Ilya V Kolmanovsky

List of Publications by Citations

Source: https://exaly.com/author-pdf/5853538/ilya-v-kolmanovsky-publications-by-citations.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

5,462 65 294 33 h-index g-index citations papers 6.29 7,107 330 3.4 avg, IF L-index ext. papers ext. citations

#	Paper	IF	Citations
294	Theory and computation of disturbance invariant sets for discrete-time linear systems. Mathematical Problems in Engineering, 1998, 4, 317-367	1.1	495
293	MPC-Based Energy Management of a Power-Split Hybrid Electric Vehicle. <i>IEEE Transactions on Control Systems Technology</i> , 2012 , 20, 593-603	4.8	423
292	Stochastic MPC With Learning for Driver-Predictive Vehicle Control and its Application to HEV Energy Management. <i>IEEE Transactions on Control Systems Technology</i> , 2014 , 22, 1018-1031	4.8	248
291	Nonlinear tracking control in the presence of state and control constraints: a generalized reference governor. <i>Automatica</i> , 2002 , 38, 2063-2073	5.7	243
290	Discrete-time reference governors and the nonlinear control of systems with state and control constraints. <i>International Journal of Robust and Nonlinear Control</i> , 1995 , 5, 487-504	3.6	242
289	Fast reference governors for systems with state and control constraints and disturbance inputs. <i>International Journal of Robust and Nonlinear Control</i> , 1999 , 9, 1117-1141	3.6	156
288	Reference and command governors for systems with constraints: A survey on theory and applications. <i>Automatica</i> , 2017 , 75, 306-328	5.7	148
287	Model Predictive Control approach for guidance of spacecraft rendezvous and proximity maneuvering. <i>International Journal of Robust and Nonlinear Control</i> , 2012 , 22, 1398-1427	3.6	134
286	Turbocharger Modeling for Automotive Control Applications 1999,		126
285	Model Predictive Control for Spacecraft Rendezvous and Docking: Strategies for Handling Constraints and Case Studies. <i>IEEE Transactions on Control Systems Technology</i> , 2015 , 23, 1638-1647	4.8	112
284	Application of input estimation techniques to charge estimation and control in automotive engines. <i>Control Engineering Practice</i> , 2002 , 10, 1371-1383	3.9	107
283	Game Theory Controller for Hybrid Electric Vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2014 , 22, 652-663	4.8	95
282	Game Theoretic Modeling of Driver and Vehicle Interactions for Verification and Validation of Autonomous Vehicle Control Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 1782	2-1797	90
281	Power Smoothing Energy Management and Its Application to a Series Hybrid Powertrain. <i>IEEE Transactions on Control Systems Technology</i> , 2013 , 21, 2091-2103	4.8	74
280	Adaptive posicast controller for time-delay systems with relative degree . <i>Automatica</i> , 2010 , 46, 279-28	89 _{5.7}	65
279	Reference and command governors: A tutorial on their theory and automotive applications 2014,		63
278	Spark ignition engine fuel-to-air ratio control: An adaptive control approach. <i>Control Engineering Practice</i> , 2010 , 18, 1369-1378	3.9	57

(2017-2007)

277	Constraint Handling in a Fuel Cell System: A Fast Reference Governor Approach. <i>IEEE Transactions on Control Systems Technology</i> , 2007 , 15, 86-98	4.8	56	
276	Real-Time Model Predictive Control for Shipboard Power Management Using the IPA-SQP Approach. <i>IEEE Transactions on Control Systems Technology</i> , 2015 , 23, 2129-2143	4.8	50	
275	Enhanced Smoothing Technique for Indirect Optimization of Minimum-Fuel Low-Thrust Trajectories. <i>Journal of Guidance, Control, and Dynamics</i> , 2016 , 39, 2500-2511	2.1	50	
274	On-line identification of SISO linear time-invariant delay systems from output measurements. <i>Automatica</i> , 2007 , 43, 2060-2069	5.7	48	
273	Generalized Markov Models for Real-Time Modeling of Continuous Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2014 , 22, 983-998	8.3	45	
272	Nonlinear Model Predictive Control of a Diesel Engine Air Path: A Comparison of Constraint Handling and Computational Strategies. <i>IFAC-PapersOnLine</i> , 2015 , 48, 372-379	0.7	45	
271	An integrated perturbation analysis and Sequential Quadratic Programming approach for Model Predictive Control. <i>Automatica</i> , 2009 , 45, 2412-2418	5.7	44	
270	Switched mode feedback control laws for nonholonomic systems in extended power form. <i>Systems and Control Letters</i> , 1996 , 27, 29-36	2.4	44	
269	Suboptimal Control of Switched Systems With an Application to the DISC Engine. <i>IEEE Transactions on Control Systems Technology</i> , 2008 , 16, 189-201	4.8	43	
268	Model Predictive Idle Speed Control: Design, Analysis, and Experimental Evaluation. <i>IEEE Transactions on Control Systems Technology</i> , 2011 ,	4.8	42	
267	Model-Based Plant Design and Hierarchical Control of a Prototype Lighter-Than-Air Wind Energy System, With Experimental Flight Test Results. <i>IEEE Transactions on Control Systems Technology</i> , 2014 , 22, 531-542	4.8	40	
266	Inertia-Free Spacecraft Attitude Control Using Reaction Wheels. <i>Journal of Guidance, Control, and Dynamics</i> , 2013 , 36, 1425-1439	2.1	38	
265	Visual-Manual Distraction Detection Using Driving Performance Indicators With Naturalistic Driving Data. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2018 , 19, 2528-2535	6.1	37	
264	Spark-Ignition-Engine Idle Speed Control: An Adaptive Control Approach. <i>IEEE Transactions on Control Systems Technology</i> , 2011 , 19, 990-1002	4.8	37	
263	Cabin and Battery Thermal Management of Connected and Automated HEVs for Improved Energy Efficiency Using Hierarchical Model Predictive Control. <i>IEEE Transactions on Control Systems Technology</i> , 2020 , 28, 1711-1726	4.8	35	
262	Optimally controlling Hybrid Electric Vehicles using path forecasting 2009,		33	
261	Safe Positively Invariant Sets for Spacecraft Obstacle Avoidance. <i>Journal of Guidance, Control, and Dynamics</i> , 2015 , 38, 720-732	2.1	30	
260	Co-state initialization for the minimum-time low-thrust trajectory optimization. <i>Advances in Space Research</i> , 2017 , 59, 2360-2373	2.4	29	

