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Nota di contenuto	Contents; Preface; Acknowledgments; List of Symbols; 1. Introduction; Part I Moving Load Problems; Part II Interaction Dynamics Problems; Appendix A Derivation of Response Function P1 in Eq. (2.55); Appendix B Newmark's β Method; Appendix C Vertical Frequency of Vibration of Curved Beam; Appendix D Horizontal Frequency of Vibration of Curved Beam; Appendix E Derivation of Residual Vibration for Curved Beam in Eq. (5.53); Appendix F Beam Element and Structural Damping Matrix; Appendix G Partitioned Matrices and Vector for Vehicle, Eq. (9.4) Appendix H Related Matrices and Vectors for CFR Element Appendix I Related Matrices and Vectors for 3D Vehicle Model; Appendix J Mass and Stiffness Matrices for Rail and Bridge Elements; References; Subject Index
Sommario/riassunto	The commercial operation of the bullet train in 1964 in Japan marked the beginning of a new era for high-speed railways. Because of the huge amount of kinetic energy carried at high speeds, a train may interact significantly with the bridge and even resonate with it

undercertain circumstances. Equally important is the riding comfort of thetrain cars, which relates closely to the maneuverability of the trainduring its passage over the bridge at high speeds.
