

K W Hill

List of Publications by Year in descending order

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123
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218381

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times ranked

1390
citing authors

#	ARTICLE	IF	CITATIONS
1	Hot Spot Evolution Measured by High-Resolution X-Ray Spectroscopy at the National Ignition Facility. <i>Physical Review Letters</i> , 2022, 128, 185002.	2.9	6
2	Comparing plasma conditions in short-pulse-heated foils via fine-structure x-ray emission. <i>Review of Scientific Instruments</i> , 2021, 92, 033525.	0.6	4
3	Calibration of a versatile multi-energy soft x-ray diagnostic for WEST long pulse plasmas. <i>Review of Scientific Instruments</i> , 2021, 92, 043509.	0.6	2
4	A new class of focusing crystal shapes for Bragg spectroscopy of small, point-like, x-ray sources in laser produced plasmas. <i>Review of Scientific Instruments</i> , 2021, 92, 043531.	0.6	4
5	Correction and verification of x-ray imaging crystal spectrometer analysis on Wendelstein 7-X through x-ray ray tracing. <i>Review of Scientific Instruments</i> , 2021, 92, 043530.	0.6	4
6	Pulse width dependence of magnetic field generation using laser-powered capacitor coils. <i>Physics of Plasmas</i> , 2021, 28, 052105.	0.7	9
7	The multi-optics high-resolution absorption x-ray spectrometer (HiRAXS) for studies of materials under extreme conditions. <i>Review of Scientific Instruments</i> , 2021, 92, 053102.	0.6	6
8	Multi-energy reconstructions, central electron temperature measurements, and early detection of the birth and growth of runaway electrons using a versatile soft x-ray pinhole camera at MST. <i>Review of Scientific Instruments</i> , 2021, 92, 073502.	0.6	3
9	Design and expected performance of a variable-radii sinusoidal spiral x-ray spectrometer for the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2021, 92, 093904.	0.6	3
10	Measurements of Unequilibrated Ions in Hot, Solid-Density Plasmas Via X-Ray Lineshapes*. , 2021, , .		0
11	Measurement of heating depth of highly-ionized copper from relativistically-intense laser pulses. , 2021, , .		0
12	K-shell spectroscopy of Ni nanowire plasmas heated with highly relativistic laser pulses*. , 2021, , .		0
13	Design and engineering challenges of a multi-energy hard x-ray camera for long-pulse profile measurements at WEST tokamak. <i>Fusion Engineering and Design</i> , 2021, 173, 112957.	1.0	1
14	Solid-Density Ion Temperature from Redshifted and Double-Peaked Stark Line Shapes. <i>Physical Review Letters</i> , 2021, 127, 205001.	2.9	6
15	Study of core plasma rotation characteristics of RF-heated H-mode discharges on experimental advanced superconducting tokamak. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	7
16	Core radial electric field and transport in Wendelstein 7-X plasmas. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	47
17	Absolute calibration of a time-resolved high resolution x-ray spectrometer for the National Ignition Facility (invited). <i>Review of Scientific Instruments</i> , 2018, 89, 10F125.	0.6	5
18	Pixel-to-pixel variation on a calibrated PILATUS3-based multi-energy soft x-ray detector. <i>Review of Scientific Instruments</i> , 2018, 89, 10G119.	0.6	9

