

# Alexander B Movchan

## List of Publications by Year in descending order

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210  
papers

5,306  
citations

87888

38  
h-index

110387

64  
g-index

213  
all docs

213  
docs citations

213  
times ranked

2160  
citing authors

#	ARTICLE	IF	CITATIONS
1	On waves in multi-scale chiral elastic systems. <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 1855-1868.	2.4	1
2	Modelling of seismic assessment for large geological systems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	3.4	4
3	Frontal waves and transmissions for temporal laminates and imperfect chiral interfaces. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	3.4	4
4	Wave generation and transmission in multi-scale complex media and structured metamaterials. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	3.4	1
5	Fibril density reduction in keratoconic corneas. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20200900.	3.4	8
6	Scattering Reduction and Resonant Trapping of Flexural Waves: Two Rings to Rule Them. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4462.	2.5	1
7	Increasing Resolution of Seismic Hazard Mapping on the Example of the North of Middle Russian Highland. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5298.	2.5	4
8	Early assessment of seismic hazard in terms of Voronezh massif-Moscow Depression contact. <i>Mining of Mineral Deposits</i> , 2021, 15, 62-70.	2.8	5
9	Scattering from a non-linear structured interface. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 136, 103687.	4.8	1
10	One-way interfacial waves in a flexural plate with chiral double resonators. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190350.	3.4	13
11	Localized waves at a line of dynamic inhomogeneities: General considerations and some specific problems. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 138, 103901.	4.8	11
12	Waves in elastic bodies with discrete and continuous dynamic microstructure. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190313.	3.4	14
13	Flexural vibration systems with gyroscopic spinners. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20190154.	3.4	10
14	Nested Bloch waves in elastic structures with configurational forces. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20190101.	3.4	9
15	Omnidirectional flexural invisibility of multiple interacting voids in vibrating elastic plates. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019, 475, 20190283.	2.1	12
16	Microstructure-based numerical simulation of the mechanical behaviour of ocular tissue. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20180685.	3.4	26
17	Analysis of Low Frequency Acoustic Stop Bands in Cubic Arrays of Thick Spherical Shells With Holes. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	2
18	Analysis of X-ray scattering microstructure data for implementation in numerical simulations of ocular biomechanical behaviour. <i>PLoS ONE</i> , 2019, 14, e0214770.	2.5	10

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19	Wave polarization and dynamic degeneracy in a chiral elastic lattice. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190313.	2.1	10
20	Serpentine locomotion through elastic energy release. Journal of the Royal Society Interface, 2017, 14, 20170055.	3.4	23
21	Tilted resonators in a triangular elastic lattice: Chirality, Bloch waves and negative refraction. Journal of the Mechanics and Physics of Solids, 2017, 103, 236-256.	4.8	50
22	Blockage and guiding of flexural waves in a semi-infinite double grating. Mathematical Methods in the Applied Sciences, 2017, 40, 3265-3282.	2.3	3
23	Propagation and filtering of elastic and electromagnetic waves in piezoelectric composite structures. Mathematical Methods in the Applied Sciences, 2017, 40, 3202-3220.	2.3	6
24	Edge Waves and Localization in Lattices Containing Tilted Resonators. Frontiers in Materials, 2017, 4, .	2.4	23
25	Quasi-periodicity and multi-scale resonators for the reduction of seismic vibrations in fluid-solid systems. International Journal of Engineering Science, 2016, 109, 216-239.	5.0	24
26	Transmission and localisation in ordered and randomly-perturbed structured flexural systems. International Journal of Engineering Science, 2016, 98, 126-152.	5.0	16
27	Metamaterial Systems and Routing of Elastic Waves in Engineered Structures. , 2016, , 107-113.		0
28	“Parabolic” trapped modes and steered Dirac cones in platonic crystals. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140746.	2.1	26
29	DYNAMIC MULTI-STRUCTURE IN MODELLING A TRANSITION FLEXURAL WAVE. Mathematika, 2015, 61, 444-456.0.5		6
30	Transition Wave in the Collapse of the San Saba Bridge. Frontiers in Materials, 2014, 1, .	2.4	17
31	Transformation elastodynamics and cloaking for flexural waves. Journal of the Mechanics and Physics of Solids, 2014, 72, 131-143.	4.8	81
32	Symmetry and resonant modes in platonic grating stacks. Waves in Random and Complex Media, 2014, 24, 126-148.	2.7	12
33	Transformation cloaking and radial approximations for flexural waves in elastic plates. New Journal of Physics, 2014, 16, 093020.	2.9	36
34	Dynamic response of a growing inclusion in a discrete system. International Journal of Solids and Structures, 2014, 51, 2990-3001.	2.7	2
35	Resonant waves in elastic structured media: Dynamic homogenisation versus Green’s functions. International Journal of Solids and Structures, 2014, 51, 2254-2260.	2.7	16
36	Dynamic response and localization in strongly damaged waveguides. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140136.	2.1	13

