

**Theme 3-7: Structures and Structural Materials - 2022**

| Title   | Authors  | Scopus Source Title  | Volume | Issue | Pages       | Publication type |
|---|--|--|--------|-------|-------------|------------------|
| Geopolymer concrete incorporating recycled aggregates: A comprehensive review   | Sorath Thomas, B.   Yang, J.   Bahurudeen, A.   Chinnu, S.N.   Abdalla, J.A.   Hawileh, R.A.   Hamada, H.M.    | Cleaner Materials  | 3      | -     | -           | Review           |
| Influence of nano-TiO <sub>2</sub> , nano-Fa <sub>2</sub> O <sub>3</sub> , nanoclay and nano-CaCO <sub>3</sub> on the properties of cement/geopolymer concrete  | Abdalla, J.A.   Thomas, B.S.   Hawileh, R.A.   Yang, J.   Jinda, B.B.   Ariyachandra, E.                       | Cleaner Materials  | 4      | -     | -           | Review           |
| Flexural behavior of all lightweight reinforced concrete beams externally strengthened with CFRP sheets   | Nawaz, W.   Elchakkani, M.   Karrech, A.   Yehia, S.   Yang, B.   Youssf, O.                                   | Construction and Building Materials  | 327    | -     | -           | Article          |
| Flexural behavior of RC beams externally bonded with polyethylene terephthalate (PET) fiber reinforced polymer (FRP) laminates  | Hawileh, R.A.   Mhanna, H.H.   Al Rashed, A.   Abdalla, J.A.   Naser, M.Z.                                     | Engineering Structures   | 256    | -     | -           | Article          |
| Behavior of RC Beam-Column Joints Strengthened with Modified Reinforcement Techniques   | Tiwary, A.K.   Singh, S.   Chohan, J.S.   Kumar, R.   Sharma, S.   Chattopadhyaya, S.   Abed, F.   Stepien, M. | Sustainability (Switzerland)   | 14     | 3     | -           | Article          |
| Microstructure and mechanical property evaluation of dune sand reactive powder concrete subjected to hot air curing   | Ahmed, S.   Mahani, Z.   Abed, F.   Maman, M.A.   Al-Samarai, M.   | Materials  | 15     | 1     | -           | Article          |
| Guide to non-destructive concrete strength assessment: Homogeneity tests and sampling plans   | Saleh, E.   Tarawneh, A.   Dwali, H.   Alhamaydeh, M.  | Journal of Building Engineering  | 49     | -     | -           | Article          |
| Strengthening Square and Circular Low-Strength Concrete Columns with Fiber Reinforced Cementitious Matrix: Experimental Investigation   | Abed, F.   Elrefai, A.   El Shafrawi, M.   Tello, N.   Alhouby, Y.   | Practice Periodical on Structural Design and Construction                                | 27     | 2     | -           | Article          |
| Seismic Performance and Cost Analysis of UHPC Tall Buildings in UAE with Ductile Coupled Shear Walls  | Alhamaydeh, M.   Elshafrawi, M.   Baru, S.   | Materials  | 15     | 8     | -           | Article          |
| Analysis and Design of UHPC Tall Buildings in UAE with Ductile Coupled Shear Walls Lateral Load Resisting System  | Alhamaydeh, M.   Elshafrawi, M.E.   Amin, F.M.   Maky, A.M.   Mahmoudi, F.                                     | 2022 Advances in Science and Engineering Technology International Conferences, ASET 2022 | -      | -     | -           | Conference Paper |
| Use of hemp, kenaf and bamboo natural fiber in cement-based concrete  | Abdalla, J.A.   Thomas, B.S.   Hawileh, R.A.   | Materials Today: Proceedings   | 65     | -     | 2070-2072   | Article          |
| Flexural and Bond Behavior of Concrete Beams Strengthened with FRP and Galvanized Steel Mesh Laminates  | Hawileh, R.A.   Al Nuaimi, N.   Hweza, W.   Abdalla, J.A.   Sohal, M.G.  | Practice Periodical on Structural Design and Construction                                | 27     | 1     | -           | Article          |
| Cost Effectiveness of UHPC Ductile-Coupled Shear Walls for High-Rise Buildings in UAE Subjected to Seismic Loading  | Alhamaydeh, M.   Elshafrawi, M.E.   Eyyas, M.   Uways, F.  | 2022 Advances in Science and Engineering Technology International Conferences, ASET 2022 | -      | -     | -           | Conference Paper |
| Evaluation of UHPC Tall Buildings in UAE with Ductile Coupled Shear Walls under Seismic Loading   | Alhamaydeh, M.   Elshafrawi, M.E.   Aswad, N.G.   Tabo, R.   Baru, S.  | 2022 Advances in Science and Engineering Technology International Conferences, ASET 2022 | -      | -     | -           | Conference Paper |
| Influence of nanomaterials on the water absorption and chloride penetration of cement-based concrete  | Abdalla, J.A.   Thomas, B.S.   Hawileh, R.A.   Syed Ahmed Kabeer, K.I.   | Materials Today: Proceedings   | 65     | -     | 2066-2069   | Article          |