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19	A computational tool for simulation and design of tangential multi-energy soft x-ray pin-hole cameras for tokamak plasmas. Review of Scientific Instruments, 2018, 89, 10G120.	0.6	3
20	Upgrade of X-ray crystal spectrometer for high temperature measurement using neon-like xenon lines on EAST. Review of Scientific Instruments, 2018, 89, 10F110.	0.6	10
21	In situ wavelength calibration system for the X-ray Imaging Crystal Spectrometer (XICS) on W7-X. Review of Scientific Instruments, 2018, 89, 10F107.	0.6	9
22	Simulation, design, and first test of a multi-energy soft x-ray (SXR) pinhole camera in the Madison Symmetric Torus (MST). Review of Scientific Instruments, 2018, 89, 10G116.	0.6	12
23	Development of wavelength calibration techniques for high-resolution x-ray imaging crystal spectrometers on the EAST tokamak. Review of Scientific Instruments, 2018, 89, 10F112.	0.6	11
24	A new toroidal x-ray crystal spectrometer for the diagnosis of high energy density plasmas at the National Ignition Facility. Review of Scientific Instruments, 2018, 89, 10F118.	0.6	9
25	ITER core imaging X-ray spectroscopy: Atomic physics issues. AIP Conference Proceedings, 2017, , .	0.3	4
26	Investigation of multi-cone geometry imaging with laser lights. Review of Scientific Instruments, 2017, 88, 123116.	0.6	1
27	Upgrades of poloidal and tangential x-ray imaging crystal spectrometers for temperature and rotation measurements on EAST. Review of Scientific Instruments, 2016, 87, 11E342.	0.6	15
28	Multi-energy SXR cameras for magnetically confined fusion plasmas (invited). Review of Scientific Instruments, 2016, 87, 11E204.	0.6	10
29	Multi-energy x-ray detector calibration for Te and impurity density (nZ) measurements of MCF plasmas. Review of Scientific Instruments, 2016, 87, 11E320.	0.6	6
30	A multi-cone x-ray imaging Bragg crystal spectrometer. Review of Scientific Instruments, 2016, 87, 11E333.	0.6	10
31	Development of a high resolution x-ray spectrometer for the National Ignition Facility (NIF). Review of Scientific Instruments, 2016, 87, 11E344.	0.6	11
32	Spatial resolution of a spherical x-ray crystal spectrometer at various magnifications. Review of Scientific Instruments, 2016, 87, 11D611.	0.6	0
33	Measurement of helium-like and hydrogen-like argon spectra using double-crystal X-ray spectrometers on EAST. Review of Scientific Instruments, 2016, 87, 11E326.	0.6	20
34	Lineshape spectroscopy with a very high resolution, very high signal-to-noise crystal spectrometer. Review of Scientific Instruments, 2016, 87, 063501.	0.6	18
35	Measuring the diffraction properties of an imaging quartz(211) crystal. Review of Scientific Instruments, 2016, 87, 063103.	0.6	2
36	A high-resolving-power x-ray spectrometer for the OMEGA EP Laser (invited). Review of Scientific Instruments, 2016, 87, 11D504.	0.6	7

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37	Spherical quartz crystals investigated with synchrotron radiation. Review of Scientific Instruments, 2015, 86, 103704.	0.6	17
38	Investigation of Toroidal Acceleration and Potential Acceleration Forces in EAST and J-TEXT Plasmas. Plasma and Fusion Research, 2015, 10, 3402069-3402069.	0.3	1
39	Tomographic inversion techniques incorporating physical constraints for line integrated spectroscopy in stellarators and tokamaks. Review of Scientific Instruments, 2014, 85, 11E424.	0.6	15
40	A new spectrometer design for the x-ray spectroscopy of laser-produced plasmas with high (sub-ns) time resolution. Review of Scientific Instruments, 2014, 85, 11D627.	0.6	2
41	Upgrades of imaging x-ray crystal spectrometers for high-resolution and high-temperature plasma diagnostics on EAST. Review of Scientific Instruments, 2014, 85, 11E406.	0.6	45
42	X-ray tests of a two-dimensional stigmatic imaging scheme with variable magnifications. Review of Scientific Instruments, 2014, 85, 11D604.	0.6	5
43	Characterization of spatially resolved high resolution x-ray spectrometers for high energy density physics and light source experiments. Review of Scientific Instruments, 2014, 85, 11D612.	0.6	7
44	A high-resolution imaging x-ray crystal spectrometer for high energy density plasmas. Review of Scientific Instruments, 2014, 85, 11E606.	0.6	14
45	Alternative optical concept for electron cyclotron emission imaging. Review of Scientific Instruments, 2014, 85, 11D802.	0.6	1
46	ECH effects on toroidal rotation: KSTAR experiments, intrinsic torque modelling and gyrokinetic stability analyses. Nuclear Fusion, 2013, 53, 113031.	1.6	18
47	Novel energy resolving x-ray pinhole camera on Alcator C-Mod. Review of Scientific Instruments, 2012, 83, 10E526.	0.6	9
48	Layout and results from the initial operation of the high-resolution x-ray imaging crystal spectrometer on the Large Helical Device. Review of Scientific Instruments, 2012, 83, 083506.	0.6	29
49	Optimization of the configuration of pixilated detectors based on the Shannon-Nyquist theory. Review of Scientific Instruments, 2012, 83, 10E139.	0.6	5
50	Application of spatially resolved high resolution crystal spectrometry to inertial confinement fusion plasmas. Review of Scientific Instruments, 2012, 83, 10E125.	0.6	1
51	Observation of Cocurrent Toroidal Rotation in the EAST Tokamak with Lower-Hybrid Current Drive. Physical Review Letters, 2011, 106, 235001.	2.9	46
52	Spatially Resolved Measurements of Temperature and Rotation Velocity from the Tangential Imaging X-ray Crystal Spectrometer on the EAST Tokamak. Journal of the Korean Physical Society, 2011, 59, 2734-2738.	0.3	20
53	Objectives and layout of a high-resolution x-ray imaging crystal spectrometer for the large helical device. Review of Scientific Instruments, 2010, 81, 10E328.	0.6	14
54	Development of a spatially resolving x-ray crystal spectrometer for measurement of ion-temperature (Ti) and rotation-velocity (v) profiles in ITER. Review of Scientific Instruments, 2010, 81, 10E322.	0.6	23