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37	Dispersion and localisation in structured Rayleigh beams. International Journal of Solids and Structures, 2014, 51, 4452-4461.	2.7	23
38	Dispersion properties of vortex-type monatomic lattices. International Journal of Solids and Structures, 2014, 51, 2213-2225.	2.7	46
39	Uniform Asymptotic Formulae for Green's Functions for the Laplacian in Domains with Small Perforations. Lecture Notes in Mathematics, 2013, , 3-19.	0.2	0
40	Localisation near defects and filtering of flexural waves in structured plates. International Journal of Fracture, 2013, 184, 25-41.	2.2	3
41	Making waves round a structured cloak: lattices, negative refraction and fringes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130218.	2.1	30
42	Localization for a line defect in an infinite square lattice. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120579.	2.1	19
43	Crack propagation induced by thermal shocks in structured media. International Journal of Solids and Structures, 2013, 50, 2725-2736.	2.7	17
44	Transition wave in a supported heavy beam. Journal of the Mechanics and Physics of Solids, 2013, 61, 2067-2085.	4.8	30
45	Propagation of Slepyan's crack in a non-uniform elastic lattice. Journal of the Mechanics and Physics of Solids, 2013, 61, 1464-1488.	4.8	25
46	Stroh formalism in analysis of skew-symmetric and symmetric weight functions for interfacial cracks. Mathematics and Mechanics of Solids, 2013, 18, 135-152.	2.4	12
47	Phononic Band Gap Systems in Structural Mechanics: Finite Slender Elastic Structures and Infinite Periodic Waveguides. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.6	30
48	Elastic metamaterials with inertial locally resonant structures: Application to lensing and localization. Physical Review B, 2013, 87, .	3.2	170
49	Bypassing shake, rattle and roll. Physics World, 2013, 26, 32-36.	0.0	14
50	Structured interfaces for flexural waves – trapped modes and transmission resonances. Journal of Physics: Conference Series, 2013, 451, 012024.	0.4	1
51	Green's Kernels and Meso-Scale Approximations in Perforated Domains. Lecture Notes in Mathematics, 2013, , .	0.2	39
52	Green's Function for the Dirichlet Boundary Value Problem in a Domain with Several Inclusions. Lecture Notes in Mathematics, 2013, , 59-73.	0.2	1
53	Green's Tensor in Bodies with Multiple Rigid Inclusions. Lecture Notes in Mathematics, 2013, , 139-167.	0.2	0
54	Green's Tensor for the Mixed Boundary Value Problem in a Domain with a Small Hole. Lecture Notes in Mathematics, 2013, , 169-188.	0.2	0

