1. Record Nr. UNINA9910153084803321 Autore Giancoli Douglas C. Titolo Physics for scientists & engineers . Volume 2 / / Douglas C. Giancoli Pubbl/distr/stampa Harlow, Essex:,: Pearson,, [2014] ©2014 **ISBN** 1-292-05319-4 Edizione [Fourth, Pearson new international edition.] Descrizione fisica 1 online resource (iv, 500 pages): colour illustrations Collana Always learning Disciplina 530 Soggetti **Physics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1. Electric charge and electric field -- Problem set (4/e): Electric charge Nota di contenuto and electric field -- 2. Gauss's law -- Probel set (4/e): Gauss's law -- 3. Electri potential -- Problem set (4/e): Electric potential -- 4. Capacitance, dielectrics, electric energy storage -- Problem set (4/e): Capacitance, dielectrics, electric energy storage -- 5. Electric currents and resistance -- Problem set (4/e): Electric currents and resisance --6. DC circuits -- Problem set (4/e): DC circuits -- 7. Magnetism --Problem set (4/e): Magnetism -- 8. Sources of magnetic field --Problem set (4/e): Sources of magnetic field -- 9. Electromagnetic induction and Faraday's law -- Problem set (4/e): Electromagnetic induction and Faraway's law -- 10. Inductance, electromagnetic oscillations, and AC circuits -- Problem set (4/e): Inductance, electromagnetic oscillations, and AC circuits -- 11. Maxwell's equation and electromagnetic waves -- Problem set (4/e): Maxwell's equations and electromagnetic waves --12. Light: reflection and refraction -- Problem set (4/e): Light: reflection and refraction -- 13. Lenses and optical instruments --Problem set (4/e): Lenses and optical instruments --14. The wave nature of light; interference -- Problem set (4/e): The wave nature of light; interference -- 15. Diffraction and polarization -- Problem set (4/e): Diffraction and polarization -- Appendix: Mathematical formulas -- Appendix: Derivatives and integrals -- Appendix: More on dimensional analysis -- Appendix: Gravitational force due to a

spherical mass distribution -- Appendix: Differential form of Maxwell's

equations -- Appendix: Selected isotopes.

Sommario/riassunto

For the calculus-based General Physics course primarily taken by engineers and science majors (including physics majors). Long-awaited and extensive revision maintains Giancoli's reputation for creating carefully crafted, highly accurate and precise physics texts. Physics for Scientists and Engineers combines outstanding pedagogy with a clear and direct narrative and applications that draw the student into the physics. The new edition also features an unrivaled suite of media and on-line resources that enhance the understanding of physics. This book is written for students. It aims to explain physics in a readable and interesting manner that is accessible and clear, and to teach students by anticipating their needs and difficulties without oversimplifying. Physics is a description of reality, and thus each topic begins with concrete observations and experiences that students can directly relate to. We then move on to the generalizations and more formal treatment of the topic. Not only does this make the material more interesting and easier to understand, but it is closer to the way physics is actually practiced.