

Brian E Anderson

List of Publications by Year in descending order

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Version: 2024-02-01

67
papers

755
citations

566801

15
h-index

610482

24
g-index

90
all docs

90
docs citations

90
times ranked

378
citing authors

#	ARTICLE	IF	CITATIONS
1	Time Reversal. <i>Acoustics Today</i> , 2008, 4, 5.	1.0	109
2	Damage imaging in a laminated composite plate using an air-coupled time reversal mirror. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	36
3	Dynamic Acousto-Elasticity in a Fatigue-Cracked Sample. <i>Journal of Nondestructive Evaluation</i> , 2014, 33, 216-225.	1.1	34
4	Improving spatio-temporal focusing and source reconstruction through deconvolution. <i>Wave Motion</i> , 2015, 52, 151-159.	1.0	29
5	Experimental implementation of reverse time migration for nondestructive evaluation applications. <i>Journal of the Acoustical Society of America</i> , 2011, 129, EL8-EL14.	0.5	26
6	Time reversal focusing of elastic waves in plates for an educational demonstration. <i>Journal of the Acoustical Society of America</i> , 2017, 141, 1084-1092.	0.5	25
7	Three component time reversal: Focusing vector components using a scalar source. <i>Journal of Applied Physics</i> , 2009, 106, 113504.	1.1	22
8	Time reversal focusing of high amplitude sound in a reverberation chamber. <i>Journal of the Acoustical Society of America</i> , 2018, 143, 696-705.	0.5	22
9	Creating an active-learning environment in an introductory acoustics course. <i>Journal of the Acoustical Society of America</i> , 2012, 131, 2500-2509.	0.5	21
10	Optimized Dynamic Acousto-elasticity Applied to Fatigue Damage and Stress Corrosion Cracking. <i>Journal of Nondestructive Evaluation</i> , 2014, 33, 226-238.	1.1	21
11	Stress corrosion crack depth investigation using the time reversed elastic nonlinearity diagnostic. <i>Journal of the Acoustical Society of America</i> , 2017, 141, EL76-EL81.	0.5	19
12	Time reversal reconstruction of finite sized sources in elastic media. <i>Journal of the Acoustical Society of America</i> , 2011, 130, EL219-EL225.	0.5	18
13	Time reversal of continuous-wave, steady-state signals in elastic media. <i>Applied Physics Letters</i> , 2009, 94, 111908.	1.5	17
14	Matched signals: The beginnings of time reversal. <i>Proceedings of Meetings on Acoustics</i> , 2011, .	0.3	16
15	Time reversal acoustics applied to rooms of various reverberation times. <i>Journal of the Acoustical Society of America</i> , 2018, 144, 3055-3066.	0.5	16
16	Nonlinearity from stress corrosion cracking as a function of chloride exposure time using the time reversed elastic nonlinearity diagnostic. <i>Journal of the Acoustical Society of America</i> , 2019, 145, 382-391.	0.5	15
17	Nonlinear resonant ultrasound spectroscopy of stress corrosion cracking in stainless steel rods. <i>NDT and E International</i> , 2019, 102, 194-198.	1.7	15
18	Probing the interior of a solid volume with time reversal and nonlinear elastic wave spectroscopy. <i>Journal of the Acoustical Society of America</i> , 2011, 130, EL258-EL263.	0.5	14

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19	A high amplitude, time reversal acoustic non-contact excitation (trance). Journal of the Acoustical Society of America, 2013, 134, EL52-EL56.	0.5	14
20	The effect of transducer directivity on time reversal focusing. Journal of the Acoustical Society of America, 2017, 142, EL95-EL101.	0.5	14
21	A comparison of impulse response modification techniques for time reversal with application to crack detection. Journal of the Acoustical Society of America, 2019, 145, 3195-3207.	0.5	13
22	Detecting and imaging stress corrosion cracking in stainless steel, with application to inspecting storage canisters for spent nuclear fuel. NDT and E International, 2020, 109, 102180.	1.7	13
23	Energy current imaging method for time reversal in elastic media. Applied Physics Letters, 2009, 95, 021907.	1.5	12
24	Optimization of the array mirror for time reversal techniques used in a half-space environment. Journal of the Acoustical Society of America, 2013, 133, EL351-EL357.	0.5	12
25	Three-dimensional time reversal communications in elastic media. Journal of the Acoustical Society of America, 2016, 139, EL25-EL30.	0.5	12
26	The effect of inharmonic partials on pitch of piano tones. Journal of the Acoustical Society of America, 2005, 117, 3268-3272.	0.5	11
27	Grating lobe reduction in transducer arrays through structural filtering of supercritical plates. Journal of the Acoustical Society of America, 2009, 126, 612-619.	0.5	10
28	Improving time reversal focusing through deconvolution: 20 questions. Proceedings of Meetings on Acoustics, 2012, , .	0.3	10
29	Comparison and visualization of focusing wave fields from various time reversal techniques in elastic media. Journal of the Acoustical Society of America, 2013, 134, EL527-EL533.	0.5	10
30	Improving the air coupling of bulk piezoelectric transducers with wedges of power-law profiles: A numerical study. Ultrasonics, 2014, 54, 1409-1416.	2.1	10
31	The effects of source placement on time reversal focusing in rooms. Applied Acoustics, 2019, 156, 279-288.	1.7	10
32	Selective source reduction to identify masked sources using time reversal acoustics. Journal Physics D: Applied Physics, 2008, 41, 155504.	1.3	9
33	Loudspeaker line array educational demonstration. Journal of the Acoustical Society of America, 2012, 131, 2394-2400.	0.5	9
34	High-amplitude time reversal focusing of airborne ultrasound to generate a focused nonlinear difference frequency. Journal of the Acoustical Society of America, 2021, 150, 1411-1423.	0.5	8
35	Ultrasonic radiation from wedges of cubic profile: Experimental results. Ultrasonics, 2015, 63, 141-146.	2.1	7
36	The impact of room location on time reversal focusing amplitudes. Journal of the Acoustical Society of America, 2021, 150, 1424-1433.	0.5	7

