1. Record Nr. UNINA9910816346203321 Autore Wu F. Y (Fa Yueh) **Titolo** Exactly solved models [[electronic resource]]: a journey in statistical mechanics: selected papers with commentaries (1963-2008) / / Fa Yueh Wu; with an introduction by C.N. Yang Hackensack, NJ,: World Scientific, c2009 Pubbl/distr/stampa **ISBN** 1-282-44140-X 9786612441400 981-281-389-6 Descrizione fisica 1 online resource (661 p.) Altri autori (Persone) YangChen Ning <1922-> MaillardJean-Marie Disciplina 530.13/2 Soggetti Statistical mechanics Statistical physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes a review of F.Y. Wu's research by Jean-Marie Maillard. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction by C. N. Yang; Preface; Contents; COMMENTARIES; 1. Dimer Statistics; 2. The Vertex Model; 3. Duality and Gauge Transformations; 4. The Ising Model; 5. The Potts Model; 6. Critical Frontiers; 7. Percolation; 8. Graph Theory; 9. Knot Invariants; 10. Other Topics; Photographs; Reprinted Papers; REPRINTED PAPERS; APPENDIX; Research Summary A Challenge in Enumerative Combinatorics: The Graph of Contributions of Professor Fa-Yueh Wu Review of F. Y. Wu's Research by J.-M. Maillard; Fa Yueh Wu: Vita; Index of Names in the Commentaries Sommario/riassunto This unique volume provides a comprehensive overview of exactly solved models in statistical mechanics by looking at the scientific achievements of F Y Wu in this and related fields, which span four decades of his career. The book is organized into topics ranging from lattice models in condensed matter physics to graph theory in mathematics, and includes the author's pioneering contributions. Through insightful commentaries, the author presents an overview of each of the topics and an insider's look at how crucial developments

emerged. With the inclusion of important pedagogical review article