# Shihab Asfour

List of Publications by Year
in descending order

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|---|---|---|---|
| **51** papers | **1,275** citations | 471061 **17** h-index | 360668 **35** g-index |
| **51** all docs | **51** docs citations | **51** times ranked | **1670** citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Model predictive HVAC load control in buildings using real-time electricity pricing. Energy and Buildings, 2013, 60, 199-209. | 3.1 | 177 |
| 2 | Tool breakage detection using support vector machine learning in a milling process. International Journal of Machine Tools and Manufacture, 2005, 45, 241-249. | 6.2 | 144 |
| 3 | Pilot Study Comparing Changes in Postural Control After Training Using a Video Game Balance Board Program and 2 Standard Activity-Based Balance Intervention Programs. Archives of Physical Medicine and Rehabilitation, 2012, 93, 1138-1146. | 0.5 | 106 |
| 4 | Design of multisensor fusion-based tool condition monitoring system in end milling. International Journal of Advanced Manufacturing Technology, 2010, 46, 681-694. | 1.5 | 94 |
| 5 | Machine ensemble approach for simultaneous detection of transient and gradual abnormalities in end milling using multisensor fusion. Journal of Materials Processing Technology, 2009, 209, 4728-4738. | 3.1 | 77 |
| 6 | Short-Term Forecasting of Electric Loads Using Nonlinear Autoregressive Artificial Neural Networks with Exogenous Vector Inputs. Energies, 2017, 10, 40. | 1.6 | 77 |
| 7 | Solving the Multivariant EV Routing Problem Incorporating V2G and G2V Options. IEEE Transactions on Transportation Electrification, 2017, 3, 238-248. | 5.3 | 72 |
| 8 | Effects of Tobacco Smoking on the Degeneration of the Intervertebral Disc: A Finite Element Study. PLoS ONE, 2015, 10, e0136137. | 1.1 | 64 |
| 9 | Modeling tool wear progression by using mixed effects modeling technique when end-milling AISI 4340 steel. Journal of Materials Processing Technology, 2008, 205, 190-202. | 3.1 | 30 |
| 10 | The effect of pitch type on ground reaction forces in the baseball swing. Sports Biomechanics, 2011, 10, 270-279. | 0.8 | 30 |
| 11 | Smart Control of Fleets of Electric Vehicles in Smart and Connected Communities. IEEE Transactions on Smart Grid, 2019, 10, 6883-6897. | 6.2 | 30 |
| 12 | Development and validation of a three dimensional dynamic biomechanical lifting model for lower back evaluation for careful box placement. International Journal of Industrial Ergonomics, 2016, 54, 10-18. | 1.5 | 29 |
| 13 | Modeling the role of IGF-1 on extracellular matrix biosynthesis and cellularity in intervertebral disc. Journal of Biomechanics, 2014, 47, 2269-2276. | 0.9 | 27 |
| 14 | Short-Term Electrical Peak Demand Forecasting in a Large Government Building Using Artificial Neural Networks. Energies, 2014, 7, 1935-1953. | 1.6 | 25 |
| 15 | Two-stage discrete-continuous multi-objective load optimization: An industrial consumer utility approach to demand response. Applied Energy, 2017, 206, 206-221. | 5.1 | 25 |
| 16 | Effectiveness of pedicle screw inclusion at the fracture level in short-segment fixation constructs for the treatment of thoracolumbar burst fractures: a computational biomechanics analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1412-1420. | 0.9 | 25 |
| 17 | The effects of different carrying methods on locomotion stability, gait spatio-temporal parameters and spinal stresses. International Journal of Industrial Ergonomics, 2018, 67, 81-88. | 1.5 | 23 |
| 18 | A linear optimization based controller method for real-time load shifting in industrial and commercial buildings. Energy and Buildings, 2016, 110, 269-283. | 3.1 | 19 |

