P A Martin

List of Publications by Year
in descending order

105 papers	2,706 citations	218592 26 h-index	233338 45 g-index
110 all docs	110 docs citations	110 times ranked	1338 citing authors

#	Article	IF	Citations
1	On Fourierâ€“Bessel series and the Kneserâ€“Sommerfeld expansion. Mathematical Methods in the Applied Sciences, 2022, 45, 1145-1152.	1.2	4
2	On blockage coefficients: flow past a body in a pipe. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	7
3	Frank Rizzo and boundary integral equations. Engineering Analysis With Boundary Elements, 2021, 124, 137-141.	2.0	0
4	A Stroh Formalism for Small-on-Large Problems in Spherical Polar Coordinates. Journal of Elasticity, 2020, 138, 125-144.	0.9	2
5	Scattering by a sphere in a tube, and related problems. Journal of the Acoustical Society of America, 2020, 148, 191-200.	0.5	10
6	Acoustic scattering in a rarefied gas: Solving the R13 equations in spherical polar coordinates. Mathematical Methods in the Applied Sciences, 2020, 43, 8906-8929.	1.2	0
7	Acoustics and dynamic materials. Mechanics Research Communications, 2020, 105, 103502.	1.0	3
8	Two-dimensional Brinkman flows and their relation to analogous Stokes flows. IMA Journal of Applied Mathematics, 2019, 84, 912-929.	0.8	3
9	Acoustic scattering by one bubble before 1950: Spitzer, Willis, and Division 6. Journal of the Acoustical Society of America, 2019, 146, 920-926.	0.5	2
10	Antiplane elastic waves in an anisotropic half-space: Fundamental solution, multipoles and scattering problems. Mechanics Research Communications, 2019, 95, 104-107.	1.0	3
11	Temporally Manipulated Plasmons on Graphene. SIAM Journal on Applied Mathematics, 2019, 79, 1051-1074.	0.8	10
12	Quadratic quantities in acoustics: Scattering cross-section and radiation force. Wave Motion, 2019, 86, 63-78.	1.0	7
13	On the use of approximate fundamental solutions: Connections with the method of fundamental solutions and the method of regularized stokeslets. Engineering Analysis With Boundary Elements, 2019, 99, 23-28.	2.0	2
14	On inâ€out splitting of incident fields and the farâ€field behaviour of Herglotz wavefunctions. Mathematical Methods in the Applied Sciences, 2018, 41, 2961-2970.	1.2	2
15	Multiple scattering and scattering cross sections. Journal of the Acoustical Society of America, 2018, 143, 995-1002.	0.5	14
16	Asymptotic Approximations for Radial Spheroidal Wavefunctions with Complex Size Parameter. Studies in Applied Mathematics, 2018, 140, 255-269.	1.1	0
17	Bounds on ratios of modified Bessel functions with complex arguments. Journal of Mathematical Analysis and Applications, 2017, 454, 429-438.	0.5	1
18	On the far-field computation of acoustic radiation forces. Journal of the Acoustical Society of America, 2017, 142, 2094-2100.	0.5	6

