

Juan R Sanmartin

List of Publications by Year in descending order

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73
papers

1,429
citations

331670

21
h-index

345221

36
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74
all docs

74
docs citations

74
times ranked

430
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative <i>Saturn</i> Versus <i>Jupiter</i> Tether Operation. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6026-6030.	2.4	3
2	Analysis of thermionic bare tether operation regimes in passive mode. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	9
3	Analysis of Tether-Mission Concept for Multiple Flybys of Moon Europa. <i>Journal of Propulsion and Power</i> , 2017, 33, 338-342.	2.2	4
4	Survivability analysis of tape-tether against two concurring impacts with debris. <i>Advances in Space Research</i> , 2016, 57, 2273-2284.	2.6	4
5	Optimum sizing of bare-tape tethers for de-orbiting satellites at end of mission. <i>Advances in Space Research</i> , 2015, 56, 1485-1492.	2.6	28
6	Low work-function thermionic emission and orbital-motion-limited ion collection at bare-tether cathodic contact. <i>Physics of Plasmas</i> , 2015, 22, 053504.	1.9	11
7	Analysis of tape tether survival in LEO against orbital debris. <i>Advances in Space Research</i> , 2014, 53, 1370-1376.	2.6	21
8	Survival Probability of Round and Tape Tethers Against Debris Impact. <i>Journal of Spacecraft and Rockets</i> , 2013, 50, 603-608.	1.9	37
9	Relativistic current collection by a cylindrical Langmuir probe. <i>Physics of Plasmas</i> , 2012, 19, 063506.	1.9	18
10	A Proposed Two-Stage Two-Tether Scientific Mission at Jupiter. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 274-281.	1.3	7
11	Low Work-Function Coating for an Entirely Propellantless Bare Electrodynamic Tether. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 1441-1445.	1.3	31
12	Bare-tether cathodic contact through thermionic emission by low-work-function materials. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	14
13	Tether radiation in Juno-type and circular-equatorial Jovian orbits. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	1
14	The radiation impedance of electrodynamic tethers in a polar Jovian orbit. <i>Advances in Space Research</i> , 2010, 45, 1050-1057.	2.6	4
15	Fast magnetosonic wave excitation by an array of wires with time-modulated currents. <i>Annales Geophysicae</i> , 2010, 28, 577-586.	1.6	0
16	A review of electrodynamic tethers for science applications. <i>Plasma Sources Science and Technology</i> , 2010, 19, 034022.	3.1	26
17	Electrodynamic Tether Applications and Constraints. <i>Journal of Spacecraft and Rockets</i> , 2010, 47, 442-456.	1.9	68
18	Magnetic pumping of whistler waves by tether current modulation. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	6

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19	Jupiter Power Generation with Electrodynamic Tethers at Constant Orbital Energy. Journal of Propulsion and Power, 2009, 25, 415-423.	2.2	16
20	Sounding rocket experiment of bare electrodynamic tether system. Acta Astronautica, 2009, 64, 313-324.	3.2	32
21	Plasma kinetics issues in an ESA study for a plasma laboratory in space. Plasma Physics and Controlled Fusion, 2008, 50, 074016.	2.1	1
22	Role of Superconducting Shields in Electrodynamic Propulsion. Journal of Propulsion and Power, 2008, 24, 851-854.	2.2	3
23	Damping models in the truncated derivative nonlinear Schrödinger equation. Physics of Plasmas, 2007, 14, .	1.9	35
24	Floating bare tether as upper atmosphere probe. Journal of Geophysical Research, 2006, 111, .	3.3	26
25	Performance of Electrodynamic Tethers and Ion Thrusters Against Hybrid Systems. Journal of Propulsion and Power, 2006, 22, 698-700.	2.2	2
26	Efficiency of Electrodynamic Tether Thrusters. Journal of Spacecraft and Rockets, 2006, 43, 659-666.	1.9	18
27	Exploration of Outer Planets Using Tethers for Power and Propulsion. Journal of Propulsion and Power, 2005, 21, 573-576.	2.2	27
28	Hard transition to chaotic dynamics in Alfvén wave fronts. Physics of Plasmas, 2004, 11, 2026-2035.	1.9	22
29	Analysis of Bare-Tether Systems for Deorbiting Low-Earth-Orbit Satellites. Journal of Spacecraft and Rockets, 2002, 39, 198-205.	1.9	59
30	Magnetic self-field effects on current collection by an ionospheric bare tether. Journal of Geophysical Research, 2002, 107, SIA 2-1.	3.3	10
31	Efficiency of different types of ED-tether thrusters. AIP Conference Proceedings, 2001, , .	0.4	7
32	Experimental Evidence of a Hard Transition to Chaos. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 2255-2262.	1.7	4
33	Alfvén wave far field from steady-current tethers. Journal of Geophysical Research, 1997, 102, 14625-14630.	3.3	11
34	Artificial auroral effects from a bare conducting tether. Journal of Geophysical Research, 1997, 102, 27257-27263.	3.3	12
35	A derivation of thermodynamic principles. European Journal of Physics, 1996, 17, 76-81.	0.6	0
36	Macroscopic motion and gravitation in thermodynamics. European Journal of Physics, 1995, 16, 8-13.	0.6	6

