Igor Sevostianov

List of Publications by Year in descending order

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253	5,889	87723	123241
papers	citations	38 h-index	61 g-index

264	264	264	2888
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On quantitative characterization of microstructures and effective properties. International Journal of Solids and Structures, 2005, 42, 309-336.	1.3	241
2	Explicit cross-property correlations for anisotropic two-phase composite materials. Journal of the Mechanics and Physics of Solids, 2002, 50, 253-282.	2.3	203
3	Effect of interphase layers on the overall elastic and conductive properties of matrix composites. Applications to nanosize inclusion. International Journal of Solids and Structures, 2007, 44, 1304-1315.	1.3	169
4	Effective elastic properties of matrix composites with transversely-isotropic phases. International Journal of Solids and Structures, 2005, 42, 455-476.	1.3	153
5	Generalization of Maxwell homogenization scheme for elastic material containing inhomogeneities of diverse shape. International Journal of Engineering Science, 2013, 64, 23-36.	2.7	117
6	Dependence of the mechanical properties of sintered hydroxyapatite on the sintering temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 431, 218-227.	2.6	116
7	On the shape of effective inclusion in the Maxwell homogenization scheme for anisotropic elastic composites. Mechanics of Materials, 2014, 75, 45-59.	1.7	110
8	Compliance Tensors of Ellipsoidal Inclusions. International Journal of Fracture, 1999, 96, 3-7.	1.1	100
9	Impact of the porous microstructure on the overall elastic properties of the osteonal cortical bone. Journal of Biomechanics, 2000, 33, 881-888.	0.9	92
10	Elastic and electric properties of closed-cell aluminum foams. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 420, 87-99.	2.6	92
11	Micromechanics of Materials, with Applications. Solid Mechanics and Its Applications, 2018, , .	0.1	89
12	Plasma-sprayed ceramic coatings: anisotropic elastic and conductive properties in relation to the microstructure; cross-property correlations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 297, 235-243.	2.6	87
13	Modeling of the anisotropic elastic properties of plasma-sprayed coatings in relation to their microstructure. Acta Materialia, 2000, 48, 1361-1370.	3.8	81
14	On elastic compliances of irregularly shaped cracks. International Journal of Fracture, 2002, 114, 245-257.	1.1	76
15	Explicit cross-property correlations for porous materials with anisotropic microstructures. Journal of the Mechanics and Physics of Solids, 2001, 49, 1-25.	2.3	72
16	Maxwellâ€™s methodology of estimating effective properties: Alive and well. International Journal of Engineering Science, 2019, 140, 35-88.	2.7	66
17	On some controversial issues in effective field approaches to the problem of the overall elastic properties. Mechanics of Materials, 2014, 69, 93-105.	1.7	64
18	Connections between Elastic and Conductive Properties of Heterogeneous Materials. Advances in Applied Mechanics, 2009, 42, 69-252.	1.4	63

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19	Health monitoring of bolted joints via electrical conductivity measurements. International Journal of Engineering Science, 2010, 48, 874-887.	2.7	59
20	On computation of the compliance and stiffness contribution tensors of non ellipsoidal inhomogeneities. International Journal of Solids and Structures, 2008, 45, 4375-4383.	1.3	57
21	Relations between compliances of inhomogeneities having the same shape but different elastic constants. International Journal of Engineering Science, 2007, 45, 797-806.	2.7	56
22	On approximate symmetries of the elastic properties and elliptic orthotropy. International Journal of Engineering Science, 2008, 46, 211-223.	2.7	52
23	Connections between different models describing imperfect interfaces in periodic fiber-reinforced composites. International Journal of Solids and Structures, 2012, 49, 1518-1525.	1.3	52
24	Evaluation of the effective elastic and conductive properties of a material containing concave pores. International Journal of Engineering Science, 2015, 97, 60-68.	2.7	50
25	Elastic compliances of non-flat cracks. International Journal of Solids and Structures, 2007, 44, 6412-6427.	1.3	48
26	Point force and point electric charge in infinite and semi-infinite transversely isotropic piezoelectric solids. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 331-359.	0.6	47
27	Evaluation of the probability density of inhomogeneous fiber orientations by computed tomography and its application to the calculation of the effective properties of a fiber-reinforced composite. International Journal of Engineering Science, 2018, 122, 14-29.	2.7	47
28	Elastic and Conductive Properties of Plasma-Sprayed Ceramic Coatings in Relation to Their Microstructure: An Overview. Journal of Thermal Spray Technology, 2009, 18, 822-834.	1.6	45
29	Elastic fields generated by inhomogeneities: Far-field asymptotics, its shape dependence and relation to the effective elastic properties. International Journal of Solids and Structures, 2011, 48, 2340-2348.	1.3	45
30	Inelastic behaviour of bacterial cellulose hydrogel: In aqua cyclic tests. Polymer Testing, 2015, 44, 82-92.	2.3	45
31	Effective elastic properties of composites with particles of polyhedral shapes. International Journal of Solids and Structures, 2017, 120, 157-170.	1.3	45
32	Quantitative characterization of microstructures of plasma-sprayed coatings and their conductive and elastic properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 164-174.	2.6	44
33	Effect of crack orientation statistics on effective stiffness of mircocracked solid. International Journal of Solids and Structures, 2009, 46, 1574-1588.	1.3	44
34	Riceâ€™s Internal Variables Formalism and Its Implications for the Elastic and Conductive Properties of Cracked Materials, and for the Attempts to Relate Strength to Stiffness. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	42
35	On the thermal expansion of composite materials and cross-property connection between thermal expansion and thermal conductivity. Mechanics of Materials, 2012, 45, 20-33.	1.7	42
36	Spheroidal inhomogeneity in a transversely isotropic piezoelectric medium. Archive of Applied Mechanics, 2000, 70, 673-693.	1.2	41

