

# Mehrdad Arashpour

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9167450/publications.pdf>

Version: 2024-02-01

80  
papers

3,030  
citations

186209

28  
h-index

175177

52  
g-index

80  
all docs

80  
docs citations

80  
times ranked

1733  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Critical evaluation of off-site construction research: A Scientometric analysis. Automation in Construction, 2018, 87, 235-247.  | 4.8 | 406       |
| 2  | Predicting the compressive strength of normal and High-Performance Concretes using ANN and ANFIS hybridized with Grey Wolf Optimizer. Construction and Building Materials, 2020, 232, 117266.                                | 3.2 | 289       |
| 3  | Collaboration in BIM-based construction networks: A bibliometric-qualitative literature review. International Journal of Project Management, 2017, 35, 1288-1301.  | 2.7 | 262       |
| 4  | Lean Methodologies and Techniques for Modular Construction: Chronological and Critical Review. Journal of Construction Engineering and Management - ASCE, 2019, 145, .   | 2.0 | 97        |
| 5  | Analysis of Citation Networks in Building Information Modeling Research. Journal of Construction Engineering and Management - ASCE, 2018, 144, .   | 2.0 | 93        |
| 6  | Off-site construction optimization: Sequencing multiple job classes with time constraints. Automation in Construction, 2016, 71, 262-270.  | 4.8 | 89        |
| 7  | Optimization of process integration and multi-skilled resource utilization in off-site construction. Automation in Construction, 2015, 50, 72-80.  | 4.8 | 88        |
| 8  | Optimization modeling of multi-skilled resources in prefabrication: Theorizing cost analysis of process integration in off-site construction. Automation in Construction, 2018, 95, 1-9.                                     | 4.8 | 85        |
| 9  | Analysis of interacting uncertainties in on-site and off-site activities: Implications for hybrid construction. International Journal of Project Management, 2016, 34, 1393-1402.  | 2.7 | 81        |
| 10 | Optimizing decisions in advanced manufacturing of prefabricated products: Theorizing supply chain configurations in off-site construction. Automation in Construction, 2017, 84, 146-153.                                    | 4.8 | 81        |
| 11 | Sensor-based safety management. Automation in Construction, 2020, 113, 103128.   | 4.8 | 78        |
| 12 | Integrated management of on-site, coordination and off-site uncertainty: Theorizing risk analysis within a hybrid project setting. International Journal of Project Management, 2017, 35, 647-655.                           | 2.7 | 68        |
| 13 | Enhancing collaboration in BIM-based construction networks through organisational discontinuity theory: a case study of the new Royal Adelaide Hospital. Architectural Engineering and Design Management, 2016, 12, 333-352. | 1.2 | 64        |
| 14 | 3D point cloud data processing with machine learning for construction and infrastructure applications: A comprehensive review. Advanced Engineering Informatics, 2022, 51, 101501.   | 4.0 | 64        |
| 15 | Autonomous production tracking for augmenting output in off-site construction. Automation in Construction, 2015, 53, 13-21.  | 4.8 | 60        |
| 16 | Analysis of Workflow Variability and Its Impacts on Productivity and Performance in Construction of Multistory Buildings. Journal of Management in Engineering - ASCE, 2015, 31, .   | 2.6 | 49        |
| 17 | An integrated model for factors affecting construction and demolition waste management in Iran. Engineering, Construction and Architectural Management, 2017, 24, 1246-1268.   | 1.8 | 46        |
| 18 | Sustainable pavement construction: A systematic literature review of environmental and economic analysis of recycled materials. Journal of Cleaner Production, 2021, 313, 127936.  | 4.6 | 44        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Scene understanding in construction and buildings using image processing methods: A comprehensive review and a case study. <i>Journal of Building Engineering</i> , 2021, 33, 101672.                              | 1.6 | 42        |
| 20 | Performance-based control of variability and tolerance in off-site manufacture and assembly: optimization of penalty on poor production quality. <i>Construction Management and Economics</i> , 2020, 38, 502-514. | 1.8 | 41        |
| 21 | Collaborative Role of Sociotechnical Components in BIM-Based Construction Networks in Two Hospitals. <i>Journal of Management in Engineering - ASCE</i> , 2018, 34, .  | 2.6 | 40        |
| 22 | Optimal process integration architectures in off-site construction: Theorizing the use of multi-skilled resources. <i>Architectural Engineering and Design Management</i> , 2018, 14, 46-59.                       | 1.2 | 40        |
| 23 | Analysis of Disruptions Caused by Construction Field Rework on Productivity in Residential Projects. <i>Journal of Construction Engineering and Management - ASCE</i> , 2014, 140, .                               | 2.0 | 36        |
| 24 | The evolution of stakeholder management practices in Australian mega construction projects. <i>Engineering, Construction and Architectural Management</i> , 2018, 25, 690-706.                                     | 1.8 | 36        |