259	Rate-Based Model Predictive Controller for Diesel Engine Air Path: Design and Experimental Evaluation. <i>IEEE Transactions on Control Systems Technology</i> , 2016 , 24, 1922-1935	4.8	29
258	Parameter governors for discrete-time nonlinear systems with pointwise-in-time state and control constraints. <i>Automatica</i> , 2006 , 42, 841-848	5.7	28
257	Cloud aided semi-active suspension control 2014 ,		27
256	MPC on manifolds with an application to the control of spacecraft attitude on SO(3). <i>Automatica</i> , 2017 , 76, 293-300	5.7	26
255	Model Predictive Control of Engine Speed During Vehicle Deceleration. <i>IEEE Transactions on Control Systems Technology</i> , 2014 , 22, 2205-2217	4.8	26
254	A Conjugate Gradient-Based BPTT-Like Optimal Control Algorithm With Vehicle Dynamics Control Application. <i>IEEE Transactions on Control Systems Technology</i> , 2011 , 19, 1587-1595	4.8	24
253	Road Risk Modeling and Cloud-Aided Safety-Based Route Planning. <i>IEEE Transactions on Cybernetics</i> , 2016 , 46, 2473-2483	10.2	23
252	A game theoretical model of traffic with multiple interacting drivers for use in autonomous vehicle development 2016 ,		23
251	Hierarchical reasoning game theory based approach for evaluation and testing of autonomous vehicle control systems 2016 ,		23
250	Shaping low-thrust trajectories with thrust-handling feature. <i>Advances in Space Research</i> , 2018 , 61, 879	9-83A 9	23
249	Connected and automated road vehicles: state of the art and future challenges. <i>Vehicle System Dynamics</i> , 2020 , 58, 672-704	2.8	23
	Connected and automated road vehicles: state of the art and future challenges. Vehicle System		
249	Connected and automated road vehicles: state of the art and future challenges. <i>Vehicle System Dynamics</i> , 2020 , 58, 672-704 Robust Control of Constrained Linear Systems With Bounded Disturbances. <i>IEEE Transactions on</i>	2.8	22
249 248	Connected and automated road vehicles: state of the art and future challenges. <i>Vehicle System Dynamics</i> , 2020 , 58, 672-704 Robust Control of Constrained Linear Systems With Bounded Disturbances. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 2683-2688 A stable block model predictive control with variable implementation horizon. <i>Automatica</i> , 2007 ,	2.8	22
249248247	Connected and automated road vehicles: state of the art and future challenges. <i>Vehicle System Dynamics</i> , 2020 , 58, 672-704 Robust Control of Constrained Linear Systems With Bounded Disturbances. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 2683-2688 A stable block model predictive control with variable implementation horizon. <i>Automatica</i> , 2007 , 43, 1945-1953 Coordinated Model Predictive Control of Aircraft Gas Turbine Engine and Power System. <i>Journal of</i>	2.8 5.9 5.7	22 22 22
249248247246	Connected and automated road vehicles: state of the art and future challenges. <i>Vehicle System Dynamics</i> , 2020 , 58, 672-704 Robust Control of Constrained Linear Systems With Bounded Disturbances. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 2683-2688 A stable block model predictive control with variable implementation horizon. <i>Automatica</i> , 2007 , 43, 1945-1953 Coordinated Model Predictive Control of Aircraft Gas Turbine Engine and Power System. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 2538-2555 A New Clustering Algorithm for Processing GPS-Based Road Anomaly Reports With a Mahalanobis	2.8 5.9 5.7 2.1	22 22 22 21
249248247246245	Connected and automated road vehicles: state of the art and future challenges. Vehicle System Dynamics, 2020, 58, 672-704 Robust Control of Constrained Linear Systems With Bounded Disturbances. IEEE Transactions on Automatic Control, 2012, 57, 2683-2688 A stable block model predictive control with variable implementation horizon. Automatica, 2007, 43, 1945-1953 Coordinated Model Predictive Control of Aircraft Gas Turbine Engine and Power System. Journal of Guidance, Control, and Dynamics, 2017, 40, 2538-2555 A New Clustering Algorithm for Processing GPS-Based Road Anomaly Reports With a Mahalanobis Distance. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 1980-1988	2.8 5.9 5.7 2.1	22 22 22 21 21

(2020-2009)

