Philip L Marston

List of Publications by Year in descending order

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189	5,251	39	63
papers	citations	h-index	g-index
313	313	313	1318
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Axial radiation force of a Bessel beam on a sphere and direction reversal of the force. Journal of the Acoustical Society of America, 2006, 120, 3518-3524.	1.1	274
2	An acoustical helicoidal wave transducer with applications for the alignment of ultrasonic and underwater systems. Journal of the Acoustical Society of America, 1999, 106, 3313-3316.	1.1	266
3	Shape oscillation and static deformation of drops and bubbles driven by modulated radiation stresses—Theory. Journal of the Acoustical Society of America, 1980, 67, 15-26.	1.1	166
4	Angular momentum flux of nonparaxial acoustic vortex beams and torques on axisymmetric objects. Physical Review E, 2011, 84, 065601.	2.1	159
5	Geometrical interpretation of negative radiation forces of acoustical Bessel beams on spheres. Physical Review E, 2011, 84, 035601.	2.1	145
6	Radiation force of a helicoidal Bessel beam on a sphere. Journal of the Acoustical Society of America, 2009, 125, 3539-3547.	1.1	143
7	Radiation torque on a sphere caused by a circularly-polarized electromagnetic wave. Physical Review A, 1984, 30, 2508-2516.	2.5	121
8	Scattering of a Bessel beam by a sphere. Journal of the Acoustical Society of America, 2007, 121, 753-758.	1.1	115
9	Negative axial radiation forces on solid spheres and shells in a Bessel beam. Journal of the Acoustical Society of America, 2007, 122, 3162-3165.	1.1	113
10	Acoustic scattering from a solid aluminum cylinder in contact with a sand sediment: Measurements, modeling, and interpretation. Journal of the Acoustical Society of America, 2010, 127, 3356-3371.	1.1	89
11	Hyperbolic umbilic diffraction catastrophe and rainbow scattering from spheroidal drops. Nature, 1984, 312, 529-531.	27.8	85
12	Manipulation of Fluid Objects with Acoustic Radiation Pressure. Annals of the New York Academy of Sciences, 2004, 1027, 414-434.	3.8	82
13	GTD for backscattering from elastic spheres and cylinders in water and the coupling of surface elastic waves with the acoustic field. Journal of the Acoustical Society of America, 1988, 83, 25-37.	1.1	79
14	Quadrupole resonance of drops driven by modulated acoustic radiation pressureâ€"Experimental properties. Journal of the Acoustical Society of America, 1980, 67, 27-37.	1.1	78
15	Axial radiation force exerted by general non-diffracting beams. Journal of the Acoustical Society of America, 2012, 131, EL329-EL335.	1.1	75
16	Acoustic radiation force on a compressible cylinder in a standing wave. Journal of the Acoustical Society of America, 2004, 116, 201-208.	1.1	74
17	Scattering of a Bessel beam by a sphere: II. Helicoidal case and spherical shell example. Journal of the Acoustical Society of America, 2008, 124, 2905-2910.	1.1	73
18	Observations and modeling of the backscattering of short tone bursts from a spherical shell: Lamb wave echoes, glory, and axial reverberations. Journal of the Acoustical Society of America, 1989, 85, 1014-1028.	1.1	72

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19	Acoustic beam scattering and excitation of sphere resonance: Bessel beam example. Journal of the Acoustical Society of America, 2007, 122, 247-252.	1.1	72
20	High-frequency backscattering enhancements by thick finite cylindrical shells in water at oblique incidence: Experiments, interpretation, and calculations. Journal of the Acoustical Society of America, 1998, 103, 785-794.	1.1	65
21	Stabilization of a cylindrical capillary bridge far beyond the Rayleigh–Plateau limit using acoustic radiation pressure and active feedback. Journal of Fluid Mechanics, 1997, 351, 345-357.	3. 4	62
22	Capillary bridge modes driven with modulated ultrasonic radiation pressure. Physics of Fluids, 1996, 8, 3-5.	4.0	59
23	Cusp diffraction catastrophe from spheroids: generalized rainbows and inverse scattering. Optics Letters, 1985, 10, 588.	3.3	58
24	Geometrical and Catastrophe Optics Methods in Scattering. Physical Acoustics, 1992, , 1-234.	0.0	56
