

Accessibility and system reduction of nonlinear time-delay control systems

Bartosiewicz, Zbigniew; Kaldmäe, Arvo; Kawano, Yu; Kotta, Ülle; Pawluszewicz, Ewa; Simha, Ashutosh; Wyrwas, Małgorzata IEEE Transactions on Automatic Control 2021 / p. 3781–3788 <https://doi.org/10.1109/TAC.2020.3028566> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Algebraic formalism of differential one-forms for nonlinear control systems on time scales

Bartosiewicz, Zbigniew; Kotta, Ülle; Pawluszewicz, Ewa; Wyrwas, Małgorzata Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2007 / 3, p. 264-282

Algebraic formalism of differential p-forms and vector fields for nonlinear control systems on homogeneous time scales

Bartosiewicz, Zbigniew; Kotta, Ülle; Pawluszewicz, Ewa; Tönso, Maris; Wyrwas, Małgorzata Proceedings of the Estonian Academy of Sciences 2013 / p. 215-226 <https://doi.org/10.3176/proc.2013.4.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Equivalence of linear control systems on time scales

Bartosiewicz, Zbigniew; Kotta, Ülle; Pawluszewicz, Ewa Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2006 / 1, p. 43-52

Feedback linearization of an active magnetic bearing system operated with a zero-bias flux

Mystkowski, Arkadiusz; Kaparin, Vadim; Kotta, Ülle; Pawluszewicz, Ewa; Tönso, Maris International journal of applied mathematics and computer science 2017 / p. 539-548 : ill <https://doi.org/10.1515/amcs-2017-0038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

FLHex: a flapped-paddle hexapod for all-terrain amphibious locomotion

Burzynski, Piotr; Simha, Ashutosh; Kotta, Ülle; Pawluszewicz, Ewa; Sastry, Shivakumar Bulletin of the Polish Academy of Sciences Technical Sciences 2021 / art. e139007, 9 p. : ill <https://doi.org/10.24425/bpasts.2021.139007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forward and backward shifts of vector fields : towards the dual algebraic framework

Mullari, Tanel; Kotta, Ülle; Bartosiewicz, Zbigniew; Pawluszewicz, Ewa; Moog, Claude IEEE transactions on automatic control 2017 / p. 3029-3033 <https://doi.org/10.1109/TAC.2016.2608718> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Linearization by generalized input-output injections on homogeneous time scales

Ciulkin, Monika; Pawluszewicz, Ewa; Kaparin, Vadim; Kotta, Ülle 2016 21st International Conference on Methods and Models in Automation and Robotics (MMAR 2016) : Miedzyzdroje, Poland, 29 August - 1 September 2016 2016 / p. 48-53 <https://doi.org/10.1109/MMAR.2016.7575086>

Linearization by input-output injections on homogeneous time scales

Ciulkin, Monika; Kaparin, Vadim; Kotta, Ülle; Pawluszewicz, Ewa Proceedings of the Estonian Academy of Sciences 2014 / p. 387-397 https://artiklid.elnet.ee/record=b2707375*est <https://doi.org/10.3176/proc.2014.4.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Motor failure tolerant control system with self diagnostics for unmanned multirotors

Ambroziak, Leszek; Simha, Ashutosh; Pawluszewicz, Ewa; Kotta, Ülle 2019 24th International Conference on Methods and Models in Automation and Robotics (MMAR) 2019 / p. 422–427 : ill <https://doi.org/10.1109/MMAR.2019.8864726>

Nabla derivatives associated with nonlinear control systems on homogeneous time scales

Bartosiewicz, Zbigniew; Kotta, Ülle; Mullari, Tanel; Tönso, Maris; Pawluszewicz, Ewa; Wyrwas, Małgorzata Nonlinear analysis : modelling and control 2016 / p. 547-563 <https://doi.org/10.15388/NA.2016.4.8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the finiteness of accessibility test for nonlinear discrete-time systems

Sarafrazi, Mohammad Amin; Pawluszewicz, Ewa; Bartosiewicz, Zbigniew; Kotta, Ülle International journal of control 2021 / p. 2330-2336 <https://doi.org/10.1080/00207179.2019.1706102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the properties of forward and backward shifts of vector fields

Kaldmäe, Arvo; Kaparin, Vadim; Kotta, Ülle; Mullari, Tanel; Pawluszewicz, Ewa Proceedings of the Estonian Academy of Sciences 2022 / p. 314-325 <https://doi.org/10.3176/proc.2022.4.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Popov form and the explicit equations of inverse systems

Bartosiewicz, Zbigniew; Kotta, Ülle; Pawluszewicz, Ewa; Tönso, Maris; Wyrwas, Małgorzata Proceedings of the Estonian Academy of Sciences 2018 / p. 432-355 : ill http://www.kirj.ee/public/proceedings_pdf/2018/issue_4/proc-2018-4-342-355.pdf <https://doi.org/10.3176/proc.2018.4.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The concepts of Lie derivative for discrete-time systems

Mullari, Tanel; Kotta, Ülle; Bartosiewicz, Zbigniew; Pawluszewicz, Ewa Proceedings of the Estonian Academy of Sciences 2012 / p. 253-265 : ill

The strong Popov form of nonlinear input–output equations

Bartosiewicz, Zbigniew; Pawluszewicz, Ewa; Wyrwas, Małgorzata; **Kotta, Ülle; Tönso, Maris** Proceedings of the Estonian Academy of Sciences 2018 / p. 193–206 <https://doi.org/10.3176/proc.2018.3.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Transforming a set of nonlinear input-ouput equations into Popov form

Bartosiewicz, Zbigniew; **Kotta, Ülle;** Pawluszewicz, Ewa; **Tönso, Maris;** Wyrwas, Małgorzata 2015 54th IEEE Conference on Decision and Control (CDC) : date: 15-18 Dec. 2015 2015 / p. 7131 - 7136 <https://doi.org/10.1109/CDC.2015.7403344> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Weak reachability and controllability of discrete-time nonlinear systems: generic approach and singular points

Mullari, Tanel; Kotta, Ülle; Bartosiewicz, Zbigniew; Sarafrazi, Mohammad Amin; Moog, Claude; Pawluszewicz, Ewa International journal of control 2020 / p. 483-489 <https://doi.org/10.1080/00207179.2018.1479076> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)