# Shu Liang

List of Publications by Year
in descending order



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|---|---|---|---|
| 54 papers | 1,545 citations | 331670 21 h-index | 302126 39 g-index |
| 54 all docs | 54 docs citations | 54 times ranked | 764 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Distributed Nash equilibrium seeking for aggregative games with coupled constraints. Automatica, 2017, 85, 179-185. | 5.0 | 179 |
| 2 | A novel algorithm on adaptive backstepping control of fractional order systems. Neurocomputing, 2015, 165, 395-402. | 5.9 | 143 |
| 3 | Distributed Continuous-Time Algorithms for Resource Allocation Problems Over Weight-Balanced Digraphs. IEEE Transactions on Cybernetics, 2018, 48, 3116-3125. | 9.5 | 128 |
| 4 | Distributed Nonsmooth Optimization With Coupled Inequality Constraints via Modified Lagrangian Function. IEEE Transactions on Automatic Control, 2018, 63, 1753-1759. | 5.7 | 109 |
| 5 | Generalized Nash equilibrium seeking strategy for distributed nonsmooth multi-cluster game. Automatica, 2019, 103, 20-26. | 5.0 | 85 |
| 6 | Distributed algorithms for aggregative games of multiple heterogeneous Eulerâ€“Lagrange systems. Automatica, 2019, 99, 246-252. | 5.0 | 73 |
| 7 | Subspace identification for fractional order Hammerstein systems based on instrumental variables. International Journal of Control, Automation and Systems, 2012, 10, 947-953. | 2.7 | 62 |
| 8 | Distributed Nash Equilibrium Seeking for Aggregative Games With Nonlinear Dynamics Under External Disturbances. IEEE Transactions on Cybernetics, 2020, 50, 4876-4885. | 9.5 | 60 |
| 9 | Distributed sub-optimal resource allocation over weight-balanced graph via singular perturbation. Automatica, 2018, 95, 222-228. | 5.0 | 57 |
| 10 | State space approximation for general fractional order dynamic systems. International Journal of Systems Science, 2014, 45, 2203-2212. | 5.5 | 52 |
| 11 | Distributed Computation of Linear Matrix Equations: An Optimization Perspective. IEEE Transactions on Automatic Control, 2019, 64, 1858-1873. | 5.7 | 51 |
| 12 | Exponential convergence of distributed primalâ€“dual convex optimization algorithm without strong convexity. Automatica, 2019, 105, 298-306. | 5.0 | 51 |
| 13 | Distributed optimal resource allocation of secondâ€order multiagent systems. International Journal of Robust and Nonlinear Control, 2018, 28, 4246-4260. | 3.7 | 49 |
| 14 | A universal modified LMS algorithm with iteration order hybrid switching. ISA Transactions, 2017, 67, 67-75. | 5.7 | 46 |
| 15 | Bounded real lemmas for fractional order systems. International Journal of Automation and Computing, 2015, 12, 192-198. | 4.5 | 43 |
| 16 | Distributed Smooth Convex Optimization With Coupled Constraints. IEEE Transactions on Automatic Control, 2020, 65, 347-353. | 5.7 | 43 |
| 17 | Estimation of exact initial states of fractional order systems. Nonlinear Dynamics, 2016, 86, 2061-2070. | 5.2 | 31 |
| 18 | Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. IEEE Transactions on Automatic Control, 2020, 65, 1785-1791. | 5.7 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Rational approximation of fractional order systems by vector fitting method. International Journal of Control, Automation and Systems, 2017, 15, 186-195. | 2.7 | 24 |
| 20 | Distributed sub-optimal resource allocation via a projected form of singular perturbation. Automatica, 2020, 121, 109180. | 5.0 | 24 |
| 21 | Routh-type table test for zero distribution of polynomials with commensurate fractional and integer degrees. Journal of the Franklin Institute, 2017, 354, 83-104. | 3.4 | 21 |
| 22 | Distributed quasi-monotone subgradient algorithm for nonsmooth convex optimization over directed graphs. Automatica, 2019, 101, 175-181. | 5.0 | 21 |
| 23 | Exponentially Convergent Algorithm Design for Constrained Distributed Optimization via Nonsmooth Approach. IEEE Transactions on Automatic Control, 2022, 67, 934-940. | 5.7 | 17 |
| 24 | Fractional differential equation approach for convex optimization with convergence rate analysis. Optimization Letters, 2020, 14, 145-155. | 1.6 | 16 |
| 25 | Distributed Dual Subgradient Algorithms With Iterate-Averaging Feedback for Convex Optimization With Coupled Constraints. IEEE Transactions on Cybernetics, 2021, 51, 2529-2539. | 9.5 | 15 |
