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Farzad Tat Shahdost

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Doctor of Engineering  
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Robot stability analysis in Banach space  
(<https://orcid.org/0000-0002-2283-2663>)

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MATLAB Simulation





Publications

Publications (300)

**Land capability assessment by combining LESA and GIS in a calcareous watershed, Iran**

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Mar 2022

 Mohammad Akbari ·  Mohammad Tahmoures ·  Aliasghar Azma · [...] · 

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**Examination of warm transfer on extending sheet by variation iteration method strategy and investigation of arrangements for optimizing liquid properties**

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Feb 2022

 Pooya Pasha ·  Ali Hosin Alibak ·  Hossein Nabi ·  Farzad Tat Shahdost

This study aimed at investigating the variation of heat transfer and velocity changes of the fluid flow along the vertical line on a surface drawn from both sides. In the beginning, several parameters such as Prandtl number and viscoelastic effect were evaluated for heat transfer and fluid velocity by the variation iteration method. The results wer...





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**A universal methodology for reliable predicting the non-steroidal anti-inflammatory drug solubility in supercritical carbon dioxide**

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Jan 2022

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Understanding the drug solubility behavior is likely the first essential requirement for designing the supercritical technology for pharmaceutical processing. Therefore, this study utilizes different machine learning scenarios to simulate the solubility of twelve non-steroidal anti-inflammatory drugs (NSAIDs) in the supercritical carbon dioxide (SC...

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Jan 2022

 masoume\_ahmadi\_14@yahoo.com ·  am.parizi@gmail.com ·  Farzad Tat  
Shahdost

با توجه به اینکه کارکنان مراقبت های بهداشتی و درمانی در خط اول مبارزه با بیماری های عفونی و بیماری کووید-19 می باشند اولین کسانی هستند که در معرض آلودگی به این ویروس قرار می گیرند ترس و اضطراب ناشی از ابتلای احتمالی، بار روانی زیاد و مخربی ایجاد نموده که می تواند منجر به ناهنجاری های روحی و روانی، تضعیف... سیستم ایمنی و کاهش توان بدن در مبارزه با بیما

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با توجه به اینکه کارکنان مراقبت های بهداشتی و درمانی در خط اول مبارزه با بیماری های عفونی و بیماری کووید-19 می باشند اولین کسانی هستند که در معرض آلودگی به این ویروس قرار می گیرند ترس و اضطراب ناشی از ابتلای احتمالی، بار روانی زیاد و مخربی ایجاد نموده که می تواند منجر به ناهنجاری های روحی و روانی، تضعیف... سیستم ایمنی و کاهش توان بدن در مبارزه با بیما

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Dec 2021

 Zahra Rahmani ·  Saeed Fosshat ·  Seyed Mehdi Seyed Alizadeh · [...] ·  Abdol Ghaffar Ebadi

The adsorption of N2, O2, H2O, hydrogen



chloride (HCl), Cl<sub>2</sub>, hypochlorous acid (HClO), and ClO<sub>2</sub> gases was explored onto an AlN nanotube (AlNNT) through density functional theory computations. As N<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>O, HCl, Cl<sub>2</sub>, and HClO approach the AlNNT, their adsorption releases 7.1, 12.6, 22.3, 26.5, 30.2, and 41.2 kJ/mol of energy, respectively,



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### Developing a global approach for determining the molar heat capacity of deep eutectic solvents

Article

Dec 2021

 Ali Bagherzadeh ·  Nahal Shahini ·

 Danial Saber · [...] ·  Farzad Tat Shahdost

Deep eutectic solvents (DES) are a new class of green solvents. Reliable characterization of DESs is a prerequisite for their successful applications. The molar heat capacity (C<sub>p</sub>) is likely an essential thermal property often measured through expensive and time-consuming experimentations. Hence, it is necessary to derive an accurate model for C<sub>p</sub> ca...


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### Numerical investigation fluid velocity and heat transfer on the stretching sheet by VIM method and optimization fluid temperature and velocity parameter by Prandtl number and viscoelastic parameter

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 Pooya Pasha ·  Ali Hosin Alibak ·  Hossein Nabi ·  Farzad Tat Shahdost

This study aimed at investigating the variation of heat transfer and velocity changes of the fluid flow along the vertical line on a surface drawn from both sides. In the beginning, the several parameters such as Prandtl number and viscoelastic effect evaluated for heat transfer and fluid velocity by variation Iteration method. The results were com...

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How can full order slide control control be detected and identified?**

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**In a fault system based on multiple viewers, is it better to design an input rule with interrelated components or several control rules?**

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**Are the error and control variable signals separable (separate isolation and analysis)? (Sensor-actuator signal or sensor-actuator error)**

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Conference Paper

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**What is the function of sensor error detection sensors in the absence of general uncertainty?**

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How can the nonlinear matrix function of the dynamic model of the control system be expressed in linear form in the parameters?

