Record Nr.	UNINA9910299941203321
Titolo	Mechanisms of Cracking and Debonding in Asphalt and Composite Pavements: State-of-the-Art of the RILEM TC 241-MCD / / edited by William G. Buttlar, Armelle Chabot, Eshan V. Dave, Christophe Petit, Gabriele Tebaldi
Pubbl/distr/stampa	Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018
ISBN	3-319-76849-2
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXI, 237 p. 159 illus.)
Collana	RILEM State-of-the-Art Reports, , 2213-204X ; ; 28
Disciplina	624
Soggetti	Civil engineering Mechanics Mechanics, Applied Materials science Structural materials Computer mathematics Civil Engineering Solid Mechanics Characterization and Evaluation of Materials Structural Materials Computational Mathematics and Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface 1. Introduction, by William Buttlar and Armelle Chabot 2. Cracking in Asphalt Materials, by E. Dave, R. Botella, P. Marsac, and D. Bodin 3. Interface Debonding Behavior, by Christophe Petit, Armelle Chabot, Alexandra Destrée, and Christiane Raab 4. Advanced Measurement Systems for Crack Characterization, by Gabriele Tebaldi, Alex Apeagyei, Denis Jelagin, and Augusto Cannone Falchetto 5. Summary, by by William Buttlar and Armelle Chabot.
Sommario/riassunto	Premature cracking in asphalt pavements and overlays continues to shorten pavement lifecycles and creates significant economic and

environmental burden. In response, RILEM Technical Committee TC 241-MCD on Mechanisms of Cracking and Debonding in Asphalt and Composite Pavements has conducted a State-of-the-Art Review (STAR), as detailed in this comprehensive book. Cutting-edge research performed by RILEM members and their international partners is presented, along with summaries of open research questions and recommendations for future research. This book is organized according to the theme areas of TC 241-MCD - i.e., fracture in the asphalt bulk material, interface debonding behaviour, and advanced measurement systems. This STAR is expected to serve as a long term reference for researchers and practitioners, as it contributes to a deeper fundamental understanding of the mechanisms behind cracking and debonding in asphalt concrete and composite pavement systems.