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37	Time Reversal Techniques. , 2019, , 547-581.		6
38	Nonlinear characteristics of high amplitude focusing using time reversal in a reverberation chamber. Journal of the Acoustical Society of America, 2022, 151, 3603-3614.	0.5	6
39	On the steering of sound energy through a supercritical plate by a near-field transducer array. Journal of the Acoustical Society of America, 2008, 123, 2613-2619.	0.5	5
40	Ultrasonic anechoic chamber qualification: Accounting for atmospheric absorption and transducer directivity. Journal of the Acoustical Society of America, 2011, 130, EL69-EL75.	0.5	5
41	Equivalent circuit modeling and vibrometry measurements of the Nigerian-origin Udu Utar drum. Journal of the Acoustical Society of America, 2013, 133, 1718-1726.	0.5	5
42	Depth profile of a time-reversal focus in an elastic solid. Ultrasonics, 2015, 58, 60-66.	2.1	5
43	Active noise control using remotely placed sources: Application to magnetic resonance imaging noise and equivalence to the time reversal inverse filter. Applied Acoustics, 2021, 176, 107902.	1.7	5
44	The song of the singing rod. Journal of the Acoustical Society of America, 2012, 131, 2435-2443.	0.5	4
45	The performance of time reversal in elastic chaotic cavities as a function of volume and geometric shape of the cavity. Journal of the Acoustical Society of America, 2021, 150, 526-539.	0.5	4
46	Solving one-dimensional acoustic systems using the impedance translation theorem and equivalent circuits: A graduate level homework assignment. Journal of the Acoustical Society of America, 2021, 150, 4155-4165.	0.5	4
47	On the measurement of airborne, angular-dependent sound transmission through supercritical bars. Journal of the Acoustical Society of America, 2012, 132, EL257-EL263.	0.5	3
48	First simulations of the candy can concept for high amplitude non-contact excitation. Proceedings of Meetings on Acoustics, 2012, , .	0.3	3
49	Evaluation of moving-coil loudspeaker and passive radiator parameters using normal-incidence sound transmission measurements: Theoretical developments. Journal of the Acoustical Society of America, 2013, 134, 223-236.	0.5	3
50	Electromagnetic excitation technique for nonlinear resonant ultrasound spectroscopy. NDT and E International, 2020, 109, 102181.	1.7	3
51	Imaging crack orientation using the time reversed elastic nonlinearity diagnostic with three component time reversal. Proceedings of Meetings on Acoustics, 2013, , .	0.3	3
52	Vector component focusing in elastic solids using a scalar source in three component time reversal. Physics Procedia, 2010, 3, 685-689.	1.2	2
53	Ultrasonic airborne insertion loss measurements at normal incidence (L). Journal of the Acoustical Society of America, 2010, 128, 3305-3307.	0.5	2
54	The effects of non-cardioid directivity on incidence angle estimation using the polar energy time curve. Journal of the Acoustical Society of America, 2011, 130, EL244-EL250.	0.5	2

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55	Improving the focal quality of the time reversal acoustic noncontact source using a deconvolution operation. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
56	Teaching the descriptive physics of string instruments at the undergraduate level. Proceedings of Meetings on Acoustics, 2016, , .	0.3	2
57	The physics of knocking over LEGO minifigures with time reversal focused vibrations for use in a museum exhibit. Journal of the Acoustical Society of America, 2022, 151, 738-751.	0.5	2
58	SELECTIVE SOURCE REDUCTION TO IDENTIFY MASKED SMALLER SOURCES USING TIME REVERSED ACOUSTICS (TRA). AIP Conference Proceedings, 2008, , .	0.3	1
59	Finite-difference simulations of transient radiation from a finite-length pipe. Journal of the Acoustical Society of America, 2014, 135, 17-26.	0.5	1
60	Effects of simultaneous sound arrivals on direction-of-arrival estimates of the polar energy time curve. Applied Acoustics, 2017, 117, 167-172.	1.7	1
61	Selecting a new textbook for a graduate level course on vibration and fluid acoustics. Proceedings of Meetings on Acoustics, 2019, , .	0.3	1
62	Design of an underwater acoustics lab. Proceedings of Meetings on Acoustics, 2021, , .	0.3	1
63	Modal response and sound radiation from a hammered dulcimer. Proceedings of Meetings on Acoustics, 2014, , .	0.3	0
64	Extraction of plate bending stiffness from coincidence angles of sound transmission measurements. Journal of the Acoustical Society of America, 2015, 137, 498-500.	0.5	0
65	Understanding radiation impedance through animations. Proceedings of Meetings on Acoustics, 2018, , .	0.3	0
66	Understanding Acoustics: An Experimentalist's View of Sound and Vibration, Second Edition. Journal of the Acoustical Society of America, 2021, 150, 1733-1734.	0.5	0
67	A laboratory experiment to test the limits of Bernoulli-Euler theory for flexural waves in bars. Proceedings of Meetings on Acoustics, 2016, , .	0.3	0