

# Physics

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## Scope

The purpose of this pathfinder is to introduce some of the resources available in Robert W. Woodruff Library on **PHYSICS**. This pathfinder is NOT a comprehensive listing of sources, but is intended to be a starting point from which you can begin your research according to your specific needs.

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## 1. Biographies

*Biography of Physics* by George Gamow  
Location: MAIN STACKS QC7 .G27 1988

*Legends in Their Own Time: A Century of American Physical Scientists* by Anthony Serifini  
Location: MAIN STACKS QC15 .S437 1993

*The Nobel Scientists: A Biographical Encyclopedia* by George T. Kurian  
Location: MAIN STACKS Q141 .K78 2002

*Quantum Profiles* by Jeremy Bernstein  
Location: MAIN STACKS QC174.12 .B464 1991

*Women in Chemistry and Physics: A Bibliographic Sourcebook* edited by L.S. Grinstein, R. K. Rose and M.H. Rafailovich  
Location: MAIN STACKS QD21 .W62 1993

## 2. Dictionaries

*A Dictionary of Physics* edited by Alan Isaacs  
Location: REFERENCE QC5 .C56 2000

*The Hutchinson Pocket Dictionary of Physics*  
Location: NetLibrary Electronic Book QC5.H88 2004

*Langenscheidts Routledge German Dictionary of Physics* by Ralf Sube  
Location: REFERENCE QC5 .S885 2001

### 3. Encyclopedias

*Encyclopedia of Physics* by Joe Rosen  
Location: REFERENCE QC5 .R596 2004

*Encyclopedia of the Atomic Age* edited by Rodney P. Carlisle  
Location: REFERENCE QC773 .E49 2001

### 4. Handbooks

*CRC Handbook of Chemistry and Physics*  
Location: REFERENCE QD65 .H3 2004

*CRC Materials Science and Engineering Handbook* edited by James F. Shackelford and William Alexander.  
Location: REFERENCE TA403.4 .C74 2001

*Handbook of Atmospheric Science* edited by C.N. Hewitt and A.V. Jackson  
Location: NetLibrary Electronic Book QC864 .H36 2003

*Handbook of Mass Measurement* by Frank E. Jones and Randall M. Schoonover  
Location: MAIN STACKS QC106 .J66 2002

*Handbook of Physics* by John W. Harris, Horst Stoecher and Walter Benenson  
Location: MAIN STACKS QC61 .H37 2001

*Handbook on the Physics and Chemistry of Rare Earths*, Vol. 31, Pt. 2 High Temperature Superconductors edited by Karl A. Gschneider, LeRoy Eyring and M. Brian Maple  
Location: REFERENCE QD172 .R2 H262 2001

*The Illustrated Wavelet Transform Handbook: Introductory Theory and Applications in Science, Engineering, Medicine and Finance* by Paul S. Addison  
Location: MAIN STACKS QA403.3 .A35 2002

### 5. Methods

*Advanced Mathematical Methods in Science and Engineering* by S.I. Hayek  
Location: REFERENCE QA37.2 .H39 2001

*Advances in Surface Science* edited by Hari S. Nalwa  
Location: REFERENCE QC173.4 .S94 A38 2001

*Computational Methods in Solid State Physics* by V.V. Nemoshkalenko and V.N. Antonov  
Location: MAIN STACKS QC176.5 .N45 1998

*Essential Mathematical Methods for Physicists* by Hans J. Weber and George B. Arfken  
Location: MAIN STACKS QC20 .W42 2004

*Integral Methods in Science and Engineering* edited by P. Schiavone, C. Constanda and A. Mioduchowski  
Location: MAIN STACKS QA431 .I49 2002

*Mathematical Methods for Physicists* by George B. Arfken and Hans J. Weber  
Location: MAIN STACKS QA37.3 .A74 2001

*Mathematical Methods for Physicists: A Concise Introduction* by Tai L. Chow  
Location: NetLibrary Electronic Book QC20 C57  
2000eb

*Mathematical Methods for Students of Physics and Related Fields* by Sadri Hassani  
Location: MAIN STACKS QC20 .H392 2000

*Mathematical Methods Using Mathematica for Students of Physics and Related Fields* by Sadri Hassani  
Location: NetLibrary Electronic Book QC20 .H393 2003

*Methods for Solving Inverse Problems in Mathematical Physics* by Aleksey I. Prilepko, Dmitry G. Orlovsky and Igor A. Vasin  
Location: MAIN STACKS QC20.7 .D5 P73 2000

*Methods of Statistical Physics* by Tomoyasu Tanaka  
Location: MAIN STACKS QC174.8 .T36 2002

