# Seok-Kyoon Kim

List of Publications by Year
in descending order

| 97 papers | 1,059 citations | 471509 17 h-index | 501196 28 g-index |
|---|---|---|---|
| 97 all docs | 97 docs citations | 97 times ranked | 844 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Feedback Loop Adaptation Speed Feedback Systems for PMSMs via Angle Filtering and Acceleration Stabilization Techniques. IEEE Transactions on Industrial Electronics, 2023, 70, 4416-4426. | 7.9 | 0 |
| 2 | Computationally Efficient Model Predictive Torque Control of Permanent Magnet Synchronous Machines Using Numerical Techniques. IEEE Transactions on Control Systems Technology, 2022, 30, 1774-1781. | 5.2 | 6 |
| 3 | Active-Damping Speed Tracking Technique for Permanent Magnet Synchronous Motors With Transient Performance Boosting Mechanism. IEEE Transactions on Industrial Informatics, 2022, 18, 2171-2179. | 11.3 | 15 |
| 4 | Performance-Boosting Attitude Control for 2-DOF Helicopter Applications via Surface Stabilization Approach. IEEE Transactions on Industrial Electronics, 2022, 69, 7234-7243. | 7.9 | 13 |
| 5 | Output-Voltage-Tracking Control for Buck Converters Using Variable Convergence Rate Mechanism Without Current Feedback. IEEE Transactions on Industrial Electronics, 2022, 69, 2938-2946. | 7.9 | 5 |
| 6 | Learning and Adaptation-Based Position-Tracking Controller for Rover Vehicle Applications Considering Actuator Dynamics. IEEE Transactions on Industrial Electronics, 2022, 69, 2976-2985. | 7.9 | 5 |
| 7 | Variable-Performance Nonlinear Feedback Filter Based on Dynamic Surface Stabilization Approach. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2721-2728. | 5.8 | 0 |
| 8 | Online current cutâ€off frequency selfâ€tuning active damping speed controller for permanent magnet synchronous motors. IET Power Electronics, 2022, 15, 57. | 2.1 | 0 |
| 9 | $L_2$-Stable Speed Estimator for BLDCM Servo System Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2822-2826. | 3.0 | 0 |
| 10 | Order Reduction Approach to Velocity Sensorless Performance Recovery PD-Type Attitude Stabilizer for 2-DOF Helicopter Applications. IEEE Transactions on Industrial Informatics, 2022, 18, 6848-6856. | 11.3 | 4 |
| 11 | Current-Sensorless Energy-Shaping Output Voltage-Tracking Control for dc/dc Boost Converters With Damping Adaptation Mechanism. IEEE Transactions on Power Electronics, 2022, 37, 9266-9274. | 7.9 | 5 |
| 12 | Single-loop output-feedback positioning technique for servo systems via second-order pole-zero cancellation approach. Mechatronics, 2022, 84, 102796. | 3.3 | 0 |
| 13 | Model-Independent Observer-Based Current Sensorless Speed Servo Systems with Adaptive Feedback Gain. Actuators, 2022, 11, 126. | 2.3 | 3 |
| 14 | Decentralized Current Sensorless Speed Synchronization with Feedback-Loop Adaptation for Multi-Servo System Applications. IEEE Transactions on Industrial Electronics, 2022, , 1-1. | 7.9 | 1 |
| 15 | Nonlinear Positioning Technique via Dynamic Current Cut-Off Frequency and Observer-Based Pole-Zero Cancellation Approaches for MAGLEV Applications. IEEE Access, 2022, 10, 70143-70153. | 4.2 | 1 |
| 16 | Model-Free Observer for Speed and Acceleration Estimations for Speed Servo System Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4944-4948. | 3.0 | 0 |
| 17 | Decentralized Tension Control With Active-Damping Injection for Large-Scale Roll-to-Roll Systems. IEEE Systems Journal, 2021, 15, 5694-5703. | 4.6 | 7 |
| 18 | Current and Position Sensor Fault Diagnosis Algorithm for PMSM Drives Based on Robust State Observer. IEEE Transactions on Industrial Electronics, 2021, 68, 5227-5236. | 7.9 | 35 |