| 25 | Viability of the BIM Manager Enduring as a Distinct Role: Association Rule Mining of Job Advertisements. <i>Journal of Construction Engineering and Management - ASCE</i> , 2018, 144, .                           | 2.0 | 35        |
| 26 | Optimal Work Assignment to Multiskilled Resources in Prefabricated Construction. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .   | 2.0 | 34        |
| 27 | Barriers to the use of integrated project delivery (IPD): a quantified model for Malaysia. <i>Engineering, Construction and Architectural Management</i> , 2019, 27, 186-204.                                      | 1.8 | 34        |
| 28 | Application of Nonlinear-Autoregressive-Exogenous model to predict the hysteretic behaviour of passive control systems. <i>Engineering Structures</i> , 2015, 85, 1-10.  | 2.6 | 33        |
| 29 | Safety management in construction: 20 years of risk modeling. <i>Safety Science</i> , 2020, 129, 104805.   | 2.6 | 29        |
| 30 | Vision-based excavator pose estimation using synthetically generated datasets with domain randomization. <i>Automation in Construction</i> , 2022, 134, 104089.  | 4.8 | 29        |
| 31 | Sustainability by Information and Communication Technology: A paradigm shift for construction projects in Iran. <i>Journal of Cleaner Production</i> , 2017, 168, 1-13.  | 4.6 | 28        |
| 32 | An integrated review of automation and robotic technologies for structural prefabrication and construction. <i>Transportation Safety and Environment</i> , 2020, 2, 81-96.   | 1.1 | 28        |
| 33 | Computer vision for anatomical analysis of equipment in civil infrastructure projects: Theorizing the development of regression-based deep neural networks. <i>Automation in Construction</i> , 2022, 137, 104193. | 4.8 | 28        |
| 34 | Skill Set Configuration in Prefabricated Construction: Hybrid Optimization and Multicriteria Decision-Making Approach. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .             | 2.0 | 25        |
| 35 | Critical Literature Review of Labor Multiskilling in Construction. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .   | 2.0 | 22        |
| 36 | Critical success factors for implementing risk management systems in developing countries. <i>Construction Economics and Building</i> , 2016, 16, 18-32.   | 0.5 | 21        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Evaluating the Impact of Building Information Modeling on the Labor Productivity of Construction Projects in Malaysia. <i>Buildings</i> , 2020, 10, 66.   | 1.4 | 21        |
| 38 | Novel metaheuristic-based type-2 fuzzy inference system for predicting the compressive strength of recycled aggregate concrete. <i>Journal of Cleaner Production</i> , 2021, 320, 128771.   | 4.6 | 21        |
| 39 | Collaborative Scheduling of On-Site and Off-Site Operations in Prefabrication. <i>Sustainability</i> , 2020, 12, 9266.  | 1.6 | 20        |
| 40 | Predicting the compressive strength of green concretes using Harris hawks optimization-based data-driven methods. <i>Construction and Building Materials</i> , 2022, 318, 125944.   | 3.2 | 20        |
| 41 | A new approach for modelling variability in residential construction projects. <i>Construction Economics and Building</i> , 2013, 13, 83-92.  | 0.5 | 18        |
| 42 | Green mix design of rubbercrete using machine learning-based ensemble model and constrained multi-objective optimization. <i>Journal of Cleaner Production</i> , 2021, 327, 129518.   | 4.6 | 17        |
| 43 | Comparative life cycle assessment of reprocessed plastics and commercial polymer modified asphalts. <i>Journal of Cleaner Production</i> , 2022, 337, 130464.   | 4.6 | 17        |
| 44 | Framework for improving workflow stability: deployment of optimized capacity buffers in a synchronized construction production. <i>Canadian Journal of Civil Engineering</i> , 2014, 41, 995-1004.                                      | 0.7 | 16        |
| 45 | Quantitative Analysis of Rate-Driven and Due Date-Driven Construction: Production Efficiency, Supervision, and Controllability in Residential Projects. <i>Journal of Construction Engineering and Management - ASCE</i> , 2016, 142, . | 2.0 | 16        |
| 46 | Investigating the Barriers to Applying the Internet-of-Things-Based Technologies to Construction Site Safety Management. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 868.                      | 1.2 | 16        |
| 47 | Artificial Neural Network for Predicting Building Energy Performance: A Surrogate Energy Retrofits Decision Support Framework. <i>Buildings</i> , 2022, 12, 829.  | 1.4 | 16        |
| 48 | Valuing the contribution of knowledge-oriented workers to projects: a merit based approach in the construction industry. <i>Construction Economics and Building</i> , 2015, 12, 1-12.   | 0.5 | 14        |
| 49 | Assessing the Influence of Virtuality on the Effectiveness of Engineering Project Networks: a "Big Five Theory" Perspective. <i>Journal of Construction Engineering and Management - ASCE</i> , 2018, 144, .                            | 2.0 | 13        |
| 50 | A review of building parameters' roles in conserving energy versus maintaining comfort. <i>Journal of Building Engineering</i> , 2021, 35, 102087.  | 1.6 | 13        |
