Kleomenis Tsiganis

List of Publications by Year
in descending order

58 papers	5,976 citations	257450 24 h-index	175258 52 g-index
61 all docs	61 docs citations	61 times ranked	3451 citing authors

#	Article	IF	Citations
1	Origin of the cataclysmic Late Heavy Bombardment period of the terrestrial planets. Nature, 2005, 435, 466-469.	27.8	1,444
2	Origin of the orbital architecture of the giant planets of the Solar System. Nature, 2005, 435, 459-461.	27.8	1,186
3	Chaotic capture of Jupiter's Trojan asteroids in the early Solar System. Nature, 2005, 435, 462-465.	27.8	743
4	Origin of the structure of the Kuiper belt during a dynamical instability in the orbits of Uranus and Neptune. Icarus, 2008, 196, 258-273.	2.5	385
5	Dynamics of the Giant Planets of the Solar System in the Gaseous Protoplanetary Disk and Their Relationship to the Current Orbital Architecture. Astronomical Journal, 2007, 134, 1790-1798.	4.7	268
6	Contamination of the asteroid belt by primordial trans-Neptunian objects. Nature, 2009, 460, 364-366.	27.8	250
7	LATE ORBITAL INSTABILITIES IN THE OUTER PLANETS INDUCED BY INTERACTION WITH A SELF-GRAVITATING PLANETESIMAL DISK. Astronomical Journal, 2011, 142, 152.	4.7	204
8	EVIDENCE FROM THE ASTEROID BELT FOR A VIOLENT PAST EVOLUTION OF JUPITER'S ORBIT. Astronomical Journal, 2010, 140, 1391-1401.	4.7	192
9	European component of the AIDA mission to a binary asteroid: Characterization and interpretation of the impact of the DART mission. Advances in Space Research, 2018, 62, 2261-2272.	2.6	118
10	AstRoMap European Astrobiology Roadmap. Astrobiology, 2016, 16, 201-243.	3.0	99
11	Science case for the Asteroid Impact Mission (AIM): A component of the Asteroid Impact & Deflection Assessment (AIDA) mission. Advances in Space Research, 2016, 57, 2529-2547.	2.6	95
12	Explaining why the uranian satellites have equatorial prograde orbits despite the large planetary obliquity. Icarus, 2012, 219, 737-740.	2.5	86
13	The ESA Hera Mission: Detailed Characterization of the DART Impact Outcome and of the Binary Asteroid (65803) Didymos. Planetary Science Journal, 2022, 3, 160.	3.6	82
14	THE ORIGIN OF ASTEROID 101955 (1999 RQ₃₆). Astrophysical Journal Letters, 2010, 721, L53-L57.	8.3	75
15	Chaotic Diffusion And Effective Stability of Jupiter Trojans. Celestial Mechanics and Dynamical Astronomy, 2005, 92, 71-87.	1.4	45
16	Vertical instability and inclination excitation during planetary migration. Celestial Mechanics and Dynamical Astronomy, 2014, 119, 221-235.	1.4	39
17	Interaction of free-floating planets with a starâ€“planet pair. Celestial Mechanics and Dynamical Astronomy, 2012, 113, 387-402.	1.4	34
18	Creep stability of the DART/Hera mission target 65803 Didymos: II. The role of cohesion. Icarus, 2021, 362, 114433.	2.5	33

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19	The excited spin state of Dimorphos resulting from the DART impact. Icarus, 2021, 370, 114624.	2.5	33
20	Stable Chaos in the 12:7 Mean Motion Resonance and Its Relation to the Stickiness Effect. Icarus, 2000, 146, 240-252.	2.5	32
21	Chaotic transport and chronology of complex asteroid families. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1263-1272.	4.4	30
22	Is Vesta an intact and pristine protoplanet?. Icarus, 2015, 254, 190-201.	2.5	30
23	Reconstructing the orbital history of the Veritas family. Icarus, 2007, 186, 484-497.	2.5	29
24	Trapping in high-order orbital resonances and inclination excitation in extrasolar systems. Monthly Notices of the Royal Astronomical Society, 2009, 400, 1373-1382.	4.4	28
25	Short-lived asteroids in the 7/3 Kirkwood gap and their relationship to the Koronis and Eos families. Icarus, 2003, 166, 131-140.	2.5	26
26	ReDSHIFT: A Global Approach to Space Debris Mitigation. Aerospace, 2018, 5, 64.	2.2	25
27	Stable Chaos versus Kirkwood Gaps in the Asteroid Belt: A Comparative Study of Mean Motion Resonances. Icarus, 2002, 159, 284-299.	2.5	24
28	Stable Chaos in High-Order Jovian Resonances. Icarus, 2002, 155, 454-474.	2.5	23
29	Predictions for the Dynamical States of the Didymos System before and after the Planned DART Impact. Planetary Science Journal, 2022, 3, 157.	3.6	23
30	Reconstructing the size distribution of the primordial Main Belt. Icarus, 2018, 304, 14-23.	2.5	21
31	Trapping in three-planet resonances during gas-driven migration. Celestial Mechanics and Dynamical Astronomy, 2011, 111, 201-218.	1.4	20
32	Dynamical cartography of Earth satellite orbits. Advances in Space Research, 2019, 63, 443-460.	2.6	20
33	Galileo disposal strategy: stability, chaos and predictability. Monthly Notices of the Royal Astronomical Society, 2017, 464, 4063-4076.	4.4	19
34	Dynamical portrait of the Lixiaohua asteroid family. Celestial Mechanics and Dynamical Astronomy, 2010, 107, 35-49.	1.4	18
35	Dimensionality differences between sticky and non-sticky chaotic trajectory segments in a 3D Hamiltonian system. Chaos, Solitons and Fractals, 2000, 11, 2281-2292.	5.1	17
36	Chaos and the Effects of Planetary Migration on the Orbit of S/2000 S5 Kiviuq. Astronomical Journal, 2004, 128, 1899-1915.	4.7	17

