Alexander L Mackinnon

List of Publications by Year in descending order

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65 papers

1,343 citations

393982 19 h-index 344852 36 g-index

67 all docs

67 docs citations

67 times ranked

904 citing authors

#	Article	IF	CITATIONS
1	The high-energy Sun - probing the origins of particle acceleration on our nearest star. Experimental Astronomy, 2022, 54, 335-360.	1.6	3
2	Modelling magnetised medium particle transport in the guiding centre limit with GEANT4. Astronomy and Astrophysics, 2021, 654, A82.	2.1	0
3	FLUKA Simulations of Pion Decay Gamma-Radiation from Energetic Flare Ions. Solar Physics, 2020, 295, 1.	1.0	4
4	Self-consistent Modeling of Gamma-ray Spectra from Solar Flares with the Monte Carlo Simulation Package FLUKA. Solar Physics, 2019, 294, 1.	1.0	7
5	Tracking of an electron beam through the solar corona with LOFAR. Astronomy and Astrophysics, 2018, 611, A57.	2.1	23
6	Contribution of energetic ion secondary particles to solar flare radio spectra. Proceedings of the International Astronomical Union, 2016, 12, 120-123.	0.0	3
7	Origin of the 30 THz Emission Detected During the Solar Flare on 2012 March 13 at 17:20 UT. Solar Physics, 2015, 290, 2809-2826.	1.0	25
8	LOFAR tied-array imaging and spectroscopy of solar S bursts. Astronomy and Astrophysics, 2015, 580, A65.	2.1	34
9	LOFAR tied-array imaging of Type III solar radio bursts. Astronomy and Astrophysics, 2014, 568, A67.	2.1	60
10	Effect of binary collisions on electron acceleration in magnetic reconnection. Astronomy and Astrophysics, 2014, 561, A107.	2.1	13
11	Solar flares at submillimeter wavelengths. Astronomy and Astrophysics Review, 2013, 21, 1.	9.1	55
12	Wavelets, Intermittency and Solar Flare Hard X-rays 1. Local Intermittency Measure in Cascade and Avalanche Scenarios. Solar Physics, 2013, 282, 471-481.	1.0	5
13	Wavelets, Intermittency and Solar Flare Hard X-rays 2. LIM Analysis of High Time Resolution BATSE Data. Solar Physics, 2013, 282, 483-501.	1.0	7
14	Remote sensing of low-energy SEPs via charge exchange. , 2013, , .		0
15	NUMERICAL SIMULATIONS OF CHROMOSPHERIC HARD X-RAY SOURCE SIZES IN SOLAR FLARES. Astrophysical Journal, 2012, 752, 4.	1.6	15
16	ELECTRON-BEAM-INDUCED RADIO EMISSION FROM ULTRACOOL DWARFS. Astrophysical Journal, 2012, 752, 60.	1.6	14
17	CHARGE-EXCHANGE LIMITS ON LOW-ENERGY α-PARTICLE FLUXES IN SOLAR FLARES. Astrophysical Journal, 2012, 752, 84.	1.6	7
18	Solar Particle Acceleration Radiation and Kinetics (SPARK). Experimental Astronomy, 2012, 33, 237-269.	1.6	4

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19	Particle Acceleration in the Presence of Weak Turbulence at an X-Type Neutral Point. Solar Physics, 2012, 280, 575-590.	1.0	7
20	Mapping radio emitting-region on low-mass stars and brown dwarfs. EPJ Web of Conferences, 2011, 16, 06013.	0.1	0
21	Properties of Energetic Ions in the Solar Atmosphere from \hat{I}^3 -Ray and Neutron Observations. Space Science Reviews, 2011, 159, 167-224.	3.7	97
22	Acceleration of charged particles by fluctuating and steady electric fields in a X-type magnetic field. Advances in Space Research, 2011, 48, 884-898.	1.2	10
23	Modelling the radio pulses of an ultracool dwarf. Astronomy and Astrophysics, 2011, 525, A39.	2.1	23
24	Turbulent cross-field transport of non-thermal electrons in coronal loops: theory and observations. Astronomy and Astrophysics, 2011, 535, A18.	2.1	23
25	Inverse Compton X-rays from relativistic flare electrons and positrons. Astronomy and Astrophysics, 2010, 510, A29.	2.1	7
26	Thermalisation and hard X-ray bremsstrahlung efficiency of self-interacting solar flare fast electrons. Astronomy and Astrophysics, 2010, 520, A72.	2.1	4
27	Advanced characterization and simulation of SONNE: a fast neutron spectrometer for Solar Probe Plus. Proceedings of SPIE, 2009, , .	0.8	4
28	Test and simulation of a Fast Neutron Imaging Telescope. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 603, 406-414.	0.7	12
29	Calibration of the Fast Neutron Imaging Telescope (FNIT) Prototype Detector. IEEE Transactions on Nuclear Science, 2009, 56, 2947-2954.	1.2	16
30	CORONAL RADIATION BELTS. Astrophysical Journal, 2009, 698, L86-L89.	1.6	8
31	Local re-acceleration and a modified thick target model of solar flare electrons. Astronomy and Astrophysics, 2009, 508, 993-1000.	2.1	89
32	Hard X-ray emission from the solar corona. Astronomy and Astrophysics Review, 2008, 16, 155-208.	9.1	206
33	Coronal Î ³ -Ray Bremsstrahlung from Solar Flare-accelerated Electrons. Astrophysical Journal, 2008, 678, L63-L66.	1.6	68
34	Fluctuating electric field particle acceleration at a magnetic field null point. AIP Conference Proceedings, 2008, , .	0.3	0
35	Chromospheric magnetic field and density structure measurements using hard X-rays in a flaring coronal loop. Astronomy and Astrophysics, 2008, 489, L57-L60.	2.1	65
36	Design optimization and performance capabilities of the fast neutron imaging telescope (FNIT). , 2007, , .		3

