Publications

Architectural Engineering Department

Year 2019

Journals

- 1. A Hassan, AHI Mourad, Y Rashid, N Ismail, MS Laghari. Thermal and structural performance of geopolymer concrete containing phase change material encapsulated in expanded clay. Energy and Buildings 191, 72-81, 2019.
- 2. Ahmed Hassan, Yasir Rashid , Abdul Hamid Mourad. Najif Ismail, Thermal and Structural Characterization of Geopolymer-Coated Polyurethane Foam—Phase Change Material Capsules/Geopolymer Concrete Composites. materials 12 (5), 796, 2019.
- 3. Amira R. AbouElhamd, Khaled A. Al-Sallal, Ahmed Hassan. Review of Core/Shell Quantum Dots Technology Integrated into Building's Glazing. Energies 12 (6), 1058, 2019
- 4. Qamar Navid, Ahmed Hassan. An Accurate and Precise Grey Box Model of a Low-Power Lithium-Ion Battery and Capacitor/Supercapacitor for Accurate Estimation of State-of-Charge. Batteries 5 (3), 50, 2019.
- 5. M. Khoukhi; A. Hassan; S., Al Saadi; S. Abdelbaqi "A dynamic thermal response on thermal conductivity at different temperature and moisture levels of EPS insulation", 2019, Case Studies in Thermal Engineering, 14,100481.
- 6. M. Khoukhi; S. Abdelbaqi; A. Hassan"Yearly Energy Performance Assessment of Employing Expanded Polystyrene with Variable Temperature & Moisture-Thermal Conductivity Relationship". Accepted in materials.
- 7. M Haggag, A Hassan, S Abdelbaq. Phase Change Material to Reduce Cooling Load of Buildings in Hot Climate. Key Engineering Materials 801, 416-423, 2019.
- 8. Khalid Sabri, Arwa and Galal Ahmed, Khaled (Corresponding author) (2019) "Replacing Land-Use Planning with Localized Form-Based Codes in the United Arab Emirates: A Proposed Method" Land, Vol. 8, No. 3, 47; doi:10.3390/land8030047
- 9. Galal Ahmed, Khaled and S. M. Hossein Alipour (2019) "Urban Form Compaction and Energy Use Intensity in New Social Housing Neighborhoods in the UAE" Sustainability, Vol. 11, No. 14, 3815; https://doi.org/10.3390/su11143815, https://www.mdpi.com/2071-1050/11/14/3815/pdf
- Galal Ahmed, Khaled and Alipour, S. M. Hossein (2019) Investigating the Effect of Urban Compactness on Energy Efficiency in Recent Urban Communities in UAE, IOP Conference Series: Materials Science and Engineering, Vol. 603, Section 1, https://iopscience.iop.org/article/10.1088/1757-899X/603/2/022092
- 11. Haddad, M. Shrive, N. Investigating the inelastic cyclic behaviour of large-size steel wide-flange section braces. Construction and Building Materials. Volume 199, 2019, pp. 92-105.
- 12. Albattah, M., Goodrum, P., Littlejohn, R., and Taylor, T. R. (2019). "A Comparative Analysis of the Utilization of Multiskilling among U.S. Hispanic and Non-Hispanic Construction Craft Workers." International Journal of Construction Management. 1-11.

- 13. Albattah, M., Goodrum, P., and Taylor, T. (2019). "A New Metric of Workforce Availability among Construction Occupations and Regions" Practice Periodical on Structural Design and Construction. 24 (2), 04019003.
- 14. Dhariwal J., Manandhar P., Bande L., Marpu P., Armstrong P., F.Reinhart C.; 2019; Evaluating the effectiveness of outdoor evaporative cooling in a hot, arid climate; Elsevier; V150: 281-288
- 15. Bande L., Afshari A., Al Masri D., Jha M., Norford L., Tsoupos A., Marpu P., Pasha Y., and Armstrong 3; August 2019; Validation of UWG and ENVI-Met Models in an Abu Dhabi District, Based on Site Measurements; Sustainability;
- 16. Khoukhi, M. (2019), Simultaneous changes of temperature and moisture of thermal conductivity of EPS insulation material and its impact on building energy performance. International Journal of Smart Grid and Clean Energy, 8(2).
- 17. Hasim Altan, Zahraa Alshikh, Vittorino Belpoliti, Young Ki Kim, Zafar Said, Monadhil Al-chaderchi (2019), "An experimental study of the impact of cool roof on solar PV electricity generations on building rooftops in Sharjah, UAE", International Journal of Low-Carbon Technologies, Volume 14, Issue 2, June 2019, Page 267-276.