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|---|---------|-----|-----------|
| 19 | Energy-Shaping Speed Controller With Time-Varying Damping Injection for Permanent-Magnet Synchronous Motors. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 381-385. | 3.0 | 16 |
| 20 | Position-Tracking Controller for Two-Wheeled Balancing Robot Applications Using Invariant Dynamic Surface. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 705-711. | 9.3 | 11 |
| 21 | Real-Time Optimal Torque Control of Interior Permanent Magnet Synchronous Motors Based on a Numerical Optimization Technique. IEEE Transactions on Control Systems Technology, 2021, 29, 1815-1822. | 5.2 | 8 |
| 22 | Variable-Performance Proportional-Type Angle-Filtering System for Motor Drives. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 511-515. | 3.0 | 5 |
| 23 | Proportional-Derivative Voltage Control With Active Damping for DC/DC Boost Converters via Current Sensorless Approach. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 737-741. | 3.0 | 15 |
| 24 | Variable-Performance Positioning Law for Hybrid-Type Stepper Motors via Active Damping Injection and Disturbance Observer. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1308-1312. | 3.0 | 6 |
| 25 | Variable Cut-Off Frequency Algorithm-Based Nonlinear Position Controller for Magnetic Levitation System Applications. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4599-4605. | 9.3 | 10 |
| 26 | Output-Feedback Speed-Tracking Control Without Current Feedback for BLDCMs Based on Active-Damping and Invariant Surface Approach. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2528-2532. | 3.0 | 11 |
| 27 | Variable Cut-Off Frequency Observer-Based Positioning for Ball-Beam Systems Without Velocity and Current Feedback Considering Actuator Dynamics. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 396-405. | 5.4 | 8 |
| 28 | Observer-Based Proportional-Type Controller for Two-Wheeled Mobile Robots via Simple Coordinate Transformation Technique. IEEE Transactions on Vehicular Technology, 2021, 70, 11458-11468. | 6.3 | 1 |
| 29 | Velocity-sensorless proportional–derivative trajectory tracking control with active damping for quadcopters. Nonlinear Dynamics, 2021, 103, 1681-1692. | 5.2 | 6 |
| 30 | DC Motor Speed Regulator via Active Damping Injection and Angular Acceleration Estimation Techniques. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 641-647. | 13.1 | 3 |
| 31 | Cascade-Type Pole-Zero Cancellation Output Voltage Regulator for DC/DC Boost Converters. Energies, 2021, 14, 3824. | 3.1 | 4 |
| 32 | Observer-based decentralized pole–zero cancellation tension control with gain booster and surface stabilizer for roll-to-roll systems. Nonlinear Dynamics, 2021, 105, 2313-2326. | 5.2 | 4 |
| 33 | Angular Velocity Observer-Based Quadcopter Attitude Stabilization via Pole-Zero Cancellation Technique. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2458-2462. | 3.0 | 7 |
| 34 | Active Damping Injection Output Voltage Control with Dynamic Current Cut-Off Frequency for DC/DC Buck Converters. Energies, 2021, 14, 6848. | 3.1 | 5 |
| 35 | Delay-Dependent State-Feedback Dissipative Control for Suspension Systems With Constraints Using a Generalized Free-Weighting-Matrix Method. IEEE Access, 2021, 9, 145573-145582. | 4.2 | 0 |
| 36 | Pole-Zero Cancellation Speed Control With Variable Current Cut-Off Frequency for Servo Motors. IEEE Access, 2021, 9, 161248-161255. | 4.2 | 1 |