241	From vehicle stability control to intelligent personal minder: Real-time vehicle handling limit warning and driver style characterization 2009 ,		20
240	Vehicle Velocity Prediction and Energy Management Strategy Part 1: Deterministic and Stochastic Vehicle Velocity Prediction Using Machine Learning		20
239	A Regularized and Smoothed Fischer B urmeister Method for Quadratic Programming With Applications to Model Predictive Control. <i>IEEE Transactions on Automatic Control</i> , 2019 , 64, 2937-2944	5.9	20
238	Adaptive Game-Theoretic Decision Making for Autonomous Vehicle Control at Roundabouts 2018,		20
237	Geometric Mechanics Based Nonlinear Model Predictive Spacecraft Attitude Control with Reaction Wheels. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 309-319	2.1	18
236	Embedding Constrained Model Predictive Control in a Continuous-Time Dynamic Feedback. <i>IEEE Transactions on Automatic Control</i> , 2019 , 64, 1932-1946	5.9	18
235	Model Predictive Control of three dimensional spacecraft relative motion 2012,		17
234	Trajectory Control of Very Flexible Aircraft with Gust Disturbance 2013,		17
233	On the dynamics and control of through-plane water distributions in PEM fuel cells. <i>Chemical Engineering Science</i> , 2008 , 63, 4418-4432	4.4	17
232	Real-time optimization and model predictive control for aerospace and automotive applications 2018 ,		16
231	Nonlinear model predictive control strategy for low thrust spacecraft missions. <i>Optimal Control Applications and Methods</i> , 2014 , 35, 1-20	1.7	16
230	Stochastic dynamic programming control policies for fuel efficient in-traffic driving 2012 ,		16
229	Stochastic dynamic programming control policies for fuel efficient vehicle following 2013,		16
228	Value Iteration for (Switched) Homogeneous Systems. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 1290-1294	5.9	16
227	Ultracapacitor assisted powertrains: Modeling, control, sizing, and the impact on fuel economy 2008 ,		16
226	Model Predictive Climate Control of Connected and Automated Vehicles for Improved Energy Efficiency 2018 ,		16
225	Reference governor for Network Control Systems subject to variable time-delay. <i>Automatica</i> , 2015 , 62, 77-86	5.7	15
224	Time-distributed optimization for real-time model predictive control: Stability, robustness, and constraint satisfaction. <i>Automatica</i> , 2020 , 117, 108973	5.7	15

223	Fast Computable Recoverable Sets and Their Use for Aircraft Loss-of-Control Handling. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 934-947	2.1	15
222	Cloud aided safety-based route planning 2014 ,		15
221	Game Theoretic Modeling of Vehicle Interactions at Unsignalized Intersections and Application to Autonomous Vehicle Control 2018 ,		14
220	Constrained Spacecraft Relative Motion Planning Exploiting Periodic Natural Motion Trajectories and Invariance. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 3100-3115	2.1	14
219	Neighboring Extremal Solution for Nonlinear Discrete-Time Optimal Control Problems With State Inequality Constraints. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 2674-2679	5.9	14
218	Two-Layer Model Predictive Battery Thermal and Energy Management Optimization for Connected and Automated Electric Vehicles 2018 ,		14
217	Model Predictive Control of Spacecraft Relative Motion with Convexified Keep-Out-Zone Constraints. <i>Journal of Guidance, Control, and Dynamics</i> , 2018 , 41, 2054-2062	2.1	14
216	HIFiltering for Cloud-Aided Semi-active Suspension with Delayed Road Information. <i>IFAC-PapersOnLine</i> , 2015 , 48, 275-280	0.7	13
215	A Finite State Machine Based Automated Driving Controller and its Stochastic Optimization 2017,		13
214	A control allocation technique to recover from pilot-induced oscillations (capio) due to actuator rate limiting 2010 ,		13
213	MEAN-SQUARE STABILITY OF NONLINEAR SYSTEMS WITH TIME-VARYING, RANDOM DELAY. Stochastic Analysis and Applications, 2001 , 19, 279-293	1.1	13
212	Game-Theoretic Modeling of Traffic in Unsignalized Intersection Network for Autonomous Vehicle Control Verification and Validation. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2020 , 1-16	6.1	13
211	Integrated optimization of Power Split, Engine Thermal Management, and Cabin Heating for Hybrid Electric Vehicles 2019 ,		13
21 0	Attitude Control of a 2U Cubesat by Magnetic and Air Drag Torques. <i>IEEE Transactions on Control Systems Technology</i> , 2019 , 27, 1047-1059	4.8	13
209	Reference Governor Strategies for Vehicle Rollover Avoidance. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 1954-1969	4.8	12
208	Road anomaly estimation: Model based pothole detection 2015,		12
207	A generalized Markov Chain modeling approach for on board applications 2010,		12
206	Reduced order reference governor 2012 ,		12