Conferences

- 1. Tabet Aoul, K, Attoye, D. Al Ghatrif1, L. (2019) "Performance of Electrochromic Glazing: State of the Art Review", 4th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium WMCAUS 2019, 17-21 June, 2019 Prague (Czech Republic)
- 2. Hagi, R., Tabet Aoul, K. Abdelghani, R., Akhozheya, B. Abdou, Y., Suleiman, N. (2019) "Thermal performance gap investigation using infrared thermal imagery in the UAE residential buildings", 11th International Conference on Sustainability in Energy and Buildings SEB-19, 4-5 July, 2019, Budapest, Hungary.
- 3. Attoye, D., Tabet Aoul, K.A.; Hassan, A., (2019) "The case of Building Integrated Photovoltaics: A qualitative assessment of potential users' perception", 2nd Conference, May 2019, Arizona State University (USA)
- 4. Attoye, D. Tabet Aoul, K. Basem, O. (2019) "Innovative Technologies and the Human Factor: The Case of Building Integrated Photovoltaics" 4th International Conference on Smart and Sustainable Technologies 2019: SpliTech2019, June 2019, Croatia NO
- 5. Al-Saffar, M., Tabet Aoul, K, (2019) "Visitors voice in historic sites interpretation centers in Bahrain", 4th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium WMCAUS 2019, 17-21 June, 2019 Prague (Czech Republic)
- 6. Tabet Aoul, K., Al Ameri, A., Hassan, A., (2019) "Occupants Behaviour and Energy Usage in Emirati Households; Exploratory Investigation", The 6th International Conference on Architecture and Built Environment, 5-7 March 2019, Havana, Cuba Proc. forthcoming
- 7. Tabet Aoul, K. (2019) "Sustainability Literacy and Higher Education; Paradigm and Challenges in the Built Environment of the Gulf Region" Proceedings of the 1st International Conference on: Comfort at the Extremes: Energy, Economy and Climate 10th 11th April 2019, Heriot Watt University, Dubai, (UAE) pp: 397-408

- 8. Attoye, D., Tabet Aoul, K.A.; Hassan, A., (2019) "Innovation in Construction: the case of BIPV customization in extreme climates", Proceedings of the 1st International Conference on: Comfort at the Extremes: Energy, Economy and Climate 10th 11th April 2019, Heriot Watt University, Dubai, (UAE) pp: 682-693
- 9. Haggag, M.; A. Hassan; S. Abdel Baqi, Phase Change Material to Reduce Cooling Load of Buildings in Hot Climate, Conference Proceedings, The 4th International Conference on Composite Materials and Material Engineering (ICCMME2019), 19-22 Jan. 2019, Tokyo, Japan.
- 10. Alhams, Y and Haggag, M.; Stainable Walkway Design in Hot Climate; Case Study of Abu Dhabi Corniche, UAE, Proceedings of the 7th Annual International Conference on Architecture and Civil Engineering (ACE 2019), 27-28 May 2019, Singapore.
- 11. M. Khoukhi, A. Hassan, S. Abdelbaqi"The Impact of Employing Insulation with Variant Thermal Conductivity on the Thermal Performance of Buildings in the Extremely Hot Climate of UAE", Fourth International Conference on Civil, Structural and Transportation Engineering (ICCSTE'19) Ottawa, Canada June 11-12, 2019.
- 12. Galal Ahmed, Khaled; Al Naaimi, Hamda; Omar, Menatullah; Megahed, Mona and Alazeezi, Shaikha (2019) Assessment of Social Housing Design in Dubai: Conventional Vs. Virtual Reality Participatory Tools. In the Proceedings of the 7th Annual International Conference on Architecture and Civil Engineering (ACE 2019), Singapore, May 27-28, 2019, pp 630-636 [DOI: 10.5176/2301-394X_ACE19.545].
- 13. Galal Ahmed, Khaled and Alipour, S. M. Hossein (2019) Investigating the Effect of Urban Compactness on Energy Efficiency in Recent Urban Communities in UAE, in the Proceedings of the WMCAUS 2019 4th World Multidisciplinary Civil Engineering, Architecture, and Urban Planning Symposium, 17-21 June, Prague, Czech Republic.
- 14. Galal Ahmed, Khaled; Al Naaimi, Hamda; Omar, Menatullah; Megahed, Mona and Alazeezi, Shaikha (2019) Utilizing Virtual Reality in Assessing Socio-Culturally Sustainability in Emirati Public Housing, the Undergraduate Student Research Conference (USRC), UAEU, 23rd April 2019, Al Ain, UAE.
- 15. Qadir, Gh., Haddad, M., Hamdan, D. Potential of building energy improvements in a traditional Emirati house Analyses of Resource Energy (RE) credit in the Estidama Pearl Rating system. Proceedings of the 2nd International Conference on Energy and Power. Sydney, Australia, 2019. Paper ID: 128.
- 16. Numayr, K., Haddad, R., Ailabouni, Q., Haddad, M. Passive base isolation system for an asymmetric building. Proceedings of the 7th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019), Greece, 2019. Paper ID: C 20738 P.
- 17. Sahera Bleibleh, Marwan Sunakh Zabanoot,. "Walkability between dubai's developments:a portryal assestment of walkability indicies in dubai, Valencia' Spain,1- 3 October 2019'
- 18. Albattah, M, Saheed, A., and Shafiq, M.T. (2019). "Employment of Unskilled Craft Workers in the UAE Construction Projects: Explicating the Reasons." 4th International Conference on Management, Engineering, Science, Social Science and Humanities (iCon-MESSSH'19), 26-27 July, 2019
- 19. Agiel, A., & Kutty, N. (2019, November). Using Repertory Grid Technique (RGT) to Analyze the Aesthetics of Contemporary Architectural Images of Mosques. At the 2nd International Conference on Mosque Architecture (ICMA). Kuala Lumpur, Malaysia. (In press)