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37	Solar hard X-ray halo from decaying neutrons. Astronomy and Astrophysics, 2007, 462, 763-767.	2.1	4
38	Particle acceleration by fluctuating electric fields at a magnetic field null point. Astronomy and Astrophysics, 2007, 472, 623-632.	2.1	20
39	Introduction: The High-energy Corona – Waves, Eruptions, Particles. , 2007, , 1-11.		1
40	Radiative Diagnoses of Energetic Particles. , 2006, , 157.		3
41	Crossâ€Field Diffusion of Electrons in Tangled Magnetic Fields and Implications for Coronal Fine Structure. Astrophysical Journal, 2006, 646, 615-624.	1.6	30
42	Compton backscattered and primary X-rays from solar flares: angle dependent Green's function correction for photospheric albedo. Astronomy and Astrophysics, 2006, 446, 1157-1163.	2.1	86
43	Regularized Energy-Dependent Solar Flare Hard X-Ray Spectral Index. Solar Physics, 2005, 227, 299-310.	1.0	18
44	Fast electron slowing-down and diffusion in a high temperature coronal X-ray source. Astronomy and Astrophysics, 2005, 438, 1107-1114.	2.1	20
45	Do fast protons and \hat{l}_{\pm} particles have the same energy distributions in solar flares?. Solar Physics, 2004, 223, 155-168.	1.0	10
46	What Can Be Learned About Competing Acceleration Models from Multiwavelength Observations?. Lecture Notes in Physics, 2003, , 127-160.	0.3	14
47	Warm thick target solar Î ³ -ray source revisited. Astronomy and Astrophysics, 2003, 409, 745-753.	2.1	6
48	High energy particles accelerated during the large solar flare of 1990 May 24: X/\hat{I}^3 -ray observations. Astronomy and Astrophysics, 2003, 412, 865-874.	2.1	45
49	Coulomb Energy Losses in the Solar Corona and the Proton Energy Budget in Flares. Astrophysical Journal, 1997, 485, 430-433.	1.6	14
50	Particle Acceleration in Dynamical Collisionless Reconnection. Solar Physics, 1997, 172, 279-286.	1.0	19
51	One-dimensional percolation models of transient phenomena. Physica A: Statistical Mechanics and Its Applications, 1997, 243, 1-13.	1.2	1
52	Particle orbits near a neutral point. Space Science Reviews, 1994, 68, 117-118.	3.7	3
53	High-energy gamma-ray emission from solar flares: Constraining the accelerated proton spectrum. Solar Physics, 1994, 151, 147-167.	1.0	13
54	Interpretation of solar flare \hat{I}^3 -Ray continuum observations. Advances in Space Research, 1993, 13, 259-262.	1.2	2

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55	Alfv�n turbulence and the time dependence of non-thermal line broadening in flares. Solar Physics, 1993, 144, 155-168.	1.0	7
56	Proton energy deposition in converging magnetic fields. Advances in Space Research, 1991, 11, 331-335.	1.2	O
57	Heating of astrophysical plasma by mildly-relativistic non-thermal protons. Astrophysics and Space Science, 1991, 178, 287-298.	0.5	0
58	Return current and collisional effects in nonthermal electron beams with pulsed injection. Solar Physics, 1990, 129, 325-341.	1.0	15
59	Beam heating in solar flares - Electrons or protons?. Astrophysical Journal, Supplement Series, 1990, 73, 343.	3.0	31
60	On the bremsstrahlung efficiency of nonthermal hard X-ray source models. Solar Physics, 1989, 122, 303-311.	1.0	7
61	Comments on the thick-target interpretation of solar X-ray burst ?stereo? observations. Solar Physics, 1986, 106, 415-419.	1.0	2
62	Interpretation of temporal features in an unusual X-ray and microwave burst. Solar Physics, 1986, 104, 191-198.	1.0	6
63	Temporal behaviour of the thermal model of hard X-ray bursts. Solar Physics, 1985, 98, 293-304.	1.0	4
64	Quantitative analysis of hard X-ray ?footpoint? flares observed by the Solar Maximum Mission. Solar Physics, 1985, 99, 231-262.	1.0	31
65	Development of the Fast Neutron Imaging Telescope. , 0, , .		10