1. Record Nr. UNISA996308769603316 Autore Armstrong Rachel Titolo Vibrant architecture : matter as a codesigner of living structures / / Rachel Armstrong; managing editor, Monika Michalowicz; associate editor, Davina Jackson [Hawthorne, New York]:,: De Gruyter Open, . 2015 Pubbl/distr/stampa ©2015 **ISBN** 3-11-040373-0 1 online resource (384 pages): color illustrations, photographs Descrizione fisica Disciplina 720.1 Architecture - Philosophy Soggetti Sustainable architecture Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front matter -- Contents -- Preface -- Acknowledgements -- 1 Introduction -- 2 Definitions -- 3 Literature Survey -- 4 Method -- 5 Vibrant Matter in Practice -- 6 Dynamic Droplets -- 7 'A Short Story of a Short Life' -- 8 'Hylozoic Ground' -- 9 'Biolime: Mock Rock' -- 10 Vibrant Venice: Designing with Vibrant Matter -- 11 'Post-natural Venice' -- 12 Vibrant Cities -- 13 'Japan: 2060' -- 14 Manifesto For Vibrant Architecture -- 15 'The Greatest Alluvian Poet That Ever Lived' -- 16 Conclusion -- References -- List of Figures -- List of Movies --List of Tables -- Index Sommario/riassunto This book sets out the conditions under which the need for a new approach to the production of architecture in the twenty-first century is established, where our homes and cities are facing increasing pressures from environmental challenges that are compromising our lives and well being. Vibrant architecture embodies a new kind of architectural

design practice that explores how lively materials, or 'vibrant matter', may be incorporated into our buildings to confer on them some of the properties of living things, such as movement, growth, sensitivity and self-repair. The theoretical and practical implications of how this may occur are explored through the application of a new group of materials. Characteristically, these substances possess some of the properties of

living systems but may not have the full status of being truly alive. They include forms of chemical artificial life such as 'dynamic droplets' or synthetically produced soils. As complex systems, they are able to communicate directly with the natural world using a shared language of chemistry and so, negotiate their continued survival in a restless world. Vibrant architecture may create new opportunities for architectural design practice that venture beyond top-down form-finding programs, by enabling architects to co-design in partnership with human and nonhuman collectives, which result from the production of post natural landscapes. Ultimately, vibrant architecture may operate as an ecological platform for human development that augments the liveliness of our planet, rather than diminishes it.