1. Record Nr. UNINA9910812040903321 Frontiers of engineering: reports on leading edge engineering from the **Titolo** 1996 NAE Symposium on Frontiers of Engineering / / National Academy of Engineering Washington, D.C., : National Academies Press, 1997 Pubbl/distr/stampa **ISBN** 0-309-17485-6 0-309-52435-0 0-585-16592-0 Edizione [1st ed.] Descrizione fisica 1 online resource (133 p.) 620 Disciplina Soggetti Engineering - Research - United States Chemical engineering - Research - United States Engineering - Technological innovations - United States Chemical engineering - Technological innovations - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Intro -- Preface -- Contents -- Designing Vehicles in Changing Times -- Development of Performance-Based Seismic Design Procedures --Information in the Design Process -- Product Modularity: A Key Concept in Life-Cycle Design -- Visualizing Aircraft Aerodynamic Design -- Virtual Reality and Augmented Reality In Aircraft Design and Manufacturing -- The Frontiers of Virtual Reality Applied to High Performance Computing and Communications -- Digitizing the Shape and Appearance of Three-Dimensional Objects --Microelectromechanical Systems (MEMS) -- Fabrication Technology and the Challenges of Large-Scale Production -- Frontiers in MEMS Design -- Large-Market Applications of MEMS -- Cellular Materials: Structure. Properties, and Applications -- Silicon Satellites -- Novel Ceramic Ferroelectric Composites -- Co-Continuous Composite Materials from Net-Shape Displacement Reactions -- Institutional Cultures and Individual Careers -- Contributors -- Program -- Participants.