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| *pii:*            | S225204301400054-4 |

**Considerable Reduction** in Sewage Pollutants of Urmia City from Modernist view of Biolac Process
ABSTRACT:
The Biolac filtration system is based on active multi-stage sludge refineries. This system is a kind of modern biological treatment process. Experiments showed that by applying this system, the effluent quality is improved to such an extent that the results of these studies satisfy the standards of EPA. Thus, it will be evident that the effluent of this system can be discharged to surface waters.

Keywords: Biolac, EPA Standards, Pollutant, Urmia Wastewater

The Effect of Uncertainties on Calculation of Initiation of Corrosion of Reinforcement for Assessment of Reliability of Concrete Structures

ABSTRACT:
An important problem with the analysis of corrosion of reinforcements used in concrete structures is the calculation of the corrosion initiation time. The uncertainty of each input parameter can result in uncertainty in the calculated corrosion initiation time. In this research, the random sampling method was employed in the probabilistic model of the corrosion initiation time calculation. The results showed that the resulting time will be associated with at least 40% of uncertainty.

Keywords: Reinforcement Corrosion, Corrosion Initiation Time, Probabilistic Model, Random Sampling

Considering Creep Parameters of Rock Mass to Evaluate the Necessity Thrust for Excavation in Squeezing Ground

ABSTRACT:
There are a lot of complex problems involving a number of conflicting factors when planning a TBM drive in a squeezing ground. In this study, the effect of the creep mechanism of rock mass on the thrust force was investigated. The results showed that the increment of advance rate as a mitigation measure to thrust reduction is decreased by increasing the advance rate.

Keywords: Beheshtabad tunnel, Creep, TBM, Thrust, 3D numerical simulation

Reflecting to Explanation of Islamic City's Authentic Concept

ABSTRACT:
Today, there are many efforts to develop Islamic City's criteria and requisites that have been endeavored to generalize the parameters of the authentic concept of the Islamic City. The standards are complicated with the standards and Islamic validated and documented principles derived from the Quran and traditions.

Keywords: Islamic City, Islamic Teachings, Theoretical Perspectives.
Seismic Behavior Assessment of The Historical Tomb of Sheikh Shahab-edin Ahary

ABSTRACT: This study aims to investigate failure mechanism of historical tomb of Shahab-edin Ahary elements and determines areas that need conservation. Various results have been studied after utilize finite element model using Ansys software and various analyses.

Keywords: Seismic Behavior, Historical Buildings, Dynamic Analysis, Sheikh Shahab-edin Ahary, Macro Modeling.


ABSTRACT: Current study has analyzed the trend of population establishment in residential centers of Tehran metropolitan area and has evaluated the role of urban settlements network of Tehran metropolitan area and emergence of environmental problems in the region.

Keywords: Management and Planning System, Residential Centers, New Towns, Spatial Organization of Population, Metropolitan Area, Tehran.

Three Dimensional Simulation of Flow for Semi Cylindrical Weirs Using Fluent Software

ABSTRACT: The weirs are one of the important and prevalent items to measure discharge in open channels and they are used in most of the cases around the world. In this research three different radiuses of semi cylindrical weirs are evaluated for evaluating the flow pattern. It is worth noting simulating the flow has done for three different radiuses of semi cylindrical weirs.

Keywords: Flow pattern, Semi Cylindrical Weir, 3D simulation, K-ε Turbulence Model, Volume of Fluid Model, Fluent software.


ABSTRACT: Today there are many methods of financing in the world and every country selects its convenient financing methods for different projects. In this study, we have prioritized the methods of financing for dam and power plant projects using AHP model and it is found that “self-financing”, “bank loans”, and “international development assistance” are the most important factors in the ranking of project financing methods, respectively.

Keywords: Finance, Financial resources, Financing of project, Project Financing Techniques, Analytical Hierarchy Process (AHP).
Estimating of the Relationship between Chemical Water Quality Parameters and Flow Rate of Karun River in Wet and Dry Seasons

Original Article, D62
Karami O, Shokouhifar M, Boroomandnasab S.

ABSTRACT:
Hydro-Chemical Studies using regression tests would be efficient operational to save the time and cost, If the regression ... estimating the HCO₃ values were appropriate but none of the regression models did not have satisfactory for pH and EC.

Keywords: Adjusted R Square, Hydro chemical, Karun River, Residual, Regression pattern, t-Test

Assessment and Feasibility of Tourism Development in the Kanibarazan Wetland of Mahabad, Iran

Original Article, D63
Hossein pour M, Movahhed A., Rashidi Ebrahim hesari A, Shamaie A.

ABSTRACT:
Tourism has been approved as in powerful tool in development model, and its activities are known as invisible export and ... of job creating and making money, but also steps will be taken in order to create a tourism center within the region.

Keywords: KaniBarazan wetland, Tourism Development, Environment, SWOT, Mahabad

The Evaluation of the Eco-tourism and Geo tourism in Maragheh, Iran: A SWOT Analysis

Original Article, D64
Tavallaei S, Solaymani M, Rashidi Ebrahim Hesari A, Hadjalizadeh J.