| 51 | Automatic far-field camera calibration for construction scene analysis. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2021, 36, 1073-1090.   | 6.3 | 13        |
| 52 | Predicting delays in prefabricated projects: SD-BP neural network to define effects of risk disruption. <i>Engineering, Construction and Architectural Management</i> , 2022, 29, 1753-1776.  | 1.8 | 12        |
| 53 | Back-stepping control of delta parallel robots with smart dynamic model selection for construction applications. <i>Automation in Construction</i> , 2022, 137, 104211.   | 4.8 | 12        |
| 54 | Predicting the construction labour productivity using artificial neural network and grasshopper optimisation algorithm. <i>International Journal of Construction Management</i> , 2023, 23, 763-779.                                    | 2.2 | 11        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | A Bayesian smoothing for input-state estimation of structural systems. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 317-334.   | 6.3 | 11        |
| 56 | Machine learning-based analysis of occupant-centric aspects: Critical elements in the energy consumption of residential buildings. <i>Journal of Building Engineering</i> , 2022, 46, 103846.  | 1.6 | 9         |
| 57 | Design for Manufacture and Assembly in Off-Site Construction: Advanced Production of Modular Façade Systems. , 2018, , .   |     | 8         |
| 58 | Behavior and design of thin-walled double-skin concrete-filled rectangular steel tubular short and slender columns with external stainless-steel tube incorporating local buckling effects. <i>Thin-Walled Structures</i> , 2022, 170, 108552. | 2.7 | 8         |
| 59 | Recursive principal component analysis for model order reduction with application in nonlinear Bayesian filtering. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 371, 113334.   | 3.4 | 7         |
| 60 | Quantitative Analysis of Safety Risks and Relationship with Delayed Project Completion Times. <i>Risk Analysis</i> , 2022, 42, 580-591.  | 1.5 | 7         |
| 61 | Australia's push to make residential housing sustainable - Do end-users care?. <i>Habitat International</i> , 2021, 114, 102384.   | 2.3 | 7         |
| 62 | A qualitative investigation of perceived impacts of virtuality on effectiveness of hybrid construction project teams. <i>Construction Innovation</i> , 2018, 18, 109-131.  | 1.5 | 5         |
| 63 | OPTIMISING COLLABORATIVE LEARNING AND GROUP WORK AMONGST TERTIARY STUDENTS. <i>Proceedings of International Structural Engineering and Construction</i> , 2019, 6, .   | 0.1 | 5         |
| 64 | An analysis of 4D-BIM Construction Planning: Advantages, Risks and Challenges. , 2020, , .   |     | 5         |
| 65 | Hybrid bi-objective economic lot scheduling problem with feasible production plan equipped with an efficient adjunct search technique. <i>International Journal of Systems Science: Operations and Logistics</i> , 2023, 10, .                 | 2.0 | 5         |
| 66 | Multiskilled Workforce Planning: A Case from the Construction Industry. <i>Journal of Construction Engineering and Management - ASCE</i> , 2022, 148, .  | 2.0 | 5         |
| 67 | The Less Agents, the More Schedule Reliability: Examination of Single-Point Responsibility Model in Design Management. <i>International Journal of Civil Engineering</i> , 2019, 17, 1307-1316.  | 0.9 | 4         |
| 68 | Process Modelling in Civil Infrastructure Projects: A Review of Construction Simulation Methods. , 2019, , .   |     | 4         |
| 69 | Applications of Building Information Modeling (BIM) in Disaster Resilience: Present Status and Future Trends. , 2020, , .  |     | 4         |
| 70 | Group Dynamics in Higher Education. <i>Advances in Educational Technologies and Instructional Design Book Series</i> , 2020, , 42-60.  | 0.2 | 4         |
| 71 | Project Production Flows in Off-Site Prefabrication: BIM-Enabled Railway Infrastructure. , 2018, , .   |     | 3         |
| 72 | Multiskilled Human Resource Problem in Off-Site Construction. , 2018, , .  |     | 3         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Role of Simulation in Construction Processes – Harmony in Capturing Resources. , 2012, , .  |     | 3         |
| 74 | The Cost Burden of Safety Risk Incidents on Construction: A Probabilistic Quantification Method. Risk Analysis, 2022, 42, 2312-2326.  | 1.5 | 3         |
| 75 | Simulation-based analysis of occupational health and safety continuous improvement (OHSCI) in modern construction and infrastructure industries. Automation in Construction, 2022, 134, 104058.       | 4.8 | 3         |
| 76 | Constructible Design for Off-site Prefabricated Structures in Industrial Environments: Review of Mixed Reality Applications. , 2020, , .  |     | 2         |
| 77 | Worksite Accident Impacts on Construction and Infrastructure: Nondeterministic Analysis of Subsectors and Organization Sizes. Journal of Construction Engineering and Management - ASCE, 2022, 148, . | 2.0 | 2         |
| 78 | A Critical Review of Machine Vision Applications in Construction. , 2020, , .   |     | 1         |
| 79 | Using BIM for multi-trade prefabrication in construction. , 2020, , 209-221.  |     | 1         |
| 80 | A simulation model for investigation of operation of elevator’s up-peak. Journal of Simulation, 2020, 14, 229-238.  | 1.0 | 0         |