205	Developments in Constrained Control Using Reference Governors. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 282-290		12	
204	Adaptive control allocation for constrained systems. <i>Automatica</i> , 2020 , 121, 109161	5.7	12	
203	Quad-Rotor Flight Simulation in Realistic Atmospheric Conditions. <i>AIAA Journal</i> , 2020 , 58, 1992-2004	2.1	12	
202	A neural network approach to retinal layer boundary identification from optical coherence tomography images 2015 ,		11	
201	A novel approach for optimal trajectory design with multiple operation modes of propulsion system, part 1. <i>Acta Astronautica</i> , 2020 , 172, 151-165	2.9	11	
200	Model Predictive Control Strategies for Constrained Soft Landing on an Asteroid 2016 ,		11	
199	Model Predictive Control of an Underactuated Spacecraft with Two Reaction Wheels. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 320-332	2.1	11	
198	Reference and extended command governors for control of turbocharged gasoline engines based on linear models 2011 ,		11	
197	A control allocation system for automatic detection and compensation of phase shift due to actuator rate limiting 2011 ,		11	
196	Source Identification for Parabolic Equations. <i>Mathematics of Control, Signals, and Systems</i> , 2003 , 16, 141-157	1.3	11	
195	Stochastic Fuel Efficient Optimal Control of Vehicle Speed. <i>Lecture Notes in Control and Information Sciences</i> , 2014 , 147-162	0.5	11	
194	Fixed-point constrained Model Predictive Control of spacecraft attitude 2015,		10	
193	Training Drift Counteraction Optimal Control Policies Using Reinforcement Learning: An Adaptive Cruise Control Example. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2018 , 19, 2903-2912	6.1	10	
192	Reduced order extended command governor. <i>Automatica</i> , 2014 , 50, 1466-1472	5.7	10	
191	An Adaptive Proportional Integral Control of a Urea Selective Catalytic Reduction System based on System Identification Models. <i>SAE International Journal of Fuels and Lubricants</i> , 2010 , 3, 625-642	1.8	10	
190	Game-Theoretic Modeling of Multi-Vehicle Interactions at Uncontrolled Intersections. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2020 , 1-15	6.1	10	
189	Learning reference governor for cycle-to-cycle combustion control with misfire avoidance in spark-ignition engines at high exhaust gas recirculation liluted conditions. <i>International Journal of Engine Research</i> , 2020 , 21, 1819-1834	2.7	9	
188	Simultaneous road profile estimation and anomaly detection with an input observer and a jump diffusion process estimator 2016 ,		9	

187	Constrained control of free piston engine generator based on implicit reference governor. <i>Science China Information Sciences</i> , 2018 , 61, 1	3.4	9
186	Zonotope-based recursive estimation of the feasible solution set for linear static systems with additive and multiplicative uncertainties. <i>Automatica</i> , 2018 , 95, 236-245	5.7	9
185	Constrained spacecraft attitude control on SO(3) using reference governors and nonlinear model predictive control 2014 ,		9
184	Stable hierarchical model predictive control using an inner loop reference model and . <i>Automatica</i> , 2014 , 50, 92-99	5.7	9
183	Fast reference governors for second-order linear systems with constraints and an input time-delay. <i>Automatica</i> , 2014 , 50, 641-645	5.7	9
182	A novel approach for optimal trajectory design with multiple operation modes of propulsion system, part 2. <i>Acta Astronautica</i> , 2020 , 172, 166-179	2.9	8
181	Envelope-Aware Flight Management for Loss of Control Prevention Given Rudder Jam. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 1027-1041	2.1	8
180	Modeling of vehicle driving conditions using transition probability models 2011,		8
179	Forward-integration Riccati-based output-feedback control of linear time-varying systems 2012,		8
178	Distributed Supervisory Controller Design for Battery Swapping Modularity in Plug-In Hybrid Electric Vehicles. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2012 , 134,	1.6	8
177	Hybrid feedback stabilization of rotational Translational actuator (RTAC) system. <i>International Journal of Robust and Nonlinear Control</i> , 1998 , 8, 367-375	3.6	8
176	Set-membership condition monitoring framework for dual fuel engines 2016 ,		8
175	Cloud resource allocation for cloud-based automotive applications. <i>Mechatronics</i> , 2018 , 50, 356-365	3	8
174	A cascaded economic model predictive control strategy for a diesel engine using a non-uniform prediction horizon discretization 2017 ,		7
173	Dual-loop Control of Free Piston Engine Generator. IFAC-PapersOnLine, 2015, 48, 174-180	0.7	7
172	Constrained Model Predictive Control of spacecraft attitude with reaction wheels desaturation 2015 ,		7
171	Automotive Powertrain Control Problems Involving Time Delay: An Adaptive Control Approach 2008 ,		7
170	Boosted Gasoline Direct Injection Engines: Comparison of Throttle and VGT Controllers for Homogeneous Charge Operation 2002 ,		7

169	Best interpolation in a strip II: Reduction to unconstrained convex optimization. <i>Computational Optimization and Applications</i> , 1996 , 5, 233-251	1.4	7	
168	Deep Reinforcement Learning with Enhanced Safety for Autonomous Highway Driving 2020,		7	
167	Long-Term Vehicle Speed Prediction via Historical Traffic Data Analysis for Improved Energy Efficiency of Connected Electric Vehicles. <i>Transportation Research Record</i> , 2020 , 2674, 17-29	1.7	7	
166	Recovering Linear Controllability of an Underactuated Spacecraft by Exploiting Solar Radiation Pressure. <i>Journal of Guidance, Control, and Dynamics</i> , 2016 , 39, 826-837	2.1	7	
165	Nonlinear Dynamic Inversion of a Flexible Aircraft. IFAC-PapersOnLine, 2016, 49, 338-342	0.7	7	
164	Robust Science-Optimal Spacecraft Control for Circular Orbit Missions. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020 , 50, 923-934	7.3	7	
163	Distributed Model Predictive Control for More Electric Aircraft Subsystems Operating at Multiple Time Scales. <i>IEEE Transactions on Control Systems Technology</i> , 2020 , 28, 2177-2190	4.8	7	
162	Fault tolerant control for over-actuated systems: An adaptive correction approach 2016,		6	
161	Underactuated Spacecraft Switching Law for Two Reaction Wheels and Constant Angular Momentum. <i>Journal of Guidance, Control, and Dynamics</i> , 2016 , 39, 2086-2099	2.1	6	
160	Reference Governors for Enforcing Compressor Surge Constraints. <i>IEEE Transactions on Control Systems Technology</i> , 2016 , 24, 1729-1739	4.8	6	
159	A tutorial overview of IPA-SQP approach for optimization of constrained nonlinear systems 2014,		6	
158	Direct Optimal Design for Component Swapping Modularity in Control Systems. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 297-306	5.5	6	
157	Optimal State Estimation for Systems Driven by Jump D iffusion Process With Application to Road Anomaly Detection. <i>IEEE Transactions on Control Systems Technology</i> , 2017 , 25, 1634-1643	4.8	6	
156	Stability, Control, and Constraint Enforcement of Piston Motion in a Hydraulic Free-Piston Engine. <i>IEEE Transactions on Control Systems Technology</i> , 2017 , 25, 1284-1296	4.8	6	
155	Deterministic drift counteraction optimal control and its application to satellite life extension 2015,		6	
154	Adaptive control approach for cylinder balancing in a hydraulic linear engine 2013,		6	
153	Path dependent receding horizon control policies for Hybrid Electric Vehicles 2009,		6	
152	Further developments and applications of network reference governor for constrained systems 2012 ,		6	

