David Linton Johnson

List of Publications by Year
in descending order

57 papers	5,225 citations	185998 28 h-index	161609 54 g-index
58 all docs	58 docs citations	58 times ranked	2298 citing authors

#	Article	IF	Citations
1	Impact of T. J. Plonaâ€™s Observation and Quantification of the Biot Fast and Slow Waves. , 2017, , .		0
2	Density of states in granular media in the presence of damping. Physical Review E, 2015, 91, 062208.	0.8	4
3	Nonlinear phasing and dephasing of three-wave mixing of acoustic guided waves. Physical Review E, 2013, 88, 033204.	0.8	0
4	Normal-mode spectrum of finite-sized granular systems: The effects of fluid viscosity at the grain contacts. Physical Review E, 2012, 85, 041302.	0.8	7
5	Experiments on stress dependent borehole acoustic waves. Journal of the Acoustical Society of America, 2011, 130, 1799-1809.	0.5	9
6	Effect of granular media on the vibrational response of a resonant structure: Theory and experiment. Journal of the Acoustical Society of America, 2010, 128, 2768-2781.	0.5	9
7	Aspects of Diffusive-Relaxation Dynamics with a Nonuniform, Partially Absorbing Boundary in General Porous Media. Physical Review Letters, 2009, 103, 118701.	2.9	14
8	Dynamic effective mass of granular media and the attenuation of structure-borne sound. Physical Review E, 2009, 80, 051304.	0.8	15
9	Nonlinear tube waves in permeable formations: Difference frequency generation. Journal of the Acoustical Society of America, 2004, 116, 209-216.	0.5	2
10	Can one hear the shape of a saturation patch?. Geophysical Research Letters, 2002, 29, 12-1.	1.5	86
11	Theory of frequency dependent acoustics in patchy-saturated porous media. Journal of the Acoustical Society of America, 2001, 110, 682-694.	0.5	347
12	Nonlinear elasticity of granular media. Physica B: Condensed Matter, 2000, 279, 134-138.	1.3	21
13	Biot Slow Wave in a Magnetorheological Slurry?. Physical Review Letters, 2000, 84, 396-396.	2.9	3
14	The interaction of tube waves with borehole fractures, Part II: Analytical models. Geophysics, 1998, 63, 809-815.	1.4	37
15	The interaction of tube waves with borehole fractures, Part I: Numerical models. Geophysics, 1998, 63, 800-808.	1.4	32
16	Tube waves and mandrel modes: Experiment and theory. Journal of the Acoustical Society of America, 1997, 102, 3277-3289.	0.5	20
17	Effects of an elastic membrane on tube waves in permeable formations. Journal of the Acoustical Society of America, 1997, 101, 3322-3329.	0.5	39
18	Rough elastic spheres in contact: Memory effects and the transverse force. Journal of the Mechanics and Physics of Solids, 1997, 45, 1025-1036.	2.3	11

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19	A limitation of the Biotâ€“Gardner theory of extensional waves in fluidâ€saturated porous cylinders. Journal of the Acoustical Society of America, 1995, 97, 741-744.	0.5	12
20	Probing porous media with first and second sound. I. Dynamic permeability. Journal of Applied Physics, 1994, 76, 104-114.	1.1	76
21	Nonlinear tube waves. Journal of the Acoustical Society of America, 1994, 96, 1829-1843.	0.5	17
22	Probing porous media with first and second sound. II. Acoustic properties of waterâ€saturated porous media. Journal of Applied Physics, 1994, 76, 115-125.	1.1	121
23	Fluid permeability in porous media: Comparison of electrical estimates with hydrodynamical calculations. Physical Review B, 1992, 45, 186-195.	1.1	101
24	Nuclear magnetic relaxation in porous media: The role of the mean lifetime ï„(ï¡D). Physical Review B, 1991, 44, 4960-4973.	1.1	62
25	Influence of rough surfaces on electrolytic conduction in porous media. Physical Review B, 1989, 40, 2450-2458.	1.1	76
26	Novel geometrical effects in electrolytic conduction in porous media. Physica A: Statistical Mechanics and Its Applications, 1989, 157, 493-496.	1.2	11
27	Probing porous media with superfluid acoustics. Physica A: Statistical Mechanics and Its Applications, 1989, 157, 593-600.	1.2	0
28	Permeability and borehole Stoneley waves: Comparison between experiment and theory. Geophysics, 1989, 54, 66-75.	1.4	125
29	Scaling function for dynamic permeability in porous media. Physical Review Letters, 1989, 63, 580-580.	2.9	28
30	Surface conduction and length scales in porous media. Physical Review B, 1988, 37, 7975-7978.	1.1	14
31	Thermal-Wave Spectroscopy: A New Probe of Porous Media. Physical Review Letters, 1988, 61, 2748-2751.	2.9	4
32	Dependence of the conductivity of a porous medium on electrolyte conductivity. Physical Review B, 1988, 37, 3502-3510.	1.1	84
33	Characteristic pore sizes and transport in porous media. Physical Review B, 1987, 35, 7283-7286.	1.1	103
34	Theory of dynamic permeability and tortuosity in fluid-saturated porous media. Journal of Fluid Mechanics, 1987, 176, 379.	1.4	1,778
35	New Pore-Size Parameter Characterizing Transport in Porous Media. Physical Review Letters, 1986, 57, 2564-2567.	2.9	404
36	Long-wavelength acoustic propagation in ordered and disordered suspensions. Physical Review B, 1984, 30, 4302-4313.	1.1	25

