Fanghua Jiang

List of Publications by Year
in descending order

28 papers	1,031 citations	471509 17 h-index	552781 26 g-index
29 all docs	29 docs citations	29 times ranked	324 citing authors

#	Article	IF	Citations
1	Practical Techniques for Low-Thrust Trajectory Optimization with Homotopic Approach. Journal of Guidance, Control, and Dynamics, 2012, 35, 245-258.	2.8	263
2	Homotopic approach and pseudospectral method applied jointly to low thrust trajectory optimization. Acta Astronautica, 2012, 71, 38-50.	3.2	82
3	Real-time optimal control for irregular asteroid landings using deep neural networks. Acta Astronautica, 2020, 170, 66-79.	3.2	79
4	Real-Time Optimal Control for Spacecraft Orbit Transfer via Multiscale Deep Neural Networks. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 2436-2450.	4.7	72
5	Fuel-Optimal Low-Thrust Trajectory Optimization Using Indirect Method and Successive Convex Programming. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 2053-2066.	4.7	57
6	Multiconstrained Real-Time Entry Guidance Using Deep Neural Networks. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 325-340.	4.7	51
7	Real-time control for fuel-optimal Moon landing based on an interactive deep reinforcement learning algorithm. Astrodynamics, 2019, 3, 375-386.	2.4	49
8	Improving Low-Thrust Trajectory Optimization by Adjoint Estimation with Shape-Based Path. Journal of Guidance, Control, and Dynamics, 2017, 40, 3282-3289.	2.8	48
9	Fast Generation of Optimal Asteroid Landing Trajectories Using Deep Neural Networks. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2642-2655.	4.7	47
10	Pseudospectral Methods for Trajectory Optimization with Interior Point Constraints: Verification and Applications. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2005-2017.	4.7	39
11	Adaptive neural network control of nonlinear systems with unknown dynamics. Advances in Space Research, 2021, 67, 1114-1123.	2.6	32
12	Capture of near-Earth objects with low-thrust propulsion and invariant manifolds. Astrophysics and Space Science, 2016, 361, 1.	1.4	29
13	Systematic low-thrust trajectory optimization for a multi-rendezvous mission using adjoint scaling. Astrophysics and Space Science, 2016, 361, 1.	1.4	25
14	Fast solution continuation of time-optimal asteroid landing trajectories using deep neural networks. Acta Astronautica, 2020, 167, 63-72.	3.2	23
15	Optimization of observing sequence based on nominal trajectories of symmetric observing configuration. Astrodynamics, 2018, 2, 25-37.	2.4	19
16	Minimum-time low-thrust many-revolution geocentric trajectories with analytical costates initialization. Aerospace Science and Technology, 2021, 119, 107146.	4.8	19
17	Trajectory Optimization of Multi-Asteroids Exploration with Low Thrust. Transactions of the Japan Society for Aeronautical and Space Sciences, 2009, 52, 47-54.	0.7	18
18	Fuel optimal low thrust rendezvous with outer planets via gravity assist. Science China: Physics, Mechanics and Astronomy, 2011, 54, 756-769.	5.1	16

#	Article	IF	Citations
19	Power-limited low-thrust trajectory optimization with operation point detection. Astrophysics and Space Science, 2018, 363, 1.	1.4	14
20	Rapid generation of low-thrust many-revolution earth-center trajectories based on analytical state-based control. Acta Astronautica, 2021, 187, 338-347.	3.2	10
21	Artificial Martian frozen orbits and Sun-Synchronous orbits using continuous low-thrust control. Astrophysics and Space Science, 2014, 352, 503-514.	1.4	9
22	Optimization of variable-specific-impulse gravity-assist trajectories via optimality-preserving transformation. Aerospace Science and Technology, 2020, 101, 105828.	4.8	8
23	Problem A of the 9th China trajectory optimization competition: Results found at Tsinghua University. Acta Astronautica, 2018, 150, 204-212.	3.2	7
24	Analytical shaping method for low-thrust rendezvous trajectory using cubic spline functions. Acta Astronautica, 2022, 193, 511-520.	3.2	7
25	GTOC 11: Results from Tsinghua University and Shanghai Institute of Satellite Engineering. Acta Astronautica, 2023, 202, 819-828.	3.2	6
26	An identifier-actor-optimizer policy learning architecture for optimal control of continuous-time nonlinear systems. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	2
27	Optimization of Low-Thrust Gravity-Assist Trajectories via Optimality-Preserving Transformation. , 2020, , .		0
28	Polynomial-based method for determining coast-terminating zero of fuel-optimal time-fixed trajectory. Astrophysics and Space Science, 2020, 365, 1.	1.4	0