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| 37 | Output-Feedback Position Tracking Servo System with Feedback Gain Learning Mechanism via Order-Reduction Speed-Error-Stabilization Approach. Actuators, 2021, 10, 324. | 2.3 | 1 |
| 38 | Adaptive Nonlinear Tracking Control Algorithm for Quadcopter Applications. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 84-94. | 4.7 | 21 |
| 39 | Auto-Tuning Proportional-Type Synchronization Algorithm for DC Motor Speed Control Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 521-525. | 3.0 | 10 |
| 40 | Velocity Observer-Based Nonlinear Self-Tuning Position Stabilizer for Ball-Beam System Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1309-1313. | 3.0 | 3 |
| 41 | Learning Algorithm-Based Offset-Free One-Step Time-Delay Compensation for Power Converter and Motor Drive System Applications. IEEE Transactions on Industrial Informatics, 2020, 16, 3789-3796. | 11.3 | 7 |
| 42 | Disturbance Observer-Based Offset-Free Global Tracking Control for Input-Constrained LTI Systems with DC/DC Buck Converter Applications. Energies, 2020, 13, 4079. | 3.1 | 4 |
| 43 | Variable-Performance Servo System Design Without Actuator Current and Angle Measurement for Rover Vehicles. IEEE Transactions on Vehicular Technology, 2020, 69, 12725-12733. | 6.3 | 4 |
| 44 | Self-Tuning Nonlinear Control System Design for Roll-to-Roll Printing Systems. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2667-2676. | 5.8 | 14 |
| 45 | Position Regulator With Variable Cut-Off Frequency Mechanism for Hybrid-Type Stepper Motors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3533-3540. | 5.4 | 14 |
| 46 | Active damping injection controller for web longitude and tensions of nonlinear roll-to-roll systems. Nonlinear Dynamics, 2020, 100, 3367-3379. | 5.2 | 7 |
| 47 | Sensorless nonâ€‘linear positionâ€‘stabilising control for magnetic levitation systems. IET Control Theory and Applications, 2020, 14, 2682-2687. | 2.1 | 5 |
| 48 | Velocity-Sensorless Decentralized Tension Control for Roll-to-Roll Printing Machines. IEEE Access, 2020, 8, 93682-93691. | 4.2 | 4 |
| 49 | Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. IEEE Signal Processing Letters, 2020, 27, 2183-2187. | 3.6 | 2 |
| 50 | Self-Tuning Proportional-Type Performance Recovery Property Output Voltage-Tracking Algorithm for DCâ€“DC Boost Converter. IEEE Transactions on Industrial Electronics, 2019, 66, 3167-3175. | 7.9 | 21 |
| 51 | Auto-Tuner-Based Controller for Quadcopter Attitude Tracking Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 2012-2016. | 3.0 | 17 |
| 52 | Performance Recovery Tracking-Controller for Quadcopters via Invariant Dynamic Surface Approach. IEEE Transactions on Industrial Informatics, 2019, 15, 5235-5243. | 11.3 | 21 |
| 53 | Proportional-Type Sensor Fault Diagnosis Algorithm for DC/DC Boost Converters Based on Disturbance Observer. Energies, 2019, 12, 1412. | 3.1 | 3 |
| 54 | Robust Invariant Manifold-Based Output Voltage-Tracking Controller for DC/DC Boost Power Conversion Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, , 1-8. | 9.3 | 7 |

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| 55 | Nonlinear Position Stabilizing Control with Active Damping Injection Technique for Magnetic Levitation Systems. Electronics (Switzerland), 2019, 8, 221. | 3.1 | 8 |
| 56 | Using the Stator Current Ripple Model for Real-Time Estimation of Full Parameters of a Permanent Magnet Synchronous Motor. IEEE Access, 2019, 7, 33369-33379. | 4.2 | 20 |
| 57 | Output voltage tracking controller embedding auto-tuning algorithm for DC/DC boost converters. IET Power Electronics, 2019, 12, 3767-3773. | 2.1 | 4 |