151	A Dynamic Semi-Analytic Channel-to-Channel Model of Two-Phase Water Distribution for a Unit Fuel Cell. <i>IEEE Transactions on Control Systems Technology</i> , 2009 , 17, 1055-1068	4.8	6
150	Model-free Learning to Avoid Constraint Violations: An Explicit Reference Governor Approach 2019 ,		6
149	Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 3677-3684	5.9	6
148	Model predictive emissions control of a diesel engine airpath: Design and experimental evaluation. <i>International Journal of Robust and Nonlinear Control</i> , 2020 , 30, 7446-7477	3.6	6
147	A Perturbed Chord (Newton-Kantorovich) Method for Constrained Nonlinear Model Predictive Control. <i>IFAC-PapersOnLine</i> , 2016 , 49, 253-258	0.7	6
146	Optimized Design of Multi-Speed Transmissions for Battery Electric Vehicles 2019 ,		6
145	Inexact Newton Kantorovich Methods for Constrained Nonlinear Model Predictive Control. <i>IEEE Transactions on Automatic Control</i> , 2019 , 64, 3602-3615	5.9	6
144	Explicit Reference Governor for the Constrained Control of Linear Time-Delay Systems. <i>IEEE Transactions on Automatic Control</i> , 2019 , 64, 2883-2889	5.9	6
143	Predictive propulsion and power control for large transient power loads in a More Electric Aircraft 2017 ,		5
142	A Traffic Simulation Model with Interactive Drivers and High-fidelity Car Dynamics. <i>IFAC-PapersOnLine</i> , 2019 , 51, 384-389	0.7	5
141	Stochastic Predictive Control for Partially Observable Markov Decision Processes With Time-Joint Chance Constraints and Application to Autonomous Vehicle Control. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME,</i> 2019 , 141,	1.6	5
140	FBstab: A proximally stabilized semismooth algorithm for convex quadratic programming. <i>Automatica</i> , 2020 , 113, 108801	5.7	5
139	Game Theory-Based Traffic Modeling for Calibration of Automated Driving Algorithms. <i>Lecture Notes in Control and Information Sciences</i> , 2019 , 89-106	0.5	5
138	Reference governors for chance-constrained systems. <i>Automatica</i> , 2019 , 109, 108500	5.7	5
137	Model-free optimal control based automotive control system falsification 2017,		5
136	Drift counteraction optimal control for deterministic systems and enhancing convergence of value iteration. <i>Automatica</i> , 2017 , 83, 108-115	5.7	5
135	Optimal Driving Policies for Autonomous Vehicles Based on Stochastic Drift Counteraction. <i>IFAC-PapersOnLine</i> , 2017 , 50, 290-296	0.7	5
134	Reference and command governors for systems with slowly time-varying references and time-dependent constraints 2014 ,		5

133	Limit Protection in Gas Turbine Engines Based on Reference and Extended Command Governors 2014 ,		5	
132	A stochastic drift counteraction optimal control approach to glider flight management 2011 ,		5	
131	Constrained actuator coordination by virtual state governing 2011,		5	
130	Eco-Cooling Control Strategy for Automotive Air-Conditioning System: Design and Experimental Validation. <i>IEEE Transactions on Control Systems Technology</i> , 2020 , 1-12	4.8	5	
129	Optimal and receding horizon drift counteraction control: Linear programming approaches 2017,		5	
128	Neighboring extremal optimal control for mechanical systems on Riemannian manifolds. <i>Journal of Geometric Mechanics</i> , 2016 , 8, 257-272	1.5	5	
127	Integrated Power and Thermal Management of Connected HEVs via Multi-Horizon MPC 2020,		5	
126	Design Environment for Nonlinear Model Predictive Control 2016 ,		5	
125	Stochastic drift counteraction optimal control and enhancing convergence of value iteration 2016,		5	
124	Constrained control for soft landing on an asteroid with gravity model uncertainty 2016,		5	
123	A Semismooth Predictor Corrector Method for Real-Time Constrained Parametric Optimization with Applications in Model Predictive Control 2018 ,		5	
122	Zonotope-based set-membership parameter identification of linear systems with additive and multiplicative uncertainties: A new algorithm 2017 ,		4	
121	Deterministic Drift Counteraction Optimal Control for Attitude Control of Spacecraft with Time-Varying Mass 2016 ,		4	
120	Spacecraft Drift Counteraction Optimal Control: Open-Loop and Receding Horizon Solutions. Journal of Guidance, Control, and Dynamics, 2018, 41, 1859-1872	2.1	4	
119	Distributed MPC via ADMM for Coordination and Control of More Electric Aircraft Subsystems 2017 ,		4	
118	Constraint Enforcement for a Lighter-than-Air Wind-Energy System: An Application of Reference Governors with Chance Constraints. <i>IFAC-PapersOnLine</i> , 2017 , 50, 13258-13263	0.7	4	
117	Control of Gear Ratio and Slip in Continuously Variable Transmissions: A Model Predictive Control Approach 2017 ,		4	
116	Hardware implementation of Model Predictive Control for relative motion maneuvering 2015,		4	