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37	Normal and tangential compliances of interface of rough surfaces with contacts of elliptic shape. International Journal of Solids and Structures, 2008, 45, 2723-2736.	1.3	41
38	Effective properties of linear viscoelastic microcracked materials: Application of Maxwell homogenization scheme. Mechanics of Materials, 2015, 84, 28-43.	1.7	41
39	Effective conductivity of composite with imperfect contact between elliptic fibers and matrix: Maxwellâ€™s homogenization scheme. International Journal of Engineering Science, 2014, 83, 146-161.	2.7	39
40	On the modeling and design of piezocomposites with prescribed properties. Archive of Applied Mechanics, 2001, 71, 733-747.	1.2	38
41	Copperâ€“graphite composites: thermal expansion, thermal and electrical conductivities, and cross-property connections. Journal of Materials Science, 2016, 51, 7977-7990.	1.7	38
42	Time-dependent rheological behaviour of bacterial cellulose hydrogel. Materials Science and Engineering C, 2016, 58, 153-159.	3.8	38
43	Thermal conductivity of a material containing cracks of arbitrary shape. International Journal of Engineering Science, 2006, 44, 513-528.	2.7	37
44	Effective properties of heterogeneous materials: Proper application of the non-interaction and the â€œdilute limitâ€•approximations. International Journal of Engineering Science, 2012, 58, 124-128.	2.7	37
45	Contact of rough surfaces: A simple model for elasticity, conductivity and cross-property connections. Journal of the Mechanics and Physics of Solids, 2008, 56, 1380-1400.	2.3	35
46	On the Compliance Contribution Tensor for a Concave Superspherical Pore. International Journal of Fracture, 2012, 177, 199-206.	1.1	35
47	Maxwell homogenization scheme as a rigorous method of micromechanics: Application to effective conductivity of a composite with spheroidal particles. International Journal of Engineering Science, 2016, 98, 36-50.	2.7	35
48	Cross-property connections for fiber reinforced piezoelectric materials with anisotropic constituents. International Journal of Engineering Science, 2007, 45, 719-735.	2.7	34
49	Special issue on â€œAdvances in micromechanics of materialsâ€• Acta Mechanica, 2016, 227, 1-1.	1.1	34
50	Effective elastic properties of the particulate composite with transversely isotropic phases. International Journal of Solids and Structures, 2004, 41, 885-906.	1.3	33
51	Effect of pore distribution on the statistics of peak stress and overall properties of porous material. International Journal of Solids and Structures, 2009, 46, 4419-4429.	1.3	33
52	Anisotropic thermal conductivities of plasma-sprayed thermal barrier coatings in relation to the microstructure. Journal of Thermal Spray Technology, 2000, 9, 478-482.	1.6	32
53	The principle of correspondence between elastic and piezoelectric problems. Archive of Applied Mechanics, 2002, 72, 564-587.	1.2	32
54	Homogenization of a Nanoparticle with Graded Interface. International Journal of Fracture, 2006, 139, 121-127.	1.1	32

