B K Alpert

List of Publications by Year
in descending order

38	2,380	331670 21	345221 36
papers	citations	h-index	g-index

38	38	38	1607
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiplexed Superconducting Detectors for a Neutrino Mass Experiment. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-4.	1.7	0
2	Efficient and Precise Representation of Pure Fluid Phase Equilibria with Chebyshev Expansions. International Journal of Thermophysics, 2021, 42, 1.	2.1	8
3	Progress in the Development of TES Microcalorimeter Detectors Suitable for Neutrino Mass Measurement. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	7
4	Status of the HOLMES Experiment. Journal of Low Temperature Physics, 2020, 199, 1098-1106.	1.4	1
5	Count Rate Optimizations for TES Detectors at a Femtosecond X-ray Laser. Journal of Low Temperature Physics, 2020, 199, 1038-1045.	1.4	1
6	High-resolution high-speed microwave-multiplexed low temperature microcalorimeters for the HOLMES experiment. European Physical Journal C, 2019, 79, 1.	3.9	13
7	Advances in Analysis of Microcalorimeter Gamma-Ray Spectra. IEEE Transactions on Nuclear Science, 2019, 66, 2355-2363.	2.0	4
8	TES X-ray Spectrometer at SLAC LCLS-II. Journal of Low Temperature Physics, 2018, 193, 1287-1297.	1.4	21
9	Exceptionally reliable density-solving algorithms for multiparameter mixture models from Chebyshev expansion rootfinding. Fluid Phase Equilibria, 2018, 476, 89-102.	2.5	9
10	Approaches to the Optimal Nonlinear Analysis of Microcalorimeter Pulses. Journal of Low Temperature Physics, 2018, 193, 539-546.	1.4	8
11	Status of the HOLMES Experiment to Directly Measure the Neutrino Mass. Journal of Low Temperature Physics, 2018, 193, 1137-1145.	1.4	11
12	ChebTools: C++11 (and Python) tools for working with Chebyshev expansions. Journal of Open Source Software, 2018, 3, 569.	4.6	8
13	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
14	Fast Updating Multipole Coulombic Potential Calculation. SIAM Journal of Scientific Computing, 2017, 39, A1038-A1061.	2.8	2
15	A reassessment of absolute energies of the x-ray L lines of lanthanide metals. Metrologia, 2017, 54, 494-511.	1.2	35
16	A practical superconducting-microcalorimeter X-ray spectrometer for beamline and laboratory science. Review of Scientific Instruments, 2017, 88, 053108.	1.3	96
17	Code-division-multiplexed readout of large arrays of TES microcalorimeters. Applied Physics Letters, 2016, 109, .	3.3	38
18	Pile-Up Discrimination Algorithms for the HOLMES Experiment. Journal of Low Temperature Physics, 2016, 184, 405-411.	1.4	17

#	Article	IF	Citations
19	The Practice of Pulse Processing. Journal of Low Temperature Physics, 2016, 184, 374-381.	1.4	65
20	Algorithms for Identification of Nearly-Coincident Events in Calorimetric Sensors. Journal of Low Temperature Physics, 2016, 184, 263-273.	1.4	24
21	The HOLMES Experiment. Journal of Low Temperature Physics, 2016, 184, 922-929.	1.4	32
22	MICROCALORIMETER SPECTROSCOPY AT HIGH PULSE RATES: A MULTI-PULSE FITTING TECHNIQUE. Astrophysical Journal, Supplement Series, 2015, 219, 35.	7.7	32
23	HOLMES. European Physical Journal C, 2015, 75, 112.	3.9	127
24	Note: Operation of gamma-ray microcalorimeters at elevated count rates using filters with constraints. Review of Scientific Instruments, 2013, 84, 056107.	1.3	19
25	A high resolution gamma-ray spectrometer based on superconducting microcalorimeters. Review of Scientific Instruments, 2012, 83, 093113.	1.3	77
26	Predicted Energy Resolution of a Running-Sum Algorithm for Microcalorimeters. Journal of Low Temperature Physics, 2012, 167, 582-587.	1.4	6
27	Optimization of the TES-Bias Circuit for a Multiplexed Microcalorimeter Array. Journal of Low Temperature Physics, 2012, 167, 595-601.	1.4	10
28	Nonreflecting Boundary Conditions for the Time-Dependent Wave Equation. Journal of Computational Physics, 2002, 180, 270-296.	3.8	108
29	Adaptive Solution of Partial Differential Equations in Multiwavelet Bases. Journal of Computational Physics, 2002, 182, 149-190.	3.8	204
30	An Integral Evolution Formula for the Wave Equation. Journal of Computational Physics, 2000, 162, 536-543.	3.8	26
31	Rapid Evaluation of Nonreflecting Boundary Kernels for Time-Domain Wave Propagation. SIAM Journal on Numerical Analysis, 2000, 37, 1138-1164.	2.3	166
32	Hybrid Gauss-Trapezoidal Quadrature Rules. SIAM Journal of Scientific Computing, 1999, 20, 1551-1584.	2.8	157
33	A Fast Spherical Filter with Uniform Resolution. Journal of Computational Physics, 1997, 136, 580-584.	3.8	84
34	Condition Number of a Vandermonde Matrix. SIAM Review, 1996, 38, 314-314.	9.5	0
35	High-order quadratures for integral operators with singular kernels. Journal of Computational and Applied Mathematics, 1995, 60, 367-378.	2.0	22
36	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

#	Article	IF	Citations
37	Wavelet-Like Bases for the Fast Solution of Second-Kind Integral Equations. SIAM Journal of Scientific Computing, 1993, 14, 159-184.	2.8	346
38	A Fast Algorithm for the Evaluation of Legendre Expansions. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 158-179.	1.5	160