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55	Meso-scale Approximations for Solutions of Dirichlet Problems. Lecture Notes in Mathematics, 2013, , 191-219.	0.2	0
56	Mixed Boundary Value Problems in Multiply-Perforated Domains. Lecture Notes in Mathematics, 2013, , 221-247.	0.2	0
57	Other Examples of Asymptotic Approximations of Green's Functions in Singularly Perturbed Domains. Lecture Notes in Mathematics, 2013, , 83-94.	0.2	0
58	Numerical Simulations Based on the Asymptotic Approximations. Lecture Notes in Mathematics, 2013, , 75-81.	0.2	0
59	Mixed and Neumann Boundary Conditions for Domains with Small Holes and Inclusions: Uniform Asymptotics of Green's Kernels. Lecture Notes in Mathematics, 2013, , 21-57.	0.2	0
60	Green's Tensor for the Dirichlet Boundary Value Problem in a Domain with a Single Inclusion. Lecture Notes in Mathematics, 2013, , 97-137.	0.2	0
61	Analytic theory of defects in periodically structured elastic plates. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 1196-1216.	2.1	15
62	Vortex-type elastic structured media and dynamic shielding. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3027-3046.	2.1	42
63	Transmission, trapping and filtering of waves in periodically constrained elastic plates. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 76-93.	2.1	32
64	Asymptotics of eigenfrequencies in the dynamic response of elongated multi-structures. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 378-394.	2.1	32
65	Dynamic anisotropy and localization in elastic lattice systems. Waves in Random and Complex Media, 2012, 22, 143-159.	2.7	28
66	Cloaking Comes Out of the Shadows. Physics Magazine, 2012, 5, .	0.1	5
67	Dynamics of a Fault Steadily Propagating within a Structural Interface. Multiscale Modeling and Simulation, 2012, 10, 936-953.	1.6	14
68	Interaction of an interfacial crack with linear small defects under out-of-plane shear loading. Computational Materials Science, 2012, 52, 226-230.	3.0	11
69	Uniform asymptotics of Green's kernels in perforated domains and meso-scale approximations. Complex Variables and Elliptic Equations, 2012, 57, 137-154.	0.8	5
70	Trapping of a crack advancing through an elastic lattice. International Journal of Engineering Science, 2012, 61, 129-141.	5.0	7
71	Mode III crack propagation in a bimaterial plane driven by a channel of small line defects. Computational Materials Science, 2012, 64, 239-243.	3.0	3
72	Perturbation analysis of Mode III interfacial cracks advancing in a dilute heterogeneous material. International Journal of Solids and Structures, 2012, 49, 244-255.	2.7	13

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73	Analytical model of thermal striping for a micro-cracked solid. <i>International Journal of Solids and Structures</i> , 2012, 49, 1189-1194.	2.7	4
74	The colours of cloaks. <i>Journal of Optics (United Kingdom)</i> , 2011, 13, 024014.	2.2	53
75	Mesoscale Asymptotic Approximations to Solutions of Mixed Boundary Value Problems in Perforated Domains. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 424-448.	1.6	31
76	Asymptotic Approximation for the Weight Function in a Solid with a Surface-Breaking Crack and Small Voids. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 1444-1458.	1.6	0
77	Weight Function in a Bimaterial Strip Containing an Interfacial Crack and an Imperfect Interface. Application to Bloch-Floquet Analysis in a Thin Inhomogeneous Structure with Cracks. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 1327-1349.	1.6	8
78	Flexural waves in structured elastic plates: Mindlin versus bi-harmonic models. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 869-880.	2.1	13
79	Dispersion and localization of elastic waves in materials with microstructure. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 2874-2895.	2.1	35
80	Waves and damage in structured solids with multi-scale resonators. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 964-984.	2.1	7
81	Asymptotic Study of A Thermoelastic Problem in A Semi-Infinite Body Containing A Surface-Breaking Crack and Small Perforations. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2011, 64, 349-369.	1.3	5
82	Micromechanical model of nonlinear deformation of shape memory alloys under phase and structure transitions. <i>Mechanics of Solids</i> , 2010, 45, 406-416.	0.7	19
83	Asymptotic and numerical models of waves in tunable multi-scale structures. <i>Continuum Mechanics and Thermodynamics</i> , 2010, 22, 531-544.	2.2	0
84	Bloch-Floquet waves and localisation within a heterogeneous waveguide with long cracks. <i>Continuum Mechanics and Thermodynamics</i> , 2010, 22, 545-553.	2.2	2
85	Shear polarisation of elastic waves by a structured interface. <i>Continuum Mechanics and Thermodynamics</i> , 2010, 22, 663-677.	2.2	12
86	Preface to the special issue in honour of Leonid Slepyan. <i>Continuum Mechanics and Thermodynamics</i> , 2010, 22, 413-419.	2.2	0
87	Frequency related localisation of harmonic elastic waves in stratified welds. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010, 26, 567-572.	3.4	0
88	Crack in a lattice waveguide. <i>International Journal of Fracture</i> , 2010, 162, 91-106.	2.2	32
89	Perturbation of mode III interfacial cracks. <i>International Journal of Fracture</i> , 2010, 166, 41-51.	2.2	14
90	Dynamic mode-III interface crack in a bi-material strip. <i>International Journal of Fracture</i> , 2010, 166, 121-133.	2.2	12