115	Robust Hizontrol for a class of networked uncertain systems with multiple channels subject to Markovian switching 2015 ,		4
114	Feedback Control during Mode Transition for a Marine Dual Fuel Engine. <i>IFAC-PapersOnLine</i> , 2015 , 48, 279-284	0.7	4
113	Constraint enforcement of piston motion in a free-piston engine 2014,		4
112	Disturbance canceling control based on simple input observers with constraint enforcement for aerospace applications 2014 ,		4
111	Lyapunov-based constrained engine torque control using electronic throttle and variable cam timing 2012 ,		4
110	Estimation of fuel flow for telematics-enabled adaptive fuel and time efficient vehicle routing 2011 ,		4
109	Model predictive control for spacecraft rendezvous and docking with a rotating/tumbling platform and for debris avoidance 2011 ,		4
108	Output-Feedback RLS-Based Model Predictive Control* 2020,		4
107	A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 3207-3214	5.9	4
106	Development, implementation, and experimental outdoor evaluation of quadcopter controllers for computationally limited embedded systems. <i>Annual Reviews in Control</i> , 2021 , 52, 372-372	10.3	4
105	Integrated/coordinated control of aircraft gas turbine engine and electrical power system: Towards large electrical load handling 2016 ,		4
104	Thermal Responses of Connected HEVs Engine and Aftertreatment Systems to Eco-Driving 2019,		4
103	Combined homotopy and neighboring extremal optimal control. <i>Optimal Control Applications and Methods</i> , 2017 , 38, 459-469	1.7	3
102	Coordinating Controllers for Constrained Linear Systems by Virtual State Governors. <i>IEEE Transactions on Automatic Control</i> , 2015 , 60, 2177-2182	5.9	3
101	Performance Comparison of Smoothing Functions for Indirect Optimization of Minimum-Fuel Low-thrust Trajectories 2018 ,		3
100	Simple Input Disturbance Observer-Based Control: Case Studies. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME,</i> 2018 , 140,	1.6	3
99	MPC on manifolds with an application to SE(3) 2016 ,		3
98	Toward Real-Time Automotive Model Predictive Control: A Perspective from a Diesel Air Path Control Development 2018 ,		3

97	Evolving Markov chain models of driving conditions using onboard learning 2013,		3
96	Parameter Governors for Coordinated Control of n-Spacecraft Formations. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 3020-3025	2.1	3
95	Developing Fuzzy State Models as Markov Chain Models with Fuzzy Encoding. <i>Studies in Fuzziness and Soft Computing</i> , 2015 , 79-106	0.7	3
94	Onboard learning-based fuel consumption optimization in series hybrid electric vehicles 2012,		3
93	Forward-integration Riccati-based feedback control for spacecraft rendezvous maneuvers on elliptic orbits 2012 ,		3
92	Decentralized constraint enforcement using reference governors 2013,		3
91	Constrained control of very flexible aircraft using reference and extended command governors 2013 ,		3
90	Hypersonic glider guidance using Model Predictive Control 2013,		3
89	Spacecraft constrained maneuver planning for moving debris avoidance using positively invariant constraint admissible sets 2013 ,		3
88	Constrained control using error governors with online parameter estimation 2010,		3
87	Range maximization of a direct methanol fuel cell powered Mini Air Vehicle using Stochastic Drift Counteraction Optimal Control 2012 ,		3
86	Optimal Control of Switched Homogeneous Systems. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	3
85	Efficient Reorientation of a Deformable Body in Space: A Free-Free Beam Example 1993,		3
84	Prioritization schemes for reference and command governors 2013 ,		3
83	Hierarchical Optimization of Speed and Gearshift Control for Battery Electric Vehicles Using Preview Information 2020 ,		3
82	Stochastic model predictive control for remanufacturing system management. <i>Journal of Manufacturing Systems</i> , 2021 , 59, 355-366	9.1	3
81	Co-states initialization of minimum-time low-thrust trajectories using shape-based methods 2016,		3
80	Time Shift Governor for Coordinated Control of Two Spacecraft Formations. <i>IFAC-PapersOnLine</i> , 2016 , 49, 296-301	0.7	3