| Influence of nanomaterials on the workability and compressive strength of cement-based concrete   | Abdalla, J.A.   Thomas, B.S.   Hawileh, R.A.   Syed Ahmed Kabeer, K.I.   | Materials Today: Proceedings   | 65     | -     | 2073-2076   | Article          |
| Effects of aggregate type, aggregate pretreatment method, supplementary cementitious materials, and macro fibers on fresh and hardened properties of high-strength all-lightweight self-compacting concrete | Liu, H.   Elchakkani, M.   Sadakathulla, M.A.   Yehia, S.   Pham, T.M.   Yang, B.                              | Structural Concrete  | -      | -     | -           | Article          |
| Performance of Different Concrete Types Exposed to Elevated Temperatures: A Review  | Alhamed, A.   Yehia, S.   Labib, E.   Elchakkani, M.   | Materials  | 15     | 14    | -           | Review           |
| Strengthening pre-damaged RC square columns with fabric-reinforced cementitious matrix (FRCM): Experimental investigation   | Alhouby, Y.   El Refai, A.   Abed, F.   El-Maaddawy, T.   Tello, N.  | Composite Structures   | 294    | -     | -           | Article          |
| Experimental Investigation of Recycled Fine Aggregate from Demolition Waste in Concrete   | Fabsh, S.W.   Alhouby, Y.  | Sustainability (Switzerland)   | 14     | 17    | -           | Article          |
| Compressive Strength Development of Dune Sand Reactive Powder Concrete (RPC) Under Different Curing Conditions  | Ahmed, S.   Abed, F.   Maman, M.A.   | IOP Conference Series: Earth and Environmental Science                                   | 1006   | 1     | -           | Conference Paper |
| Compressive Behaviour of Glass Fiber-Reinforced Polymer (GFRP) Reinforced Concrete Columns  | Abed, F.   El Refai, A.   ElMesalami, N.   | Lecture Notes in Civil Engineering   | 198    | -     | 851-858     | Conference Paper |
| The Flexural Performance of BFRP-Reinforced UHPC Beams Compared to Steel and GFRP-Reinforced Beams  | Alhouby, Y.   Mahani, Z.   Abed, F.  | Sustainability (Switzerland)   | 14     | 22    | -           | Article          |
| Flexural Response of CFST Beams with Incorporated DCLs  | Khalaf, S.   El Masri, A.   Alhendi, F.   Abed, F.   | 2022 Advances in Science and Engineering Technology International Conferences, ASET 2022 | -      | -     | -           | Conference Paper |
| Experimental investigation of pre-damaged circular RC columns strengthened with fabric-reinforced cementitious matrix (FRCM)  | Tello, N.   Abed, F.   El Refai, A.   El-Maaddawy, T.   Alhouby, Y.  | Structural Concrete  | -      | -     | -           | Article          |
| Short-term and long-term behavior of RC beams strengthened by galvanized steel mesh laminate  | Hao, R.   Lin, W.   Al-Nuaimi, N.A.   Hawileh, R.A.   Abdalla, J.A.   Bahie, W.Z.F.B.                          | Construction and Building Materials  | 340    | -     | -           | Article          |
| Behavior of reinforced concrete beams cast with a proposed geopolymer concrete (GPC) mix  | Hawileh, R.A.   Badrawi, H.A.   Makahleh, H.Y.   Karad, A.S.   Abdalla, J.A.                                   | International Journal of Applied Science and Engineering                                 | 19     | 2     | -           | Article          |
| Structural Health Monitoring Techniques and Technologies for Large-Scale Structures: Challenges, Limitations, and Recommendations   | Alhamaydeh, M.   Ghazal Aswad, N.  | Practice Periodical on Structural Design and Construction                                | 27     | 3     | -           | Review           |
| Shear Response of BFRP-Reinforced Short Beams Using Fiber Reinforced Concrete   | Abed, F.   Sabbagh, M.M.   | Lecture Notes in Civil Engineering   | 198    | -     | 327-334     | Conference Paper |
| THE USE OF ULTRA-HIGH STRENGTH CONCRETE (UHSC) WITH LONGITUDINAL GFRP REINFORCEMENT UNDER FLEXURE   | Mahaini, Z.   Abed, F.   | Proceedings of International Structural Engineering and Construction                     | 9      | -     | 16-STR-16-6 | Conference Paper |
| Effect of FRP Anchor Inclination Angle on Shear Strengthening of Reinforced Concrete T-Beams  | Mhanna, H.H.   Hawileh, R.A.   Abdalla, J.A.   | Lecture Notes in Civil Engineering   | 198    | -     | 2169-2179   | Conference Paper |
| A review on buckling and postbuckling of thin elastic beams   | Emam, S.   Lacarbonara, W.   | European Journal of Mechanics, A/Solids  | 92     | -     | -           | Article          |
| Nonlinear Finite Element Analysis (NLFEA) of Pre-stressed RC Beams Reinforced with Iron-Based Shape Memory Alloy (Fe-SMA)   | Elshafrawi, M.E.   Mohsen Khalil, A.   Abuzaid, W.   Hawileh, R.A.   Alhamaydeh, M.                            | 2022 Advances in Science and Engineering Technology International Conferences, ASET 2022 | -      | -     | -           | Conference Paper |