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91	Asymptotic treatment of perforated domains without homogenization. <i>Mathematische Nachrichten</i> , 2010, 283, 104-125.	0.8	55
92	Dynamics of structural interfaces: Filtering and focussing effects for elastic waves. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 1212-1224.	4.8	75
93	Acoustic band gaps in arrays of neutral inclusions. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 1962-1969.	2.0	9
94	All-angle-negative-refraction and ultra-refraction for liquid surface waves in 2D phononic crystals. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 2011-2019.	2.0	29
95	Focussing bending waves via negative refraction in perforated thin plates. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	71
96	Convergence properties and flat bands in platonic crystal band structures using the multipole formulation. <i>Waves in Random and Complex Media</i> , 2010, 20, 702-716.	2.7	21
97	Band-gap shift and defect-induced annihilation in prestressed elastic structures. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	81
98	Junction Conditions for Cracked Elastic Thin Solids Under Bending and Shear. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2009, 62, 481-494.	1.3	4
99	Wave scattering by platonic grating stacks. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2009, 465, 3383-3400.	2.1	36
100	A thermoelastic junction problem in a thin-walled structure: asymptotic analysis. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2009, 465, 1309-1321.	2.1	1
101	Interfacial effects in electromagnetic coupling within piezoelectric phononic crystals. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2009, 25, 95-99.	3.4	8
102	Platonic crystals: Bloch bands, neutrality and defects. <i>Mechanics of Materials</i> , 2009, 41, 356-363.	3.2	58
103	Symmetric and skew-symmetric weight functions in 2D perturbation models for semi-infinite interfacial cracks. <i>Journal of the Mechanics and Physics of Solids</i> , 2009, 57, 1657-1682.	4.8	40
104	Localised knife waves in a structured interface. <i>Journal of the Mechanics and Physics of Solids</i> , 2009, 57, 1958-1979.	4.8	64
105	Negative refraction, surface modes, and superlensing effect via homogenization near resonances for a finite array of split-ring resonators. <i>Physical Review E</i> , 2009, 80, 046309.	2.1	27
106	Cloaking bending waves propagating in thin elastic plates. <i>Physical Review B</i> , 2009, 79, .	3.2	126
107	Achieving control of in-plane elastic waves. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	258
108	Uniform Asymptotics of Green's Kernels for Mixed and Neumann Problems in Domains with Small Holes and Inclusions. <i>International Mathematical Series</i> , 2009, , 277-316.	0.3	16

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109	Crack in a lattice waveguide. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 91-106.	0.2	0
110	Acoustic stop bands in almost-periodic and weakly randomized stratified media: perturbation analysis. Acta Mechanica Sinica/Lixue Xuebao, 2008, 24, 549-556.	3.4	9
111	Uniform asymptotic approximations of Green's functions in a long rod. Mathematical Methods in the Applied Sciences, 2008, 31, 2055-2068.	2.3	17
112	Dynamical extraction of a single chain from a discrete lattice. Journal of the Mechanics and Physics of Solids, 2008, 56, 487-495.	4.8	18
113	Dynamics of a prestressed stiff layer on an elastic half space: filtering and band gap characteristics of periodic structural models derived from long-wave asymptotics. Journal of the Mechanics and Physics of Solids, 2008, 56, 2494-2520.	4.8	57
114	Achieving invisibility over a finite range of frequencies. Optics Express, 2008, 16, 5656.	3.4	51
115	Dynamics of a bridged crack in a discrete lattice. Quarterly Journal of Mechanics and Applied Mathematics, 2008, 61, 151-160.	1.3	38
116	A homogenization route towards square cylindrical acoustic cloaks. New Journal of Physics, 2008, 10, 115030.	2.9	46
117	Asymptotic model of fields in a thin-walled structure with crack-like defects. Quarterly Journal of Mechanics and Applied Mathematics, 2008, 62, 1-18.	1.3	1
118	Waves in lattices with imperfect junctions and localized defect modes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2037-2054.	2.1	8
119	Analytical and numerical analysis of lensing effect for linear surface water waves through a square array of nearly touching rigid square cylinders. Physical Review E, 2008, 77, 046308.	2.1	27
120	Broadband Cylindrical Acoustic Cloak for Linear Surface Waves in a Fluid. Physical Review Letters, 2008, 101, 134501.	7.8	314
121	Asymptotic Models Of Bloch-Floquet Waves In Periodic Waveguides. Springer Proceedings in Physics, 2008, , 291-305.	0.2	0
122	Two-parameter asymptotic approximations in the analysis of a thin solid fixed on a small part of its boundary. Quarterly Journal of Mechanics and Applied Mathematics, 2007, 60, 457-471.	1.3	9
123	Acoustic metamaterials for sound focusing and confinement. New Journal of Physics, 2007, 9, 399-399.	2.9	264
124	Bloch-Floquet waves and controlled stop bands in periodic thermo-elastic structures. Waves in Random and Complex Media, 2007, 17, 429-438.	2.7	7
125	Waves and fracture in an inhomogeneous lattice structure. Waves in Random and Complex Media, 2007, 17, 409-428.	2.7	36
126	Asymptotic analysis of Bloch-Floquet waves in a thin bi-material strip with a periodic array of finite-length cracks. Waves in Random and Complex Media, 2007, 17, 511-533.	2.7	7