79	On Closed-loop Lyapunov Stability with Minimum-time MPC Feedback Laws for Discrete-time Systems 2019 ,		3
78	LQ control of unknown discrete-time linear systems novel approach and a comparison study. <i>Optimal Control Applications and Methods</i> , 2019 , 40, 265-291	1.7	3
77	Multihorizon Model Predictive Control: An Application to Integrated Power and Thermal Management of Connected Hybrid Electric Vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2021 , 1-13	4.8	3
76	Optimal Control Based Falsification of Unknown Systems with Time Delays: A Gasoline Engine A/F Ratio Control Case Study. <i>IFAC-PapersOnLine</i> , 2018 , 51, 252-257	0.7	3
75	Coordinated Receding-Horizon Control of Battery Electric Vehicle Speed and Gearshift Using Relaxed Mixed-Integer Nonlinear Programming. <i>IEEE Transactions on Control Systems Technology</i> , 2021 , 1-11	4.8	3
74	On Satellite Orbit Decay Compensation in Low Earth Orbits 2018 ,		2
73	Rapid Uncertainty Propagation and Chance-Constrained Trajectory Optimization for Small Unmanned Aerial Vehicles 2018 ,		2
72	Cloud-aided collaborative estimation by ADMM-RLS algorithms for connected diagnostics and prognostics 2018 ,		2
71	Horizon-1 Predictive Control of Automotive Electromagnetic Actuators. <i>IEEE Transactions on Control Systems Technology</i> , 2013 , 21, 1652-1665	4.8	2
70	Launch Performance Optimization of GTDI-DCT Powertrain. <i>SAE International Journal of Engines</i> , 2015 , 8, 1398-1407	2.4	2
69	Modeling and predictive control of Free Piston Engine Generator 2015,		2
68	Constrained inner-loop control of a hypersonic glider using Extended Command Governor 2013,		2
67	Optimal control of manifold filling during VDE mode transitions 2013,		2
66	Reference governors for linear systems with nonlinear constraints 2011 ,		2
65	Stabilizing feedback laws for internally actuated multibody systems in space. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1996 , 26, 1461-1479	1.3	2
64	Safe Learning Reference Governor: Theory and Application to Fuel Truck Rollover Avoidance. <i>ASME Journal of Autonomous Vehicles and Systems</i> , 2021 , 1,		2
63	Model-free Learning for Safety-critical Control Systems: A Reference Governor Approach 2020,		2
62	Energy-Efficient Control Approach for Automated HEV and BEV With Short-Horizon Preview Information 2018 ,		2

(2018-2019)

61	Combined Energy and Comfort Optimization of Air Conditioning System in Connected and Automated Vehicles 2019 ,		2
60	Rapid uncertainty propagation and chance-constrained path planning for small unmanned aerial vehicles. <i>Advanced Control for Applications</i> , 2020 , 2, e23	0.9	2
59	Active Noise Control for Harmonic and Broadband Disturbances Using RLS-Based Model Predictive Control 2020 ,		2
58	Cooperative constrained parameter estimation by ADMM-RLS. <i>Automatica</i> , 2020 , 121, 109175	5.7	2
57	Failure Prognostics for In-Tank Fuel Pumps of the Returnless Fuel Systems 2016,		2
56	Nonlinear control of semi-active suspension systems: A Quasi-Linear Control approach 2016,		2
55	Decision making in dynamic and interactive environments based on cognitive hierarchy theory, Bayesian inference, and predictive control 2019 ,		2
54	Robust Hierarchical MPC for Handling Long Horizon Demand Forecast Uncertainty with Application to Automotive Thermal Management 2019 ,		2
53	Stochastic Driver Modeling and Validation with Traffic Data 2019,		2
52	MPC-based Precision Cooling Strategy (PCS) for Efficient Thermal Management of Automotive Air Conditioning System 2019 ,		2
51	Automotive Applications of Model Predictive Control. Control Engineering, 2019, 493-527	1	2
50	Distributed State Estimation for Linear Systems With Application to Full-Car Active Suspension Systems. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 68, 1615-1625	8.9	2
49	Action Governor for Discrete-Time Linear Systems With Non-Convex Constraints 2021 , 5, 121-126		2
48	Model predictive control for drift counteraction of stochastic constrained linear systems. <i>Automatica</i> , 2021 , 123, 109304	5.7	2
47	Tractable Stochastic Predictive Control for Partially Observable Markov Decision Processes with Time-Joint Chance Constraints 2018 ,		2
46	Drift Counteraction and Control of Downsized and Underactuated Systems: What MPC Has to Offer?. <i>IFAC-PapersOnLine</i> , 2018 , 51, 175-190	0.7	2
45	Stochastic MPC Approach to Drift Counteraction 2018 ,		2
44	Dynamically Embedded Model Predictive Control 2018,		2