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19	On Mixed Boundary-Value Problems in a Wedge. Quarterly Journal of Mechanics and Applied Mathematics, 2017, 70, 373-386.	0.5	3
20	The pulsating orb: solving the wave equation outside a ball. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160037.	1.0	6
21	Acoustic scattering by a sphere in the time domain. Wave Motion, 2016, 67, 68-80.	1.0	9
22	One-dimensional reflection by a semi-infinite periodic row of scatterers. Wave Motion, 2015, 58, 1-12.	1.0	14
23	A scaled mapping parabolic equation for sloping range-dependent environments. Journal of the Acoustical Society of America, 2014, 135, EL172-EL178.	0.5	6
24	Scattering from a large cylinder with an eccentrically embedded core: An orders-of-scattering approximation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 133, 520-525.	1.1	5
25	On acoustic and electric Faraday cages. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140344.	1.0	17
26	Time-domain BEM for 3-D transient elastodynamic problems with interacting rigid movable disc-shaped inclusions. Computational Mechanics, 2014, 53, 1311-1325.	2.2	3
27	Hypersingular integral equations over a disc: Convergence of a spectral method and connection with Tranterâ€™s method. Journal of Computational and Applied Mathematics, 2014, 269, 118-131.	1.1	10
28	Shear-wave resonances in a fluidâ€“solidâ€“solid layered structure. Wave Motion, 2014, 51, 1161-1169.	1.0	1
29	masses on an infinite string and related one-dimensional scattering problems. Wave Motion, 2014, 51, 296-307.	1.0	6
30	Propagation in one-dimensional crystals with positional and compositional disorder. European Physical Journal B, 2013, 86, 1.	0.6	5
31	Peter Waterman and T-matrix methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 123, 2-7.	1.1	32
32	Singularities in auxetic elastic bimaterials. Mechanics Research Communications, 2013, 47, 102-105.	1.0	4
33	Fritz Joseph Ursell. 28 April 1923 â€” 11 May 2012. Biographical Memoirs of Fellows of the Royal Society, 2013, 59, 407-421.	0.1	1
34	Moshinsky's shutter problem: an initial-value problem for the Kleinâ€“Gordon equation. Applicable Analysis, 2012, 91, 309-322.	0.6	0
35	Generation of Internal Gravity Waves by an Oscillating Horizontal Elliptical Plate. SIAM Journal on Applied Mathematics, 2012, 72, 725-739.	0.8	2
36	Maurice Jaswon and boundary element methods. Engineering Analysis With Boundary Elements, 2012, 36, 1699-1704.	2.0	1

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37	Two-dimensional acoustic scattering, conformal mapping, and the Rayleigh hypothesis. Journal of the Acoustical Society of America, 2012, 132, 2184-2188.	0.5	11
38	Internal gravity waves, boundary integral equations and radiation conditions. Wave Motion, 2012, 49, 427-444.	1.0	4
39	The horn-feed problem: sound waves in a tube joined to a cone, and related problems. Journal of Engineering Mathematics, 2011, 71, 291-304.	0.6	5
40	Scattering by defects in an exponentially graded layer and misuse of the method of images. International Journal of Solids and Structures, 2011, 48, 2164-2166.	1.3	16
41	Multiple scattering of flexural waves by random configurations of inclusions in thin plates. Wave Motion, 2011, 48, 161-175.	1.0	21
42	Generation of internal gravity waves by an oscillating horizontal disc. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 3406-3423.	1.0	13
43	Multiple scattering by random configurations of circular cylinders: Reflection, transmission, and effective interface conditions. Journal of the Acoustical Society of America, 2011, 129, 1685-1695.	0.5	15
44	Waves around almost periodic arrangements of scatterers: Analysis of positional disorder. Mathematical Methods in the Applied Sciences, 2010, 33, 2215-2224.	1.2	1
45	Estimating the dynamic effective mass density of random composites. Journal of the Acoustical Society of America, 2010, 128, 571-577.	0.5	37
46	Effective propagation in a one-dimensional perturbed periodic structure: comparison of several approaches. Waves in Random and Complex Media, 2010, 20, 634-655.	1.6	10
47	Scattering by a Cavity in an Exponentially Graded Half-Space. Journal of Applied Mechanics, Transactions ASME, 2009, 76, .	1.1	42
48	Multiple scattering by multiple scatterers. ESAIM: Proceedings and Surveys, 2009, 26, 180-206.	0.4	0
49	Multiple scattering by random configurations of circular cylinders: Weak scattering without closure assumptions. Wave Motion, 2008, 45, 865-880.	1.0	24
50	On functions defined by sums of products of Bessel functions. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 015207.	0.7	12
51	Stress intensity factor computation using the method of fundamental solutions: mixed-mode problems. International Journal for Numerical Methods in Engineering, 2007, 69, 469-483.	1.5	21
52	On the T-matrix for scattering by small obstacles. Journal of Computational and Applied Mathematics, 2007, 204, 219-230.	1.1	2
53	Multiple Scattering by Multiple Spheres: A New Proof of the Lloyd–Berry Formula for the Effective Wavenumber. SIAM Journal on Applied Mathematics, 2006, 66, 1649-1668.	0.8	43
54	Exact Solution of Some Integral Equations over a Circular Disc. Journal of Integral Equations and Applications, 2006, 18, 39.	0.2	6

