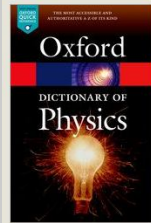


Home PageA Dictionary of Physics (7 ed.) 

Edited by Jonathan Law and Richard Rennie

[Previous Edition \(6 ed.\)](#)

Over 3,900 entries

This is the most popular dictionary of physics available, and defines all commonly encountered physics terms and concepts, as well as many terms from the related fields of astronomy, astrophysics, and physical chemistry. It is generously illustrated with over 120 diagrams, graphs, and tables and also contains biographies of important scientists. Appendices include SI units, the solar system, and the electromagnetic spectrum, plus a list of Nobel Prize winners and a chronology of key dates in physics. With over 200 new entries and full revision of the existing text, this new ... [More](#)

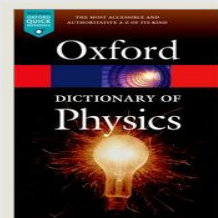
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Jonathan Law, *editor*Richard Rennie, *editor*

Richard Rennie has conducted research at the Universities of Aberdeen, Oxford, Cambridge, and California, Santa Barbara. His main interest is in the theory of the structure of matter. He has contributed to several other reference titles including the *Oxford Dictionary of* [More](#)

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Subject

Physics -Dictionaries

Accessibility

Partially Free

Language

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Brief History

First edition was published in 1985 as Concise Dictionary of Physics. The second edition came in 1990 and the third edition came in 1996. The fourth edition came in 2000 renamed Dictionary of Physics. The fifth and sixth edition came gradually in 2005 and 2009. Current Online Version (7th edition) was released in 2015. The editors of this version are Jonathan Law and Richard Rennie. This version online published also in 2015. Current Online Version published in 2016. Print ISBN-13:9780198714743 and eISBN: 9780191783036.

Scope and Coverage

This is the most popular dictionary of physics available online. This dictionary contains over 3,900 entries covering all commonly encountered physics terms and concepts, as well as terms from the related fields of astronomy, astrophysics, and physical chemistry. With 200 new entries and expanded coverage in areas including applied physics, statistical distributions, polymers, and nano science. The dictionary is generously illustrated with over 120 diagrams, graphs, and tables. Feature entries provide in-depth analysis of key topics such as crystal defects, magnetic resonance imaging, and the solar system. Three feature entries on low-temperature physics, nanophysics, and quantum entanglement are completely new to this edition, as are entry-level web links.

Kind of Information

The meaning of the terms, definitions and short notes on those terms, some biographies of physicists are available here. See and see also references are also available here. Some terms within the meaning of a particular entry are cross referenced. Related terms of a particular entry are also given in hyper link form. Some examples are given below for clear understanding.

- **Ohm's law**

The ratio of the potential difference between the ends of a conductor to the current flowing through it is constant. This constant is the resistance of the conductor, i.e. $V=IR$, where V is the potential difference in volts, I is the current in amperes, and R is the resistance in ohms. The law was discovered in 1827 by Georg Ohm. Most materials do not obey this simple linear law; those that do are said to be **ohmic** but remain so only if physical conditions, such as temperature, remain constant. Metals are the most accurately ohmic conductors.

- **Avogadro, Amedeo (1776–1856)** Italian chemist and physicist.

In 1811 he published his hypothesis (see Avogadro's law), which provided a method of calculating molecular weights from vapour densities. The importance of the work remained unrecognized, however, until championed by Stanislao Cannizzaro (1826–1910) in 1860

- **axion**

A hypothetical elementary particle postulated to explain why there is no observed CP violation (see CP invariance) in the strong interaction (see fundamental interactions). Axions have not been detected experimentally, although it has been

possible to put limits on their mass and other properties from the effects that they would have on some astrophysical phenomena (e.g. the cooling of stars). It has also been suggested that they may account for some or all of the missing matter in the universe (see **missing mass**).

Related Content

IN THIS WORK

CP invariance

fundamental interactions

missing mass

Special Features

- ❖ Links to Gmail, Yahoo mail and various social networking sites like Facebook, Twitter, Pinterest, Google plus etc. are available.
- ❖ Subject wise arrangement of various Oxford reference tools is available in this site.
- ❖ If one types a particular term in the search bar the list of books published from Oxford, on that specific topic is found.

Arrangement Pattern

Entries are arranged alphabetically. Under an alphabet the entries which start with that particular alphabet are also arranged alphabetically. For an example mention may be made of balance, ballistic galvanometer, ballistic pendulum, ballistics, ball lightning etc. which come under the alphabet “B”.

Remarks

It is ideal for students of physics at A-Level and undergraduate level, as well as students of related science subjects. This site is also valuable for professionals and for anyone who comes into contact with the terms and concepts of physics.

Comparable Tools

- einstein-online (<http://www.einstein-online.info/dictionary>)
- etacude.com (<http://dictionary.etacude.com/>)
- Dictionary of Geophysics, Astrophysics and Astronomy (<http://www.deu.edu.tr/userweb/emre.timur/dosyalar/Dictionary%20of%20Geophysics,%20Astrophysics%20and%20Astronomy.pdf>)

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