| 26 | Frequency distributed model of Caputo derivatives and robust stability of a class of multi-variable fractional-order neural networks with uncertainties. Neurocomputing, 2016, 202, 91-97. | 5.9 | 14 |
| 27 | Robust fast controller design via nonlinear fractional differential equations. ISA Transactions, 2017, 69, 20-30. | 5.7 | 13 |
| 28 | Distributed solving Sylvester equations with fractional order dynamics. Control Theory and Technology, 2021, 19, 249-259. | 1.6 | 11 |
| 29 | General Output Feedback Stabilization for Fractional Order Systems: An LMI Approach. Abstract and Applied Analysis, 2014, 2014, 1-9. | 0.7 | 8 |
| 30 | Robust analysis and synthesis for a class of fractional order systems with coupling uncertainties. International Journal of Control, Automation and Systems, 2015, 13, 494-500. | 2.7 | 8 |
| 31 | Lyapunov stability and generalized invariance principle for nonconvex differential inclusions. Control Theory and Technology, 2016, 14, 140-150. | 1.6 | 7 |
| 32 | Distributed Nash equilibrium seeking of a class of aggregative games. , 2017, , . | | 7 |
| 33 | Two-DOF lifted LMI conditions for robust D-stability of polynomial matrix polytopes. International Journal of Control, Automation and Systems, 2013, 11, 636-642. | 2.7 | 6 |
| 34 | Representation and LQR of exact fractional order systems. , 2014, , . | | 6 |
| 35 | Positive real lemmas for fractional order systems. , 2014, , . | | 6 |
| 36 | Distributed Nash Equilibrium Seeking for Aggregative Games via Derivative Feedback. International Journal of Control, Automation and Systems, 2020, 18, 1075-1082. | 2.7 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Distributed Variational Equilibrium Seeking of Multi-coalition Game via Variational Inequality Approach. IFAC-PapersOnLine, 2017, 50, 940-945. | 0.9 | 4 |
| 38 | Exponentially convergent distributed Nash equilibrium seeking for constrained aggregative games. Autonomous Intelligent Systems, 2022, 2, 1. | 3.1 | 4 |
| 39 | Distributed Nash equilibrium seeking under quantization communication. Automatica, 2022, 141, 110318. | 5.0 | 4 |
| 40 | Inverse Lyapunov Theorem for Linear Time Invariant Fractional Order Systems. Journal of Systems Science and Complexity, 2019, 32, 1544-1559. | 2.8 | 3 |
| 41 | Distributed continuous-time algorithm for nonsmooth optimal consensus without sharing local decision variables. Journal of the Franklin Institute, 2020, 357, 3585-3600. | 3.4 | 3 |
| 42 | Stochastic Adaptive Optimization With Dithers. IEEE Transactions on Automatic Control, 2022, 67, 189-202. | 5.7 | 3 |
| 43 | Routh table test for stability of commensurate fractional degree polynomials and their commensurate fractional order systems. Control Theory and Technology, 2019, 17, 297-306. | 1.6 | 2 |
| 44 | Composite Model Reference Adaptive Control for a Class of Nonlinear Fractional Order Systems. , 2015, , . | | 1 |
| 45 | Stability Criterion for Nonsmooth Systems and Nash Equilibrium Seeking via Projected Gradient Dynamics * *This work was supported by Beijing Natural Science Foundation (4152057), NSFC (61333001), Program 973 (2014CB845301/2/3), and the China Postdoctoral Science Foundation (No.2016M591272).. IFAC-PapersOnLine, 2017, 50, 6134-6139. | 0.9 | 1 |
| 46 | Distributed Optimization Over Unbalanced Graph: Integration of Surplus-Based Method and Push-DIGing Method. , 2019, , . | | 1 |
| 47 | Distributed optimization for multi-agent system over unbalanced graphs with linear convergence rate. Kybernetika, 0, , 559-577. | 0.0 | 1 |
| 48 | Rejection and tracking sinusoidal signals based on state-derivative feedback. , 2015, , . | | 0 |
| 49 | Chaos control of tethered satellite system by nonfeedback method. , 2016, , . | | 0 |
| 50 | Privacy Preservation for Distributed Nonsmooth Constrained Optimization Based on Pseudo-Subgradient. , 2018, , . | | 0 |
| 51 | Distributed continuous-time algorithm for solving linear complementarity problems with exponential convergence. , 2018, , . | | 0 |
| 52 | Distributed Stochastic Algorithm for Convex Optimization Over Directed Graphs. , 2019, , . | | 0 |
| 53 | Distributed Nash Equilibrium Seeking for Quadratic Games with Security. International Journal of Cooperative Information Systems, 2019, 28, 1950009. | 0.8 | 0 |
| 54 | Multi-agent network flows that solve linear complementarity problems. Kybernetika, 0, , 542-556. | 0.0 | 0 |