1. Record Nr. UNINA9910678181303321 Autore Yang Yeong-Bin <1954-> Titolo Vehicle scanning method for bridges / / Yeong-Bin Yang [et al.] Pubbl/distr/stampa Hoboken, New Jersey;; Chichester, West Sussex, England:,: Wiley,, [2020] ©2020 **ISBN** 1-119-53961-7 1-119-53962-5 1-119-53949-8 Descrizione fisica 1 online resource (285 pages) Disciplina 624.25 Soggetti Bridges - Testing Bridges - Live loads Structural health monitoring Automatic data collection systems Dynamic testing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. "Vehicle Scanning Method for Bridges is the first book on vehicle Sommario/riassunto scanning the dynamic properties of bridges, written by the leading author on the subject. This vehicle scanning method (VSM) allows engineers to monitor every bridge of concern on a regular and routine basis, for the purpose of maintenance and damage detection. This method is efficient, economic and mobile in bridge health monitoring, compared with the conventional direct measurement approach. Vehicle Scanning Method for Bridges includes a review of the existing literature on the topic and presents the basic concept of extracting bridge frequencies from a moving test vehicle fitted with vibration sensors. How road surface roughness affects the vehicle scanning method is

experimental results are also included"--

considered and a finite element simulation is conducted to demonstrate how surface roughness affects the vehicle response. Case studies and