemistry D-6</i>
H-4	Applied optics	
	[Colour]	<i>No longer used : see Colour Chemistry</i>
H-4.2	Laser technology & applications	<i>Theory : see E-7</i>
H-5	Electron optics (use of electron lenses in electron microscopes, cathode ray tubes, etc.)	

<b>[J</b>	<b>Heat]</b>
J-0	General
J-1	Temperature measurement, radiation
J-2	Heat transfer
J-3	Thermodynamics, statistical dynamics, statistical mechanics <i>Industrial applications : see Chemical Engineering A-4.5</i> <i>Chemical thermodynamics : see Chemistry J</i> <i>Statistical thermodynamics : see Chemistry C-4</i>
J-5	Low temperature physics
<b>[K</b>	<b>Electricity and Magnetism]</b>
K-0	General
K-1	Classical electricity and magnetism
K-2	General conductivity in liquids and solids and resistance – general <i>See also Electrical Engineering G-2</i>
K-2.1	(Electrical) Conductivity in gases, ions, ionization, x-rays, cathode rays
K-2.2	Semiconductivity, general
K-2.21	Structure and specific kinds of semiconductors
K-2.25	Diffusion and mass transfer in semiconductors
K-2.26	Interactions in and specific properties of semiconductors (including effects of beams and electromagnetic fields, Hall effects, adsorption, instabilities, resistivity, tunneling)
K-2.3	Superconductivity
K-2.4	Dielectrics, ferroelectrics, piezoelectrics
K-3	Magnetism
<b>[L</b>	<b>Geophysics, Meteorology, Atmospheric Electricity]</b>
L-0	General <i>See also Geography D-0</i>
L-0.02	series
L-1	Aurora
<b>[N</b>	<b>Plasma Physics]</b>
N-0	General