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Autore	Haugland Sindre W.
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Nota di contenuto	Outline -- General Background -- From Two-Cluster State to Chimera -- Coexistence Patterns of Four Oscillators -- A Hierarchy of Solutions for N = 2n -- Conclusion and Outlook.
Sommario/riassunto	This book is about coexistence patterns in ensembles of globally coupled nonlinear oscillators. Coexistence patterns in this respect are states of a dynamical system in which the dynamics in some parts of the system differ significantly from those in other parts, even though there is no underlying structural difference between the different parts. In other words, these asymmetric patterns emerge in a self-organized manner. As our main model, we use ensembles of various numbers of Stuart-Landau oscillators, all with the same natural frequency and all coupled equally strongly to each other. Employing computer simulations, bifurcation analysis and symmetry considerations, we uncover the mechanism behind a wide range of complex patterns found in these ensembles. Our starting point is the creation of so-called chimeras, which are subsequently treated within a new and broader context of related states.