25	Acoustic radiation torque and the conservation of angular momentum (L). Journal of the Acoustical Society of America, 2011, 129, 1679-1680.	1.1	55
26	Acoustic radiation torque on small objects in viscous fluids and connection with viscous dissipation. Journal of the Acoustical Society of America, 2014, 136, 2917-2921.	1.1	55
27	Ray synthesis of Lamb wave contributions to the total scattering cross section for an elastic spherical shell. Journal of the Acoustical Society of America, 1990, 88, 1103-1113.	1.1	53
28	Negative group velocity Lamb waves on plates and applications to the scattering of sound by shells. Journal of the Acoustical Society of America, 2003, 113, 2659-2662.	1.1	53
29	Backscattering from an elastic sphere: Sommerfeld–Watson transformation and experimental confirmation. Journal of the Acoustical Society of America, 1985, 78, 1093-1102.	1.1	51
30	Free decay of shape oscillations of bubbles acoustically trapped in water and sea water. Journal of Fluid Mechanics, 1995, 300, 149-167.	3.4	51
31	Acoustically forced shape oscillation of hydrocarbon drops levitated in water. Journal of Colloid and Interface Science, 1979, 68, 280-286.	9.4	49
32	Quadrupole projection of the radiation pressure on a compressible sphere. Journal of the Acoustical Society of America, 1981, 69, 1499-1501.	1.1	49
33	Synthesis of backscattering from an elastic sphere using the Sommerfeld–Watson transformation and giving a Fabry–Perot analysis of resonances. Journal of the Acoustical Society of America, 1986, 79, 1702-1708.	1.1	46
34	Rainbow phenomena and the detection of nonsphericity in drops. Applied Optics, 1980, 19, 680.	2.1	45
35	Backscattering enhancements associated with subsonic Rayleigh waves on polymer spheres in water: Observation and modeling for acrylic spheres. Journal of the Acoustical Society of America, 2000, 107, 1930-1936.	1.1	44
36	Passive Stabilization of Capillary Bridges in Air with Acoustic Radiation Pressure. Physical Review Letters, 2001, 86, 2293-2296.	7.8	44

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37	Light scattering by bubbles in liquids: Mie theory, physical-optics approximations, and experiments. Flow, Turbulence and Combustion, 1982, 38, 373-383.	0.2	43
38	Tensile strength and visible ultrasonic cavitation of superfluid4He. Journal of Low Temperature Physics, 1976, 25, 383-407.	1.4	41
39	Shape oscillations of bubbles in water driven by modulated ultrasonic radiation pressure: Observations and detection with scattered laser light. Journal of the Acoustical Society of America, 1993, 93, 706-713.	1.1	41
40	Evaporation–condensation resonance frequency of oscillating vapor bubbles. Journal of the Acoustical Society of America, 1979, 66, 1516-1521.	1.1	40
41	Optical theorem for acoustic non-diffracting beams and application to radiation force and torque. Biomedical Optics Express, 2013, 4, 1610.	2.9	39
42	Optical levitation of bubbles in water by the radiation pressure of a laser beam: An acoustically quiet levitator. Journal of the Acoustical Society of America, 1988, 83, 970-975.	1.1	37
43	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>T</mml:mi></mml:math> -matrix evaluation of three-dimensional acoustic radiation forces on nonspherical objects in Bessel beams with arbitrary order and location. Physical Review E, 2019, 99, 063004.	2.1	34
44	Acoustic radiation force on a bubble driven above resonance. Journal of the Acoustical Society of America, 1994, 96, 3096-3099.	1.1	33
45	Enhancement of the backscattering of highâ€frequency tone bursts by thin spherical shells associated with a backwards wave: Observations and ray approximation. Journal of the Acoustical Society of America, 1994, 96, 3704-3714.	1.1	33
46	Generalized optical theorem for scatterers having inversion symmetry: Applications to acoustic backscattering. Journal of the Acoustical Society of America, 2001, 109, 1291-1295.	1.1	32
47	Acoustic radiation force expressed using complex phase shifts and momentum-transfer cross sections. Journal of the Acoustical Society of America, 2016, 140, EL178-EL183.	1.1	31
48	Glory in Optical Backscattering from Air Bubbles. Physical Review Letters, 1981, 47, 913-916.	7.8	30
