

# Cheng Lin

## List of Publications by Year in descending order

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34  
papers

1,120  
citations

430874

18  
h-index

395702

33  
g-index

35  
all docs

35  
docs citations

35  
times ranked

365  
citing authors

#	ARTICLE	IF	CITATIONS
1	Practical Techniques for Low-Thrust Trajectory Optimization with Homotopic Approach. <i>Journal of Guidance, Control, and Dynamics</i> , 2012, 35, 245-258.	2.8	263
2	Homotopic approach and pseudospectral method applied jointly to low thrust trajectory optimization. <i>Acta Astronautica</i> , 2012, 71, 38-50.	3.2	82
3	Real-time optimal control for irregular asteroid landings using deep neural networks. <i>Acta Astronautica</i> , 2020, 170, 66-79.	3.2	79
4	Real-Time Optimal Control for Spacecraft Orbit Transfer via Multiscale Deep Neural Networks. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2019, 55, 2436-2450.	4.7	72
5	Fuel-Optimal Low-Thrust Trajectory Optimization Using Indirect Method and Successive Convex Programming. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2018, 54, 2053-2066.	4.7	57
6	Multiconstrained Real-Time Entry Guidance Using Deep Neural Networks. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2021, 57, 325-340.	4.7	51
7	Real-time control for fuel-optimal Moon landing based on an interactive deep reinforcement learning algorithm. <i>Astrodynamics</i> , 2019, 3, 375-386.	2.4	49
8	Improving Low-Thrust Trajectory Optimization by Adjoint Estimation with Shape-Based Path. <i>Journal of Guidance, Control, and Dynamics</i> , 2017, 40, 3282-3289.	2.8	48
9	Fast Generation of Optimal Asteroid Landing Trajectories Using Deep Neural Networks. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2020, 56, 2642-2655.	4.7	47
10	Study on the connection between the rotating mass dipole and natural elongated bodies. <i>Astrophysics and Space Science</i> , 2015, 356, 29-42.	1.4	46
11	Pseudospectral Methods for Trajectory Optimization with Interior Point Constraints: Verification and Applications. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2013, 49, 2005-2017.	4.7	39
12	Adaptive neural network control of nonlinear systems with unknown dynamics. <i>Advances in Space Research</i> , 2021, 67, 1114-1123.	2.6	32
13	Capture of near-Earth objects with low-thrust propulsion and invariant manifolds. <i>Astrophysics and Space Science</i> , 2016, 361, 1.	1.4	29
14	The feasibility criterion of fuel-optimal planetary landing using neural networks. <i>Aerospace Science and Technology</i> , 2021, 116, 106860.	4.8	27
15	Systematic low-thrust trajectory optimization for a multi- rendezvous mission using adjoint scaling. <i>Astrophysics and Space Science</i> , 2016, 361, 1.	1.4	25
16	Fast solution continuation of time-optimal asteroid landing trajectories using deep neural networks. <i>Acta Astronautica</i> , 2020, 167, 63-72.	3.2	23
17	Optimization of observing sequence based on nominal trajectories of symmetric observing configuration. <i>Astrodynamics</i> , 2018, 2, 25-37.	2.4	19
18	Minimum-time low-thrust many-revolution geocentric trajectories with analytical costates initialization. <i>Aerospace Science and Technology</i> , 2021, 119, 107146.	4.8	19

#	ARTICLE	IF	CITATIONS
19	Warm-Start Multihomotopic Optimization for Low-Thrust Many-Revolution Trajectories. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 4478-4490.	4.7	16
20	Power-limited low-thrust trajectory optimization with operation point detection. Astrophysics and Space Science, 2018, 363, 1.	1.4	14
21	Warm Start for Low-Thrust Trajectory Optimization via Switched System. Journal of Guidance, Control, and Dynamics, 2021, 44, 1700-1706.	2.8	13
22	Autonomous Navigation of Mars Probes by Single X-ray Pulsar Measurement and Optical Data of Viewing Martian Moons. Journal of Navigation, 2017, 70, 18-32.	1.7	10
23	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
24	Autonomous Navigation of Mars Probes by Combining Optical Data of Viewing Martian Moons and SST Data. Journal of Navigation, 2015, 68, 1019-1040.	1.7	9
25	Problem A of the 9th China trajectory optimization competition: Results found at Tsinghua University. Acta Astronautica, 2018, 150, 204-212.	3.2	7
26	Analytical shaping method for low-thrust rendezvous trajectory using cubic spline functions. Acta Astronautica, 2022, 193, 511-520.	3.2	7
27	Analytical Costate Estimation by a Reference Trajectory-Based Least-Squares Method. Journal of Guidance, Control, and Dynamics, 2022, 45, 1529-1537.	2.8	7
28	GTOC 11: Results from Tsinghua University and Shanghai Institute of Satellite Engineering. Acta Astronautica, 2023, 202, 819-828.	3.2	6
29	A Beam Search-Based Channel Allocation Method for Interference Mitigation of NGSO Satellites with Multi-Beam Antennas. Aerospace, 2022, 9, 177.	2.2	5
30	Extension of frozen orbits and Sun-synchronous orbits around terrestrial planets using continuous low-thrust propulsion. Astrophysics and Space Science, 2015, 360, 1.	1.4	4
31	A simple method to design non-collision relative orbits for close spacecraft formation flying. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	2
32	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
33	A New 3D Shaping Method for Low-Thrust Trajectories between Non-Intersect Orbits. Aerospace, 2021, 8, 315.	2.2	1
34	Polynomial-based method for determining coast-terminating zero of fuel-optimal time-fixed trajectory. Astrophysics and Space Science, 2020, 365, 1.	1.4	0