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37	The radiation impedance of orbiting conductors. Journal of Geophysical Research, 1995, 100, 1677.	3.3	19
38	Bare wire anodes for electrodynamic tethers. Journal of Propulsion and Power, 1993, 9, 353-360.	2.2	215
39	Nonlocal electron heat relaxation in a plasma shock at arbitrary ionization number. Physics of Fluids B, 1993, 5, 1485-1490.	1.7	3
40	Current collection by an active spherical electrode in an unmagnetized plasma. Physics of Fluids B, 1992, 4, 3847-3855.	1.7	11
41	Self-consistent, nonlocal electron heat flux at arbitrary ion charge number. Physics of Fluids B, 1992, 4, 3579-3585.	1.7	10
42	Magnetic and electric current morphology in the plasma ejected by a laser-irradiated foil. Physics of Fluids B, 1991, 3, 1708-1716.	1.7	0
43	Nonlocal electron heat flux revisited. Physics of Fluids B, 1990, 2, 2519-2521.	1.7	7
44	Coronal fluid-dynamics in laser fusion. Laser and Particle Beams, 1989, 7, 219-228.	1.0	2
45	Non-uniform target illumination in deflagration regime. Refractive smoothing. Laser and Particle Beams, 1989, 7, 627-635.	1.0	2
46	Self-consistent resonance absorption with two-layer profile steepening. Physics of Fluids B, 1989, 1, 2450-2461.	1.7	1
47	Nonuniform target illumination in the deflagration regime: Thermal smoothing. Physics of Fluids, 1988, 31, 2320.	1.4	15
48	Resonant absorption in a plasma step profile. Plasma Physics and Controlled Fusion, 1987, 29, 419-432.	2.1	18
49	The hydrodynamic efficiency of laser-target acceleration. Plasma Physics and Controlled Fusion, 1985, 27, 983-993.	2.1	5
50	Inverse bremsstrahlung absorption in spherical laser targets. Plasma Physics and Controlled Fusion, 1985, 27, 279-297.	2.1	3
51	Two-electron temperature model of a laser-driven implosion. Physics of Fluids, 1985, 28, 2282.	1.4	3
52	O Botafumeiro: Parametric pumping in the Middle Ages. American Journal of Physics, 1984, 52, 937-945.	0.7	31
53	Comment on "Another look at the uniform rope sliding over the edge of a smooth table". American Journal of Physics, 1983, 51, 585-585.	0.7	2
54	Ion charge number and flux saturation effects in the corona of a laser-irradiated pellet. Physics of Fluids, 1983, 26, 3361.	1.4	9

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55	Comment on "Steady-state planar ablative flow" [Phys. Fluids 25, 1644 (1982)]. Physics of Fluids, 1983, 26, 2754.	1.4	7
56	Influence of air drag on the optimal hand launching of a small, round projectile. American Journal of Physics, 1982, 50, 59-64.	0.7	5
57	Quasi-steady expansion of plasma ablated from laser-irradiated pellets. Physics of Fluids, 1981, 24, 2098.	1.4	38
58	Self-consistent profile modification in the underdense region of laser-produced plasmas. Journal of Plasma Physics, 1980, 23, 349-356.	2.1	9
59	Transition from isentropic to isothermal expansion in laser produced plasmas. Plasma Physics, 1980, 22, 617-626.	0.9	15
60	Profile modification by light pressure in plasmas expanding with uniform, time-dependent temperature. Physics of Fluids, 1980, 23, 2413.	1.4	11
61	Spherical thermal waves in laser plasmas. Physics of Fluids, 1980, 23, 650.	1.4	2
62	Widespread error in a standard problem in the dynamics of deformable bodies. American Journal of Physics, 1978, 46, 949-950.	0.7	2
63	Self-similar motion of laser half-space plasmas. II. Thermal wave and intermediate regimes. Physics of Fluids, 1978, 21, 1967.	1.4	18
64	Self-similar motion of laser half-space plasmas. I. Deflagration regime. Physics of Fluids, 1978, 21, 1957.	1.4	33
65	Self-similar motion of laser fusion plasmas. Absorption in an unbounded plasma. Physics of Fluids, 1977, 20, 1155.	1.4	24
66	Dispersion relation for electron waves propagating in an isotropic plasma containing Maxwellian and suprathermal electrons. Journal of Plasma Physics, 1975, 14, 7-17.	2.1	1
67	Ion-Temperature-Sensitive Effect in Transient Langmuir Probe Response. Physics of Fluids, 1972, 15, 391.	1.4	13
68	End Effect in Langmuir Probe Response under Ionospheric Satellite Conditions. Physics of Fluids, 1972, 15, 1134.	1.4	24
69	Far-Wake Structure in Rarefield Plasma Flows past Charged Bodies. Physics of Fluids, 1971, 14, 62.	1.4	57
70	Similarities between Ion Waves in Plasmas and Gravity Waves in Incompressible Fluids. Physics of Fluids, 1971, 14, 786.	1.4	0
71	Ion Correlations due to a High-Frequency Electric Field and Their Effect on the Nonlinear Plasma Conductivity. Physics of Fluids, 1970, 13, 1223.	1.4	2
72	Electrostatic Plasma Instabilities Excited by a High-Frequency Electric Field. Physics of Fluids, 1970, 13, 1533.	1.4	108

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73	Theory of a Probe in a Strong Magnetic Field. Physics of Fluids, 1970, 13, 103.	1.4	118