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### 2024

#### **A structured framework to evaluate capsule endoscope locomotion systems.**

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#### **Development of a solar powered multirotor micro aerial vehicle.**

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#### **Adaptive Input Shaper for Payload Swing Control of a 5-DOF Tower Crane with Parameter Uncertainties and Obstacle Avoidance.**

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#### **Development and economic viability analysis of photovoltaic (PV) energy powered decentralized ultrafiltration of rainwater for potable use.**

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#### **Active Blade Pitch Control and Stabilization of a Wind Turbine Driven PMSG For Power Output Regulation.**

Chen YX, Shaheed MH and Vepa R. *Wind Engineering*. McGowan JG. Sage Publications.

#### **Optimised Sliding Mode Control of a Hexacopter: Simulation and Experiments.**

Sun C, Agha SA, Mohamed Z and Shaheed MH. *Electronics* vol. 11, (16). Mdpi.

#### **Input shaping with an adaptive scheme for swing control of an underactuated tower crane under payload hoisting and mass variations.**

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#### **Grey-box modelling and fuzzy logic control of a Leader-Follower Robot manipulator system: A hybrid Grey Wolf Whale Optimization approach.**

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**Impact of hydrodynamic conditions on optimum power generation in dual stage pressure retarded osmosis using spiral-wound membrane.**

AlZainati N, Yadav S, Altaee A, Subbiah S, Zaidi SJ, Zhou J, Al-Juboori RA, Chen Y and Shaheed MH. *Energy Nexus* vol. 5, Elsevier.

## 2021

**Optimal design of a scaled-up PRO system using swarm intelligence approach.**

Chen Y, Shi Z, Xu B and Shaheed MH. *Science China Information Sciences* vol. 64, (12). Springer Nature.

**Optimal Trajectory Synthesis for Spacecraft Asteroid Rendezvous.**

Vepa R and Shaheed MH. *Symmetry*. Editors: Garcia JL and Awrejcewicz J. Mdpi.

**Hybrid renewable energy/hybrid desalination potentials for remote areas: Selected cases studied in Egypt.**

El-Hady B Kashyout A, Hassan A, Hassan G, El-Banna Fath H, El-Wahab Kassem A, Elshimy H, Ranjanvepa and Shaheed MH. *Rsc Advances* vol. 11, (22) 13201-13219.

**Dynamic characterization of a masterslave robotic manipulator using a hybrid grey wolfwhale optimization algorithm.**

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**Control of an Underactuated Double-Pendulum Overhead Crane using Improved Model Reference Command Shaping: Design, Simulation and Experiment.**

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**A Modified Computed Torque Control Approach for a Master-Slave Robot Manipulator System.**

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**Optimum Power Output Control of a Wind Turbine Rotor.**

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**Cancer classification using a novel gene selection approach by means of shuffling based on data clustering with optimization.**

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**Flying by the Sun only: The Solarcopter prototype.**

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**Stand-alone seawater RO (reverse osmosis) desalination powered by PV (photovoltaic) and PRO (pressure retarded osmosis).**

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**Grand challenges in magnetic capsule endoscopy.**

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**Real time adaptive nonlinear model inversion control of a twin rotor MIMO system using neural networks.**

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**Constrained output feedback model predictive control for nonlinear systems.**

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**Collocated and non-collocated control of flexible manipulators.**

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**Non-linear modelling of a one-degree-of-freedom twin-rotor multi-input multi-output system using radial basis function networks.**

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