

Kanya Kusano

List of Publications by Year in descending order

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128
papers

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citations

126907

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docs citations

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2782
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling the Transport and Deposition of ^{10}Be Produced by the Strongest Solar Proton Event During the Holocene. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	4
2	Generation of Solar-like Differential Rotation. <i>Astrophysical Journal</i> , 2022, 933, 199.	4.5	22
3	Thickness-dependent thermoelectric properties of $\text{Si}_{1-x}\text{Ge}_x$ films formed by Al-induced layer exchange. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	10
4	Data-driven MHD Simulation of Successive Solar Plasma Eruptions. <i>Astrophysical Journal</i> , 2021, 909, 155.	4.5	15
5	Magnetic Helicity Flux across Solar Active Region Photospheres. II. Association of Hemispheric Sign Preference with Flaring Activity during Solar Cycle 24. <i>Astrophysical Journal</i> , 2021, 911, 79.	4.5	6
6	Eruptivity in Solar Flares: The Challenges of Magnetic Flux Ropes. <i>Astrophysical Journal</i> , 2021, 913, 124.	4.5	5
7	PSTEP: project for solar-terrestrial environment prediction. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	10
8	Solar differential rotation reproduced with high-resolution simulation. <i>Nature Astronomy</i> , 2021, 5, 1100-1102.	10.1	31
9	A physics-based method that can predict imminent large solar flares. <i>Science</i> , 2020, 369, 587-591.	12.6	65
10	Lagrangian chaotic saddles and objective vortices in solar plasmas. <i>Physical Review E</i> , 2020, 102, 060201.	2.1	12
11	A New Parameter of the Photospheric Magnetic Field to Distinguish Eruptive-flare Producing Solar Active Regions. <i>Astrophysical Journal</i> , 2020, 894, 20.	4.5	10
12	Zn-induced layer exchange of p- and n-type nanocrystalline SiGe layers for flexible thermoelectrics. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	13
13	Serial Flaring in an Active Region: Exploring Why Only One Flare Is Eruptive. <i>Astrophysical Journal</i> , 2020, 890, 84.	4.5	5
14	A Comparison of Flare Forecasting Methods. IV. Evaluating Consecutive-day Forecasting Patterns. <i>Astrophysical Journal</i> , 2020, 890, 124.	4.5	33
15	A Magnetohydrodynamic Relaxation Method for Non-force-free Magnetic Field in Magnetohydrostatic Equilibrium. <i>Astrophysical Journal, Supplement Series</i> , 2020, 247, 6.	7.7	8
16	Forward Modeling of Particle Acceleration and Transport in an Individual Solar Flare. <i>Astrophysical Journal</i> , 2020, 902, 147.	4.5	10
17	Magnetic Helicity Flux across Solar Active Region Photospheres. I. Hemispheric Sign Preference in Solar Cycle 24. <i>Astrophysical Journal</i> , 2020, 904, 6.	4.5	6
18	The Effects of Oscillations and Collisions of Emerging Bipolar Regions on the Triggering of Solar Flares. <i>Astrophysical Journal</i> , 2020, 900, 65.	4.5	0

