Cristian Pantea

List of Publications by Year in descending order

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46	964	623574	434063
papers	citations	14 h-index	31 g-index

65	65	65	1242
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure of carbon blacks determined by X-ray diffraction profile analysis. Carbon, 2002, 40, 929-937.	5.4	188
2	Thermal equations of state of theÎ±,Î², andÏ‰phases of zirconium. Physical Review B, 2005, 71, .	1.1	113
3	Enhancement of fracture toughness in nanostructured diamondâ€“SiC composites. Applied Physics Letters, 2004, 84, 1356-1358.	1.5	100
4	Experimental constraints on the phase diagram of elemental zirconium. Journal of Physics and Chemistry of Solids, 2005, 66, 1213-1219.	1.9	77
5	Manipulation of diamond nanoparticles using bulk acoustic waves. Journal of Applied Physics, 2011, 109, .	1.1	73
6	Partial graphitization of diamond crystals under high-pressure and high-temperature conditions. Journal of Applied Physics, 2001, 90, 1632-1637.	1.1	72
7	Determination of acoustical nonlinear parameter Î² of water using the finite amplitude method. Ultrasonics, 2013, 53, 1012-1019.	2.1	35
8	High-temperature phase transitions in CsH2PO4 under ambient and high-pressure conditions: A synchrotron x-ray diffraction study. Journal of Chemical Physics, 2007, 127, 194701.	1.2	31
9	Digital ultrasonic pulse-echo overlap system and algorithm for unambiguous determination of pulse transit time. Review of Scientific Instruments, 2005, 76, 114902.	0.6	26
10	High-pressure neutron diffraction studies at LANSCE. Applied Physics A: Materials Science and Processing, 2010, 99, 585-599.	1.1	24
11	Kinetics of SiC formation during high Pâ€“T reaction between diamond and silicon. Diamond and Related Materials, 2005, 14, 1611-1615.	1.8	22
12	Low-frequency ultrasonic Bessel-like collimated beam generation from radial modes of piezoelectric transducers. Applied Physics Letters, 2017, 110, .	1.5	22
13	Structural Influence of Erbium Centers on Silicon Nanocrystal Phase Transitions. Physical Review Letters, 2004, 93, 175502.	2.9	20
14	Ultrasonic Bessel beam generation from radial modes of piezoelectric discs. Ultrasonics, 2019, 96, 140-148.	2.1	17
15	Radial modes of laterally stiffened piezoelectric disc transducers for ultrasonic collimated beam generation. Wave Motion, 2018, 76, 19-27.	1.0	13
16	Development of high Pâ€“T neutron diffraction at LANSCE â€“ toroidal anvil press, TAP-98, in the HiPPO diffractometer. , 2005, , 461-474.		12
17	Broadband unidirectional ultrasound propagation using sonic crystal and nonlinear medium. Emerging Materials Research, 2013, 2, 117-126.	0.4	11
18	A broadband wavelet implementation for rapid ultrasound pulse-echo time-of-flight measurements. Review of Scientific Instruments, 2020, 91, 075115.	0.6	9

#	Article	IF	Citations
19	Evaluation of the transmission line model for couplant layer corrections in pulse-echo measurements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 943-953.	1.7	8
20	Noninvasive Acoustic Measurements in Cylindrical Shell Containers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2251-2258.	1.7	8
21	A Physics-Based Signal Processing Approach for Noninvasive Ultrasonic Characterization of Multiphase Oilâ€“Waterâ€“Gas Flows in a Pipe. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1328-1346.	1.7	7
22	Ultrasonic waves from radial mode excitation of a piezoelectric disc on the surface of an elastic solid. Smart Materials and Structures, 2020, 29, 085002.	1.8	7
23	An acoustic resonance measurement cell for liquid property determinations up to 250â€‰Â°C. Review of Scientific Instruments, 2012, 83, 115106.	0.6	6
24	Resonant Ultrasound Spectroscopy studies of Berea sandstone at high temperature. Journal of Geophysical Research: Solid Earth, 2016, 121, 6401-6410.	1.4	6
25	Ultrasonic sensing for noninvasive characterization of oil-water-gas flow in a pipe. AIP Conference Proceedings, 2017, , .	0.3	6
26	On the in-plane vibrations and electromechanical resonance characteristics of non-uniformly polarized rectangular piezoelectric wafers: Selective mode-type excitation and specific mode enhancement. Journal of Sound and Vibration, 2021, 506, 116129.	2.1	6
27	The acoustic nonlinearity parameter in Fluorinert up to 381â€‰K and 13.8â€‰MPa. Journal of the Acoustical Society of America, 2015, 138, EL31-EL35.	0.5	5
28	Measured sound speeds and acoustic nonlinearity parameter in liquid water up to 523 K and 14 MPa. AIP Advances, 2016, 6, .	0.6	5
29	Acoustic Characterization of Fluorinert FC-43 Liquid with Helium Gas Bubbles: Numerical Experiments. Shock and Vibration, 2017, 2017, 1-7.	0.3	4
30	Full-waveform inversion and least-squares reverse-time migration imaging of collimated ultrasonic-beam data for high-resolution wellbore integrity monitoring. Applied Physics Letters, 2018, 113, .	1.5	4
31	Multi-Level Information Storage Using Engineered Electromechanical Resonances of Piezoelectric Wafers: A Concept Piezoelectric Quick Response (PQR) Code. Sensors, 2020, 20, 6344.	2.1	4
32	Engineering the beat phenomenon of quasi-Rayleigh waves for regions with minimal Surface Acoustic Wave (SAW) amplitude. Journal of Sound and Vibration, 2021, 515, 116444.	2.1	4
33	Determination of the acoustic nonlinearity parameter in liquid water up to 250°C and 14 MPa. , 2012, , .		3
34	The effect of a transducerâ€™s spatial averaging on an elastodynamic guided waveâ€™s wavenumber spectrum. Ultrasonics, 2021, 114, 106422.	2.1	3
35	Acoustic Nonlinearity in Fluorinert FC-43. Proceedings of Meetings on Acoustics, 2009, , .	0.3	2
36	Creating a collimated ultrasound beam in highly attenuating fluids. Ultrasonics, 2012, 52, 564-570.	2.1	2

#	Article	IF	Citations
37	Collimated acoustic beams from radial modes of piezoelectric disc transducers. AIP Conference Proceedings, 2019, , .	0.3	2
38	Multilevel Frequency-Specific Information Storage Using Engineered Electromechanical Resonances in Piezoelectric Wafer Arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1392-1398.	1.7	2
39	Beam Profile Characterization for Thickness Mode Transducers versus Radial Modes. , 2019, , .		1
40	Electromechanical response of laterally clamped piezoelectric wafers: Absence of in-plane mechanical resonances in the electromechanical impedance spectrum. Applied Acoustics, 2022, 188, 108545.	1.7	1
41	Broadband directional ultrasound propagation using sonic crystal and nonlinear medium. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
42	Broad-band acoustic low frequency collimated beam for ultrasonic imaging. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
43	High frequency signal acquisition using a smartphone in an undergraduate teaching laboratory: Applications in ultrasonic resonance spectra. Journal of the Acoustical Society of America, 2016, 140, 2810-2816.	0.5	0
44	Low-frequency ultrasonic collimated beam generation from piezoelectric discs. Proceedings of Meetings on Acoustics, 2017, , .	0.3	0
45	Development of a 3D Acoustic Borehole Integrity Monitoring System. , 2019, , .		0
46	Tuning the Relative Strengths of Electromechanical Resonances Using Non-Uniform Polarization of Piezoelectric Wafers. IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 2, 17-29.	0.9	0