43	Approximate Closed-Form Solution to a Linear Quadratic Optimal Control Problem with Disturbance. <i>Journal of Guidance, Control, and Dynamics</i> , 2017 , 40, 477-483	2.1	1
42	Iterative model and trajectory refinement for orbital trajectory optimization. <i>Optimal Control Applications and Methods</i> , 2017 , 38, 1132-1147	1.7	1
41	A new algorithm for a class of deterministic drift counteraction optimal control problems 2017,		1
40	An Evaluation of Stochastic Model-Dependent and Model-Independent Glider Flight Management. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 1040-1056	4.8	1
39	Mission-Based Fault Reconfiguration for Spacecraft Applications. <i>Journal of Aerospace Information Systems</i> , 2013 , 10, 513-516	1	1
38	Robust Control of Linear Systems With Disturbances Bounded in a State Dependent Set. <i>IEEE Transactions on Automatic Control</i> , 2011 , 56, 1740-1745	5.9	1
37	Glider flight environment modeling for optimal control 2012,		1
36	Aircraft Vision-Based Landing Using Robust Extended Command Governors. <i>IFAC-PapersOnLine</i> , 2020 , 53, 14716-14723	0.7	1
35	Vision-Based Autonomous Driving: A Model Learning Approach 2020 ,		1
34	Reference Governor-based fault-tolerant constrained control. <i>Automatica</i> , 2022 , 136, 110089	5.7	1
33	Autonomous Eco-Driving with Traffic Light and Lead Vehicle Constraints: An Application of Best Constrained Interpolation. <i>IFAC-PapersOnLine</i> , 2021 , 54, 45-50	0.7	1
32	H-infinity Filtering for Cloud-Aided Semi-active Suspension with Delayed Information. <i>Advances in Delays and Dynamics</i> , 2017 , 283-297	0.3	1
31	Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 4288-4294	5.9	1
30	A constraint-separation principle in model predictive control. <i>Automatica</i> , 2020 , 121, 109190	5.7	1
29	Safe Affine Transformation-Based Guidance of a Large-Scale Multiquadcopter System. <i>IEEE Transactions on Control of Network Systems</i> , 2021 , 8, 640-653	4	1
28	A vehicle routing problem with dynamic demands and restricted failures solved using stochastic predictive control 2019 ,		1
27	The FBstab Quadratic Programming Method Applied to Model Predictive Control: An Implicit Condensing Approach 2019 ,		1
26	Scalar Reference Governor for Constrained Maneuver and Shape Control of Nonlinear Multibody Aircraft. <i>IFAC-PapersOnLine</i> , 2019 , 52, 819-824	0.7	1

25	Model Predictive Control Architectures for Maneuver Load Alleviation in Very Flexible Aircraft 2019 ,		1
24	Minimum-Time Model Predictive Spacecraft Attitude Control for Waypoint Following and Exclusion Zone Avoidance 2019 ,		1
23	A Model-Based Approach to the Estimation and Control of a Continuously Variable Transmission. <i>IEEE Transactions on Control Systems Technology</i> , 2020 , 28, 1940-1947	4.8	1
22	Full State Feedback Foiling Control for Americal Cup Catamarans. <i>IEEE Transactions on Control Systems Technology</i> , 2021 , 29, 1-17	4.8	1
21	Scalable Vehicle Team Continuum Deformation Coordination with Eigen Decomposition. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1	5.9	1
20	Data-Driven Retrospective Cost Adaptive Control for Flight Control Applications. <i>Journal of Guidance, Control, and Dynamics</i> , 2021 , 44, 1732-1758	2.1	1
19	Chance-constrained controller state and reference governor. <i>Automatica</i> , 2021 , 133, 109864	5.7	1
18	An Analysis of Closed-Loop Stability for Linear Model Predictive Control Based on Time-Distributed Optimization. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1	5.9	1
17	MPC-Based Emergency Vehicle-Centered Multi-Intersection Traffic Control. <i>IEEE Transactions on Control Systems Technology</i> , 2022 , 1-13	4.8	1
16	Solution to the HJB equation for LQR-type problems on compact connected Lie groups. <i>Automatica</i> , 2018 , 95, 525-528	5.7	Ο
15	ROTEC: Robust to early termination command governor for systems with limited computing capacity. <i>Systems and Control Letters</i> , 2022 , 161, 105142	2.4	O
14	A Feasibility Governor for Enlarging the Region of Attraction of Linear Model Predictive Controllers. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1	5.9	O
13	Trajectory Optimization for Falsification: A Case Study of Vehicle Rollover Test Generation Based on Black-box Models. <i>IFAC-PapersOnLine</i> , 2020 , 53, 14279-14284	0.7	O
12	Detection-averse optimal and receding-horizon control for Markov decision processes. <i>Automatica</i> , 2020 , 122, 109278	5.7	O
11	Robust Action Governor for Discrete-Time Piecewise Affine Systems With Additive Disturbances 2021 , 1-1		O
10	An Analytical Safe Approximation to Joint Chance-Constrained Programming With Additive Gaussian Noises. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1	5.9	O
9	Fuzzy Encoded Markov Chains: Overview, Observer Theory, and Applications. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021 , 51, 116-130	7.3	O
8	Stochastic Drift Counteraction Optimal Control of a Fuel Cell-Powered Small Unmanned Aerial Vehicle. <i>Energies</i> , 2021 , 14, 1304	3.1	O

7	Set-Theoretic Failure Mode Reconfiguration for Stuck Actuators 2022 , 6, 1316-1321		O
6	A reference governor for linear systems with polynomial constraints. <i>Automatica</i> , 2022 , 110313	5.7	O
5	Nonlinear Model Predictive Detumbling of Small Satellites with a Single-Axis Magnetorquer. <i>Journal of Guidance, Control, and Dynamics</i> , 2021 , 44, 1211-1218	2.1	
4	A sum-of-squares-based procedure to approximate the Pontryagin difference of basic semi-algebraic sets. <i>Automatica</i> , 2021 , 135, 109783	5.7	
3	Multi-mode Controller for Propellantless Spacecraft Translational Maneuvering Through Orientation Changes Only. <i>IFAC-PapersOnLine</i> , 2019 , 52, 825-830	0.7	
2	Viability, viscosity, and storage functions in model-predictive control with terminal constraints. <i>Automatica</i> , 2021 , 131, 109748	5.7	
1	Corrections to Bafe Affine Transformation-Based Guidance of a Large-Scale Multiquadcopter System[Jun 21 640-653]. <i>IEEE Transactions on Control of Network Systems</i> , 2021 , 8, 1987-1987	4	