

Richard L Weaver

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4562641/publications.pdf>

Version: 2024-02-01

124
papers

5,176
citations

125106

35
h-index

100535

70
g-index

129
all docs

129
docs citations

129
times ranked

2956
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffuse energy transport and coda-wave interferometry for resonant transmission between reverberant structures. Journal of the Acoustical Society of America, 2021, 150, 830-840.	0.5	1
2	Application of temporal reweighting to ambient noise cross-correlation for improved seismic Green's function. Geophysical Journal International, 2020, 221, 265-272.	1.0	7
3	Amplitude and decay of long-period coda of great earthquakes. Physics of the Earth and Planetary Interiors, 2020, 306, 106538.	0.7	2
4	Slow dynamic elastic recovery in unconsolidated metal structures. Physical Review E, 2020, 102, 012901.	0.8	9
5	Slow dynamics in a single glass bead. Physical Review E, 2020, 101, 012902.	0.8	8
6	Slow dynamic nonlinearity in unconsolidated glass bead packs. Physical Review E, 2020, 101, 012901.	0.8	12
7	Retrieval of amplitude and attenuation from ambient seismic noise: synthetic data and practical considerations. Geophysical Journal International, 2020, 222, 544-559.	1.0	2
8	Effectiveness of diffuse ultrasound for evaluation of micro-cracking damage in concrete. Cement and Concrete Research, 2019, 124, 105862.	4.6	35
9	Avalanches and scaling collapse in the large- $\langle m \rangle$ Kuramoto model. Physical Review E, 2018, 97, 042219.	0.8	9
10	Temporally weighting a time varying noise field to improve Green function retrieval. Journal of the Acoustical Society of America, 2018, 143, 3706-3719.	0.5	12
11	Effect of annealing on nanoindentation slips in a bulk metallic glass. Physical Review B, 2017, 96, .	1.1	9
12	Diffuse elastic waves in a nearly axisymmetric body: Energy distribution, transport and dynamical localization. European Physical Journal: Special Topics, 2017, 226, 1371-1408.	1.2	3
13	Avalanche Statistics Identify Intrinsic Stellar Processes near Criticality in KIC 8462852. Physical Review Letters, 2016, 117, 261101.	2.9	27
14	On band gap predictions for multiresonant metamaterials on plates. Journal of the Acoustical Society of America, 2016, 139, 1282-1284.	0.5	9
15	Fluctuations in the cross-correlation for fields lacking full diffusivity: The statistics of spurious features. Journal of the Acoustical Society of America, 2016, 140, 702-713.	0.5	5
16	Effect of dispersion on the convergence rate for Green's function retrieval. Journal of the Acoustical Society of America, 2016, 140, 4496-4505.	0.5	0
17	Comment on "Relative variance of the mean squared pressure in multimode media: Rehabilitating former approaches". J. Acoust. Soc. Am. 136, 2621-2629 (2014). Journal of the Acoustical Society of America, 2015, 137, 1598-1601.	0.5	0
18	Retrieval of Green's function in the radiative transfer regime. Journal of the Acoustical Society of America, 2013, 133, 792-798.	0.5	3

