1.	Record Nr.	UNINA9910830140103321
	Titolo	Flow-induced vibration handbook for nuclear and process equipment / / edited by Michel J. Pettigrew, Colette E. Taylor, Nigel J. Fisher
	Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, Inc., , [2022] ©2022
	ISBN	1-5231-5515-9 1-119-81097-3 1-119-81099-X 1-119-81098-1
	Descrizione fisica	1 online resource (494 pages)
	Collana	Wiley-ASME Press
	Disciplina	532.5
	Soggetti	Nuclear power plants - Piping - Vibration Chemical plants - Piping - Vibration Pressure vessels - Vibration Pressure vessels - Fluid dynamics Piping - Fluid dynamics Hydrodynamics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Preface -- Acknowledgments -- Contributors -- Chapter 1 Introduction and Typical Vibration Problems -- 1.1 Introduction -- 1.2 Some Typical Component Failures -- 1.3 Dynamics of Process System Components -- 1.3.1 Multi-Span Heat Exchanger Tubes -- 1.3.2 Other Nuclear and Process Components -- Notes -- References -- Chapter 2 Flow-Induced Vibration of Nuclear and Process Equipment: An Overview -- 2.1 Introduction -- 2.1.1 Flow-Induced Vibration Overview -- 2.1.2 Scope of a Vibration Analysis -- 2.2 Flow Calculations -- 2.2.1 Flow Parameter Definition -- 2.2.2 Simple Flow Path Approach -- 2.2.3 Comprehensive 3-D Approach -- 2.2.4 Two-Phase Flow Regime -- 2.3 Dynamic Parameters -- 2.3.1 Hydrodynamic Mass -- 2.3.2 Damping -- 2.4 Vibration Excitation Mechanisms -- 2.4.1 Fluidelastic Instability --

Sommario/riassunto

"Flow-induced vibration is the term for the phenomena of vibration and noise that is caused by fluid flow. Excessive flow-induced vibrations can cause fatigue or failure in process and plant equipment, which can in turn lead to operational disruptions, lost production, and costly repairs. Mechanical engineers can help avoid these issues by performing a flow-induced vibration analysis during the design phase of a project. Industries that employ plants with high capital costs, such as the nuclear, power, petrochemical, and aerospace industries, have a particular interest in understanding and mitigating flow-induced vibrations"--

2. Record Nr. UNINA9910878052303321

Autore: Li Fang

Titolo: Design for Tall Buildings in China : Past, Present, and Future Fire and Life Safety / / by Fang LI

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ISBN: 9783031650420
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Edizione: [1st ed. 2024.]

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Disciplina: 628.922

Soggetti: Fire prevention
Buildings - Protection
Buildings - Design and construction
Facility management
Architecture - History
Urban policy
Fire Science, Hazard Control, Building Safety
Building Construction and Design
Facility Management
Architectural History and Theory
Urban Policy

Lingua di pubblicazione: Inglese

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Nota di contenuto: The History of High-Rise Building and Category -- The Characteristics of Fire Risk in High-Rise Buildings -- Fire Safety Design for High-Rise Buildings -- Fire Safety Strategies for High-Rise Building -- New Technology for Fire Protection of High-Rise Buildings -- Past, Current and Future Fire and Life Safety Design for Tall Buildings in China.

Sommario/riassunto: This book provides readers an approach to overall fire and life-life design of high-rise buildings in a way that meets all stakeholders' objectives. It describes how China began constructing tall and super tall buildings decades ago and imparts many lessons learned through those experiences along with similar projects from all over the world. The

author explains the technology and culture for tall building design in China as a context for how the world seeks to ensure fire and life safety in these remarkable structures.