Alan J Walker

List of Publications by Year in descending order

23 papers	105 citations	1478505 6 h-index	1474206 9 g-index
23 all docs	23 docs citations	23 times ranked	82 citing authors

#	Article	IF	Citations
1	PIEZOELECTRIC ULTRASONIC TRANSDUCERS WITH FRACTAL GEOMETRY. Fractals, 2011, 19, 469-479.	3.7	15
2	The Provision of Mathematics and Statistics Support in Scottish Higher Education Institutions (2017) â€" A Comparative Study by the Scottish Mathematics Support Network. MSOR Connections, 2018, 16, 5.	0.1	14
3	â€œPipe Organâ€•Inspired Air-Coupled Ultrasonic Transducers With Broader Bandwidth. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1873-1881.	3.0	9
4	Asymptotic properties of radial $A + B \rightarrow C$ reaction fronts. Physical Review E, 2018, 98, .	2.1	9
5	The alignment of cylindrically layered smectic A liquid crystals with director tilt on the boundaries. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 385205.	2.1	8
6	A theoretical model of an electrostatic ultrasonic transducer incorporating resonating conduits. IMA Journal of Applied Mathematics, 2010, 75, 796-810.	1.6	8
7	Couette flow of a smectic A liquid crystal. Journal of Physics Condensed Matter, 2009, 21, 155101.	1.8	6
8	A theoretical model of a new electrostatic transducer incorporating fluidic amplification. , 2008, , .		5
9	Acoustic waves in compressible planar layered smectic liquid crystals. Journal of Physics Condensed Matter, 2010, 22, 325106.	1.8	5
10	Periodic Disturbances in Cylindrically Layered Smectic A. Molecular Crystals and Liquid Crystals, 2007, 478, 33/[789]-43/[799].	0.9	4
11	Poiseuille flow of a smectic A liquid crystal. International Journal of Engineering Science, 2010, 48, 1961-1970.	5.0	4
12	The use of fractal geometry in the design of piezoelectric ultrasonic transducers. , 2011, , .		4
13	A Mathematical Model of a Novel 3D Fractal-Inspired Piezoelectric Ultrasonic Transducer. Sensors, 2016, 16, 2170.	3.8	4
14	A pipe organ-inspired ultrasonic transducer. IMA Journal of Applied Mathematics, 2017, 82, 1135-1150.	1.6	3
15	Layer undulations in a smectic C liquid crystal with weak anchoring. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 11849-11861.	2.1	2
16	A theoretical model of an ultrasonic transducer incorporating spherical resonators. IMA Journal of Applied Mathematics, 0, , hxv023.	1.6	2
17	Comparison of empirical and predicted substrate temperature during surface melting of microalloyed steel using TIG technique and considering three shielding gases. Applied Surface Science, 2019, 477, 179-183.	6.1	2
18	THE EFFECTIVENESS OF A SIERPINSKI CARPET-INSPIRED TRANSDUCER. Fractals, 2017, 25, 1750050.	3.7	1

#	Article	IF	Citations
19	Liquid Crystal Modelling and Display Applications Workshop. Liquid Crystals Today, 2012, 21, 22-24.	2.3	0
20	Wave-induced perturbations in cylindrically layered smectic A liquid crystals. Zeitschrift Fur Angewandte Mathematik Und Physik, 2012, 63, 357-371.	1.4	0
21	â€œPipe organâ€•Air-coupled broad bandwidth transducer. , 2017, , .		0
22	â€œPipe organâ€•air-coupled broad bandwidth transducer. , 2017, , .		0
23	Structure of smectic- A liquid crystals in nonuniform domains: Modeling the impact of imperfect boundaries. Physical Review E, 2020, 101, 032703.	2.1	0