ABSTRACT:
The major objective of this study is to investigate the geo¬-tourism and ecotourism capabilities and limitations of ... strategies of the region must be developed in such a way to make the best use of the local possible opportunities.

Key words: Ecotourism, Geo Tourism, Maragheh, SWOT

A Seismic Microzonation Study with Geotechnical Aspects on the New Construction Sites in Ardabil, Iran

Original Article, D65

ABSTRACT:

Keywords:
ABSTRACT:

Due to development of constructions in Ardabil city in northwest of Iran and placement of it on the alluvium, seismic and non-seismic earthquakes are a significant risk. Consequently, a site investigation of the area was performed to identify the susceptibility of this region. In this study, site response analysis was performed for those areas which are located on the alluvium soil. Soft clayey to dense granular alluviums are the most vulnerable to earthquake due to their high deformability. Also, the high pore pressure increase during earthquakes results in liquefaction. Prospective study showed that the dense granular alluviums and some with high stiffness experience the lowest PGA of about less than 0.3 g.

Key words: Hazard, Design Earthquake, Site Response, Microzonation

ABSTRACT:

The leaking water flow from the soil dam body lead to transport of its materials that this issue causes internal and external erosion. On the other hand, the water flow leads to reduce the load bearing capacity of structure that is considered as a very serious issue. Therefore, the effects of horizontal drainage on persistent leakage of non-homogeneous soil dam body were evaluated. The effect of length and thickness parameters of horizontal drainage for the discharge of the drainage water is reduced.

Keywords: Horizontal Drainage, Non-homogeneous Dam, Leakage Flow, Finite Element

ABSTRACT:

Regarding the development of the cities and increasing human's interference in natural sources, evaluation of appearance quality in urban space is necessary. Landscape architecture is one of the important criteria to determine the beauty quality in city space. This study evaluates the beauty quality of Zargandeh district in Tehran, Iran, from the perspective of time dimension. The beauty criteria are divided into 5 main categories: Movement, Pictorial Sequence, Human Experience, Aesthetics and Aesthetic Principles. The criteria were evaluated from the field, using the expert system. Finally, the study evaluated the relationship between beauty quality and the human experience of the time dimension.

Keywords: Aesthetics, Urban Landscape, Time Dimension, Movement, Pictorial Sequence, Evaluation Criteria

ABSTRACT:

The urban worn textures are the urban development potentials that turned into a threat to the whole city by turning into a physical and psychological problem. Therefore, the current study focuses on the designing principles of Deteriorated Textures. The research is based on descriptive-analytical and qualitative, quantitative method. Finally, the proposed designs for the urban will be presented.

Key words: Deteriorated Texture, Design Principles, Public Spaces, Farzan Square

ABSTRACT:

Architecture Building Sustainability Regarding Smart Materials
ABSTRACT:

In contrast with the arrival of machine and abundant industrial production that leads to reduction of energy resources ... materials, there will be some solutions in order to achieve the goals of constant architecture by using these materials.

Keywords: Sustainable Architecture, Building Features, Smart materials.

Evaluating the Physical Functional Indicators Affecting Women’s Safety in Urban Spaces (Case study: Shahin Area 5th Region, Tehran)

ABSTRACT:

Safety of urban spaces has an important role in improving society welfare in all citizens, but among the urban ... space and applicability of public transportation the amount of perceived safety feeling from space will increase as well.

Keywords: Safety, Urban Spaces, Women

Effect of a High Resolution Finite Volume Scheme with Unstructured Voronoi Mesh for Dam Break Simulation

ABSTRACT:

In this paper, a high resolution finite volume method (FVM) is developed in order to discretization of multidimensional ... as a reliable method for dealing with shallow water (SW) and shock problems, especially those having discontinuities.

Keywords: Dam break, finite volume method, high resolution Local Lax–Friedrich scheme, Voronoi Mesh.

A Survey on the Performance of Fuzzy-Neural Network at Predicting the Average Monthly Discharge of Catchment Basin Areas Having Snow Regimes

ABSTRACT:

Snow is one kind of precipitation that because of its delay in turning into runoff water is much more different from ... between the average monthly discharge and information of the water equivalent of basin’s snow monitoring stations.

Keywords: Average monthly discharge, Neural fuzzy network, Snow melting modeling, Jajrud catchment basin
Examine the Effect Height on Changing Intermediate Flexural Frames Performance Level after Adding Outward-Oriented Vestibule Braces

Original Article, D73
Khaksefidi S., Ghalehnovi M., Rahdar H. A., Rezaee M.
J. Civil Eng. Urban.

ABSTRACT:
Considering the inability to design techniques based on force the predicted nonlinear behavior of members, arising from the expected yield, an appropriate procedure was used for estimating the structure’s performance level. The capacity spectrum method (CSM) in ATC-40 to obtain performance level was used. SAP2000 software was used for modeling and analysis.

Keywords: Flexural Frame, Nonlinear Behavior, Nonlinear Static, Outward-Oriented Brace