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Preface to the First Edition; Source of Information; A From Abbe's principle to Azbel'-Kaner cyclotron resonance; B From B92 protocol to Burstein-Moss shift; C From cage compound to cyclotron resonance; D From D'Alembert equation to Dzyaloshinskii-Moriya interaction; E From (e,2e) reaction to Eyring equation; F From Fabry-Perot resonator to FWHM (full width at half maximum); G From gain-guided lasers to gyromagnetic frequency; H From habit plane to hyperelastic scattering;

I From ideality factor to isotropy (of matter)

J From Jahn-Teller effect to Joule's law of electric heatingK From Kane model to Kuhn-Thomas-Reiche sum rule; L From lab-on-a-chip to Lyman series; M From Mach-Zender interferometer to Murrell-Mottram potential; N From NAA (neutron activation analysis) to Nyquist-Shannon

sampling theorem; O From octet rule to oxide; P From PALM

(photoactivable localization microscopy) to pyrrole; Q From Q-control to qubit; R From Rabi flopping to Rydberg gas; S From Saha equation to synergetics; T From Talbot's law to type II superconductors; U From

ultraviolet photoelectron spectroscopy (UPS) to Urbach rule V From vacancy to von Neumann machineW From Waidner-Burgess standard to Wyckoff notation; X From XMCD (X-ray magnetic circular dichroism) to XRD (X-ray diffraction); Y From Yasukawa potential to Yukawa potential; Z From Zeeman effect to Zundel ion; A list and a presentation of Scientific Journals which contain the stem Nano in their title; Abbreviations for the scientific journals which appear as sources in the text; Appendix - main properties of intrinsic (or lightly doped) semiconductors

## Sommario/riassunto

More than 1,400 entries, from a few sentences to a page in length. The second, completely revised and enlarged edition of this introductory reference handbook summarizes the terms and definitions, most important phenomena, and regulations occurring in the physics, chemistry, technology, and application of nanostructures. A representative collection of fundamental terms and definitions from quantum physics and chemistry, special mathematics, organic and inorganic chemistry, solid state physics, material science and technology accompanies recommended second sources (books, reviews, websites)