49	Axially focused (glory) scattering due to surface waves generated on spheres: Model and experimental confirmation using tungsten carbide spheres. Journal of the Acoustical Society of America, 1985, 78, 722-728.	1.1	30
50	Reversals of Acoustic Radiation Torque in Bessel Beams Using Theoretical and Numerical Implementations in Three Dimensions. Physical Review Applied, 2019, 11, .	3.8	30
51	Backscattering enhancements due to reflection of meridional leaky Rayleigh waves at the blunt truncation of a tilted solid cylinder in water: Observations and theory. Journal of the Acoustical Society of America, 1999, 106, 1673-1680.	1.1	29
52	Acoustic scattering from a water-filled cylindrical shell: Measurements, modeling, and interpretation. Journal of the Acoustical Society of America, 2014, 136, 109-121.	1.1	29
53	Ultrasonically stimulated low-frequency oscillation and breakup of immiscible liquid drops: Photographs. Physics of Fluids, 1985, 28, 1233.	1.4	28
54	Ray synthesis of the form function for backscattering from an elastic spherical shell: Leaky Lamb waves and longitudinal resonances. Journal of the Acoustical Society of America, 1991, 89, 2545-2558.	1.1	28

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55	Observation of the midfrequency enhancement of tone bursts backscattered by a thin spherical shell in water near the coincidence frequency. Journal of the Acoustical Society of America, 1993, 93, 224-230.	1.1	28
56	Stabilization of electrically conducting capillary bridges using feedback control of radial electrostatic stresses and the shapes of extended bridges. Physics of Fluids, 2000, 12, 986-995.	4.0	28
57	Backscattering of transients by tilted truncated cylindrical shells: Time-frequency identification of ray contributions from measurements. Journal of the Acoustical Society of America, 2002, 111, 1289-1294.	1.1	28
58	Unphysical consequences of negative absorbed power in linear passive scattering: Implications for radiation force and torque. Journal of the Acoustical Society of America, 2016, 139, 3139-3144.	1.1	28
59	Evidence of a Large Superfluid Vortex inHe4. Physical Review Letters, 1977, 39, 1208-1211.	7.8	27
60	Transverse cusp diffraction catastrophes: Some pertinent wave fronts and a Pearcey approximation to the wave field. Journal of the Acoustical Society of America, 1987, 81, 226-232.	1.1	26
61	Generalized rainbows and unfolded glories of oblate drops: organization for multiple internal reflections and extension of cusps into Alexander's dark band. Applied Optics, 1994, 33, 4702.	2.1	26
62	Measurement and interpretation of the impulse response for backscattering by a thin spherical shell using a broadâ€bandwidth source that is nearly acoustically transparent. Journal of the Acoustical Society of America, 1995, 97, 2699-2708.	1.1	25
63	Resonator frequency shift due to ultrasonically induced microparticle migration in an aqueous suspension: Observations and model for the maximum frequency shift. Journal of the Acoustical Society of America, 1998, 103, 3290-3300.	1.1	25
64	Relationship of scattering phase shifts to special radiation force conditions for spheres in axisymmetric wave-fields. Journal of the Acoustical Society of America, 2017, 141, 3042-3049.	1.1	25
65	Quasi-Gaussian Bessel-beam superposition: Application to the scattering of focused waves by spheres. Journal of the Acoustical Society of America, 2011, 129, 1773-1782.	1.1	24
66	Generalized tertiary rainbow of slightly oblate drops: observations with laser illumination. Applied Optics, 1998, 37, 1520.	2.1	23
67	Glory―and rainbowâ€enhanced acoustic backscattering from fluid spheres: Models for diffracted axial focusing. Journal of the Acoustical Society of America, 1983, 73, 1464-1475.	1.1	22
68	Unfolding axial caustics of glory scattering with harmonic angular perturbations of toroidal wave fronts. Journal of the Acoustical Society of America, 1989, 85, 1427-1440.	1.1	22
69	Approximate meridional leaky ray amplitudes for tilted cylinders: End-backscattering enhancements and comparisons with exact theory for infinite solid cylinders. Journal of the Acoustical Society of America, 1997, 102, 358-369.	1.1	22
70	Acoustic Radiation Force On Elliptical Cylinders And Spheroidal Objects In Low Frequency Standing Waves. AIP Conference Proceedings, 2006, , .	0.4	22