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55	Soft x-ray continuum radiation transmitted through metallic filters: An analytical approach to fast electron temperature measurements. <i>Review of Scientific Instruments</i> , 2010, 81, 10E303.	0.6	12
56	Analyzing the Radiation Properties of High-Z Impurities in High-Temperature Plasmas. , 2009, , .		5
57	Observations of counter-current toroidal rotation in Alcator C-Mod LHCD plasmas. <i>Nuclear Fusion</i> , 2009, 49, 025004.	1.6	35
58	Observation of Self-Generated Flows in Tokamak Plasmas with Lower-Hybrid-Driven Current. <i>Physical Review Letters</i> , 2009, 102, 035002.	2.9	54
59	A quantitative account of electron energy transport in a National Spherical Tokamak Experiment plasma. <i>Physics of Plasmas</i> , 2008, 15, 056108.	0.7	29
60	Atomic Physics in ITER â€” The Foundation for the Next Step to Fusion Power. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	3
61	Studies of improved electron confinement in low density L-mode National Spherical Torus Experiment discharges. <i>Physics of Plasmas</i> , 2006, 13, 092511.	0.7	7
62	Effect of plasma shaping on performance in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2006, 13, 056122.	0.7	33
63	Fe XVII Emission from Hot, Collisional Plasmas. , 2005, , .		0
64	Initial physics results from the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2001, 8, 1977-1987.	0.7	46
65	Tests of local transport theory and reduced wall impurity influx with highly radiative plasmas in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1999, 6, 877-884.	0.7	45
66	Notched velocity profiles and the radial electric field in high ion temperature plasmas in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1998, 5, 665-681.	0.7	61
67	Fusion plasma experiments on TFTR: A 20 year retrospective. <i>Physics of Plasmas</i> , 1998, 5, 1577-1589.	0.7	91
68	Deuteriumâ€“tritium plasmas in novel regimes in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1997, 4, 1714-1724.	0.7	27
69	Mode conversion heating and current drive in TFTR. , 1997, , .		4
70	Alpha particle losses from Tokamak Fusion Test Reactor deuteriumâ€“tritium plasmas. <i>Physics of Plasmas</i> , 1996, 3, 1875-1880.	0.7	25
71	Confinement analysis in lowâ€“confinement mode of hydrogen isotope experiments on the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1996, 3, 4521-4535.	0.7	12
72	Ion cyclotron range of frequency experiments in the Tokamak Fusion Test Reactor with fast waves and mode converted ion Bernstein waves. <i>Physics of Plasmas</i> , 1996, 3, 2006-2012.	0.7	26

