Richard Raspet

List of Publications by Year
in descending order

116 papers	2,695 citations	172207 29 h-index	223531 46 g-index
157 all docs	157 docs citations	157 times ranked	1483 citing authors

#	Article	IF	Citations
1	General formulation of thermoacoustics for stacks having arbitrarily shaped pore cross sections. Journal of the Acoustical Society of America, 1991, 90, 3228-3237.	0.5	173
2	Photoacoustic and filter-based ambient aerosol light absorption measurements: Instrument comparisons and the role of relative humidity. Journal of Geophysical Research, 2003, 108, AAC 15-1.	3.3	172
3	Benchmark cases for outdoor sound propagation models. Journal of the Acoustical Society of America, 1995, 97, 173-191.	0.5	109
4	Acoustic streaming in closed thermoacoustic devices. Journal of the Acoustical Society of America, 2001, 110, 1808-1821.	0.5	80
5	The influence of surface atmospheric conditions on the range and area reached by animal vocalizations. Journal of Experimental Biology, 1997, 200, 421-31.	0.8	80
6	Calculation of turbulence effects in an upwardâ€refracting atmosphere. Journal of the Acoustical Society of America, 1990, 87, 2428-2437.	0.5	69
7	Investigation of the mechanisms of lowâ€frequency wind noise generation outdoors. Journal of the Acoustical Society of America, 1992, 92, 1180-1183.	0.5	65
8	A fastâ€field program for sound propagation in a layered atmosphere above an impedance ground. Journal of the Acoustical Society of America, 1985, 77, 345-352.	0.5	62
9	Models of female choice in acoustic communication. Behavioral Ecology, 1994, 5, 293-303.	1.0	60
10	Working gases in thermoacoustic engines. Journal of the Acoustical Society of America, 1999, 105, 2677-2684.	0.5	59
11	Impedance formulation of the fast field program for acoustic wave propagation in the atmosphere. Journal of the Acoustical Society of America, 1986, 79, 628-634.	0.5	54
12	Comparison of computer codes for the propagation of sonic boom waveforms through isothermal atmospheres. Journal of the Acoustical Society of America, 1996, 100, 3017-3027.	0.5	54
13	Atmospheric controls on elephant communication. Journal of Experimental Biology, 1995, 198, 939-51.	0.8	54
14	Theory of inert gas-condensing vapor thermoacoustics: Propagation equation. Journal of the Acoustical Society of America, 2002, 112, 1414-1422.	0.5	52
15	A numerical method for general finite amplitude wave propagation in two dimensions and its application to spark pulses. Journal of the Acoustical Society of America, 1991, 90, 2683-2691.	0.5	49
16	Evaporationâ€“Condensation Effects on Resonant Photoacoustics of Volatile Aerosols. Journal of Atmospheric and Oceanic Technology, 2003, 20, 685-695.	0.5	45
17	Framework for wind noise studies. Journal of the Acoustical Society of America, 2006, 119, 834.	0.5	45
18	The reduction of blast noise with aqueous foam. Journal of the Acoustical Society of America, 1983, 74, 1757-1763.	0.5	43

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19	Infrasonic wind-noise reduction by barriers and spatial filters. Journal of the Acoustical Society of America, 2003, 114, 1379-1386.	0.5	38
20	Ballistic seed projection in two herbaceous species. American Journal of Botany, 2000, 87, 1257-1264.	0.8	37
21	Measurement and calculation of acoustic propagation constants in arrays of small air-filled rectangular tubes. Journal of the Acoustical Society of America, 1991, 89, 2617-2624.	0.5	36
22	Stability analysis of a heliumâ€filled thermoacoustic engine. Journal of the Acoustical Society of America, 1994, 96, 370-375.	0.5	36
23	A turbulence model for sound propagation from an elevated source above level ground. Journal of the Acoustical Society of America, 1987, 81, 638-646.	0.5	35
24	The effect of evaporation-condensation on sound propagation in cylindrical tubes using the low reduced frequency approximation. Journal of the Acoustical Society of America, 1999, 105, 65-73.	0.5	35
25	Thermoacoustic power conversion using a piezoelectric transducer. Journal of the Acoustical Society of America, 2010, 128, 98-103.	0.5	35
26	Parallel capillary-tube-based extension of thermoacoustic theory for random porous media. Journal of the Acoustical Society of America, 2007, 121, 1413-1422.	0.5	34
27	Meteorology and elephant infrasound at Etosha National Park, Namibia. Journal of the Acoustical Society of America, 1997, 101, 1710-1717.	0.5	33
28	Temperature discontinuities between elements of thermoacoustic devices. Journal of the Acoustical Society of America, 1997, 102, 3355-3360.	0.5	31
29	A new approximation method for thermoacoustic calculations. Journal of the Acoustical Society of America, 1998, 103, 2395-2402.	0.5	30
30	Low frequency wind noise contributions in measurement microphones. Journal of the Acoustical Society of America, 2008, 123, 1260-1269.	0.5	29
31	Propagation of medium strength shock waves through the atmosphere. Journal of the Acoustical Society of America, 1987, 82, 306-310.	0.5	28
32	Normal mode solution for lowâ€frequency sound propagation in a downward refracting atmosphere above a complex impedance plane. Journal of the Acoustical Society of America, 1992, 91, 1341-1352.	0.5	28
33	Theory of inert gas-condensing vapor thermoacoustics: Transport equations. Journal of the Acoustical Society of America, 2002, 112, 1423-1430.	0.5	28
34	Sonic boom propagation through a realistic turbulent atmosphere. Journal of the Acoustical Society of America, 1995, 98, 3412-3417.	0.5	27
35	Finding the direction of a sound source using a vector soundâ€intensity probe. Journal of the Acoustical Society of America, 1993, 94, 2408-2412.	0.5	26
36	Modification of sonic boom wave forms during propagation from the source to the ground. Journal of the Acoustical Society of America, 2002, 111, 481-486.	0.5	26