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37	A superfluid waveguide partially packed with superleak. Probing the acoustic properties of porous media. Journal of Low Temperature Physics, 1984, 55, 455-467.	0.6	1
38	Vibrational Modes in Granular Materials. Physical Review Letters, 1984, 52, 831-834.	2.9	107
39	Topological limitations of effective-medium approximations in fluid-solid systems having two longitudinal-acoustic modes. Physical Review B, 1983, 27, 3133-3137.	1.1	12
40	Highâ€frequency acoustic properties of a fluid/porous solid interface. I. New surface mode. Journal of the Acoustical Society of America, 1983, 74, 906-914.	0.5	144
41	Highâ€frequency acoustic properties of a fluid/porous solid interface. II. The 2D reflection Greenâ€™s function. Journal of the Acoustical Society of America, 1983, 74, 915-924.	0.5	62
42	Elastodynamics of gels. Journal of Chemical Physics, 1982, 77, 1531-1539.	1.2	115
43	Continuity of the Chemical Potential across an Oscillating Superleak Transducer. Physical Review Letters, 1982, 49, 1361-1361.	2.9	14
44	Acoustic slow waves and the consolidation transition. Journal of the Acoustical Society of America, 1982, 72, 556-565.	0.5	257
45	Tortuosity and Acoustic Slow Waves. Physical Review Letters, 1982, 49, 1840-1844.	2.9	225
46	Elastodynamics of porous media. , 1982, , 97-110.		3
47	The equivalence of quasistatic flow in fluidâ€saturated porous media and Biotâ€™s slow wave in the limit of zero frequency. Journal of Applied Physics, 1981, 52, 3391-3395.	1.1	117
48	Multiple scattering of acoustic waves with application to the index of refraction of fourth sound. Physical Review B, 1981, 24, 2486-2496.	1.1	51
49	Selfâ€consistent electronic structure of the refractory metal ZrB2, a pseudographite intercalation compound. Journal of Chemical Physics, 1980, 73, 1898-1906.	1.2	27
50	Equivalence between fourth sound in liquid Heâ€‰II at low temperatures and the Biot slow wave in consolidated porous media. Applied Physics Letters, 1980, 37, 1065-1067.	1.5	96
51	Polariton standing-wave structure as a test of boundary conditions for theories of spatial dispersion. Physical Review B, 1978, 18, 1942-1947.	1.1	17
52	Time-Dependent Optical Spectroscopy of Polariton Systems Having a Minimum Group Velocity. Physical Review Letters, 1978, 41, 417-420.	2.9	13
53	Aspects of spatial dispersion in the optical properties of a vacuum-dielectric interface. Physical Review B, 1976, 14, 2398-2410.	1.1	60
54	Local-field effects, x-ray diffraction, and the possibility of observing the optical Borrmann effect: Solutions to Maxwell's equations in perfect crystals. Physical Review B, 1975, 12, 3428-3437.	1.1	28

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55	Local field effects and the dielectric response matrix of insulators: A model. Physical Review B, 1974, 9, 4475-4484.	1.1	130
56	Electronic structure of cubic Laves-Phase ZrZn2: Combined interpolation scheme. Physical Review B, 1974, 9, 2273-2287.	1.1	20
57	The electronic structure of cubic laves phases: ZrZn2. Solid State Communications, 1971, 9, 2039-2043.	0.9	26