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19	A Comparison of Flare Forecasting Methods. III. Systematic Behaviors of Operational Solar Flare Forecasting Systems. <i>Astrophysical Journal</i> , 2019, 881, 101.	4.5	42
20	A Comparison of Flare Forecasting Methods. II. Benchmarks, Metrics, and Performance Results for Operational Solar Flare Forecasting Systems. <i>Astrophysical Journal, Supplement Series</i> , 2019, 243, 36.	7.7	75
21	Supergranular turbulence in the quiet Sun: Lagrangian coherent structures. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3076-3088.	4.4	19
22	Mechanism of non-steady Petschek-type reconnection with uniform resistivity. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	2
23	Onset Mechanism of M6.5 Solar Flare Observed in Active Region 12371. <i>Astrophysical Journal</i> , 2019, 887, 263.	4.5	10
24	Weak influence of near-surface layer on solar deep convection zone revealed by comprehensive simulation from base to surface. <i>Science Advances</i> , 2019, 5, eaau2307.	10.3	36
25	Coronal mass ejection hits mercury: A.I.K.E.F. hybrid-code results compared to MESSENGER data. <i>Planetary and Space Science</i> , 2018, 153, 89-99.	1.7	35
26	Formation and dynamics of a solar eruptive flux tube. <i>Nature Communications</i> , 2018, 9, 174.	12.8	55
27	Evaluation of Applicability of a Flare Trigger Model Based on a Comparison of Geometric Structures. <i>Astrophysical Journal</i> , 2018, 856, 43.	4.5	7
28	Onset mechanism of solar eruptions. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2018, 180, 3-8.	1.6	1
29	A Study of Magnetic Field Characteristics of the Flaring Active Region Based on Nonlinear Force-free Field Extrapolation. <i>Astrophysical Journal</i> , 2018, 863, 162.	4.5	11
30	The Triggering of the 2014 March 29 Filament Eruption. <i>Astrophysical Journal</i> , 2018, 860, 163.	4.5	15
31	SIMULATION STUDY OF HEMISPHERIC PHASE-ASYMMETRY IN THE SOLAR CYCLE. <i>Astrophysical Journal</i> , 2017, 835, 84.	4.5	13
32	Study on Precursor Activity of the X1.6 Flare in the Great AR 12192 with SDO, IRIS, and Hinode. <i>Astrophysical Journal</i> , 2017, 840, 116.	4.5	23
33	Magnetohydrodynamic Simulations for Studying Solar Flare Trigger Mechanism. <i>Astrophysical Journal</i> , 2017, 842, 86.	4.5	24
34	Triggering Process of the X1.0 Three-ribbon Flare in the Great Active Region NOAA 12192. <i>Astrophysical Journal</i> , 2017, 838, 134.	4.5	24
35	High-resolution observations of flare precursors in the low solar atmosphere. <i>Nature Astronomy</i> , 2017, 1, .	10.1	74
36	Taylor problem and onset of plasmoid instability in the Hall-magnetohydrodynamics. <i>Physics of Plasmas</i> , 2017, 24, 102116.	1.9	2

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37	Low temperature synthesis of highly oriented p-type Si _{1-x} Ge _x ($x \approx 1$) on an insulator by Al-induced layer exchange. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	18
38	Double Arc Instability in the Solar Corona. <i>Astrophysical Journal</i> , 2017, 843, 101.	4.5	43
39	Improvement of solar-cycle prediction: Plateau of solar axial dipole moment. <i>Astronomy and Astrophysics</i> , 2017, 607, L2.	5.1	44
40	The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?. <i>Solar Physics</i> , 2016, 291, 1761-1782.	2.5	69
41	STRUCTURE AND STABILITY OF MAGNETIC FIELDS IN SOLAR ACTIVE REGION 12192 BASED ON NONLINEAR FORCE-FREE FIELD MODELING. <i>Astrophysical Journal</i> , 2016, 818, 168.	4.5	33
42	Fast magnetic reconnection supported by sporadic small-scale Petschek-type shocks. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	24
43	Fabrication of Scalable Indoor Light Energy Harvester and Study for Agricultural IoT Applications. <i>Journal of Physics: Conference Series</i> , 2015, 660, 012110.	0.4	3
44	Nonlinear regimes of forced magnetic reconnection. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	9
45	No Major Solar Flares but the Largest Geomagnetic Storm in the Present Solar Cycle. <i>Space Weather</i> , 2015, 13, 365-367.	3.7	88
46	Comparison between Hinode/SOT and SDO/HMI, AIA data for the study of the solar flare trigger process. <i>Publication of the Astronomical Society of Japan</i> , 2014, 66, .	2.5	14
47	Coronal behavior before the large flare onset. <i>Publication of the Astronomical Society of Japan</i> , 2014, 66, .	2.5	16
48	NONLINEAR FORCE-FREE EXTRAPOLATION OF THE CORONAL MAGNETIC FIELD BASED ON THE MAGNETOHYDRODYNAMIC RELAXATION METHOD. <i>Astrophysical Journal</i> , 2014, 780, 101.	4.5	38
49	Formation of a Flare-Productive Active Region: Observation and Numerical Simulation of NOAA AR 11158. <i>Solar Physics</i> , 2014, 289, 3351-3369.	2.5	44
50	A PLASMA $\hat{\nu}^2$ TRANSITION WITHIN A PROPAGATING FLUX ROPE. <i>Astrophysical Journal</i> , 2013, 779, 142.	4.5	8
51	Comment on "Supersonic regime of the Hall-magnetohydrodynamics resistive tearing instability" [Phys. Plasmas 19, 072519 (2012)]. <i>Physics of Plasmas</i> , 2013, 20, 014703.	1.9	1
52	Onset of Hall-mediated magnetic reconnection in weakly ionized astrophysical plasmas. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 1789-1791.	4.4	2
53	THE MAGNETIC SYSTEMS TRIGGERING THE M6.6 CLASS SOLAR FLARE IN NOAA ACTIVE REGION 11158. <i>Astrophysical Journal</i> , 2013, 773, 128.	4.5	44
54	Is Something Wrong With the Present Solar Maximum?. <i>Space Weather</i> , 2013, 11, 140-141.	3.7	12