*Nonlinear Dynamics and Chaos: Where Do We Go From Here?* edited by S.J. Hogan, *et al.*  
Location: NetLibrary Electronic Book

*Selected Mathematical Methods in Theoretical Physics* by Vladimir P. Krainov  
Location: MAIN STACKS QC20.5 .K73 2002

*Studies in Atmospheric Sciences* edited by L. Mark Berliner, Douglas Nychka and Timothy Hoar  
Location: MAIN STACKS QC861.2 .S78 2000

*Symmetry Methods for Differential Equations: A Beginner's Guide* by Peter E. Hydon  
Location: MAIN STACKS QC20.7 .D5 H93 2000

*Theoretical Methods for Strongly Correlated Electrons* edited by David Sénéchal, André-Marie Tremblay and Claude Bourbonnais  
Location: NetLibrary Electronic Book QC174.8 .E4 T448 2004

## 6. Electronic Resources

**ACM Digital Library** <http://www.acm.org/dl> provides online access to all ACM journals, magazines and conference proceedings.

**Databases including GALILEO** [<http://www.auctr.edu/resources/databases.asp>] (Proxy Account Required)

EBSCO Host Academic Search Premier  
ProQuest Research Library  
Wilson OmniFile Full Text Select

**MathSciNet** <http://www.ams.org/mathscinet> is a comprehensive database covering the world's mathematical literature since 1940. The web-based version of Mathematical Reviews (MR), MathSciNet provides access to the bibliographic data and reviews of mathematical research literature contained in the Mathematical Review Database and links to approximately 300,000 original articles.

**SciFinder SCHOLAR (Restricted Access - In Library or CampusUse Only)** -SciFinder Scholar provides online access to accurate and comprehensive chemical and related scientific information. Databases include Chemical Abstracts, CAPLUS<sup>SM</sup>, REGISTRY<sup>SM</sup>, CASREACT, CHEMLIST, CHEMCAT and MEDLINE.

## 7. Print and Electronic<sup>†</sup> Journals

Ad Astra <sup>†</sup>	Journal of Statistical Mechanics: Theory & Experiment <sup>†</sup>
American Journal of Physics <sup>†</sup>	Journal of Thermoplastic Composite Materials <sup>†</sup>
Annual Review of Astronomy & Astrophysics <sup>†</sup>	Journal of the Atmospheric Sciences <sup>†</sup>
Applied Physics Letters <sup>†</sup>	Measurement Science & Technology <sup>†</sup>
APS News <sup>†</sup>	Modeling & Simulation in Materials Science & Engineering <sup>†</sup>