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37	Windâ€induced ground motion. Journal of Geophysical Research: Solid Earth, 2016, 121, 917-930.	1.4	26
38	Wind noise measured at the ground surface. Journal of the Acoustical Society of America, 2011, 129, 622-632.	0.5	25
39	Thermoacoustics of traveling waves: Theoretical analysis for an inviscid ideal gas. Journal of the Acoustical Society of America, 1993, 94, 2232-2239.	0.5	24
40	Effect of vibrational relaxation on rise times of shock waves in the atmosphere. Journal of the Acoustical Society of America, 1983, 74, 1514-1517.	0.5	23
41	Acoustic propagation through a turbulent atmosphere: Experimental characterization. Journal of the Acoustical Society of America, 1991, 90, 3307-3313.	0.5	23
42	The surface impedance of grounds with exponential porosity profiles. Journal of the Acoustical Society of America, 1996, 99, 147-152.	0.5	23
43	Scattering of sound by atmospheric turbulence: A numerical simulation above a complex impedance boundary. Journal of the Acoustical Society of America, 1991, 90, 3314-3325.	0.5	19
44	An improved procedure for the determination of ground parameters using level difference measurements. Journal of the Acoustical Society of America, 1993, 94, 396-399.	0.5	19
45	An analysis of community complaints to noise. Journal of the Acoustical Society of America, 1983, 73, 1229-1235.	0.5	18
46	Scattering of sound by atmospheric turbulence: Predictions in a refractive shadow zone. Journal of the Acoustical Society of America, 1992, 91, 1336-1340.	0.5	18
47	Effects of thermal diffusion on sound attenuation in evaporating and condensing gas-vapor mixtures in tubes. Journal of the Acoustical Society of America, 2000, 107, 1126-1130.	0.5	18
48	On the speed of sound in the atmosphere as a function of altitude and frequency. Journal of Geophysical Research, 2007, 112, .	3.3	17
49	Vibrational relaxation effects on the atmospheric attenuation and rise times of explosion waves. Journal of the Acoustical Society of America, 1978, 64, 1208-1210.	0.5	16
50	Effect of finite ground impedance on the propagation of acoustic pulses. Journal of the Acoustical Society of America, 1983, 74, 267-274.	0.5	16
51	The reduction of blast overpressures from aqueous foam in a rigid confinement. Applied Acoustics, 1987, 22, 35-45.	1.7	16
52	Sound propagation in capillaryâ€tubeâ€type porous media with small pores in the capillary walls. Journal of the Acoustical Society of America, 1991, 90, 3299-3306.	0.5	16
53	The relationship between upward refraction above a complex impedance plane and the spherical wave evaluation for a homogeneous atmosphere. Journal of the Acoustical Society of America, 1991, 89, 107-114.	0.5	15
54	Experimental determination of wind speed and direction using a three microphone array. Journal of the Acoustical Society of America, 1995, 97, 695-696.	0.5	15