- 20. Agiel, A., & Kutty, N. (2019). Personal Construct Theory for integrating users' inherent image into product design. In Proceedings of the International Conference on Digital Image & Signal Processing with ISBN (978-1-912532-09-4). Oxford, UK: Springer.
- 21. Bande L., Manadhar P., Marpu P.; Definition of Local Climate Zones in relation to ENVI-met and Site Data in the city of AL Ain, UAE. 13th International Conference on Urban Regeneration and Sustainability, Valencia, Spain; 1-3 October, 2019.
- 22. Khoukhi, M., Hassan, A. Abdelbaqi, S. (2019) "The Impact of Variable Thermal Conductivity of Insulation Materials on the Building Energy Performance in Hot Climate". Fourth International Conference on Advances on Clean Energy Research, University of Coimbra, Portugal, April 5-7, 2019.
- 23. Muhammad Tariq Shafiq (2019) A Case Study of Client Driven Early Bim Collaboration, 7th International Construction Conference, Laval, Montreal, Canada, June 2019
- 24. Lindita Bande, Kim Young, Rahma Adan, Amna A. R. A. Aldarmaki, Atmah S. S. Aldhaheri, Asma S. A. Alneyadi (2019), "Housing Programs in UAE: case study analysis based on regional sustainable standards and local microclimate", CISBAT 2019 International Scientific Conference, 4th 6th September 2019, EPFL Lausanne, Switzerland.
- 25. Young Ki Kim, Lindita Bande, Kheira Anissa Tabet Aoul, Hasim Altan (2019), "Using Energy Audit with POE Study to Reduce Energy Performnace Gap in an Office Building in UAE", ZEMCH 2019 Zero Energy Mass Custom Home, 26th 28th November 2019, Seoul, South Korea.
- 26. Lindita Bande, Raghad Ghazal, Kim Young, Rashed Khalifa Al Shaali, Kheira Anissa Tabet Aoul, M. Al Battah, Afshin Afshari, Paola Ronca (2019), "Assessment of the OTC (outdoor thermal comfort) in the UAEU Campus, AL Ain, UAE", ZEMCH 2019 Zero Energy Mass Custom Home, 26th 28th November 2019, Seoul, South Korea.
- 27. Lindita Bande, Kim Young, Rahma Adan, Amna A. R. A. Aldarmaki, Atmah S. S. Aldhaheri, Asma S. A. Alneyadi, Sharina R.O.A Aldhaheri, Mira Khalifa (2019), "Outdoor Thermal Comfort (OTC) Study on a district level as part of the Housing Programs in United Arab Emirates", ZEMCH 2019 Zero Energy Mass Custom Home, 26th 28th November 2019, Seoul, South Korea.

Book Chapters
Patents