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55	STUDY OF MAGNETIC HELICITY INJECTION IN THE ACTIVE REGION NOAA 9236 PRODUCING MULTIPLE FLARE-ASSOCIATED CORONAL MASS EJECTION EVENTS. <i>Astrophysical Journal</i> , 2013, 778, 13.	4.5	16
56	MAGNETIC FIELD STRUCTURES TRIGGERING SOLAR FLARES AND CORONAL MASS EJECTIONS. <i>Astrophysical Journal</i> , 2012, 760, 31.	4.5	162
57	DECORRELATION TIMES OF PHOTOSPHERIC FIELDS AND FLOWS. <i>Astrophysical Journal</i> , 2012, 747, 130.	4.5	15
58	A STUDY OF THE HELIOCENTRIC DEPENDENCE OF SHOCK STANDOFF DISTANCE AND GEOMETRY USING 2.5D MAGNETOHYDRODYNAMIC SIMULATIONS OF CORONAL MASS EJECTION DRIVEN SHOCKS. <i>Astrophysical Journal</i> , 2012, 759, 103.	4.5	17
59	PREPROCESSING MAGNETIC FIELDS WITH CHROMOSPHERIC LONGITUDINAL FIELDS. <i>Astrophysical Journal</i> , 2012, 752, 126.	4.5	16
60	Observational Tracking of the 2D Structure of Coronal Mass Ejections Between the Sun and 1 AU. <i>Solar Physics</i> , 2012, 279, 517-535.	2.5	23
61	EVOLUTION OF CORONAL MASS EJECTION MORPHOLOGY WITH INCREASING HELIOCENTRIC DISTANCE. II. IN SITU OBSERVATIONS. <i>Astrophysical Journal</i> , 2011, 732, 117.	4.5	34
62	EVOLUTION OF CORONAL MASS EJECTION MORPHOLOGY WITH INCREASING HELIOCENTRIC DISTANCE. I. GEOMETRICAL ANALYSIS. <i>Astrophysical Journal</i> , 2011, 731, 109.	4.5	41
63	CORONAL ELECTRON DISTRIBUTION IN SOLAR FLARES: DRIFT-KINETIC MODEL. <i>Astrophysical Journal</i> , 2011, 732, 111.	4.5	12
64	TWIST AND CONNECTIVITY OF MAGNETIC FIELD LINES IN THE SOLAR ACTIVE REGION NOAA 10930. <i>Astrophysical Journal</i> , 2011, 738, 161.	4.5	71
65	The SOLAR-C mission: current status. , 2011, , .		7
66	Discussion on Momentum Transfer Difficulty of a Magnetoplasma Sail. <i>Journal of Propulsion and Power</i> , 2011, 27, 1149-1153.	2.2	8
67	A Comparative Study of Divergence-Cleaning Techniques for Multi-Dimensional MHD Schemes. <i>Plasma and Fusion Research</i> , 2011, 6, 2401124-2401124.	0.7	8
68	Effect of cloud's characteristics on climate: A one-dimensional radiative-convective equilibrium model study. , 2011, , .		0
69	MAGNETOHYDRODYNAMIC MODELING FOR A FORMATION PROCESS OF CORONAL MASS EJECTIONS: INTERACTION BETWEEN AN EJECTING FLUX ROPE AND AN AMBIENT FIELD. <i>Astrophysical Journal</i> , 2010, 718, 1305-1314.	4.5	56
70	The HLLD Approximate Riemann Solver for Magnetospheric Simulation. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 2236-2242.	1.3	18
71	The superâ€droplet method for the numerical simulation of clouds and precipitation: a particleâ€based and probabilistic microphysics model coupled with a nonâ€hydrostatic model. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 1307-1320.	2.7	155
72	Threeâ€dimensional MHD modeling of the solar wind structures associated with 13 December 2006 coronal mass ejection. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	62