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73	Mode Conversion Heating and Current Drive Experiments in TFTR. Physical Review Letters, 1996, 76, 764-767.	2.9	45
74	Enhancement of Tokamak Fusion Test Reactor performance by lithium conditioning. Physics of Plasmas, 1996, 3, 1892-1897.	0.7	181
75	Deuterium-tritium experiments on TFTR. AIP Conference Proceedings, 1995, , .	0.3	0
76	Enhanced performance of deuterium-tritium fueled supershots using extensive lithium conditioning in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 4252-4256.	0.7	36
77	A new device for injection of iron atoms into plasmas. Review of Scientific Instruments, 1995, 66, 568-570.	0.6	0
78	Numerical studies of the imaging properties of doubly focussing crystals and their application to ITER. Review of Scientific Instruments, 1995, 66, 530-532.	0.6	19
79	Luminescence and transmission measurements on fibers exposed to high neutron fluxes. Review of Scientific Instruments, 1995, 66, 904-906.	0.6	13
80	Review of deuterium-tritium results from the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 2176-2188.	0.7	89
81	Toroidal Alfvén eigenmode induced ripple trapping. Physics of Plasmas, 1995, 2, 2871-2873.	0.7	87
82	Parametric variations of ion transport in TFTR. AIP Conference Proceedings, 1994, , .	0.3	3
83	Preparations for deuterium-tritium experiments on the Tokamak Fusion Test Reactor*. Physics of Plasmas, 1994, 1, 1560-1567.	0.7	7
84	Nondimensional transport scaling in the Tokamak Fusion Test Reactor: Is tokamak transport Bohm or gyro-Bohm?. Physics of Fluids B, 1993, 5, 477-498.	1.7	126
85	Helium, iron, and electron particle transport and energy transport studies on the Tokamak Fusion Test Reactor. Physics of Fluids B, 1993, 5, 2215-2228.	1.7	49
86	Nuclear radiation effects in fused SiO ₂ lightguides. Review of Scientific Instruments, 1992, 63, 4735-4737.	0.6	19
87	Ion cyclotron range of frequencies stabilization of sawteeth on Tokamak Fusion Test Reactor. Physics of Fluids B, 1992, 4, 2155-2164.	1.7	41
88	Status and Plans for TFTR. Fusion Science and Technology, 1992, 21, 1324-1331.	0.6	23
89	Measurements of TFTR Radiation Shielding During High Power D-D Operations. Fusion Science and Technology, 1991, 19, 1989-1995.	0.6	5
90	High- β plasmas in the TFTR tokamak. Physics of Fluids B, 1991, 3, 2308-2314.	1.7	17