#	ARTICLE	IF	CITATIONS
19	Dynamic surface acoustic response to a thermal expansion source on an anisotropic half space. Journal of the Acoustical Society of America, 2013, 133, 2634-2640.	0.5	6
20	On the retrieval of attenuation and site amplifications from ambient noise on linear arrays: further numerical simulations. Geophysical Journal International, 2013, 193, 1644-1657.	1.0	17
21	Observation of a snap-through instability in graphene. Applied Physics Letters, 2012, 100, .	1.5	55
22	Probing the mechanical properties of graphene using a corrugated elastic substrate. Applied Physics Letters, 2011, 98, .	1.5	117
23	On the amplitudes of correlations and the inference of attenuations, specific intensities and site factors from ambient noise. Comptes Rendus - Geoscience, 2011, 343, 615-622.	0.4	39
24	TOWARDS GREEN'S FUNCTION RETRIEVAL FROM IMPERFECTLY PARTITIONED AMBIENT WAVE FIELDS: TRAVEL TIMES, ATTENUATIONS, SPECIFIC INTENSITIES, AND SCATTERING STRENGTHS. , 2011, , 183-194.		4
25	On the precision of noise correlation interferometry. Geophysical Journal International, 2011, 185, 1384-1392.	1.0	80
26	Individual and collective behavior of vibrating motors interacting through a resonant plate. Complexity, 2011, 16, 45-53.	0.9	6
27	Synchronization and stimulated emission in an array of mechanical phase oscillators on a resonant support. Physical Review E, 2011, 83, 046221.	0.8	21
28	Estimation of the effect of nonisotropically distributed energy on the apparent arrival time in correlations. Geophysics, 2010, 75, SA85-SA93.	1.4	153
29	The Unreasonable Effectiveness of Random Matrix Theory for the Vibrations and Acoustics of Complex Structures. , 2010, , 42-58.		7
30	Equipartition and retrieval of Green's function. Earthquake Science, 2010, 23, 397-402.	0.4	14
31	On the Larsen effect to monitor small fast changes in materials. Journal of the Acoustical Society of America, 2009, 125, 1894-1905.	0.5	15
32	On the correlation of non-isotropically distributed ballistic scalar diffuse waves. Journal of the Acoustical Society of America, 2009, 126, 1817-1826.	0.5	151
33	Ward identities and the retrieval of Green's functions in the correlations of a diffuse field. Wave Motion, 2008, 45, 596-604.	1.0	42
34	Anderson localization of ultrasound in plates: Further experimental results. Journal of the Acoustical Society of America, 2008, 124, 3528-3533.	0.5	9
35	4. Green's Function Reconstruction. , 2008, , 99-329.		0
36	Scattering fidelity in elastodynamics. II. Further experimental results. Physical Review E, 2008, 78, 066212.	0.8	9

#	ARTICLE	IF	CITATIONS
37	Micron-scale measurements of the coefficient of thermal expansion by time-domain probe beam deflection. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	40
38	3. Highlights of Seismic Interferometry until 2003. , 2008, , 43-98.		0
39	Wigner distribution of a transducer beam pattern within a multiple scattering formalism for heterogeneous solids. <i>Journal of the Acoustical Society of America</i> , 2007, 122, 2009-2021.	0.5	64
40	Entrainment and stimulated emission of ultrasonic piezoelectric auto-oscillators. <i>Journal of the Acoustical Society of America</i> , 2007, 122, 3409-3418.	0.5	11
41	Wave diffusion and mesoscopic dynamics, towards a universal time-dependent random scattering matrix. <i>New Journal of Physics</i> , 2007, 9, 8-8.	1.2	3
42	Unitarization of the classical statistical matrix for systems with localization. <i>Physical Review E</i> , 2007, 76, 051122.	0.8	1
43	Diffuse fields in ultrasonics and seismology. <i>Geophysics</i> , 2006, 71, SI5-SI9.	1.4	36
44	Passive correlation imaging of a buried scatterer. <i>Journal of the Acoustical Society of America</i> , 2006, 119, 3549-3552.	0.5	24
45	On the linewidth of the ultrasonic Larsen effect in a reverberant body. <i>Journal of the Acoustical Society of America</i> , 2006, 120, 102-109.	0.5	8
46	Wave-vector resonance in a nonlinear multiwavespeed chaotic billiard. <i>Physical Review E</i> , 2006, 73, 025202.	0.8	0
47	Transport and localization amongst coupled substructures. <i>Physical Review E</i> , 2006, 73, 036610.	0.8	9
48	Laser vibrometry technique for measurement of contained stress in railroad rail. <i>Journal of Sound and Vibration</i> , 2005, 282, 341-366.	2.1	34
49	Towards a diffusion model of acoustic energy flow in large undamped structures. <i>Journal of Sound and Vibration</i> , 2005, 288, 729-749.	2.1	3
50	Toward a theory of wave energy transport in large irregular structures. <i>Journal of the Acoustical Society of America</i> , 2005, 118, 222-231.	0.5	2
51	The mean and variance of diffuse field correlations in finite bodies. <i>Journal of the Acoustical Society of America</i> , 2005, 118, 3447-3456.	0.5	30
52	Fluctuations in diffuse fieldâ€“field correlations and the emergence of the Greenâ€™s function in open systems. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 3432-3439.	0.5	89
53	GEOPHYSICS: Information from Seismic Noise. <i>Science</i> , 2005, 307, 1568-1569.	6.0	101
54	Energy spectrum evolution of a diffuse field in an elastic body caused by weak nonlinearity. <i>Physical Review E</i> , 2004, 69, 066605.	0.8	2