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55	Dipole moments, property contribution tensors and effective conductivity of anisotropic particulate composites. International Journal of Engineering Science, 2014, 74, 15-34.	2.7	32
56	Effective elastic moduli of a particulate composite in terms of the dipole moments and property contribution tensors. International Journal of Solids and Structures, 2015, 53, 1-11.	1.3	32
57	Mechanical behavior of porous Si3N4 ceramics manufactured with 3D printing technology. Journal of Materials Science, 2018, 53, 4796-4805.	1.7	32
58	Compliance and resistivity contribution tensors of axisymmetric concave pores. International Journal of Engineering Science, 2016, 101, 14-28.	2.7	30
59	Effective viscoelastic properties of short-fiber reinforced composites. International Journal of Engineering Science, 2016, 100, 61-73.	2.7	30
60	Electrical conductivity of epoxy-graphene and epoxy-carbon nanofibers composites subjected to compressive loading. International Journal of Engineering Science, 2018, 123, 174-180.	2.7	30
61	Effective elastic shear stiffness of a periodic fibrous composite with non-uniform imperfect contact between the matrix and the fibers. International Journal of Solids and Structures, 2014, 51, 1253-1262.	1.3	29
62	Explicit relations between elastic and conductive properties of materials containing annular cracks. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 987-999.	1.6	28
63	SIF statistics in micro cracked solid: Effect of crack density, orientation and clustering. International Journal of Engineering Science, 2009, 47, 192-208.	2.7	28
64	Dependence of the electrical conductivity of graphene reinforced epoxy resin on the stress level. International Journal of Engineering Science, 2017, 120, 63-70.	2.7	27
65	Is the concept of â€œaverage shapeâ€•legitimate, for a mixture of inclusions of diverse shapes?. International Journal of Solids and Structures, 2012, 49, 3242-3254.	1.3	26
66	Effective conductivity of spheroidal particle composite with imperfect interfaces: Complete solutions for periodic and random micro structures. Mechanics of Materials, 2015, 89, 1-11.	1.7	26
67	The â€œrigorousâ€•Maxwell homogenization scheme in 2D elasticity: Effective stiffness tensor of composite with elliptic inhomogeneities. Mechanics of Materials, 2016, 103, 44-54.	1.7	26
68	Modeling of the viscoelastic properties of thermoset vinyl ester nanocomposite using artificial neural network. International Journal of Engineering Science, 2020, 150, 103242.	2.7	26
69	Penny-shaped and half-plane cracks in a transversely isotropic piezoelectric solid under arbitrary loading. Archive of Applied Mechanics, 2000, 70, 201-229.	1.2	25
70	Electrical conductivity of unidirectional carbon fiber composites with epoxy-graphene matrix. International Journal of Engineering Science, 2018, 130, 129-135.	2.7	25
71	Computation of the relaxation effective moduli for fibrous viscoelastic composites using the asymptotic homogenization method. International Journal of Solids and Structures, 2020, 190, 281-290.	1.3	25
72	Recovery of information on the microstructure of porous/microcracked materials from the effective elastic/conductive properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 318, 1-14.	2.6	24

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73	Explicit elasticityâ€“conductivity connections for composites with anisotropic inhomogeneities. Journal of the Mechanics and Physics of Solids, 2007, 55, 2181-2205.	2.3	24
74	Estimation of changes in the mechanical properties of stainless steel subjected to fatigue loading via electrical resistance monitoring. International Journal of Engineering Science, 2013, 65, 40-48.	2.7	24
75	Combined effect of pores concavity and aspect ratio on the elastic properties of a porous material. International Journal of Solids and Structures, 2018, 134, 161-172.	1.3	24
76	Connection between elastic and conductive properties of microstructures with Hertzian contacts. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2004, 460, 1529-1534.	1.0	23
77	Quantitative characterization of the microstructure of a porous material in the context of tortuosity. International Journal of Engineering Science, 2010, 48, 1693-1701.	2.7	23
78	Evaluation of the elastic properties of a functionallyâ€graded coating from the indentation measurements. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2011, 91, 493-515.	0.9	23
79	Fraction-exponential representation of the viscoelastic properties of dentin. International Journal of Engineering Science, 2017, 111, 52-60.	2.7	23
80	Mechanical and thermal properties of stainless steel parts, manufactured by various technologies, in relation to their microstructure. International Journal of Engineering Science, 2021, 159, 103398.	2.7	23
81	On the yield condition for anisotropic porous materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 313, 1-15.	2.6	22
82	Correlation between Elastic and Electric Properties for Metal Foams: Theory and Experiment. International Journal of Fracture, 2002, 114, 23-28.	1.1	22
83	Connection Between Strength Reduction, Electric Resistance and Electro-Mechanical Impedance in Materials with Fatigue Damage. International Journal of Fracture, 2010, 164, 159-166.	1.1	22
84	Torsion of a punch attached to transversely-isotropic half-space with functionally graded coating. International Journal of Engineering Science, 2012, 61, 24-35.	2.7	22
85	Technique of rock thermal conductivity evaluation on core cuttings and non-consolidated rocks. International Journal of Rock Mechanics and Minings Sciences, 2018, 108, 15-22.	2.6	22
86	Numerical evaluation of the Eshelby tensor for a concave superspherical inclusion. International Journal of Engineering Science, 2015, 93, 51-58.	2.7	21
87	Through-thickness stress relaxation in bacterial cellulose hydrogel. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 90-98.	1.5	21
88	Inverse homogenization problem: Evaluation of elastic and electrical (thermal) properties of composite constituents. International Journal of Engineering Science, 2018, 129, 34-46.	2.7	21
89	Effective electrical conductivity of transversely isotropic rocks with arbitrarily oriented ellipsoidal inclusions. Mechanics of Materials, 2019, 133, 174-192.	1.7	21
90	Stress concentration and effective stiffness of aligned fiber reinforced composite with anisotropic constituents. International Journal of Solids and Structures, 2008, 45, 5103-5117.	1.3	20