71	LOW- TO MID-FREQUENCY SCATTERING FROM ELASTIC OBJECTS ON A SAND SEA FLOOR: SIMULATION OF FREQUENCY AND ASPECT DEPENDENT STRUCTURAL ECHOES. Journal of Computational Acoustics, 2012, 20, 1240007.	1.0	22
72	Multipole expansion of acoustical Bessel beams with arbitrary order and location. Journal of the Acoustical Society of America, 2017, 141, EL574-EL578.	1.1	22

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73	Equilibrium shape of an acoustically levitated bubble driven above resonance. Journal of the Acoustical Society of America, 1995, 97, 2138-2143.	1.1	21
74	Meridional ray contributions to scattering by tilted cylindrical shells above the coincidence frequency: ray theory and computations. Journal of the Acoustical Society of America, 1999, 106, 2595-2600.	1.1	21
75	Backscattering enhancements from Rayleigh waves on the flat face of a tilted solid cylinder in water. Journal of the Acoustical Society of America, 2000, 107, 112-117.	1.1	20
76	Active electrostatic stabilization of liquid bridges in low gravity. Journal of Fluid Mechanics, 2002, 457, 285-294.	3.4	20
77	Acoustic radiation force on a sphere in a progressive and standing zero-order quasi-Bessel-Gauss beam. Ultrasonics, 2017, 76, 1-9.	3.9	20
78	The effects of a soluble surfactant on quadrupole shape oscillations and dissolution of air bubbles in water. Journal of the Acoustical Society of America, 1997, 102, 3372-3377.	1.1	19
79	Catastrophe optics of spheroidal drops and generalized rainbows. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 63, 341-351.	2.3	19
80	Fast nearfield to farfield conversion algorithm for circular synthetic aperture sonar. Journal of the Acoustical Society of America, 2014, 136, EL61-EL66.	1.1	19
81	Equivalence of expressions for the acoustic radiation force on cylinders. Journal of the Acoustical Society of America, 2005, 118, 3397-3399.	1.1	18
82	Leaky helical flexural wave backscattering contributions from tilted cylindrical shells in water: Observations and modeling. Journal of the Acoustical Society of America, 2002, 112, 528-536.	1.1	17
83	High frequency backscattering by a solid cylinder with axis tilted relative to a nearby horizontal surface. Journal of the Acoustical Society of America, 2015, 137, 470-480.	1.1	17
84	Travelingâ€wave decomposition of surface displacements associated with scattering by a cylindrical shell: Numerical evaluation displaying guided forward and backward wave properties. Journal of the Acoustical Society of America, 1995, 98, 3501-3507.	1.1	16
85	Scattering observations for tilted transparent fibers: evolution of Airy caustics with cylinder tilt and the caustic merging transition. Applied Optics, 1998, 37, 1534.	2.1	16
86	Acoustic quasi-holographic images of scattering by vertical cylinders from one-dimensional bistatic scans. Journal of the Acoustical Society of America, 2011, 130, 3838-3851.	1.1	16
87	Uniformly valid solution for acoustic propagation in weakly tapered circular waveguides: Liquid jet example. Journal of the Acoustical Society of America, 2008, 124, 151-160.	1.1	15
88	Spectral analysis of bistatic scattering from underwater elastic cylinders and spheres. Journal of the Acoustical Society of America, 2017, 142, 110-115.	1.1	15
89	Phase velocity of Lamb waves on a spherical shell: Approximate dependence on curvature from kinematics. Journal of the Acoustical Society of America, 1989, 85, 2663-2665.	1.1	14
90	Leaky waves on weakly curved scatterers. II. Convolution formulation for twoâ€dimensional highâ€frequency scattering. Journal of the Acoustical Society of America, 1995, 97, 34-41.	1.1	14

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91	Leaky helical flexural wave scattering contributions from tilted cylindrical shells: Ray theory and wave-vector anisotropy. Journal of the Acoustical Society of America, 2001, 110, 1764-1769.	1.1	14
92	Quasi-Gaussian beam analytical basis and comparison with an alternative approach (L). Journal of the Acoustical Society of America, 2011, 130, 1091-1094.	1.1	14
93	Boundary effects on backscattering by a solid aluminum cylinder: Experiment and finite element model comparisons (L). Journal of the Acoustical Society of America, 2011, 130, 669-672.	1.1	14
