

1. Record Nr.	UNINA9910483569203321
Autore	Bader Rolf <1969->
Titolo	How music works : a physical culture theory // Rolf Bader
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-67155-0
Descrizione fisica	1 online resource (305 pages)
Disciplina	781.1
Soggetti	Music - Acoustics and physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Introduction -- Contents -- Part I -- Some Fundamentals of Musical Acoustics -- Play It Loud! -- The Mysterious Sound of Friction -- Linear Math and Nonlinear Nature -- Hermann von Helmholtz -- The First Synthesizers -- Voice from Impulses -- Unexpected Harmonicity -- Why Are Musical Instruments Such Complex Boxes? -- Who Wins the Game? -- Eigenmodes Versus Forced Oscillations -- What Makes a Musical Instrument Playable? -- Damping Is a Feature, Determining Who Wins the Game -- Synchronization as Output -- Some Fundamentals of Music Psychology -- Musical Instruments Treating the Psyche -- Music and Trance -- Aristoteles and the Beginning of Psychology -- Transcendental Aesthetic -- Transfer Effects of Music and Freedom of Will -- Music and Politics -- The Creation of Creativity -- Brain Activities -- The Split Between Hard and Soft Sciences -- Fusion of Senses -- Psychoacoustics -- Some Fundamentals of Comparative Musicology -- Music, DNA, and Sexuality -- Diversity and Change -- The Beginning of Comparative Musicology -- Ethnomusicology and Music Archiving -- Computational Music and Sound Archiving -- Part II -- Impulses -- What Is a Frequency? -- How to Deal with Many Frequencies: The Fourier Theorem -- Beyond Sinusoidals -- Damping -- Dispersion -- Linearity or Nonlinearity -- Impulse Pattern Formulation (IPF) -- Environmental Noise -- Musical Noise -- Initial Transients -- Information in Music -- Turbulence -- Turbulent and Laminar Flow -- Navier-Stokes Equation -- What Does Turbulence Lead To? -- Saxophone -- Saxophone Pitches