#	ARTICLE	IF	CITATIONS
55	Variance of transmitted power in multichannel dissipative ergodic structures invariant under time reversal. <i>Physical Review E</i> , 2004, 69, 036206.	0.8	21
56	Generalized Berry conjecture and mode correlations in chaotic plates. <i>Physical Review E</i> , 2004, 70, 046212.	0.8	11
57	Diffuse fields in open systems and the emergence of the Green's function (L). <i>Journal of the Acoustical Society of America</i> , 2004, 116, 2731-2734.	0.5	299
58	Tensile and mixed-mode strength of a thin film-substrate interface under laser induced pulse loading. <i>Journal of the Mechanics and Physics of Solids</i> , 2004, 52, 999-1022.	2.3	50
59	Forced response of a cylindrical waveguide with simulation of the wavenumber extraction problem. <i>Journal of the Acoustical Society of America</i> , 2004, 115, 1582-1591.	0.5	48
60	Propagating and evanescent elastic waves in cylindrical waveguides of arbitrary cross section. <i>Journal of the Acoustical Society of America</i> , 2004, 115, 1572-1581.	0.5	97
61	Coda-Wave Interferometry in Finite Solids: Recovery of P-to-S Conversion Rates in an Elastodynamic Billiard. <i>Physical Review Letters</i> , 2003, 90, 254302.	2.9	172
62	Laser-induced decompression shock development in fused silica. <i>Journal of Applied Physics</i> , 2003, 93, 9529-9536.	1.1	41
63	Statistics of transmitted power in multichannel dissipative ergodic structures. <i>Physical Review E</i> , 2003, 68, 016204.	0.8	25
64	Nonexponential Dissipation in a Lossy Elastodynamic Billiard: Comparison with Porter-Thomas and Random Matrix Predictions. <i>Physical Review Letters</i> , 2003, 91, 194101.	2.9	28
65	Elastic wave thermal fluctuations, ultrasonic waveforms by correlation of thermal phonons. <i>Journal of the Acoustical Society of America</i> , 2003, 113, 2611-2621.	0.5	55
66	A Novel Technique for Mixed-mode Thin Film Adhesion Measurement. <i>Materials Research Society Symposia Proceedings</i> , 2002, 750, 1.	0.1	3
67	A parametric study of laser induced thin film spallation. <i>Experimental Mechanics</i> , 2002, 42, 74-83.	1.1	107
68	On the emergence of the Green's function in the correlations of a diffuse field: pulse-echo using thermal phonons. <i>Ultrasonics</i> , 2002, 40, 435-439.	2.1	99
69	A parametric study of laser induced thin film spallation. , 2002, 42, 74.		22
70	Ultrasonics without a Source: Thermal Fluctuation Correlations at MHz Frequencies. <i>Physical Review Letters</i> , 2001, 87, 134301.	2.9	533
71	Mode counts in an aluminum foam. <i>Journal of the Acoustical Society of America</i> , 2001, 109, 2636-2641.	0.5	8
72	Temperature dependence of ultrasonic velocity using diffuse fields; implications for measurement of stress. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	1