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73	Continuum/particle interlocked simulation of gas detonation. , 2009, , 215-220.		0
74	The Earth Simulator Center. JAMSTEC Report of Research and Development, 2009, 9, 1_75-1_135.	0.2	1
75	A quantitative MHD study of the relation among arcade shearing, flux rope formation, and eruption due to the tearing instability. Journal of Geophysical Research, 2008, 113, .	3.3	17
76	Simulation study of the symmetry-breaking instability and the dipole field reversal in a rotating spherical shell dynamo. Physics of Plasmas, 2008, 15, .	1.9	27
77	Nonlinear Force-free Field Modeling of a Solar Active Region around the Time of a Major Flare and Coronal Mass Ejection. Astrophysical Journal, 2008, 675, 1637-1644.	4.5	254
78	Tests and Comparisons of Velocity Inversion Techniques. Astrophysical Journal, 2007, 670, 1434-1452.	4.5	103
79	Multi-scale plasma simulation by the interlocking of magnetohydrodynamic model and particle-in-cell kinetic model. Journal of Computational Physics, 2007, 227, 1340-1352.	3.8	40
80	Macro-micro Interlocked Simulation for Multiscale Phenomena. Lecture Notes in Computer Science, 2007, , 914-921.	1.3	5
81	Simulation study of the Solar flare onset mechanism and the self-organization in the Solar coronal plasma. Journal of Plasma Physics, 2006, 72, 979.	2.1	0
82	Virtual reality visualization by CAVE with VFIVE and VTK. Journal of Plasma Physics, 2006, 72, 1069.	2.1	14
83	MHD-PIC connection model in a magnetosphere-ionosphere coupling system. Journal of Plasma Physics, 2006, 72, 945.	2.1	9
84	Three-dimensional Simulation Study of Flux Rope Dynamics in the Solar Corona. Astrophysical Journal, 2006, 645, 742-756.	4.5	29
85	Nonlinear effects on magnetic energy release by forced magnetic reconnection: Long wavelength perturbations. Physics of Plasmas, 2006, 13, 052902.	1.9	1
86	Magnetic Helicity Injection and Sigmoidal Coronal Loops. Astrophysical Journal, 2005, 624, 1072-1079.	4.5	27
87	Simulation Study of the Formation Mechanism of Sigmoidal Structure in the Solar Corona. Astrophysical Journal, 2005, 631, 1260-1269.	4.5	44
88	A Statistical Study of the Correlation between Magnetic Helicity Injection and Soft X-Ray Activity in Solar Active Regions. Astrophysical Journal, 2005, 620, 1069-1084.	4.5	22
89	Generation and Annihilation of Magnetic Helicity in Active Regions. Highlights of Astronomy, 2005, 13, 113-116.	0.0	0
90	A multi-state HLL approximate Riemann solver for ideal magnetohydrodynamics. Journal of Computational Physics, 2005, 208, 315-344.	3.8	522

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91	Solar coronal heating by forced magnetic reconnection: Multiple reconnection events. <i>Physics of Plasmas</i> , 2005, 12, 012904.	1.9	18
92	Study of the Relationship between Magnetic Helicity and Solar Coronal Activity. <i>Proceedings of the International Astronomical Union</i> , 2004, 2004, 256.	0.0	0
93	The Trigger Mechanism of Solar Flares in a Coronal Arcade with Reversed Magnetic Shear. <i>Astrophysical Journal</i> , 2004, 610, 537-549.	4.5	151
94	Measurement of magnetic helicity flux into the solar corona. <i>Advances in Space Research</i> , 2003, 32, 1917-1922.	2.6	17
95	Annihilation of magnetic helicity: A new model for solar flare onset. <i>Advances in Space Research</i> , 2003, 32, 1931-1936.	2.6	36
96	Relation between magnetic helicity injection and flare activities in active region NOAA 8100. <i>Advances in Space Research</i> , 2003, 32, 1949-1952.	2.6	23
97	Prospect for Multiple Time and Spatial Scale Simulation Research in Astrophysical Plasma Phenomena: Multiple Scale Simulation of Magnetic Reconnection Phenomena in the Solar Corona. <i>Journal of Plasma and Fusion Research</i> , 2003, 79, 496-503.	0.4	1
98	Measurement of Magnetic Helicity Injection and Free Energy Loading into the Solar Corona. <i>Astrophysical Journal</i> , 2002, 577, 501-512.	4.5	202
99	Numerical Study of Three-dimensional Magnetohydrodynamic Instability in the Solar Coronal Magnetic Arcades. <i>Astrophysical Journal</i> , 2002, 571, 532-539.	4.5	13
100	Effect of Density Stratification on the Thermal Convection in a Rotating Spherical Shell. <i>Astrophysical Journal</i> , 2002, 581, 745-759.	4.5	5
101	A global MHD simulation of the Jovian magnetosphere interacting with/without the interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 2001, 106, 10723-10742.	3.3	15
102	Three-dimensional simulation study of magnetic reconnection in the solar corona. <i>Earth, Planets and Space</i> , 2001, 53, 491-494.	2.5	0
103	Numerical study of nonlinear forced magnetic reconnection. <i>Physics of Plasmas</i> , 2001, 8, 132-138.	1.9	7
104	Nonlinear dynamics of magnetic buoyancy instabilities in a sheared magnetic field. <i>Physics of Plasmas</i> , 1998, 5, 2582-2589.	1.9	14
105	Bifurcation-Transition Dynamics in Solar Coronal Plasma. <i>Astrophysics and Space Science Library</i> , 1998, , 185-186.	2.7	0
106	Three-dimensional Simulation Study of the Magnetohydrodynamic Relaxation Process in the Solar Corona. II. <i>Astrophysical Journal</i> , 1997, 474, 782-789.	4.5	4
107	MHD simulation of a rapidly rotating magnetosphere interacting with the external plasma flow. <i>Geophysical Research Letters</i> , 1997, 24, 2627-2630.	4.0	14
108	Computer Simulations of Pulsed-Laser Induced Coherent Plasma Oscillations in GaAs Crystals. <i>Journal of the Physical Society of Japan</i> , 1996, 65, 803-810.	1.6	5