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|---|---------|----|-----------|
| 19 | A multi-objective approach for determining optimal air compressor location in a manufacturing facility. Journal of Manufacturing Systems, 2015, 35, 176-190. | 7.6 | 17 |
| 20 | Web-based algorithm for cylindricity evaluation using support vector machine learning. Computers and Industrial Engineering, 2011, 60, 228-235. | 3.4 | 16 |
| 21 | A New Methodology to Measure the Running Biomechanics of Amputees. Prosthetics and Orthotics International, 2009, 33, 218-229. | 0.5 | 15 |
| 22 | Examination of a lumbar spine biomechanical model for assessing axial compression, shear, and bending moment using selected Olympic lifts. Journal of Orthopaedics, 2016, 13, 210-219. | 0.6 | 14 |
| 23 | Analysis of the consolidation problem of compressible porous media by a macroscopic variational continuum approach. Mathematics and Mechanics of Solids, 2017, 22, 952-968. | 1.5 | 13 |
| 24 | Development of an aggregate indicator to assess the machinability of steels. Journal of Materials Processing Technology, 2003, 134, 159-165. | 3.1 | 12 |
| 25 | Electric utility resource planning using Continuous-Discrete Modular Simulation and Optimization (CoDiMoSO). Computers and Industrial Engineering, 2012, 63, 671-694. | 3.4 | 12 |
| 26 | Altered mechano-chemical environment in hip articular cartilage: effect of obesity. Biomechanics and Modeling in Mechanobiology, 2014, 13, 945-959. | 1.4 | 11 |
| 27 | A computational analysis on the implications of age-related changes in the expression of cellular signals on the role of IGF-1 in intervertebral disc homeostasis. Journal of Biomechanics, 2015, 48, 332-339. | 0.9 | 11 |
| 28 | Two-stage economic and environmental load dispatching framework using particle filtering. International Journal of Electrical Power and Energy Systems, 2013, 48, 93-110. | 3.3 | 10 |
| 29 | Causal inverse dynamics of a flexible hub-arm system through Liapunov's second method. Robotica, 1996, 14, 381-389. | 1.3 | 7 |
| 30 | Design of Thoracolumbosacral Orthosis (TLSO) Braces Using CT/MR. Journal of Computer Assisted Tomography, 2001, 25, 963-970. | 0.5 | 7 |
| 31 | A computational model for investigating the effects of changes in bioavailability of insulin-like growth factor-1 on the homeostasis of the intervertebral disc. Computers in Biology and Medicine, 2016, 78, 126-137. | 3.9 | 7 |
| 32 | Surgical Intervention for Spastic Upper Extremity Improves Lower Extremity Kinematics in Spastic Adults: A Collection of Case Studies. Frontiers in Bioengineering and Biotechnology, 2020, 8, 116. | 2.0 | 7 |
| 33 | Comparison of gait parameters in distal femoral replacement using a metallic endoprosthesis versus allograft reconstruction. Journal of Orthopaedics, 2015, 12, S25-S30. | 0.6 | 6 |
| 34 | EFFECTS OF SOME MACHINING VARIABLES IN LATHE FACING USING A PROFILOMETER TO MEASURE SURFACE ROUGHNESS. Quality Engineering, 1992, 5, 243-253. | 0.7 | 4 |
| 35 | The effect of motorcycle helmet fit on estimating head impact kinematics from residual liner crush. Accident Analysis and Prevention, 2017, 106, 315-326. | 3.0 | 4 |
| 36 | CT/MR imaging: a design tool for custom orthosis. Disability and Rehabilitation, 2000, 22, 583-590. | 0.9 | 3 |

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|---|---------|-----|-----------|
| 37 | Selection-based virtual keyboard prototypes and data collection application. Behavior Research Methods, 2009, 41, 951-956. | 2.3 | 3 |
| 38 | Development and Validation of a Three-Dimensional Biomechanical Model of the Lower Extremity. , 2011, , . | | 3 |
| 39 | Examining attitudes toward and ability to interact with an online personal health record: A case study in Saudi Arabia. International Journal of Healthcare, 2019, 6, 1. | 0.2 | 3 |
| 40 | Biomechanical analysis of accurately and carefully placing an aerospace avionics box in restricted space. International Journal of Industrial Ergonomics, 2019, 72, 93-111. | 1.5 | 3 |
| 41 | Reliability and validity of a pain matching method of a pain induction apparatus. The Pain Clinic, 2006, 18, 11-17. | 0.1 | 3 |
| 42 | A SYNTHESIS OF QUALITY FUNCTION DEPLOYMENT AND ROBUST DESIGN AND ITS APPLICATION IN THE MEDICAL DEVICE INDUSTRY. Quality Engineering, 1999, 12, 37-45. | 0.7 | 2 |
| 43 | Cervical Strength Training Does Not Enhance Dynamic Stabilization of Head and Neck During Football Tackling. Medicine and Science in Sports and Exercise, 2010, 42, 679. | 0.2 | 2 |
| 44 | The effect of high-heeled shoe design on lower extremity kinetics, kinematics, and electromyography. International Journal of Human Factors and Ergonomics, 2012, 1, 181. | 0.2 | 2 |
| 45 | Attainment and retention of force moderation following laparoscopic resection training with visual force feedback. Surgical Endoscopy and Other Interventional Techniques, 2017, 31, 4805-4815. | 1.3 | 2 |
| 46 | Assessment of dynamic balance via measurement of lower extremities tortuosity. Sports Biomechanics, 2015, 14, 18-27. | 0.8 | 1 |
| 47 | Correcting Higher Order Aberrations Using Image Processing. IEEE Transactions on Image Processing, 2021, 30, 2276-2287. | 6.0 | 1 |
| 48 | Integrating Human Factors/Ergonomics in Facilitating the Design/Analysis of Consumer Products: A Computerized Knowledge-Base System. Proceedings of the Human Factors Society Annual Meeting, 1990, 34, 444-447. | 0.1 | 0 |
| 49 | Comparisons of Laboratory Tests and Simple Clinical Tests for Identifying Fallers among Healthy Older Persons. Medicine and Science in Sports and Exercise, 2011, 43, 711. | 0.2 | 0 |
| 50 | Fluoroscopic Video Imaging as a Clinical Tool for Assessing Patellar Maltracking. Medicine and Science in Sports and Exercise, 2015, 47, 89. | 0.2 | 0 |
| 51 | A Fuzzy Genetic Algorithm Classifier: The Impact of Time-Series Load Data Temporal Dimension on Classification Performance. , 2016, , . | | 0 |