#	ARTICLE	IF	CITATIONS
73	On the emergence of the Greenâ€™s function in the correlations of a diffuse field. Journal of the Acoustical Society of America, 2001, 110, 3011-3017.	0.5	881
74	Equipartition and mean-square responses in large undamped structures. Journal of the Acoustical Society of America, 2001, 110, 894-903.	0.5	36
75	POWER VARIANCES AND DECAY CURVATURE IN A REVERBERANT SYSTEM. Journal of Sound and Vibration, 2000, 237, 281-302.	2.1	42
76	Temperature dependence of diffuse field phase. Ultrasonics, 2000, 38, 491-494.	2.1	107
77	Determination of plate source, detector separation from one signal. Ultrasonics, 2000, 38, 620-623.	2.1	12
78	Transport in multi-coupled Anderson localizing systems. Chaos, Solitons and Fractals, 2000, 11, 1611-1620.	2.5	5
79	Surface Wave Generation by Buried Forces in a Half Space. Journal of Mechanics, 2000, 16, 73-78.	0.7	0
80	Enhanced Backscattering and Modal Echo of Reverberant Elastic Waves. Physical Review Letters, 2000, 84, 4942-4945.	2.9	48
81	Ultrasonics in an aluminum foam. Ultrasonics, 1998, 36, 435-442.	2.1	41
82	Mean-square responses in a plate with sprung masses, energy flow and diffusion. Journal of the Acoustical Society of America, 1998, 103, 414-427.	0.5	11
83	sSemiclassical analysis of spectral correlations in regular billiards with point scatterers. Physical Review E, 1997, 55, 7741-7744.	0.8	12
84	Multiple-scattering theory for mean responses in a plate with sprung masses. Journal of the Acoustical Society of America, 1997, 101, 3466-3474.	0.5	25
85	Localization, Scaling, and Diffuse Transport of Wave Energy in Disordered Media. Applied Mechanics Reviews, 1996, 49, 126-135.	4.5	5
86	Spectral statistics in damped systems. Part I. Modal decay rate statistics. Journal of the Acoustical Society of America, 1996, 100, 320-326.	0.5	13
87	Leaky Rayleigh wave scattering from elastic media with random microstructures. Journal of the Acoustical Society of America, 1996, 99, 88-99.	0.5	3
88	Spectral statistics in damped systems. Part II. Spectral density fluctuations. Journal of the Acoustical Society of America, 1996, 100, 327-334.	0.5	1
89	Diffuse energy propagation on heterogeneous plates: Structural acoustics radiative transfer theory. Journal of the Acoustical Society of America, 1996, 100, 3686-3695.	0.5	9
90	Coupling and attenuation of waves in plates by randomly distributed attached impedances. Journal of the Acoustical Society of America, 1996, 99, 2167-2175.	0.5	3

