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| 1. Record Nr. | UNINA9910299720403321 |
| Autore | Nguyen Ngoc Sn |
| Titolo | Multiple impacts in dissipative granular chains // Ngoc Son Nguyen, Bernard Brogliato |
| Pubbl/distr/stampa | Heidelberg ; ; New York, : Springer, 2013 |
| ISBN | 9783642392986 3642392989 |
| Edizione | [1st ed. 2014.] |
| Descrizione fisica | 1 online resource (xix, 234 pages) : illustrations |
| Collana | Lecture notes in applied and computational mechanics ; ; 72 |
| Altri autori (Persone) | BrogliatoBernard <1963-> |
| Disciplina | 531.11 |
| Soggetti | Mechanics, Analytic Multibody systems Statistical mechanics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "ISSN: 1613-7736." |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Introduction -- Multiple impacts in in granular chains -- Rigid-body multiple impact laws -- LZB multiple impact model -- Analysis and validation of the LZB model. |
| Sommario/riassunto | The extension of collision models for single impacts between two bodies, to the case of multiple impacts (which take place when several collisions occur at the same time in a multibody system) is a challenge in Solid Mechanics, due to the complexity of such phenomena, even in the frictionless case. This monograph aims at presenting the main multiple collision rules proposed in the literature. Such collisions typically occur in granular materials, the simplest of which are made of chains of aligned balls. These chains are used throughout the book to analyze various multiple impact rules which extend the classical Newton (kinematic restitution), Poisson (kinetic restitution) and Darboux-Keller (energetic or kinetic restitution) approaches for impact modelling. The shock dynamics in various types of chains of aligned balls (monodisperse, tapered, decorated, stepped chains) is carefully studied and shown to depend on several parameters: restitution coefficients, contact stiffness ratios, elasticity coefficients (linear or nonlinear force/ indentation relation), and kinetic angles (that depend on the mass ratios). The dissipation and the dispersion of kinetic |

energy during a multiple impact are mandatory modelling, and are quantified with suitable indices. Particular attention is paid to the ability of the presented laws to correctly predict the wave effects in the chains. Comparisons between many numerical and experimental results are shown, as well as comparisons between four different impact laws in terms of their respective abilities to correctly model dissipation and dispersion of energy.

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| 2. Record Nr. | UNINA9910996484003321 |
| Autore | Chen Chung-Yu |
| Titolo | The Pre-Austronesian 'Liangdao Man' // by Chung-yu Chen |
| Pubbl/distr/stampa | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025 |
| ISBN | 981-9789-27-3 |
| Edizione | [1st ed. 2025.] |
| Descrizione fisica | 1 online resource (XXIX, 203 p. 45 illus., 41 illus. in color.) |
| Collana | The Archaeology of Asia-Pacific Navigation, , 2524-7476 ; ; 7 |
| Disciplina | 930.102804 |
| Soggetti | Underwater archaeology Prehistoric peoples Archaeology - Philosophy Environmental archaeology Maritime Archaeology Prehistoric Archaeology Archaeology and Race Environmental Archaeology |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | The Matsu Archipelago in The Maritime Archaeology -- The Archaeology of Matsu Archipelago -- Physical Anthropology of the Two 'Liangdao Man' Individuals -- DNA Analysis of 'Liangdao Man' -- The origins of the 'Liangdao Man' Population and its East Asian Descendants -- 'Liangdao Man' from Physical and Cultural Anthropological Perspectives -- Results and Conclusion. |
| Sommario/riassunto | This book adopts a comprehensive approach, drawing from archaeology, physical anthropology, human genetics, linguistics, |

cultural anthropology, ethnology and ethnography, to explore the Austronesian link of 'Liangdao Man,' and the origins of Austronesian language groups. Due to their dating 2,300~1,500 years earlier than Austronesian-speaking peoples, these two individuals should be Pre-Austronesian or Proto-Austroasiatic. The Matsu archipelago is situated off Fuzhou City's estuary in Fujian Province. In 2011–2012, the author unearthed two human skeletons, 'Liangdao Man 1' and 'Liangdao Man 2,' aged 8,300 and 7,500 years, respectively, on Liangdao Island, one of these islands. DNA analysis revealed that haplogroups E and R9 were identified, linking them to Austronesians of Taiwan aborigines' maternal lineage.