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55	The effect of realistic ground impedance on the accuracy of ray tracing. Journal of the Acoustical Society of America, 1995, 97, 154-158.	0.5	15
56	Roughness Measurements of Soil Surfaces by Acoustic Backscatter. Soil Science Society of America Journal, 2003, 67, 241-250.	1.2	14
57	Improved prediction of the turbulence-shear contribution to wind noise pressure spectra. Journal of the Acoustical Society of America, 2011, 130, 3590-3594.	0.5	14
58	The effect of material properties on reducing intermediate blast noise. Applied Acoustics, 1987, 22, 243-259.	1.7	13
59	The acoustic surface wave above a complex impedance ground surface. Journal of the Acoustical Society of America, 1989, 85, 638-640.	0.5	13
60	Statistical and numerical study of the relationship between turbulence and sonic boom characteristics. Journal of the Acoustical Society of America, 1994, 96, 3621-3626.	0.5	13
61	Experimental study of a radial mode thermoacoustic prime mover. Journal of the Acoustical Society of America, 1999, 105, 2652-2662.	0.5	13
62	Specific acoustic impedance measurements of an airâ€filled thermoacoustic prime mover. Journal of the Acoustical Society of America, 1992, 92, 3432-3434.	0.5	12
63	The effect of largeâ€scale atmospheric inhomogeneities on acoustic propagation. Journal of the Acoustical Society of America, 1992, 92, 1040-1046.	0.5	12
64	Radial wave thermoacoustic engines: Theory and examples for refrigerators and highâ€gain narrowâ€bandwidth photoacoustic spectrometers. Journal of the Acoustical Society of America, 1996, 99, 734-745.	0.5	12
65	The effect of the physical properties of the tube wall on the attenuation of sound in evaporating and condensing gasâ€“vapor mixtures. Journal of the Acoustical Society of America, 2000, 108, 2120-2124.	0.5	11
66	Scattering of sonic booms by anisotropic turbulence in the atmosphere. Journal of the Acoustical Society of America, 2000, 107, 3059-3064.	0.5	11
67	Wind noise under a pine tree canopy. Journal of the Acoustical Society of America, 2015, 137, 651-659.	0.5	11
68	Acoustic end corrections for micro-perforated plates. Journal of the Acoustical Society of America, 2019, 146, EL399-EL404.	0.5	11
69	Acoustic characterization of rigidâ€frame airâ€filled porous media using both reflection and transmission measurements. Journal of the Acoustical Society of America, 1996, 99, 1326-1332.	0.5	10
70	Grazing incidence propagation over a soft rough surface. Journal of the Acoustical Society of America, 1997, 102, 55-59.	0.5	10
71	Roughness characterization of porous soil with acoustic backscatter. Journal of the Acoustical Society of America, 2001, 109, 1826-1832.	0.5	10
72	Thermoacoustic properties of fibrous materials. Journal of the Acoustical Society of America, 2010, 127, 3470-3484.	0.5	10

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73	Investigation of possibility of damage from the acoustically coupled seismic waveform from blast and artillery. Journal of the Acoustical Society of America, 1988, 84, 1478-1482.	0.5	9
74	Residue series solution of impulse noise propagation into a shadow zone. Journal of the Acoustical Society of America, 1988, 83, 1964-1967.	0.5	9
75	Thermo-viscous acoustic modeling of perforated micro-electro-mechanical systems (MEMS). Journal of the Acoustical Society of America, 2020, 148, 2376-2385.	0.5	9
76	Roughness Measurements of Soil Surfaces by Acoustic Backscatter. Soil Science Society of America Journal, 2003, 67, 241.	1.2	9
77	Numerical predictions of atmospheric soundâ€pressure levels in shadow zones. Journal of the Acoustical Society of America, 1988, 83, 816-820.	0.5	8
78	Experimental study of a thermoacoustic termination of a travelingâ€wave tube. Journal of the Acoustical Society of America, 1995, 98, 1623-1628.	0.5	8
79	Calculation of average turbulence effects on sound propagation based on the fast field program formulation. Journal of the Acoustical Society of America, 1995, 97, 147-153.	0.5	8
80	Wind fence enclosures for infrasonic wind noise reduction. Journal of the Acoustical Society of America, 2015, 137, 1265-1273.	0.5	8
81	Absorbing boundary conditions for a spherical monopole in a set of twoâ€dimensional acoustics equations. Journal of the Acoustical Society of America, 1990, 87, 2422-2427.	0.5	7
82	Comparison of sonic boom rise time prediction techniques. Journal of the Acoustical Society of America, 1992, 91, 1767-1768.	0.5	7
83	Contributions of turbulence to subsonic cavity flow wall pressures. Physics of Fluids, 2011, 23, 015104.	1.6	7
84	Calculated wind noise for an infrasonic wind noise enclosure. Journal of the Acoustical Society of America, 2015, 138, 332-343.	0.5	7
85	Diffraction of an explosive transient. Journal of the Acoustical Society of America, 1986, 79, 1326-1334.	0.5	6
86	Reduction of Wind Noise for Unattended Blast Noise Monitoring. Noise Control Engineering Journal, 1990, 34, 77.	0.2	6
87	Low frequency acoustic ground impedance measurement techniques. Applied Acoustics, 1993, 39, 307-325.	1.7	6
88	Temperature gradient integration in thermoacoustic stacks. Applied Acoustics, 2006, 67, 689-699.	1.7	6
89	Additional Comments on and Erratum for â€˜â€˜Effect of finite ground impedance on the propagation of acoustic pulsesâ€™â€™ [J. Acoust. Soc. Am. 74, 267â€“274 (1983)]. Journal of the Acoustical Society of America, 1985, 77, 1955-1958.	0.5	5
90	Application of the fast field program to the prediction of average noise levels around sources. Applied Acoustics, 1989, 27, 217-226.	1.7	5