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91	Experiments utilizing ion cyclotron range of frequencies heating on the TFTR tokamak. Physics of Fluids B, 1991, 3, 2270-2276.	1.7	9
92	High-beta operation and magnetohydrodynamic activity on the TFTR tokamak. Physics of Fluids B, 1990, 2, 1287-1290.	1.7	35
93	Correlations of heat and momentum transport in the TFTR tokamak. Physics of Fluids B, 1990, 2, 1300-1305.	1.7	47
94	End points in discharge cleaning on TFTR. AIP Conference Proceedings, 1990, , .	0.3	0
95	High-count-rate operation of a TFTR position-sensitive x-ray detector with delay-line readouts. Review of Scientific Instruments, 1990, 61, 2771-2773.	0.6	0
96	Tangential imaging for fluctuation studies. Review of Scientific Instruments, 1990, 61, 3055-3057.	0.6	14
97	Zeff behavior following Li and C pellet injection into TFTR. Review of Scientific Instruments, 1990, 61, 3087-3089.	0.6	1
98	Impact of radiation measurements on hardening of TFTR diagnostics. Review of Scientific Instruments, 1990, 61, 3256-3258.	0.6	5
99	Measurements of the ion temperature and plasma rotation from $K\alpha$ emission with the TFTR horizontal x-ray crystal spectrometer. Review of Scientific Instruments, 1988, 59, 2127-2130.	0.6	16
100	Measurements of radial profiles of the ion temperature and the plasma rotation velocity with the TFTR vertical x-ray crystal spectrometer. Review of Scientific Instruments, 1988, 59, 2131-2134.	0.6	26
101	Measurements of radial profiles of the ion temperature and the plasma rotation velocity with the TFTR vertical x-ray crystal spectrometer (abstract). Review of Scientific Instruments, 1988, 59, 1852-1852.	0.6	0
102	Plasma profile fitting and alternate-view generation. Review of Scientific Instruments, 1988, 59, 1760-1761.	0.6	0
103	Measurements of the ion temperature and plasma rotation from $K\alpha$ emission with the TFTR horizontal x-ray crystal spectrometer (abstract). Review of Scientific Instruments, 1988, 59, 1853-1853.	0.6	0
104	Diagnostic applications of the TFTR XIS system. Review of Scientific Instruments, 1986, 57, 2136-2138.	0.6	10
105	Perpendicular bremsstrahlung emission of suprathermal electrons. Review of Scientific Instruments, 1986, 57, 2130-2132.	0.6	6
106	Evaluation of soft x-ray average recombination coefficient and average charge for metallic impurities in beam-heated plasmas. Review of Scientific Instruments, 1986, 57, 2148-2150.	0.6	3
107	Effective $K\alpha$ x-ray excitation rates for plasma impurity measurements. Review of Scientific Instruments, 1986, 57, 2151-2153.	0.6	0
108	TFTR vertical x-ray imaging system. Review of Scientific Instruments, 1986, 57, 2133-2135.	0.6	15

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109	Probabilistic model of x-ray PHA data. Review of Scientific Instruments, 1986, 57, 1926-1928.	0.6	2
110	Vertical high-resolution Bragg x-ray spectrometer for the tokamak fusion test reactor. Review of Scientific Instruments, 1986, 57, 2145-2147.	0.6	24
111	Shielding Analysis for the Horizontal X-ray Imaging System on the TFTR. Fusion Science and Technology, 1985, 8, 1020-1025.	0.6	4
112	Measurement of the wall radiation in soft x-ray region in PDX. Review of Scientific Instruments, 1985, 56, 1160-1164.	0.6	3
113	Measurement of the wall radiation in soft x-ray region in PDX (abstract). Review of Scientific Instruments, 1985, 56, 847-847.	0.6	0
114	Gridded ionization chamber for detection of x-ray wave activity in tokamak plasmas. Review of Scientific Instruments, 1985, 56, 349-354.	0.6	2
115	Tokamak Fusion Test Reactor horizontal high-resolution Bragg x-ray spectrometer (abstract). Review of Scientific Instruments, 1985, 56, 848-848.	0.6	1
116	Tokamak Fusion Test Reactor prototype x-ray pulse-height analyzer diagnostic. Review of Scientific Instruments, 1985, 56, 840-842.	0.6	31
117	Satellite spectra for heliumlike titanium. II. Physical Review A, 1985, 32, 3011-3029.	1.0	115
118	Tokamak Fusion Test Reactor x-ray imaging diagnostic. Review of Scientific Instruments, 1985, 56, 830-832.	0.6	25
119	Tokamak Fusion Test Reactor horizontal high-resolution Bragg x-ray spectrometer. Review of Scientific Instruments, 1985, 56, 1165-1168.	0.6	28
120	Fast multichannel electron temperature diagnostic for TFTR using x-ray imaging. Review of Scientific Instruments, 1985, 56, 827-829.	0.6	17
121	Soft x-ray measurements from the PDX tokamak. Review of Scientific Instruments, 1982, 53, 1198-1213.	0.6	45
122	Low energy x-ray emission from magnetic fusion plasmas. AIP Conference Proceedings, 1981, , .	0.3	5
123	High performance plasmas on the National Spherical Torus Experiment. , 0, , .		0