| 58 | Performance-recovery proportional-type output-voltage tracking algorithm of three-phase inverter for uninterruptible power supply applications. IET Circuits, Devices and Systems, 2019, 13, 185-192. | 1.4 | 2 |
| 59 | Nonlinear Tracking Controller for DC/DC Boost Converter Voltage Control Applications via Energy-Shaping and Invariant Dynamic Surface Approach. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1855-1859. | 3.0 | 13 |
| 60 | Offset-Free Proportional-Type Self-Tuning Speed Controller for Permanent Magnet Synchronous Motors. IEEE Transactions on Industrial Electronics, 2019, 66, 7168-7176. | 7.9 | 17 |
| 61 | Self-Tuning Position-Tracking Controller for Two-Wheeled Mobile Balancing Robots. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1008-1012. | 3.0 | 11 |
| 62 | Performance recovery output voltage control algorithm for AC/DC converter. International Journal of Control, 2019, 92, 987-1000. | 1.9 | 1 |
| 63 | Output Voltage-Tracking Controller With Performance Recovery Property for DC/DC Boost Converters. IEEE Transactions on Control Systems Technology, 2019, 27, 1301-1307. | 5.2 | 21 |
| 64 | Proportional-type non-linear excitation controller with power angle reference estimator for single-machine infinite-bus power system. IET Generation, Transmission and Distribution, 2019, 13, 4029-4036. | 2.5 | 5 |
| 65 | Robust Phase Estimation of a Hybrid Monte Carlo/Finite Memory Digital Phase-Locked Loop. IEICE Transactions on Information and Systems, 2019, E102.D, 1089-1092. | 0.7 | 0 |
| 66 | Robust speed control algorithm with disturbance observer for uncertain PMSM. International Journal of Electronics, 2018, 105, 1300-1318. | 1.4 | 11 |
| 67 | Proportional-type performance recovery current tracking control algorithm for PMSM. IET Electric Power Applications, 2018, 12, 332-338. | 1.8 | 9 |
| 68 | Robust DC-Link Voltage Tracking Controller with Variable Control Gain for Permanent Magnet Synchronous Generators. Electronics (Switzerland), 2018, 7, 339. | 3.1 | 3 |
| 69 | Passivity-Based Robust Output Voltage Tracking Control of DC/DC Boost Converter for Wind Power Systems. Energies, 2018, 11, 1469. | 3.1 | 7 |
| 70 | Disturbance Observer-based Proportional-type Position Tracking Controller for DC Motor. International Journal of Control, Automation and Systems, 2018, 16, 2169-2176. | 2.7 | 17 |
| 71 | Robust optimal output voltage tracking algorithm for interleaved N-phase DC/DC boost converter with performance recovery property. International Journal of Electronics, 2018, 105, 1673-1694. | 1.4 | 5 |
| 72 | Proportional-Type Output Voltage-Tracking Controller for Interleaved DC/DC Boost Converter with Performance Recovery Property. Mathematical Problems in Engineering, 2018, 2018, 1-12. | 1.1 | 0 |

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| 73 | Robust Offset-Free Speed Tracking Controller of Permanent Magnet Synchronous Generator for Wind Power Generation Applications. Electronics (Switzerland), 2018, 7, 48. | 3.1 | 3 |
| 74 | A Robust Current Controller for Uncertain Permanent Magnet Synchronous Motors with a Performance Recovery Property for Electric Power Steering Applications. Energies, 2018, 11, 1224. | 3.1 | 10 |
| 75 | Robust output voltage tracking algorithm for three€phase rectifier with variable sliding surface. IET Power Electronics, 2018, 11, 1119-1127. | 2.1 | 9 |
| 76 | Self-Tuning Adaptive Speed Controller for Permanent Magnet Synchronous Motor. IEEE Transactions on Power Electronics, 2017, 32, 1493-1506. | 7.9 | 34 |