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55	Perturbed Cracks in Two Dimensions: A Reprise. International Journal of Fracture, 2006, 140, 299-303.	1.1	2
56	Acoustic waves in slender axisymmetric tubes. Journal of Sound and Vibration, 2005, 286, 55-68.	2.1	7
57	On flexural waves in cylindrically anisotropic elastic rods. International Journal of Solids and Structures, 2005, 42, 2161-2179.	1.3	9
58	Fundamental solutions for steady-state heat transfer in an exponentially graded anisotropic material. Zeitschrift Fur Angewandte Mathematik Und Physik, 2005, 56, 293-303.	0.7	34
59	Multiple scattering by random configurations of circular cylinders: Second-order corrections for the effective wavenumber. Journal of the Acoustical Society of America, 2005, 117, 3413-3423.	0.5	93
60	On Websterâ€™s horn equation and some generalizations. Journal of the Acoustical Society of America, 2004, 116, 1381-1388.	0.5	32
61	Waves in wood: axisymmetric waves in slender solids of revolution. Wave Motion, 2004, 40, 387-398.	1.0	10
62	ON THE SCATTERING OF SPHERICAL ELECTROMAGNETIC WAVES BY A PENETRABLE CHIRAL OBSTACLE. , 2004, , .		0
63	On Greenâ€™s function for a bimaterial elastic half-plane. International Journal of Solids and Structures, 2003, 40, 2101-2119.	1.3	12
64	The method of fundamental solutions for scattering and radiation problems. Engineering Analysis With Boundary Elements, 2003, 27, 759-769.	2.0	254
65	On connections between boundary integral equations and T-matrix methods. Engineering Analysis With Boundary Elements, 2003, 27, 771-777.	2.0	23
66	On the scattering of point-generated electromagnetic waves by a perfectly conducting sphere, and related near-field inverse problems. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2003, 83, 129-136.	0.9	16
67	Acoustic Scattering by Inhomogeneous Obstacles. SIAM Journal on Applied Mathematics, 2003, 64, 297-308.	0.8	41
68	Scattering by Inhomogeneities. , 2003, , 233-238.		0
69	On Mechanical Waves Along Aluminum Conductor Steel Reinforced (ACSR) Power Lines. Journal of Applied Mechanics, Transactions ASME, 2002, 69, 740-748.	1.1	8
70	On Green's function for a threeâ€“dimensional exponentially graded elastic solid. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 1931-1947.	1.0	84
71	Acoustic scattering by inhomogeneous spheres. Journal of the Acoustical Society of America, 2002, 111, 2013.	0.5	23
72	On functionally graded balls and cones. Journal of Engineering Mathematics, 2002, 42, 133-142.	0.6	31

