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61 -- ; 3.4 Surface composition ; 62 -- ; 4 Stellar winds ; 67 -- ; 4.1 Radiation pressure ; 67 -- ; 4.2 Wind velocities ; 74 -- ; 4.3 Mass-loss rates ; 79 -- ; 4.4 Structure and clumping ; 90 -- ; 4.5 Influence of stellar rotation ; 95 -- ; 5 Evolution of single stars ; 99 -- ; 5.1 Nucleosynthesis ; 99 -- ; 5.2 Evolution to a red supergiant ; 102 -- ; 5.3 Evolution to the Wolf-Rayet stage ; 107 -- ; 5.4 Rotation and mass-loss ; 111 -- ; 5.5 Magnetic massive stars ; 115 -- ; 5.6 Core-collapse supernovae ; 116 -- ; 6 Binaries ; 129 -- ; 6.1 Massive binary frequency ; 129 -- ; 6.2 Binary masses ; 130 -- ; 6.3 Close binary evolution ; 133 -- ; 6.4 Interacting stellar winds ; 146 -- ; 6.5 Dust formation in WC stars ; 149 -- ; 7 Birth of massive stars and star clusters ; 154 -- ; 7.1 Natal precursors of OB stars ; 155 -- ; 7.2 The initial mass function ; 163 -- ; 7.3 Formation of high-mass stars ; 167 -- ; 7.4 Massive stellar clusters ; 170 -- ; 8 The interstellar environment ; 180 -- ; 8.1 Interstellar dust ; 180 -- ; 8.2 Ionized hydrogen regions ; 184 -- ; 8.3 Wind blown bubbles ; 187 -- ; 8.4 Ejecta nebulae around LBVs and W-R stars ; 192 -- ; 9 From giant HII regions to HII galaxies ; 197 -- ; 9.1 Giant HII regions: definition and structural parameters ; 197 -- ; 9.2 30 Doradus -- the Rosetta Stone ; 200 -- ; 9.3 Stellar population diagnostics ; 208 -- ; 9.4 HII galaxies: stellar content and relation to starbursts ; 219 -- ; 10 Starburst phenomena ; 229 -- ; 10.1 Definition of a starburst ; 229 -- ; 10.2 The starburst IMF ; 231 -- ; 10.3 The evolution of starbursts ; 241 -- ; 10.4 Starburst-driven superwinds ; 250 -- ; 10.5 The starburst-AGN connection ; 255 -- ; 11 Cosmological implications ; 266 -- ; 11.1 Population III stars ; 266 -- ; 11.2 Lyman-break galaxies ; 272 -- ; 11.3 Massive stars and cosmic abundances ; 280 -- ; 11.4 Gamma ray bursts ; 287.

Sommario/riassunto

Luminous hot stars represent the extreme upper mass end of normal stellar evolution. Before exploding as supernovae, they live out their lives of a few million years with prodigious outputs of radiation and stellar winds, dramatically affecting both their evolution and environments. A detailed introduction to the topic, this book connects the astrophysics of massive stars with the extremes of galaxy evolution represented by starburst phenomena. A thorough discussion of the physical and wind parameters of massive stars is presented. HII galaxies, their connection to starburst galaxies, and the contribution of starburst phenomena to galaxy evolution through superwinds, are explored. The book concludes with the wider cosmological implications, including Population III stars, Lyman break galaxies and gamma-ray bursts, for each of which massive stars are believed to play a crucial role. This book is ideal for graduate students and researchers in astrophysics interested in luminous hot stars and galaxy evolution.