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37	Effect of 3rd-degree gravity harmonics and Earth perturbations on lunar artificial satellite orbits. Celestial Mechanics and Dynamical Astronomy, 2010, 108, 389-404.	1.4	17
38	Formation of â€˜3Dâ€™ multiplanet systems by dynamical disruption of multiple-resonance configurations. Monthly Notices of the Royal Astronomical Society, 2011, 412, 2353-2360.	4.4	17
39	Why do Trojan ASCs (not) Escape?. Celestial Mechanics and Dynamical Astronomy, 2000, 78, 125-136.	1.4	16
40	Quasi-critical orbits for artificial lunar satellites. Celestial Mechanics and Dynamical Astronomy, 2009, 104, 227-239.	1.4	16
41	Libration-induced Orbit Period Variations Following the DART Impact. Planetary Science Journal, 2021, 2, 242.	3.6	14
42	Dynamical lifetime survey of geostationary transfer orbits. Celestial Mechanics and Dynamical Astronomy, 2018, 130, 1.	1.4	12
43	Medium Earth Orbit dynamical survey and its use in passive debris removal. Advances in Space Research, 2019, 63, 3646-3674.	2.6	12
44	The origin of long-lived asteroids in the 2:1 mean-motion resonance with Jupiter. Monthly Notices of the Royal Astronomical Society, 2015, 451, 2399-2416.	4.4	11
45	Chaotic transport of navigation satellites. Chaos, 2019, 29, 101106.	2.5	9
46	Secular resonance sweeping and orbital excitation in decaying disks. Celestial Mechanics and Dynamical Astronomy, 2020, 132, 1.	1.4	7
47	Secular dynamics of a lunar orbiter: a global exploration using Pronyâ€™s frequency analysis. Celestial Mechanics and Dynamical Astronomy, 2014, 118, 379-397.	1.4	6
48	Chaotic Di?usion of Asteroids. , 2007, , 111-150.		6
49	A continuation approach for computing periodic orbits around irregular-shaped asteroids. An application to 433 Eros. Advances in Space Research, 2021, 68, 4418-4433.	2.6	5
50	Satellite orbits design using frequency analysis. Advances in Space Research, 2015, 56, 163-175.	2.6	4
51	How the Solar System didn't form. Nature, 2015, 528, 202-203.	27.8	4
52	NELIOTA: ESA's new NEO lunar impact monitoring project with the 1.2m telescope at the National Observatory of Athens. Proceedings of the International Astronomical Union, 2015, 10, 327-329.	0.0	3
53	NELIOTA: ESA's new NEO lunar impact monitoring project with the 1.2m telescope at the National Observatory of Athens. Proceedings of SPIE, 2016, , .	0.8	2
54	Chaotic Diffusion and Effective Stability of Jupiter Trojans. , 2005, , 71-87.		2

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55	Early dynamical evolution of the Solar System: constraints from asteroid and KBO dynamics. Proceedings of the International Astronomical Union, 2004, 2004, 279-292.	0.0	0
56	Constraining asteroid dynamical models using GAIA data. Planetary and Space Science, 2012, 73, 47-51.	1.7	0
57	Long-term evolution of asteroids in the 2:1 Mean Motion Resonance. Proceedings of the International Astronomical Union, 2014, 9, 178-179.	0.0	0
58	Influence of the inclination damping on the formation of planetary systems. Proceedings of the International Astronomical Union, 2014, 9, 220-222.	0.0	0