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73	RECENT ADVANCES IN THE METHOD OF FUNDAMENTAL SOLUTIONS. , 2002, , .		0
74	Waves in wood: free vibrations of a wooden pole. Journal of the Mechanics and Physics of Solids, 2001, 49, 1155-1178.	2.3	33
75	On wrinkled penny-shaped cracks. Journal of the Mechanics and Physics of Solids, 2001, 49, 1481-1495.	2.3	14
76	On the diffraction of PoincarÃ© waves. Mathematical Methods in the Applied Sciences, 2001, 24, 913-925.	1.2	10
77	The spherical-cap crack revisited. International Journal of Solids and Structures, 2001, 38, 4759-4776.	1.3	13
78	Perturbed cracks in two dimensions: An integral-equation approach. International Journal of Fracture, 2000, 104, 315-325.	1.1	28
79	Electromagnetic scattering by a homogeneous chiral obstacle: scattering relations and the far-field operator. Mathematical Methods in the Applied Sciences, 1999, 22, 1175-1188.	1.2	17
80	Reduction of free-edge stress intensities in anisotropic bimaterials. International Journal of Fracture, 1998, 91, 165-177.	1.1	6
81	On the Added Mass of Rippled Discs. Journal of Engineering Mathematics, 1998, 33, 421-431.	0.6	4
82	Smoothness-relaxation strategies for singular and hypersingular integral equations. International Journal for Numerical Methods in Engineering, 1998, 42, 885-906.	1.5	54
83	Some efficient boundary integral strategies for time-harmonic wave problems in an elastic halfspace. Computer Methods in Applied Mechanics and Engineering, 1998, 164, 207-221.	3.4	10
84	On the derivation of boundary integral equations for scattering by an infinite two-dimensional rough surface. Journal of Mathematical Physics, 1998, 39, 894-912.	0.5	21
85	On potential flow past wrinkled discs. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1998, 454, 2209-2221.	1.0	14
86	Radiation of water waves by a heaving submerged horizontal disc. Journal of Fluid Mechanics, 1997, 337, 365-379.	1.4	72
87	On the derivation of boundary integral equations for scattering by an infinite one-dimensional rough surface. Journal of the Acoustical Society of America, 1997, 102, 67-77.	0.5	48
88	General formulation for light scattering by a dielectric body near a perfectly conducting surface. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 338.	0.8	20
89	HYPERSINGULAR INTEGRALS: HOW SMOOTH MUST THE DENSITY BE?. International Journal for Numerical Methods in Engineering, 1996, 39, 687-704.	1.5	119
90	Water waves incident on an infinitely long rectangular inlet. Applied Ocean Research, 1996, 18, 1-11.	1.8	13

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91	On angular-spectrum representations for scattering by infinite rough surfaces. Wave Motion, 1996, 24, 421-433.	1.0	27
92	Partitioning, boundary integral equations, and exact Green's functions. International Journal for Numerical Methods in Engineering, 1995, 38, 3483-3495.	1.5	15
93	Fluidâ€“Solid Interaction: Acoustic Scattering by a Smooth Elastic Obstacle. SIAM Journal on Applied Mathematics, 1995, 55, 904-922.	0.8	82
94	Trapping of water waves by submerged plates using hypersingular integral equations. Journal of Fluid Mechanics, 1995, 284, 359-375.	1.4	26
95	Regularized integral equations and curvilinear boundary elements for electromagnetic wave scattering in three dimensions. IEEE Transactions on Antennas and Propagation, 1995, 43, 1416-1422.	3.1	28
96	Spectral methods for forward-propagating water waves in conformally-mapped channels. Applied Ocean Research, 1994, 16, 249-266.	1.8	13
97	A normal crack in an elastic half-space with stress-free surface. Mathematical Methods in the Applied Sciences, 1993, 16, 563-579.	1.2	4
98	Boundary integral equations for the scattering of electromagnetic waves by a homogeneous dielectric obstacle. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1993, 123, 185-208.	0.8	59
99	Boundary integral equations for the scattering of elastic waves by elastic inclusions with thin interface layers. Journal of Nondestructive Evaluation, 1992, 11, 167-174.	1.1	69
100	Reflection and transmission from porous structures under oblique wave attack. Journal of Fluid Mechanics, 1991, 224, 625-644.	1.4	256
101	On hypersingular boundary integral equations for certain problems in mechanics. Mechanics Research Communications, 1989, 16, 65-71.	1.0	35
102	Scattering of long waves by cylindrical obstacles and gratings using matched asymptotic expansions. Journal of Fluid Mechanics, 1988, 188, 465-490.	1.4	64
103	The discontinuity in the elastostatic displacement vector across a penny-shaped crack under arbitrary loads. Journal of Elasticity, 1982, 12, 201-218.	0.9	18
104	On the null-field equations for water-wave radiation problems. Journal of Fluid Mechanics, 1981, 113, 315.	1.4	34
105	Steady state diffusion in tubular structures: Assessment of one-dimensional models. European Journal of Applied Mathematics, 0, , 1-18.	1.4	1