#	ARTICLE	IF	CITATIONS
91	Range of spectral correlations in pseudointegrable systems: Gaussian-orthogonal-ensemble statistics in a rectangular membrane with a point scatterer. <i>Physical Review E</i> , 1995, 52, 3341-3350.	0.8	24
92	Diffusion of ultrasound in a glass bead slurry. <i>Journal of the Acoustical Society of America</i> , 1995, 97, 2094-2102.	0.5	41
93	Ultrasonic radiative transfer in polycrystalline media: Effects of a fluid-solids interface. <i>Journal of the Acoustical Society of America</i> , 1995, 98, 2801-2808.	0.5	16
94	Time dependence of multiply scattered diffuse ultrasound in polycrystalline media. <i>Journal of the Acoustical Society of America</i> , 1995, 97, 2639-2644.	0.5	36
95	Single Scattering and Diffusive Limits of the Ultrasonic Radiative Transfer Equation. , 1995, , 75-82.		1
96	Radiative transfer and multiple scattering of diffuse ultrasound in polycrystalline media. <i>Journal of the Acoustical Society of America</i> , 1994, 96, 3675-3683.	0.5	78
97	Diffuse waves on submerged thin shells. <i>Journal of the Acoustical Society of America</i> , 1994, 95, 857-865.	0.5	4
98	Scattering from a thin random fluid layer. <i>Journal of the Acoustical Society of America</i> , 1994, 96, 1899-1909.	0.5	1
99	Radiative transfer of ultrasound. <i>Journal of the Acoustical Society of America</i> , 1994, 96, 3654-3674.	0.5	60
100	A reanalysis of experimental high-frequency spectra using periodic orbit theory. <i>Journal of the Acoustical Society of America</i> , 1994, 96, 1873-1880.	0.5	24
101	Weak Anderson localization and enhanced backscatter in reverberation rooms and quantum dots. <i>Journal of the Acoustical Society of America</i> , 1994, 96, 3186-3190.	0.5	51
102	Monte Carlo study of multiple scattering of waves in two-dimensional random media. <i>Journal of the Acoustical Society of America</i> , 1993, 94, 506-513.	0.5	5
103	Scattering and Multiple Scattering in Disordered Materials, an Overview. <i>Materials Research Society Symposia Proceedings</i> , 1991, 253, 419.	0.1	0
104	Classical Applications of Multiple Scattering Theory, an Overview. <i>Materials Research Society Symposia Proceedings</i> , 1991, 253, 99.	0.1	0
105	Multiply Scattered and Diffusing Ultrasound: Applications, Experiments, Theory. <i>Materials Research Society Symposia Proceedings</i> , 1991, 253, 141.	0.1	0
106	DIFFUSE ULTRASOUND IN POLYCRYSTALLINE SOLIDS. , 1991, , 507-510.		10
107	Monte Carlo studies of multiple scattering of waves in one-dimensional random media. <i>Journal of the Acoustical Society of America</i> , 1990, 87, 487-494.	0.5	3
108	On the Development of Transverse Ridges on Rock Glaciers. <i>Journal of Glaciology</i> , 1989, 35, 383-391.	1.1	29

#	ARTICLE	IF	CITATIONS
109	Transient ultrasonic waves in a viscoelastic plate: Theory. Journal of the Acoustical Society of America, 1989, 85, 2255-2261.	0.5	22
110	Transient ultrasonic waves in a viscoelastic plate: Applications to materials characterization. Journal of the Acoustical Society of America, 1989, 85, 2262-2267.	0.5	21
111	On the Development of Transverse Ridges on Rock Glaciers. Journal of Glaciology, 1989, 35, 383-391.	1.1	6
112	Diffuse Field Decay Rates for Material Characterization. , 1987, , 425-434.		12
113	On the time and geometry independence of elastodynamic spectral energy density. Journal of the Acoustical Society of America, 1986, 80, 1539-1541.	0.5	9
114	Causality and theories of multiple scattering in random media. Wave Motion, 1986, 8, 473-483.	1.0	12
115	Laboratory studies of diffuse waves in plates. Journal of the Acoustical Society of America, 1986, 79, 919-923.	0.5	24
116	A variational principle for waves in discrete random media. Wave Motion, 1985, 7, 105-121.	1.0	13
117	Diffuse elastic waves at a free surface. Journal of the Acoustical Society of America, 1985, 78, 131-136.	0.5	76
118	Waves in random media. International Journal of Engineering Science, 1984, 22, 1149-1157.	2.7	6
119	On diffuse waves in solid media. Journal of the Acoustical Society of America, 1982, 71, 1608-1609.	0.5	226
120	Spectra of transient waves in elastic plates. Journal of the Acoustical Society of America, 1982, 72, 1933-1941.	0.5	19
121	Comments on "Elastic wave invariants for acoustic emission" [J. Acoust. Soc. Am. 70, 110-115 (1981)]. Journal of the Acoustical Society of America, 1982, 72, 1314-1315.	0.5	1
122	Dispersion relations for linear wave propagation in homogeneous and inhomogeneous media. Journal of Mathematical Physics, 1981, 22, 1909-1918.	0.5	97
123	Application of the transition matrix to a ribbon-shaped scatterer. Journal of the Acoustical Society of America, 1979, 66, 1199-1206.	0.5	13
124	Mesoscopics in Acoustics. , 0, , 123-130.		0