94	Optical detection of transient bubble oscillations associated with the underwater noise of rain. Journal of the Acoustical Society of America, 1993, 94, 2788-2792.	1.1	13
95	Kirchhoff Approximation for a Cylinder Breaking Through a Plane Surface and the Measured Scattering. IEEE Journal of Oceanic Engineering, 2008, 33, 386-396.	3.8	13
96	Phase-shift expansions for approximate radiation forces on solid spheres in inviscid-acoustic standing waves. Journal of the Acoustical Society of America, 2017, 142, 3358-3361.	1.1	13
97	Comment on "Radiation forces and torque on a rigid elliptical cylinder in acoustical plane progressive and (quasi)standing waves with arbitrary incidence―[Phys. Fluids 28, 077104 (2016)]. Physics of Fluids, 2017, 29, .	4.0	13
98	Spatial approximation of leaky wave surface amplitudes for three-dimensional high-frequency scattering: Fresnel patches and application to edge-excited and regular helical waves on cylinders. Journal of the Acoustical Society of America, 1997, 102, 1628-1638.	1.1	12
99	Backscattering enhancements associated with the excitation of symmetric Lamb waves on a circular plate: direct and holographic observations. Acoustics Research Letters Online: ARLO, 2001, 2, 55-60.	0.7	12
100	Liquid jet response to internal modulated ultrasonic radiation pressure and stimulated drop production. Journal of the Acoustical Society of America, 2007, 121, 3323.	1.1	12
101	Scattering resonances, filtering with reversible SAS processing, and applications of quantitative ray theory. , 2010, , .		12
102	Response of bubbles to ultrasonic radiation pressure: Dynamics in low gravity and shape oscillations. Fluid Mechanics and Its Applications, 1994, , 343-353.	0.2	12
103	Stable microscopic bubbles in helium I and evaporation— condensation resonance. Journal of the Acoustical Society of America, 1978, 64, 319-321.	1.1	11
104	Longitudinal resonances in the form function for backscattering from a spherical shell: Fluid shell case. Journal of the Acoustical Society of America, 1990, 88, 1114-1122.	1.1	11
105	Energy branching of a subsonic flexural wave on a plate at an air–water interface. I. Observation of the wave field near the interface and near the plate. Journal of the Acoustical Society of America, 1995, 97, 1389-1398.	1.1	11
106	Descartes glare points in scattering by icicles: color photographs and a tilted dielectric cylinder model of caustic and glare-point evolution. Applied Optics, 1998, 37, 1551.	2.1	11
107	Magnetic excitation and acoustical detection of torsional and quasi-flexural modes of spherical shells in water. Journal of the Acoustical Society of America, 1999, 106, 3340-3347.	1.1	11
108	Backscattering enhancements due to retroreflection of ultrasonic leaky Rayleigh waves at corners of solid elastic cubes in water. Journal of the Acoustical Society of America, 1999, 105, 700-710.	1.1	11

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109	Backscattering enhancements for tilted solid plastic cylinders in water due to the caustic merging transition: Observations and theory. Journal of the Acoustical Society of America, 2000, 107, 689-698.	1.1	11
110	Observation of the acoustic glory: Highâ€frequency backscattering from an elastic sphere. Journal of the Acoustical Society of America, 1983, 74, 605-618.	1.1	10
111	Backscattering of chirped bursts by a thin spherical shell near the coincidence frequency. Journal of the Acoustical Society of America, 1993, 93, 2700-2706.	1.1	10
112	Meridional ray backscattering enhancements for empty truncated tilted cylindrical shells: Measurements, ray model, and effects of a mode threshold. Journal of the Acoustical Society of America, 2002, 112, 1318-1326.	1.1	10
113	Backscattering enhancements associated with antisymmetric Lamb waves confined to the edge of a circular plate: Direct and holographic observations. Acoustics Research Letters Online: ARLO, 2002, 3, 101-106.	0.7	10
114	Viscous contributions to low-frequency scattering, power absorption, radiation force, and radiation torque for spheres in acoustic beams. Proceedings of Meetings on Acoustics, 2013, , .	0.3	10
