

Contents

Authors	vii
15 Electric Charge, Forces, and Fields	397
16 Electric Potential, Energy, and Capacitance	417
17 Electric Current and Resistance	443
18 Basic Electric Circuits.....	461
19 Magnetism	485
20 Electromagnetic Induction and Waves.....	513
21 AC Circuits	537
22 Reflection and Refraction of Light	555
23 Mirrors and Lenses	575
24 Physical Optics: The Wave Nature of Light.....	601
25 Vision and Optical Instruments	625
26 Relativity.....	643
27 Quantum Physics	667
28 Quantum Mechanics and Atomic Physics.....	687
29 The Nucleus.....	705
30 Nuclear Reactions and Elementary Particles	731
Appendices	753
Appendix I Mathematical Review for College Physics	753
Appendix II Planetary Data	757
Appendix III Alphabetical Listing of the Chemical Elements through Atomic Number 109 (The periodic table is provided inside the back cover.)	758
Appendix IV Properties of Selected Isotopes	759
Appendix V Answers to Follow-Up Exercises	762
Appendix VI Answers to Odd-Numbered Questions and Exercises.....	767
Photo Credits	783
Index.....	785