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91	Comments on â€˜â€˜The influence of wind and temperature gradients on sound propagation, calculated with the two way wave equationsâ€™â€™ [J. Acoust. Soc. Am. 87, 1987â€“1998 (1990)]. Journal of the Acoustical Society of America, 1992, 91, 498-500.	0.5	5
92	Application of an acoustic backscatter technique for characterizing the roughness of porous soil. Journal of the Acoustical Society of America, 2002, 111, 1565-1577.	0.5	5
93	Windâ€induced Ground Motion: Dynamic Model and Nonuniform Structure for Ground. Journal of Geophysical Research: Solid Earth, 2019, 124, 8478-8490.	1.4	5
94	Corrected Tilt Calculation for Atmospheric Pressure-Induced Seismic Noise. Applied Sciences (Switzerland), 2022, 12, 1247.	1.3	5
95	Evanescent modes and anomalous streaming in a thermoacoustic device. Applied Acoustics, 2008, 69, 23-30.	1.7	4
96	Infrasonic wind noise under a deciduous tree canopy. Journal of the Acoustical Society of America, 2015, 137, 2670-2677.	0.5	4
97	Ballistic seed projection in two herbaceous species. American Journal of Botany, 2000, 87, 1257-64.	0.8	4
98	Reduction of artillery noise by natural barriers. Applied Acoustics, 1986, 19, 117-130.	1.7	3
99	Analysis of wind noise reduction by semi-porous fabric domes. Proceedings of Meetings on Acoustics, 2014, , .	0.3	3
100	Infrasonic wind noise reduction via porous fabric domes. Proceedings of Meetings on Acoustics, 2014, , .	0.3	3
101	Optoacoustic observation of internal relaxation in liquid CS2. Journal of the Acoustical Society of America, 1989, 85, 2405-2409.	0.5	2
102	Use of the fast field program for predicting diffraction of sound by curved surfaces. Journal of the Acoustical Society of America, 1997, 102, 646-649.	0.5	2
103	Measurement of wind noise levels in streamlined probes. Journal of the Acoustical Society of America, 2010, 127, 2764-2770.	0.5	2
104	Acoustic frequency response method for the measurement of fast adsorption â€“ Diffusion processes. Theoretical treatment. Chemical Engineering Science, 2017, 164, 1-16.	1.9	2
105	Shock Waves, Blast Waves, and Sonic Booms. , 0, , 329-339.		2
106	Analytical, computational, and experimental study of thermoviscous acoustic damping in perforated micro-electro-mechanical systems with flexible diaphragm. Journal of the Acoustical Society of America, 2021, 150, 2749-2756.	0.5	2
107	Investigation of parametric drive of a longitudinal gasâ€filled resonance tube. Journal of the Acoustical Society of America, 1996, 99, 725-729.	0.5	1
108	Measurement and analysis of sound levels from a RASS site near Barrow, Alaska. Applied Acoustics, 1998, 53, 333-347.	1.7	1

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109	Influence of ground reflection on measurements involving bands of noise. Journal of the Acoustical Society of America, 1988, 84, 2275-2277.	0.5	0
110	Dispersion of impulse sound above a curved surface. Journal of the Acoustical Society of America, 1991, 89, 101-106.	0.5	0
111	Estimation of temperature gradient effects on the normalized surface impedance of soils. Journal of the Acoustical Society of America, 1997, 101, 602-605.	0.5	0
112	Hanging-Picture Instability. Physics Teacher, 2005, 43, 298-301.	0.2	0
113	Time Domain Propagation of Sonic Booms. AIP Conference Proceedings, 2006, , .	0.3	0
114	INFLUENCE OF GROUND INHOMOGENEITY ON WIND INDUCED GROUND VIBRATIONS. , 2018, , .		0
115	ELASTODYNAMIC RESPONSE OF THE GROUND SURFACE CAUSED BY WIND. , 2018, , .		0
116	Investigation of the dependence of excess attenuation of aircraft noise on distance. Journal of the Acoustical Society of America, 1986, 80, S8-S9.	0.5	0