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- 科学引文索引 (Science Citation Index Expanded): 1900年-2025年
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- 中科院期刊分区表: 2005年-2025年

检索结果:

检索类型	数据库	年份范围	记录数
SCI-E 收录	SCI-EXPANDED	2025	1
JCR 影响因子	JCR	1997 - 2024	1
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教育部科技查新站 (L39)

2025年7月17日

附件一: SCI-E 收录

#	作者	标题	来源出版物	JCR影响因子	JCR分区	中科院分区	文献类型	入藏号
1	Xiong, P; Mohamed, GFE; Lee, YS	Improve Integrated Material Handling (IMH) Efficiency of Local High-Rise Building Projects by IMH Framework Optimization and Empirical Analysis	BUILDINGS 2025, 15 (13): 2286.	3.1 (2024);	CONSTRUCTION & BUILDING TECHNOLOGY [SCIE-Q2] 31/95 (2024); ENGINEERING CIVIL [SCIE-Q2] 60/183 (2024);	小类(升级版) (2025) 结构与建筑技术 [3区]; 小类(升级版) (2025) 工程: 土木 [3区]; 大类(升级版) (2025) 工程技术 [3区];	J Article	WOS:001526456800001
合计								1

第 1 条, 共 1 条:

标题: Improve Integrated Material Handling (IMH) Efficiency of Local High-Rise Building Projects by IMH Framework Optimization and Empirical Analysis

作者: Xiong, P (Xiong, Ping); Mohamed, GFE (Mohamed, Ghazali F. E.); Lee, YS (Lee, Yong Siang)

来源出版物: BUILDINGS 卷: 15 期: 13 文献号: 2286 出版年: JUN 29 2025

入藏号: WOS:001526456800001

文献类型: Article 出版物类型: J

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出版商: MDPI 出版商城市: BASEL 出版商地址: MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Construction & Building Technology; Engineering, Civil

研究方向: Construction & Building Technology; Engineering

IDS 号: 4TS8O

eISSN: 2075-5309

基金资助机构和授权号: Chongqing Education Commission, China [233403, 2023]; Research Project on Higher Education Teaching Reform in 2023 by Chongqing Education Commission, China [23SKGH326]; Social Sciences Research Planning Project, China

基金资助致谢: This research was funded by [Research Project on Higher Education Teaching Reform in 2023 by Chongqing Education Commission, China] grant number [233403], and [2023 Chongqing Education Commission Humanities and Social Sciences Research Planning Project, China] grant number [23SKGH326].

JCR 影响因子:

期刊	JCR 影响因子	指标年份
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BUILDINGS	3.1	2024
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JCR 期刊分区:

数据库	JCR 学科类别	类别排序	类别分区	指标年份
SCIE	CONSTRUCTION & BUILDING TECHNOLOGY <small>in SCIE edition</small>	31/95	Q2	2024
SCIE	ENGINEERING CIVIL <small>in SCIE edition</small>	60/183	Q2	2024

中科院期刊分区:

期刊	类型	学科类别	分区	指标年份	TOP
Buildings	大类(升级版)	工程技术	3	2025	否
Buildings	小类(升级版)	结构与建筑技术 (CONSTRUCTION & BUILDING TECHNOLOGY)	3	2025	-
Buildings	小类(升级版)	工程: 土木 (ENGINEERING CIVIL)	3	2025	-

End

Article

Improve Integrated Material Handling (IMH) Efficiency of Local High-Rise Building Projects by IMH Framework Optimization and Empirical Analysis

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Abstract

Fast urbanization and economic development lead to a prosperous high-rise building industry with high material handling efficiency (MHE). However, the integrated material handling (IMH) framework optimization and empirical studies on Chinese high-rise buildings are not in-depth. Here, the IMH practice in Chinese Chongqing high-rise building projects (CHBPs) was researched, and the effect factors of MHE were discussed to propose improvement strategies. A questionnaire survey (191 participants), qualitative topic analysis, quantitative descriptive statistics, reliability/correlation analysis, an independent sample t-test, analysis of variance (ANOVA), and regression analysis were performed. As a result, the understanding of the IMH concept, effectiveness of training projects, and positive effect of regulations were found to favor an improved MHE. Moreover, a weak positive correlation between work experience and MHE was found. Through the proposed model development framework, the combination of theoretical analysis and empirical research can provide comprehensive tools and knowledge resources for IMH practices in CHBP to improve MHE. Through quantitative indicators such as the material handling efficiency index (MHEI), the training project impact score (TPIS) and the regulation perception index (RPI), this framework offers an objective basis for continuous monitoring and improvement.

Keywords: integrated material handling; efficiency; building project; research framework; empirical analysis



Academic Editor: Antonio Caggiano

Received: 19 May 2025

Revised: 21 June 2025

Accepted: 26 June 2025

Published: 29 June 2025

Citation: Xiong, P.; Mohamed, G.F.E.; Lee, Y.S. Improve Integrated Material Handling (IMH) Efficiency of Local High-Rise Building Projects by IMH Framework Optimization and Empirical Analysis. *Buildings* **2025**, *15*, 2286. <https://doi.org/10.3390/buildings15132286>

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1. Introduction

Quick urbanization and economic development have boosted the development of the high-rise building industry in Chongqing, in China [1]. The unique geographical location and climatic conditions in Chongqing can result in a significantly improved complexity in the architectural design and construction, leading to hard material handling (MH), high cost, slow progress, and high security risk [2,3]. The material handling efficiency (MHE) can directly affect the schedule, cost and quality of a building project [4]. An effective MH strategy can greatly reduce the work hours, lower the safety risk, and improve the overall efficiency of the construction site [5]. At present, in the high-rise office building construction in Chongqing, the MH has become one of the key factors which can affect the schedule and quality of the project. Due to large dosages and multiple kinds of building materials, combined with a small construction space, the effective organization and management