| 77 | Robust adaptive speed regulator with self-tuning law for surfaced-mounted permanent magnet synchronous motor. Control Engineering Practice, 2017, 61, 55-71. | 5.5 | 30 |
| 78 | Proportional-Type Performance Recovery DC-Link Voltage Tracking Algorithm for Permanent Magnet Synchronous Generators. Energies, 2017, 10, 1387. | 3.1 | 1 |
| 79 | Offset-Free One-Step Ahead State Predictor for Power Electronic Applications Using Robust Proportional€Integral Observer. IEEE Transactions on Industrial Electronics, 2016, 63, 1763-1770. | 7.9 | 12 |
| 80 | Singularity-Free Adaptive Speed Tracking Control for Uncertain Permanent Magnet Synchronous Motor. IEEE Transactions on Power Electronics, 2016, 31, 1692-1701. | 7.9 | 60 |
| 81 | Disturbance-observer-based model predictive control for output voltage regulation of three-phase inverter for uninterruptible-power-supply applications. European Journal of Control, 2015, 23, 71-83. | 2.6 | 38 |
| 82 | Offset-Free Model Predictive Control for the Power Control of Three-Phase AC/DC Converters. IEEE Transactions on Industrial Electronics, 2015, 62, 7114-7126. | 7.9 | 55 |
| 83 | Offset-Free Robust Adaptive Back-Stepping Speed Control for Uncertain Permanent Magnet Synchronous Motor. IEEE Transactions on Power Electronics, 2015, , 1-1. | 7.9 | 27 |
| 84 | Robust one€step ahead state predictor using adaptive proportional€integral observer. IET Power Electronics, 2015, 8, 2411-2417. | 2.1 | 6 |
| 85 | Damping improvement and terminal voltage regulation for a synchronous machine using an energy storage device. International Journal of Electronics, 2015, 102, 582-598. | 1.4 | 3 |
| 86 | Adaptive observer for estimating the parameters of an HIV model with mutants. International Journal of Control, Automation and Systems, 2015, 13, 126-137. | 2.7 | 7 |
| 87 | Robust Feedback-Linearizing Output Voltage Regulator for DC/DC Boost Converter. IEEE Transactions on Industrial Electronics, 2015, 62, 7127-7135. | 7.9 | 52 |
| 88 | Self-tuning adaptive feedback linearizing output voltage control for AC/DC converter. Control Engineering Practice, 2015, 45, 1-11. | 5.5 | 3 |
| 89 | Enhancing Tracking Performance of a Bilinear System using MPC. Journal of Institute of Control, Robotics and Systems, 2015, 21, 237-242. | 0.2 | 0 |
| 90 | Use of model predictive controller in dual-loop control of three-phase PWM AC/DC converter. International Journal of Control, Automation and Systems, 2014, 12, 340-348. | 2.7 | 12 |

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| 91 | A Stabilizing Model Predictive Controller for Voltage Regulation of a DC/DC Boost Converter. IEEE Transactions on Control Systems Technology, 2014, 22, 2016-2023. | 5.2 | 103 |
| 92 | A stabilizing model predictive controller for voltage regulation of a DC/DC converter. , 2013, , . | | 3 |
| 93 | A simple model predictive controller of a three-phase PWM AC/DC converter. , 2013, , . | | 0 |
| 94 | Model predictive control (MPC) based direct torque control (DTC) of permanent magnet synchronous motors (PMSMs). , 2013, , . | | 7 |
| 95 | Output-feedback model predictive controller for voltage regulation of a DC/DC converter. IET Control Theory and Applications, 2013, 7, 1959-1968. | 2.1 | 40 |
| 96 | Speed and current regulation for uncertain PMSM using adaptive state feedback and backstepping control. , 2009, , . | | 3 |
| 97 | Nonlinear output-feedback speed servo systems through active damping injection and position filtering approaches without current feedback. Journal of Power Electronics, 0, , . | 1.5 | 1 |