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127	Asymptotic estimates for localized electromagnetic modes in doubly periodic structures with defects. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 1045-1067.	2.1	11
128	Bloch's Floquet bending waves in perforated thin plates. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 2505-2518.	2.1	75
129	Band gap Green's functions and localized oscillations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 2709-2727.	2.1	46
130	Uniform asymptotic formulae for Green's functions in singularly perturbed domains. Journal of Computational and Applied Mathematics, 2007, 208, 194-206.	2.0	22
131	Characterization of random microstructural stresses and fracture estimation. European Journal of Mechanics, A/Solids, 2007, 26, 573-591.	3.7	3
132	High order asymptotic analysis of twisted electrostatic problems. Physica B: Condensed Matter, 2007, 394, 335-338.	2.7	8
133	Estimates for localised transverse electric modes in multi-structured crystal fibres. Physica B: Condensed Matter, 2007, 394, 281-284.	2.7	3
134	Evaluation of the Lazarus's Leblond constants in the asymptotic model of the interfacial wavy crack. Journal of the Mechanics and Physics of Solids, 2007, 55, 1575-1600.	4.8	29
135	Lattice Green's Functions in Nonlinear Analysis of Defects. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 686-690.	2.2	7
136	Localised bending modes in split ring resonators. Physica B: Condensed Matter, 2007, 394, 141-144.	2.7	7
137	Uniform asymptotic formulae for Green's kernels in regularly and singularly perturbed domains. Comptes Rendus Mathematique, 2006, 343, 185-190.	0.3	22
138	Asymptotic modelling of weakly twisted electrostatic problems. Comptes Rendus - Mecanique, 2006, 334, 91-97.	2.1	12
139	Multi-structures: asymptotic analysis and singular perturbation problems. European Journal of Mechanics, A/Solids, 2006, 25, 677-694.	3.7	8
140	Localised vibration modes and stop bands for continuous and discrete periodic structures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 431, 175-183.	5.6	23
141	Asymptotic and numerical study of a surface breaking crack subject to a transient thermal loading. Acta Mechanica Sinica/Lixue Xuebao, 2006, 22, 22-27.	3.4	9
142	Singular perturbation analysis of dynamic fields in a thermoelastic solid with a small surface-breaking crack. Acta Mechanica Sinica/Lixue Xuebao, 2006, 22, 449-454.	3.4	2
143	Steady-state motion of a mode-III crack on imperfect interfaces. Quarterly Journal of Mechanics and Applied Mathematics, 2006, 59, 487-516.	1.3	23
144	High-order asymptotics and perturbation problems for 3D interfacial cracks. Journal of the Mechanics and Physics of Solids, 2005, 53, 1128-1162.	4.8	16

