

Basic Information :

Name : Ahmed Farouk Mohamed Hassan Deifalla

Title : Professor



Education:

Certificate	Major	University	Year
PhD	Civil Engineering	McMaster University - Canada	2008
Masters	Civil Engineering - Structural Engineering	Cairo University - Faculty of Engineering	2001
Bachelor	civil engineering	Cairo University - Faculty of Engineering	1998

Teaching Experience:

Name Of Organization	Position	From Date	To Date
FUE	Teaching Staff Member	04/02/2018	Current

Researches / Publications :

Integration of wind turbine with biomass-fueled SOFC to provide hydrogen-rich fuel; economic and CO2 emission reduction assessment
Computational fluid dynamics simulation of a designed envelop contenting phase change material and imposed solar heat flux and ambient air
Testing and modeling methods to experiment the flexural performance of cement mortar modified with eggshell powder
Performance characteristics of cementitious composites modified with silica fume: A systematic review
Multi-criteria evaluation and optimization of a new multigeneration cycle based on solid oxide fuel cell and biomass fuel integrated with a thermoelectric generator, gas turbine, and methanation cycle
A worldwide development in the accumulation of waste tires and its utilization in concrete as a sustainable construction material: A review
Optimization of Graphene Oxide Incorporated in Fly Ash-Based Self-Compacting Concrete
Feasibility Study on Concrete Made with Substitution of Quarry Dust: A Review
A Review on Failure Modes and Cracking Behaviors of Polypropylene Fibers Reinforced Concrete
Incorporation of Silica Fumes and Waste Glass Powder on Concrete Properties Containing Crumb Rubber as a Partial Replacement of Fine Aggregates
Performance of Strengthened, Reinforced Concrete Shear Walls with Opening
Parametric Study on the Behavior of Steel Tube Columns with Infilled Concrete An Analytical Study
Evaluating Shear Strength of Light-Weight and Normal-Weight Concretes through Artificial Intelligence
Basalt Fibers Reinforced Concrete: Strength and Failure Modes
Optimal Design of Semirigid Connection Steel Frame with Steel Plate Shear Walls Using Dolphin Echolocation Algorithm
A Review on Strength and Durability Properties of Wooden Ash Based Concrete
Mechanical, Durability, and Microstructural Evaluation of Coal Ash Incorporated Recycled Aggregate Concrete: An Application of Waste Effluents for Sustainable Construction
Improvement in Bending Performance of Reinforced Concrete Beams Produced with Waste Lathe Scraps

Effects of Size and Flexural Reinforcement Ratio on Ambient-Cured Geopolymer Slag Concrete Beams under Four-Point Bending
Comparative Study on the Behavior of Reinforced Concrete Beam Retrofitted with CFRP Strengthening Techniques
A Review on Sustainable Concrete with the Partially Substitutions of Silica Fume as a Cementitious Material
Two-Way Shear Resistance of FRP Reinforced-Concrete Slabs: Data and a Comparative Study
Concrete Made with Iron Ore Tailings as a Fine Aggregate: A Step towards Sustainable Concrete
Mechanical, Durability and Microstructure Analysis Overview of Concrete Made with Metakaolin (MTK)
The Mechanical Behavior of Sustainable Concrete Using Raw and Processed Sugarcane Bagasse Ash
Performance of concrete reinforced with jute fibers (natural fibers): A review
Coupled Effect of Polypropylene Fibers and Slag on the Impact Resistance and Mechanical Properties of Concrete
Development of Machine Learning Models for Reliable Prediction of the Punching Shear Strength of FRP-reinforced Concrete Slabs without Shear Reinforcements
Overview of Concrete Performance Made with Waste Rubber Tires: A Step toward Sustainable Concrete
Influence of loading method and stiffening on the behavior of short and long CFST columns
Flexural Strength Prediction of Steel Fiber-Reinforced Concrete Using Artificial Intelligence
Concrete Made with Partially Substitutions of Copper Slag (CPS): A State Art of Review
Evaluation of Axial Compression Slenderness Limits of High and Ultra-High-Strength Steel Circular Hollow Sections
Enhanced Reliability Method for the Two-Way Shear Provisions of the European Code for Lightweight Concrete
Glass Fibers Reinforced Concrete: Overview on Mechanical, Durability and Microstructure Analysis
A Comprehensive Review on the Ground Granulated Blast Furnace Slag (GGBS) in Concrete Production
Evaluate Effect of Various Parameters on the Shear Strength of FRP-Reinforced Concrete Beams with or Without Stirrups
Extended Critical Shear Crack Theory for Punching Shear of Lightweight, FRP-Reinforced, or Prestressed Concrete
ANN Model for Two-Way Shear Capacity of Reinforced Concrete Slabs Without Shear Reinforcements
A Scientometric Review on Mapping Research Knowledge for 3D Printing Concrete
Concrete Reinforced with Sisal Fibers (SSF): Overview of Mechanical and Physical Properties
A Step towards Sustainable Concrete with Substitution of Plastic Waste in Concrete: Overview on Mechanical, Durability and Microstructure Analysis
Data Driven Appraisal for One-way and Two-way Shear Design of Lightweight Concrete and FRP-reinforced Concrete Elements
Reliability-Based Evaluation of Two-way Shear Design Reinforced Concrete Slabs with FRP Reinforcements
Artificial intelligence-based estimation of ultra-high-strength concrete's flexural property
Compressive Strength of Steel Fiber-Reinforced Concrete Employing Supervised Machine Learning Techniques
Mechanical Properties of Hybrid Steel-Polypropylene Fiber Reinforced High Strength Concrete Exposed to Various Temperatures
Experimental Investigations of the Behavior of Stiffened Perforated Cold-Formed Steel Sections Subjected to Axial Compression
Reliability-based assessment and optimization for the two-way shear design of lightweight reinforced concrete slabs using the ACI and EC2
The Novelty of Using Glass Powder and Lime Powder for Producing UHPSCC
Compressive Strength Evaluation of Ultra-High-Strength Concrete by Machine Learning
A Machine Learning Model for Torsion Strength of Externally Bonded FRP-Reinforced Concrete Beams
Shear strength of lightweight and normal-weight concrete slender beams and slabs: An appraisal of design codes
Using Artificial Intelligence Techniques to Predict Punching Shear Capacity of Lightweight Concrete Slabs
A mechanical and simplified model for RC elements subjected to combined shear and axial tension

Punching Shear Strength of FRP-Reinforced Concrete Slabs without Shear Reinforcements: A Reliability Assessment
Evaluation of the Strength of Slab-Column Connections with FRPs Using Machine Learning Algorithms
Punching shear strength and deformation for FRP-reinforced concrete slabs without shear reinforcements
Exploring Effect of In-plane Tensile Forces on the Two-way Shear Strength: review, comparative study and future works
Refining the torsion design of fibered concrete beams reinforced with FRP using multi-variable non-linear regression analysis for experimental results
Design of lightweight concrete slabs under two-way shear without shear reinforcements: a comparative study and a new model
Strength and Ductility of Lightweight Reinforced Concrete Slabs under Punching Shear
Investigating the Behavior of Lightweight Foamed Concrete T-Beams under Torsion, shear, and Flexure
Experimental and numerical investigation of the behavior of LWFC L-girders under combined torsion
Experimental and numerical investigation of the behavior of LWFC L-girders under combined torsion
Performance of Steel Fiber Reinforced Concrete Corbels
Behavior of stiffened and unstiffened CFT under concentric loading, An experimental study

Chapter :