115	Enhanced backscattering in water by partially exposed cylinders at free surfaces associated with an acoustic Franz wave. Journal of the Acoustical Society of America, 2014, 135, 2489-2492.	1.1	10
116	Quasi-scaling of the extinction efficiency of spheres in high frequency Bessel beams. Journal of the Acoustical Society of America, 2014, 135, 1668-1671.	1.1	10
117	Finite-size radiation force correction for inviscid spheres in standing waves. Journal of the Acoustical Society of America, 2017, 142, 1167-1170.	1.1	10
118	Electromagnetic acoustic wave transducer for the generation of acoustic evanescent waves on membranes and optical and capacitor waveâ€number selective detectors. Journal of the Acoustical Society of America, 1993, 93, 2221-2227.	1.1	9
119	Variable phase coupling coefficient for leaky waves on spheres and cylinders from resonance scattering theory. Wave Motion, 1995, 22, 65-74.	2.0	9
120	Coherent and semi-coherent processing of limited-aperture circular synthetic aperture (CSAS) data. , 2011, , .		9
121	Autofocusing circular synthetic aperture sonar imagery using phase corrections modeled as generalized cones. Journal of the Acoustical Society of America, 2014, 136, 614-622.	1.1	9
122	Surprises and anomalies in acoustical and optical scattering and radiation forces. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 162, 8-17.	2.3	9
123	Kirchhoff approximation for backscattering from a partially exposed rigid sphere at a flat interface. Journal of the Acoustical Society of America, 2016, 140, 3582-3592.	1.1	9
124	Transverse cusp diffraction catastrophes produced by the reflection of ultrasonic tone bursts from a curved surface in water: Observations. Journal of the Acoustical Society of America, 1992, 92, 2869-2877.	1.1	8
125	Leaky waves on curved scatterers. I. Fresnel width of coupling regions and elliptical Fresnel patches. Journal of the Acoustical Society of America, 1994, 96, 1893-1898.	1.1	8
126	Analysis of forward scattering of an acoustical zeroth-order Bessel beam from rigid complicated (aspherical) structures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 200, 146-162.	2.3	8

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127	Scattering and radiation force dependence on properties of empty elastic spherical shells: Low-frequency phase-shift derivation. Journal of the Acoustical Society of America, 2019, 146, EL145-EL150.	1.1	8
128	Phase-shift derivation of expansions for material and frequency dependence of progressive-wave radiation forces and backscattering by spheres. Journal of the Acoustical Society of America, 2019, 145, EL39-EL44.	1.1	8
129	Enhanced damping of capillary bridge oscillations using velocity feedback. Physics of Fluids, 2005, 17, 032105.	4.0	7
130	Phase and amplitude evolution of backscattering by a sphere scanned through an acoustic vortex beam: Measured helicity projections. Journal of the Acoustical Society of America, 2020, 148, EL135-EL140.	1.1	7
131	Quantitative Ray Methods for Scattering. , 0, , 483-492.		7
132	Versatile resonanceâ€tracking circuit for acoustic levitation experiments. Review of Scientific Instruments, 1978, 49, 224-226.	1.3	6
133	Self-reconstruction property of fractional Bessel beams: comment. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 2181.	1.5	6
134	Hyperbolic umbilic caustics from oblate water drops with tilted illumination: Observations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 147-153.	2.3	6
135	Acoustic scattering from fluid spheres: Diffraction and interference near the critical scattering angle. Journal of the Acoustical Society of America, 1981, 70, 1488-1495.	1.1	5
136	Halfâ€order derivative of a sineâ€wave burst: Applications to twoâ€dimensional radiation, photoacoustics, and focused scattering from spheres and a torus. Journal of the Acoustical Society of America, 1984, 76, 291-295.	1.1	5
137	Mixedâ€mode acoustical glory scattering from a large elastic sphere: Model and experimental verification. Journal of the Acoustical Society of America, 1984, 76, 1555-1563.	1.1	5
138	Ultrasonic fourâ€wave mixing mediated by an aqueous suspension of microspheres: Theoretical steadyâ€state properties. Journal of the Acoustical Society of America, 1995, 98, 1731-1741.	1.1	5