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109	Bifurcation and Stability of Coronal Magnetic Arcades in a Linear Force-free Field. <i>Astrophysical Journal</i> , 1996, 461, 415.	4.5	40
110	Bifurcation and Stability of the Coronal Magnetic Field. , 1996, , 303-304.		0
111	Three Dimensional Simulation Study of the Magnetohydrodynamic Relaxation Process in the Solar Corona. , 1996, , 587-588.		0
112	A solar flare triggering mechanism based on the Woltjer-Taylor minimum energy principle. <i>Astrophysical Journal</i> , 1995, 441, 942.	4.5	71
113	Three-dimensional simulation study of the magnetohydrodynamic relaxation process in the solar corona. 1: Spontaneous generation of Taylor-Heyvaerts-Priest state. <i>Astrophysical Journal</i> , 1994, 433, 361.	4.5	22
114	Energy conversion processes in the starting-up phase of externally driven reconnection. <i>Physics of Fluids B</i> , 1993, 5, 357-364.	1.7	2
115	Role of compressibility on driven magnetic reconnection. <i>Physics of Fluids B</i> , 1992, 4, 450-457.	1.7	34
116	Simulation study on double reconnection in the ultra-low-q configuration. <i>Nuclear Fusion</i> , 1991, 31, 179-183.	3.5	4
117	MHD simulation of the toroidal phase locking mechanism in a reversed field pinch plasma. <i>Nuclear Fusion</i> , 1991, 31, 1923-1932.	3.5	25
118	Computer Simulation-Trends in Highly Nonlinear Physics. 2. Macroscopic Nonlinear Phenomena. 2-2. Nonlinear Physics in Reversed-Field Pinch.. <i>Kakuyō Kenkyū</i> , 1991, 65, 528-543.	0.1	0
119	Simulation study of the self-sustainment mechanism in the reversed field pinch configuration. <i>Nuclear Fusion</i> , 1990, 30, 2075-2096.	3.5	64
120	Global and local relaxations in magnetohydrodynamic plasmas. <i>Physics of Fluids B</i> , 1989, 1, 255-257.	1.7	12
121	Simulation study of ultra-low-q discharge process. <i>Nuclear Fusion</i> , 1988, 28, 89-98.	3.5	13
122	Non-linear coupling effects on the relaxation process in the reversed field pinch. <i>Nuclear Fusion</i> , 1987, 27, 821-832.	3.5	55
123	Observation of ultra low q equilibrium. <i>Nuclear Fusion</i> , 1987, 27, 1169-1173.	3.5	13
124	Spontaneous formation of magnetohydrodynamic equilibrium profiles: Tokamaks, reversed-field pinches, and their intermediates. <i>Physics of Fluids</i> , 1987, 30, 2465.	1.4	20
125	Simulation Study of Relaxation Process in the Finite \hat{I}^2 Reversed-Field Pinch. <i>Journal of the Physical Society of Japan</i> , 1987, 56, 963-972.	1.6	10
126	Simulation study of the self-reversal process in the reversed-field pinch based on a non-linearly driven reconnection model. <i>Nuclear Fusion</i> , 1986, 26, 1051-1061.	3.5	57

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127	Nonlinear driven reconnection in the reversed-field pinch. Physical Review Letters, 1985, 54, 808-810.	7.8	38
128	Magnetic Helicity and Stability in Solar Corona. Geophysical Monograph Series, 0, , 149-156.	0.1	2