Prehľad publikačnej činnosti a ohlasov
v zmysle vyhlášky č. 6/2005 Z.z., §1 (2)f a neskorších znení

Zoznam pôvodných publikovaných vedeckých prác a učebníc

Výstupy kategórie A podľa OV16 Akreditačnej komisie SR

Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

1. Gulan, Martin – Nguyen, Ngoc Anh – Olaru, Sorin – Rodriguez-Ayerbe, Pedro – Rohaľ-Ilkiv, Boris:
   Implications of inverse parametric optimization in model predictive control.
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Publikácie v karentovaných vedeckých časopisoch

2. Gulan, Martin – Takács, Gergely – Nguyen, Ngoc Anh – Olaru, Sorin – Rodriguez-Ayerbe, Pedro – Rohaľ-Ilkiv, Boris:
   Efficient embedded model predictive vibration control via convex lifting.
   IEEE Transactions on Control Systems Technology,
   doi: 10.1109/TCST.2017.2764019.
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   Convex lifting: theory and control applications.
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   Embedded linear model predictive control for 8-bit microcontrollers via convex lifting.

In 20th IFAC World Congress, Toulouse, France, July 9–14, 2017, IFAC-PapersOnLine, vol. 50, pp. 11184–1119, doi:10.1016/j.ifacol.2017.08.2220.
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Hybrid MPC for gasoline engine air-fuel ratio control using optimal PWA approximation.
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Výstupy kategórie B podľa OV16 Akreditačnej komisie SR

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Application of adaptive multivariable generalized predictive control to a HVAC system in real time.
Archives of Control Sciences, vol. 24, no. 1, pp. 67–84, 2014, doi:10.2478/acsc-2014-0005.
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Achieving an equilibrium position of Pendubot via swing-up and stabilizing model predictive control.
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Adaptive model predictive torque vectoring control for a formula student electric racing car.
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10. Mikuláš, Erik – Takács, Gergely – Gulan, Martin – Abdollahpouri, Mohammad – Rohaľ-Ilkiv, Boris:
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In 25th International Congress on Sound and Vibration, Hiroshima, Japan, July 8–12, 2018, 8 pages.
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11. Nguyen, Ngoc Anh – Olaru, Sorin – Rodriguez-Ayerbe, Pedro – Gulan, Martin:
Construction of convex liftings based on halfspace representation.
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Real-time state estimation for an adaptive vibration energy harvesting system.
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14. Salaj, Michal – Gulan, Martin – Rohaľ-Ilkiv, Boris:
Pendubot control scheme based on nonlinear MPC and MHE exploiting parallelization.
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15. Gulan, Martin – Salaj, Michal – Rohaľ-Ilkiv, Boris:
Nonlinear model predictive control with moving horizon estimation of a Pendubot system.
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16. Gulan, Martin – Salaj, Michal – Rohaľ-Ilkiv, Boris:
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Vysokoškolské učebnice

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    Zapojenie generatívneho konštrukčného systému tvarových dielov.
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    Dvojcestné podvozky – konštrukcia a ich využitie.
    In Magazín stavebné stroje a mechanizácia, roč. 4, č. 3, s. 14–15, 2009. ISSN 2453-7500.

21. Pulkovník, Vladimír – Gulan, Ladislav – Izrael, Gregor – Gulan, Martin:
    Teleskopické manipulátory – konštrukcia a ich využitie v praxi.
    In Magazín stavebné stroje a mechanizácia, roč. 7, č. 5, s. 24–27, 2012. ISSN 2453-7500.

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   HeatShield: a low-cost didactic device for control education simulating 3D printer heater blocks.
   Submitted to IEEE Global Engineering Education Conference, Dubai, UAE, April 9–11, 2019.

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   Chemical Engineering Research and Design, vol. 116, pp. 61–82, 2016,
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   FPGA lead-lag compensator design for industrial control systems.
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- Nguyen, N.A. – Olaru, S.:
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7. Tárník M. – Murgaš, J. – Miklovičová, E.:
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V Bratislave dňa: 7. novembra 2018

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