139	Background contributions and coupling coefficients for backscattering by thick shells. Journal of the Acoustical Society of America, 1997, 101, 3792-3797.	1.1	5
140	A time-resolved glimpse of the terahertz glory. Nature, 1998, 391, 841-842.	27.8	5
141	Quasi-holographic processing as an alternative to synthetic aperture sonar imaging. Proceedings of Meetings on Acoustics, 2013, , .	0.3	5
142	James Clerk Maxwell: Life and science. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 178, 50-65.	2.3	5
143	Specular-reflection contributions to static and dynamic radiation forces on circular cylinders. Journal of the Acoustical Society of America, 2021, 149, 3042-3051.	1.1	5
144	Optically Stimulated Sound From Oil Drops And Gas Bubbles In Water: Thermal And Radiation Pressure Optoacoustic Mechanisms., 1988, 0925, 326.		4

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145	Travel time surface of a transverse cusp caustic produced by reflection of acoustical transients from a curved metal surface in water. Journal of the Acoustical Society of America, 1994, 95, 650-660.	1.1	4
146	Observation of the enhanced backscattering of light by the end of a tilted dielectric cylinder owing to the caustic merging transition. Applied Optics, 2003, 42, 412.	2.1	4
147	Doubly focused backscattering from finite targets in an Airy caustic formed by a curved reflecting surface. Journal of the Acoustical Society of America, 2005, 118, 2811-2819.	1.1	4
148	Hysteresis and mode coupling in capillary bridge oscillations: Observations. Physical Review E, 2005, 72, 067304.	2.1	4
149	Maxwell and creation: Acceptance, criticism, and his anonymous publication. American Journal of Physics, 2007, 75, 731-740.	0.7	4
150	Measured scattering of a first-order vortex beam by a sphere: Cross-helicity and helicity-neutral near-forward scattering and helicity modulation. Proceedings of Meetings on Acoustics, 2013, , .	0.3	4
151	Bessel beam expansion of linear focused ultrasound. Journal of the Acoustical Society of America, 2018, 144, 3076-3083.	1.1	4
152	Humblet's angular momentum decomposition applied to radiation torque on metallic spheres using the Hagenâ€"Rubens approximation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 220, 97-105.	2.3	4
153	Comment on oscillatory optical and acoustical radiation pressure. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 254, 107226.	2.3	4
154	Diffraction of evanescent wave tone bursts on a membrane in air. Journal of the Acoustical Society of America, 1993, 93, 1192-1195.	1.1	3
155	Circular synthetic aperture sonar imaging of simple objects illuminated by an evanescent wavefield. Journal of the Acoustical Society of America, 2016, 140, 2839-2846.	1.1	3
156	Observation and modeling of acoustic scattering from a rubber spherical shell. Journal of the Acoustical Society of America, 2018, 143, 3036-3046.	1.1	3
157	Comment on "Acoustic deformation for the extraction of mechanical properties of lipid vesicle populationsâ€. Physical Review E, 2019, 100, 057001.	2.1	3
158	Comments on the interpretation of hypersonic sound velocity data in supercooled water. Journal of Chemical Physics, 1978, 68, 2997.	3.0	2
159	Light scattering by bubbles in liquids: comments and application of results to circularly polarized incident light. Flow, Turbulence and Combustion, 1983, 40, 3-5.	0.2	2
160	Leaky helical flexural wave backscattering contributions from tilted water-filled cylindrical shells. Journal of the Acoustical Society of America, 2003, 113, 309-312.	1.1	2
161	Singly focused backscattering from small targets in an Airy caustic formed by a curved reflecting surface. Journal of the Acoustical Society of America, 2004, 116, 2751-2758.	1.1	2
162	Active Electrostatic Control of Liquid Bridge Dynamics and Stability. Annals of the New York Academy of Sciences, 2004, 1027, 495-510.	3.8	2

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163	Control of the natural frequency of the (2,0) mode of liquid bridges using active electrostatic fields. Physics of Fluids, 2005, 17, 071702.	4.0	2
164	Evanescent Acoustic Waves From Subcritical Beam Illumination: Laboratory Measurements Near a Liquid–Liquid Interface. IEEE Journal of Oceanic Engineering, 2008, 33, 397-404.	3.8	2
