

B K Alpert

List of Publications by Year in descending order

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38
papers

2,380
citations

331670

21
h-index

345221

36
g-index

38
all docs

38
docs citations

38
times ranked

1607
citing authors

#	ARTICLE	IF	CITATIONS
1	A Class of Bases in L^2 for the Sparse Representation of Integral Operators. SIAM Journal on Mathematical Analysis, 1993, 24, 246-262.	1.9	401
2	Wavelet-Like Bases for the Fast Solution of Second-Kind Integral Equations. SIAM Journal of Scientific Computing, 1993, 14, 159-184.	2.8	346
3	Adaptive Solution of Partial Differential Equations in Multiwavelet Bases. Journal of Computational Physics, 2002, 182, 149-190.	3.8	204
4	Rapid Evaluation of Nonreflecting Boundary Kernels for Time-Domain Wave Propagation. SIAM Journal on Numerical Analysis, 2000, 37, 1138-1164.	2.3	166
5	A Fast Algorithm for the Evaluation of Legendre Expansions. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 158-179.	1.5	160
6	Hybrid Gauss-Trapezoidal Quadrature Rules. SIAM Journal of Scientific Computing, 1999, 20, 1551-1584.	2.8	157
7	HOLMES. European Physical Journal C, 2015, 75, 112.	3.9	127
8	Nonreflecting Boundary Conditions for the Time-Dependent Wave Equation. Journal of Computational Physics, 2002, 180, 270-296.	3.8	108
9	A practical superconducting-microcalorimeter X-ray spectrometer for beamline and laboratory science. Review of Scientific Instruments, 2017, 88, 053108.	1.3	96
10	A Fast Spherical Filter with Uniform Resolution. Journal of Computational Physics, 1997, 136, 580-584.	3.8	84
11	A high resolution gamma-ray spectrometer based on superconducting microcalorimeters. Review of Scientific Instruments, 2012, 83, 093113.	1.3	77
12	The Practice of Pulse Processing. Journal of Low Temperature Physics, 2016, 184, 374-381.	1.4	65
13	Code-division-multiplexed readout of large arrays of TES microcalorimeters. Applied Physics Letters, 2016, 109, .	3.3	38
14	Ultrafast Time-Resolved X-ray Absorption Spectroscopy of Ferrioxalate Photolysis with a Laser Plasma X-ray Source and Microcalorimeter Array. Journal of Physical Chemistry Letters, 2017, 8, 1099-1104.	4.6	35
15	A reassessment of absolute energies of the x-ray L lines of lanthanide metals. Metrologia, 2017, 54, 494-511.	1.2	35
16	MICROCALORIMETER SPECTROSCOPY AT HIGH PULSE RATES: A MULTI-PULSE FITTING TECHNIQUE. Astrophysical Journal, Supplement Series, 2015, 219, 35.	7.7	32
17	The HOLMES Experiment. Journal of Low Temperature Physics, 2016, 184, 922-929.	1.4	32
18	An Integral Evolution Formula for the Wave Equation. Journal of Computational Physics, 2000, 162, 536-543.	3.8	26

#	ARTICLE	IF	CITATIONS
19	Algorithms for Identification of Nearly-Coincident Events in Calorimetric Sensors. <i>Journal of Low Temperature Physics</i> , 2016, 184, 263-273.	1.4	24
20	High-order quadratures for integral operators with singular kernels. <i>Journal of Computational and Applied Mathematics</i> , 1995, 60, 367-378.	2.0	22
21	TES X-ray Spectrometer at SLAC LCLS-II. <i>Journal of Low Temperature Physics</i> , 2018, 193, 1287-1297.	1.4	21
22	Note: Operation of gamma-ray microcalorimeters at elevated count rates using filters with constraints. <i>Review of Scientific Instruments</i> , 2013, 84, 056107.	1.3	19
23	Pile-Up Discrimination Algorithms for the HOLMES Experiment. <i>Journal of Low Temperature Physics</i> , 2016, 184, 405-411.	1.4	17
24	High-resolution high-speed microwave-multiplexed low temperature microcalorimeters for the HOLMES experiment. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	13
25	Status of the HOLMES Experiment to Directly Measure the Neutrino Mass. <i>Journal of Low Temperature Physics</i> , 2018, 193, 1137-1145.	1.4	11
26	Optimization of the TES-Bias Circuit for a Multiplexed Microcalorimeter Array. <i>Journal of Low Temperature Physics</i> , 2012, 167, 595-601.	1.4	10
27	Exceptionally reliable density-solving algorithms for multiparameter mixture models from Chebyshev expansion rootfinding. <i>Fluid Phase Equilibria</i> , 2018, 476, 89-102.	2.5	9
28	Approaches to the Optimal Nonlinear Analysis of Microcalorimeter Pulses. <i>Journal of Low Temperature Physics</i> , 2018, 193, 539-546.	1.4	8
29	Efficient and Precise Representation of Pure Fluid Phase Equilibria with Chebyshev Expansions. <i>International Journal of Thermophysics</i> , 2021, 42, 1.	2.1	8
30	ChebTools: C++11 (and Python) tools for working with Chebyshev expansions. <i>Journal of Open Source Software</i> , 2018, 3, 569.	4.6	8
31	Progress in the Development of TES Microcalorimeter Detectors Suitable for Neutrino Mass Measurement. <i>IEEE Transactions on Applied Superconductivity</i> , 2021, 31, 1-5.	1.7	7
32	Predicted Energy Resolution of a Running-Sum Algorithm for Microcalorimeters. <i>Journal of Low Temperature Physics</i> , 2012, 167, 582-587.	1.4	6
33	Advances in Analysis of Microcalorimeter Gamma-Ray Spectra. <i>IEEE Transactions on Nuclear Science</i> , 2019, 66, 2355-2363.	2.0	4
34	Fast Updating Multipole Coulombic Potential Calculation. <i>SIAM Journal of Scientific Computing</i> , 2017, 39, A1038-A1061.	2.8	2
35	Status of the HOLMES Experiment. <i>Journal of Low Temperature Physics</i> , 2020, 199, 1098-1106.	1.4	1
36	Count Rate Optimizations for TES Detectors at a Femtosecond X-ray Laser. <i>Journal of Low Temperature Physics</i> , 2020, 199, 1038-1045.	1.4	1

#	ARTICLE	IF	CITATIONS
37	Condition Number of a Vandermonde Matrix. SIAM Review, 1996, 38, 314-314.	9.5	0
38	Multiplexed Superconducting Detectors for a Neutrino Mass Experiment. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-4.	1.7	0