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145	Elastic waves in arrays of elliptic inclusions. Zeitschrift Fur Kristallographie - Crystalline Materials, 2005, 220, .	0.8	3
146	Perturbation of a dynamic crack in an infinite strip. Quarterly Journal of Mechanics and Applied Mathematics, 2005, 58, 333-347.	1.3	11
147	Noncommuting limits and effective properties for oblique propagation of electromagnetic waves through an array of aligned fibres. Physical Review B, 2004, 69, .	3.2	21
148	Mathematical modelling of heat transfer in a catalytic reformer. IMA Journal of Applied Mathematics, 2004, 70, 201-220.	1.6	5
149	Transport properties of densely packed composites. Effect of shapes and spacings of inclusions. Quarterly Journal of Mechanics and Applied Mathematics, 2004, 57, 495-528.	1.3	6
150	Crack path in an elastic material with a random array of small defects. International Journal of Fracture, 2004, 125, 103-123.	2.2	2
151	Analysis of Elastic Band Structures for Oblique Incidence. Archive for Rational Mechanics and Analysis, 2004, 171, 129-150.	2.4	15
152	Coupling between electromagnetic and mechanical vibrations of thin-walled structures. Quarterly Journal of Mechanics and Applied Mathematics, 2004, 57, 407-428.	1.3	14
153	Split-ring resonators and localized modes. Physical Review B, 2004, 70, .	3.2	115
154	Comparisons of finite element and Rayleigh methods for the study of conical Bloch waves in arrays of metallic cylinders. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 932-949.	0.9	5
155	Slow decay of end effects in layered structures with an imperfect interface. Journal of Engineering Mathematics, 2003, 45, 155-168.	1.2	7
156	Conical propagation of electromagnetic waves through an array of cylindrical inclusions. Physica B: Condensed Matter, 2003, 338, 149-152.	2.7	2
157	Band gaps and elastic waves in disordered stacks: normal incidence. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2003, 459, 221-240.	2.1	13
158	Oblique propagation of electromagnetic and elastic waves for an array of cylindrical fibres. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2003, 459, 2215-2263.	2.1	35
159	Realizable (Average Stress, Average Strain) Pairs in a Plate with Holes. SIAM Journal on Applied Mathematics, 2003, 63, 987-1028.	1.8	8
160	Vibrations of Lattice Structures and Phononic Band Gaps. Quarterly Journal of Mechanics and Applied Mathematics, 2003, 56, 45-64.	1.3	203
161	Two-dimensional lattice models of the Peierls type. Philosophical Magazine, 2003, 83, 569-587.	1.6	17
162	Estimates for the low eigenfrequencies of a multi-structure including an elastic shell. European Journal of Applied Mathematics, 2003, 14, 313-342.	2.9	2

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163	Imperfect Interfaces and Discrete Lattice Structures. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 7-11.	1.4	3
164	Vibrations of multi-structures including elastic shells: Asymptotic analysis. European Journal of Applied Mathematics, 2002, 13, 109-128.	2.9	4
165	Elastic waves and homogenization in oblique periodic structures. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 1887-1912.	2.1	39
166	Two-dimensional phononic crystals and scattering of elastic waves by an array of voids. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 2327-2347.	2.1	30
167	Computer simulation of grain-boundary diffusion creep. Acta Materialia, 2002, 50, 3941-3955.	7.9	58
168	Problème spectral pour la propagation conique des ondes élastiques dans un réseau de galeries. Comptes Rendus - Mécanique, 2002, 330, 491-497.	2.1	1
169	Stability of an advancing crack to small perturbation of its path. Journal of the Mechanics and Physics of Solids, 2002, 50, 57-80.	4.8	19
170	Dynamic stability of a propagating crack. Journal of the Mechanics and Physics of Solids, 2002, 50, 2637-2668.	4.8	18
171	Perturbation of a dynamic planar crack moving in a model viscoelastic solid. International Journal of Solids and Structures, 2002, 39, 5409-5426.	2.7	6
172	Statics and dynamics of structural interfaces in elasticity. International Journal of Solids and Structures, 2002, 39, 4843-4865.	2.7	72
173	A study of quasi-circular cracks. International Journal of Fracture, 2002, 113, 1-25.	2.2	13
174	Noncommuting Limits in Electromagnetic Scattering: Asymptotic Analysis for an Array of Highly Conducting Inclusions. SIAM Journal on Applied Mathematics, 2001, 61, 1706-1730.	1.8	38
175	The influence of viscoelasticity on crack front waves. Journal of the Mechanics and Physics of Solids, 2001, 49, 2177-2189.	4.8	12
176	Models of fracture of cellular monolith structures. International Journal of Solids and Structures, 2001, 38, 1659-1668.	2.7	4
177	Mathematical model of delamination cracks on imperfect interfaces. International Journal of Solids and Structures, 2001, 38, 6665-6697.	2.7	42
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