165	Comment on "Anomalous wave propagation in a one-dimensional acoustic metamaterial having simultaneously negative mass density and Young's modulus―[J. Acoust. Soc. Am. 132, 2887–2895 (2012)]. Journal of the Acoustical Society of America, 2014, 135, 1031-1033.	1.1	2
166	Maxwell–Thomson–Loschmidt reversal. Nature Physics, 2017, 13, 2-2.	16.7	2
167	Time Evolution of Bistatic Acoustic Scattering: Mechanism Loci Identification for Broadside Cylinder Near a Flat Interface. IEEE Journal of Oceanic Engineering, 2021, 46, 1024-1033.	3.8	2
168	Specular reflection contributions to dynamic radiation forces on highly reflecting spheres (L). Journal of the Acoustical Society of America, 2021, 150, 25-28.	1.1	2
169	Scattering by relatively small oblate spheroidal drops of water in the rainbow region: T-matrix results and geometric interpretation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 283, 108142.	2.3	2
170	Robert E. Apfel (1943–2002). Nature Materials, 2002, 1, 155-155.	27.5	1
171	High-Frequency Material-Dependent Scattering Processes for Tilted Truncated Cylindrical and Disk-Shaped Targets. AIP Conference Proceedings, 2004, , .	0.4	1
172	A long history of peristaltic perturbations. Physics Today, 2007, 60, 16-16.	0.3	1
173	Bessel beams and glory scattering: Comment on "Generation of Bessel beams using a 4-f spatial filtering system,―by J. M. D. Kowalczyk, S. N. Smith, and E. B. Szarmes [Am. J. Phys.77, 229–236 (2009)]. American Journal of Physics, 2009, 77, 1084-1084.	0.7	1
174	Radiation Torques and Forces in Scattering from Spheres and Acoustical Analogues. , 2009, , .		1
175	Measurements and modeling of the acoustic scattering from an aluminum pipe in the free field and in contact with a sand sediment. , 2010 , , .		1
176	Evolution of acoustic feature timing and imaging for different cylinder exposures and applications of reversible SAS filtering. , $2010, , .$		1
177	High frequency imaging and elastic effects for a solid cylinder with axis oblique relative to a nearby horizontal surface. Journal of the Acoustical Society of America, 2016, 140, 1525-1536.	1.1	1
178	Maxwell stress excitation of wire vibrations at difference and sum frequencies of electric currents in separate circuits. Journal of the Acoustical Society of America, 2020, 148, 1808-1816.	1.1	1
179	STABILIZATION OF AN ELECTRICALLY CONDUCTING CAPILLARY BRIDGE FAR BEYOND THE RAYLEIGH-PLATEAU LIMIT USING FEEDBACK CONTROL OF ELECTROSTATIC STRESSES. , 2002, , 272-272.		1
180	Measuring the modal shapes of elastic targets using modulated radiation pressure. Journal of the Acoustical Society of America, 2019, 146, 3019-3019.	1.1	1

#	Article	IF	CITATIONS
181	Acoustic scattering from a water-filled cylindrical shell: Mode identification and interpretation via finite element and analytical models. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
182	Scattering and Acoustical and Optical Radiation Forces and Torques for Manipulation., 2015,,.		0
183	STABILIZATION OF CAPILLARY BRIDGES IN AIR FAR BEYOND THE RAYLEIGH-PLATEAU LIMIT IN LOW GRAVITY USING ACOUSTIC RADIATION PRESSURE. , 2002, , 273-273.		0
184	Backscattering by a solid aluminum cylinder near a boundary: Experiment and finite element model comparisons Journal of the Acoustical Society of America, 2009, 126, 2186.	1.1	0
185	Feature timing and identification for different solid cylinder exposures revealed using reversible image filtering Journal of the Acoustical Society of America, 2010, 128, 2461-2461.	1.1	O
186	Wide bandwidth and lowâ€frequency target response measurements with a large PVDF sheet source outside the laboratory. Journal of the Acoustical Society of America, 1997, 101, 3198-3198.	1.1	0
187	Backscattering enhancement for tilted plastic cylinders in water due to the causticâ€merging transition: Ultrasonic observations. Journal of the Acoustical Society of America, 1997, 102, 3088-3088.	1.1	0
188	Modification of the time, frequency, and sonar image domain signatures of cylinders due to a material junction. Proceedings of Meetings on Acoustics, 2020, , .	0.3	0
189	GTD synthesis of resonance amplitudes in the backscattering from an elastic spherical shell. Journal of the Acoustical Society of America, 1989, 85, S150-S150.	1.1	0