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**If the zeros and poles of the nonlinear descriptive function are definite positive or semi-definite negative, what changes occur in the system behavior as well as the type and definition of system stability?**

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**If a observer(browser) is designed for a control system, is it considered a separate input, or is the browser input integrated with the system input control rule and a general input for the controlled system?**[Preprint](#)[Full-text available](#)

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If a observer(browser) is designed for a control system, is it considered a separate input, or is the browser input integrated with the system input control rule and a general input for the controlled system?

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**If any indeterminate parameter (of any degree and with any intensity) exists in the control system, can it be claimed that the system has a structured uncertainty?**

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If any indeterminate parameter (of any degree and with any intensity) exists in the control system, can it be claimed that the system has a structured uncertainty?

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**How can error thresholds be minimized or false alarms detected? In what cases are these cases undetectable or mis detection?**

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**If we have a structured uncertainty control system, what changes or changes will be achieved in achieving and satisfying finite time stability?**

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**If the errors of a control system in theory converge to zero, what guarantee is there that the same will happen in its implementation?**

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**In a system under study, how do the considered error sensors distinguish the input error from the output error and detect it separately and then converge to zero by the same unit or another unit?**

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In a system under study, how do the considered error sensors distinguish the input error from the output error and detect it separately and then converge to zero by the same unit or another unit?

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**Does not distinguishing between faults caused by the power supply or wiring and considering all of them as an**

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[View](#)**How can the detection, identification of (faults)errors and uncertainties, as well as their isolation from the model, be accomplished through an adaptive fuzzy sliding model observer(viewer)?**

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How can the detection, identification of (faults)errors and uncertainties, as well as their isolation from the model, be accomplished through an adaptive fuzzy sliding model observer(viewer)?

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**How and under what conditions can the necessary and sufficient conditions of linear control systems be defined and implemented for nonlinear systems of any degree and difficulty?**

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How and under what conditions can the necessary and sufficient conditions of linear control systems be defined and implemented for nonlinear systems of any degree and difficulty?

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**Can intra-system and extra-system errors be classified into two categories: finite and infinite or definite, definite and indefinite?**

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آیا خطاهای درون سیستمی و بیرون سیستمی را می توان به دو دسته کران دار و بیکران یا مشخص ، معین و نامشخص دسته بندی نمود؟

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**Can all concepts of linear control systems be generalized to nonlinear systems?**

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Can all concepts of linear control systems be generalized to nonlinear systems?

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**In a control system, how can unwanted signals, uncertainties and errors be separated?**

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In a control system, how can unwanted

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**Can errors due to inaccurate modeling or other types of errors fall into the category of uncertainties or vice versa?**[Preprint](#)[Full-text available](#)

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**If the uncontrolled (or uncontrollable) system is assumed to be nonlinear, how can it be proved that the stable system is asymptotic (or exponential) in Lyapunov's concept(sense)?**[Preprint](#)[Full-text available](#)

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If the uncontrolled (or uncontrollable) system is assumed to be nonlinear, how can it be proved that the stable system is asymptotic (or exponential) in Lyapunov's concept(sense)?

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**Conditional Stability -A Comparison for exactly null-controlability-observability How does it make sense?**[Preprint](#)[Full-text available](#)

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**How to control a linear uncontrolled system in the Hilbert and Euclidean space?**

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How to control a linear uncontrolled system in the Hilbert and Euclidean space?

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**What does uncontrollable and exactly null- controllable mean?**

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What does uncontrollable and exactly null-controllable mean?

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**What is the connection between the two areas exact null-controllable systems and exponentially stabilizable?**

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What is the connection between the two areas exact null-controllable systems and exponentially stabilizable?

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**What is the difference between the concept of stability and stability for systems with finite temporal-spatial dimensions and the type of infinite dimensions?**

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How do we prove for a control system that the exponential stability is complete or Liapanofi or asymptotic? ...

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**What is amplitude, dimension, dual, inverse operator as well as auxiliary controller of fuzzy systems?**

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How do fuzzy mappings take place in metrologically spaced spaces with infinite dimensions? ...

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Waste generators are typically (usually) based on the viewer. How does noise and uncertainty ensure the performan... ...

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What is the modeling of actuator and sensor frequency errors (due to the presence of electrical devices and... ...

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What about modeling errors as an unexpected change in system dynamics or as an unexpected presence of... ...

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Optimal direct adaptive nonlinear controller for three degree freedom robot How is it designed with a gravitational... ...

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Garmsar Branch**

Department of Electrical and Ele...



**Current position**

PhD Student

**Maple**

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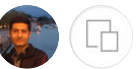
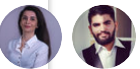


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