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Nota di contenuto	Formation of Silicon Nitride from the 19th to the 21st Century; Preface; Table of Contents; Part A: In the Beginning; Part B: Technical Context of Silicon Nitride Formation; Part C: Si ₃ N ₄ Products, Uses and Markets; Part D: Si ₃ N ₄ by Reaction of Si(cr) Surfaces and N-Species; Part E: Si ₃ N ₄ Powder Formation from Si(Powder)/N ₂ (g); Part F: Fabrication of Reaction Bonded Silicon Nitride; Part G: Si ₃ N ₄ from Si/N ₂ under Vigorous Conditions; Part H: Si ₃ N ₄ Formation by Reaction of Si with N-Compounds; Part I: Si ₃ N ₄ by Nitridation of Si-O Based Materials Part J: Si ₃ N ₄ Formation from Si-N Based MaterialsPart K: Comparative Overview and Summary of Si ₃ N ₄ CVD; Part L: Si ₃ N ₄ by CVD Nitridation of Si-H Compounds; Part M: Si ₃ N ₄ by CVD Nitridation of Si Halides and Halosilanes; Part N: Si ₃ N ₄ Formation in Si-C-N Systems; Part O: Si ₃ N ₄ Formation in Si-N-X Systems, X = B, P, S, Fe, other
Sommario/riassunto	The elements: Si, N, O, C and H, have strong chemical affinities for one another. Under the correct conditions, Si-N bonding will occur in almost any Si-N-(O/C/H), and many related, reaction systems; although Si-O and Si-C are formidable competitors to Si-N. The most favored Si-N compound is stoichiometric Si ₃ N ₄ . It comes in three common varieties. How they interrelate, how one finds them and (above all) how one makes them - and how sometimes they just happen to form - are the subjects of this book, with due attention being paid to

closely related matters. This revised second edition summariz