Astronomy<sup>†</sup>  
 Astronomy & Astrophysics<sup>†</sup>  
 Biophysical Journal<sup>†</sup>  
 Bulletin of the American Meteorological Society<sup>†</sup>  
 Bulletin of the American Physical Society<sup>†</sup>  
 Bulletin of the Atomic Scientists<sup>†</sup>  
 Chaos<sup>†</sup>  
 Chinese Physics<sup>†</sup>  
 Chinese Physics Letters<sup>†</sup>  
 Classical & Quantum Gravity<sup>†</sup>  
 European Journal of Physics<sup>†</sup>  
 The Industrial Physicist<sup>†</sup>  
 Inverse Problems<sup>†</sup>  
 Journal of Applied Meteorology<sup>†</sup>  
 Journal of Applied Physics<sup>†</sup>  
 Journal of Atmospheric & Oceanic Technology<sup>†</sup>  
 Journal of Chemical Physics<sup>†</sup>  
 Journal of Climate<sup>†</sup>  
 Journal of Difference Equations & Applications<sup>†</sup>  
 Journal of Geophysics & Engineering<sup>†</sup>  
 Journal of Heat Transfer<sup>†</sup>  
 Journal of Laser Applications<sup>†</sup>  
 Journal of Mathematical Physics<sup>†</sup>  
 Journal of Micromechanics & Microengineering<sup>†</sup>  
 Journal of Neural Engineering<sup>†</sup>  
 Journal of Optics A: Pure & Applied Optics<sup>†</sup>  
 Journal of Optics B: Quantum & Semiclassical Optics<sup>†</sup>  
 Journal of Physical & Chemical Reference Data<sup>†</sup>  
 Journal of Physics A: Mathematical & General<sup>†</sup>  
 Journal of Physics B: Atomic Molecular & Optical Physics<sup>†</sup>  
 Journal of Physics: Condensed Matter<sup>†</sup>  
 Journal of Physics: Conference Series<sup>†</sup>  
 Journal of Physics D: Applied Physics<sup>†</sup>  
 Journal of Physics G: Nuclear & Particle Physics<sup>†</sup>  
 Monthly Weather Review<sup>†</sup>  
 Nanotechnology<sup>†</sup>  
 Nonlinearity<sup>†</sup>  
 Nuclear Fusion<sup>†</sup>  
 Physical Biology<sup>†</sup>  
 Physical Review A: Atomic Molecular & Optical Physics<sup>†</sup>  
 Physical Review B: Condensed Matter/Materials Physics<sup>†</sup>  
 Physical Review C: Nuclear Physics<sup>†</sup>  
 Physical Review D: Particles Fields Gravitation & Cosmology<sup>†</sup>  
 Physical Review E: Statistical Nonlinear & Soft Matter Physics<sup>†</sup>  
 Physical Review Special Topics: Accelerators & Beams<sup>†</sup>  
 Physics Education<sup>†</sup>  
 Physics in Medicine & Biology<sup>†</sup>  
 Physics of Fluids<sup>†</sup>  
 Physics of Plasmas<sup>†</sup>  
 Physics Today<sup>†</sup>  
 Physiological Measurement<sup>†</sup>  
 Plasma Physics & Controlled Fusion<sup>†</sup>  
 Plasma Source Science & Technology<sup>†</sup>  
 Proceedings of the National Academy of Sciences, USA  
 PROLA<sup>†</sup>  
 Reports on Progress in Physics<sup>†</sup>  
 Review of Metaphysics  
 Review of Scientific Instruments<sup>†</sup>  
 Reviews of Modern Physics<sup>†</sup>  
 Semiconductor Science & Technology<sup>†</sup>  
 Smart Materials & Structures<sup>†</sup>  
 Sound & Vibration<sup>†</sup>  
 Superconductor Science & Technology<sup>†</sup>  
 Weatherwise<sup>†</sup>

## 8. Scientific Societies

Acoustical Society of America <http://www.asa.aip.org>  
 American Astronomical Society <http://www.aaas.org>  
 American Association for the Advancement of Science <http://www.aaas.org>  
 American Association of Physics Teachers <http://www.aapt.org>  
 American Center for Physics <http://www.acp.org>  
 American Crystallographic Society <http://www.hwi/buffalo.edu/ACA>

American Institute of Physics <http://www.aip.org>  
 American Meteorological Society <http://www.ametsoc.org>  
 American Nuclear Society <http://www.ans.org>  
 American Physical Society <http://www.aps.org>  
 Federation of American Scientists <http://www.fas.org>  
 Institute of Physics <http://www.iop.org>  
 Institute of Electrical and Electronics Engineers, Inc. <http://www.ieee.org>  
 International Association of Mathematical Physics <http://www.iamp.org>  
 National Academy of Sciences <http://www.nas.edu>  
 National Society of Black Physicists <http://www.nsbp.org>  
 Optical Society of America <http://www.osa.org>

## 9. Library of Congress Classifications

The following classifications provide an organizational scheme for materials relating to **Physics**. Be sure to browse the shelves nearby items in this bibliography to find related resources.

<b>QC</b>	<b>Physics</b>
QC (1-75)	Physics - General
QC (81-114)	Weights and Measures
QC (120-168.85)	Descriptive and Experimental Mechanics
QC (170-197)	Atomic Physics / Constitution and Properties of Matter (Includes molecular physics, relativity, quantum theory and solid state physics)
QC (221-246)	Acoustics / Sound
QC (251-338.5)	Heat
QC (310.5 -319)	Thermodynamics
QC (350-467)	Optics / Light
QC (450-467)	Spectroscopy
QC (474-496.9)	Radiation Physics - General
QC (501-766)	Electricity and Magnetism
QC (501-721)	Electricity
QC (669-675.8)	Electromagnetic Theory
QC (676-678.6)	Radio Waves (Theory)
QC (701-715.4)	Electric Discharge
QC (717.6-718.8)	Plasma Physics / Ionized Gases
QC (750-766)	Magnetism
QC (770-798)	Nuclear and Particle Physics / Atomic Energy / Radioactivity
QC (793-793.5)	Elementary Particle Physics
QC (794.95-798)	Radioactivity and Radioactive Substances
QC (801-809)	Geophysics / Cosmic Physics
QC (811-849)	Geomagnetism
QC (851-999)	Meteorology / Climatology (Includes the earth's atmosphere)
QC (974.5-976)	Meteorological Optics
QC (980-999)	Climatology and Weather