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91	Micromechanical modeling of the effective elastic properties of oolitic limestone. International Journal of Rock Mechanics and Minings Sciences, 2013, 62, 23-27.	2.6	20
92	Effective thermal conductivity of oolitic rocks using the Maxwell homogenization method. International Journal of Rock Mechanics and Minings Sciences, 2015, 80, 379-387.	2.6	20
93	Replacement relations for thermal conductivity of a porous rock. International Journal of Rock Mechanics and Minings Sciences, 2017, 97, 64-74.	2.6	20
94	Accuracy of the replacement relations for materials with non-ellipsoidal inhomogeneities. International Journal of Solids and Structures, 2017, 104-105, 73-80.	1.3	20
95	Microstructural analysis and mechanical properties of concrete reinforced with polymer short fibers. International Journal of Engineering Science, 2018, 133, 210-218.	2.7	20
96	Effective elastic properties of a periodic fiber reinforced composite with parallelogram-like arrangement of fibers and imperfect contact between matrix and fibers. International Journal of Solids and Structures, 2013, 50, 2022-2032.	1.3	19
97	Micromechanical modeling of elastic properties of cortical bone accounting for anisotropy of dense tissue. Journal of Biomechanics, 2014, 47, 3279-3287.	0.9	19
98	Effect of a partial contact between the crack faces on its contribution to overall material compliance and resistivity. International Journal of Solids and Structures, 2017, 108, 289-297.	1.3	19
99	Behavior of laminated shell composite with imperfect contact between the layers. Composite Structures, 2017, 176, 539-546.	3.1	19
100	Copper-graphite composite: Shear modulus, electrical resistivity, and cross-property connections. International Journal of Engineering Science, 2020, 149, 103232.	2.7	19
101	On perfectly plastic flow in porous material. International Journal of Plasticity, 2002, 18, 1649-1659.	4.1	18
102	Effective elastic moduli of a heterogeneous oolitic rock containing 3-D irregularly shaped pores. International Journal of Rock Mechanics and Minings Sciences, 2017, 98, 20-32.	2.6	18
103	Comparative micromechanical analysis of alloy 625 coatings deposited by air plasma spraying, wire arc spraying, and cold spraying technologies. Mechanics of Materials, 2020, 144, 103345.	1.7	18
104	Evaluation of the residual stresses in metallic materials produced by additive manufacturing technology: effect of microstructure. Current Opinion in Chemical Engineering, 2020, 28, 21-27.	3.8	18
105	Dependence of the Effective Thermal Pressure Coefficient of a Particulate Composite on Particles Size. International Journal of Fracture, 2007, 145, 333-340.	1.1	17
106	On an Arbitrarily Oriented Crack in a Transversely-isotropic Medium. International Journal of Fracture, 2007, 148, 273-279.	1.1	17
107	Effective elastic properties of a particulate composite with transversely-isotropic matrix. International Journal of Engineering Science, 2015, 94, 139-149.	2.7	17
108	Action of a smooth flat charged punch on the piezoelectric half-space possessing symmetry of class 6. International Journal of Engineering Science, 2016, 103, 77-96.	2.7	17

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109	Average phase stress concentrations in multiphase metal matrix composites under compressive loading. International Journal of Engineering Science, 2016, 106, 245-261.	2.7	17
110	Multiscale micromechanical modeling of the elastic properties of dentin. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 100, 103397.	1.5	17
111	Connection between elastic moduli and thermal conductivities of anisotropic short fiber reinforced thermoplastics: theory and experimental verification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 360, 339-344.	2.6	16
112	On relations between geometries of microcontact clusters and their overall properties. International Journal of Engineering Science, 2009, 47, 959-973.	2.7	16
113	Cross-Property Connection between Work-Hardening Coefficient and Electrical Resistivity of Stainless Steel During Plastic Deformation. International Journal of Fracture, 2011, 167, 281-287.	1.1	16
114	Effect of a curved fiber on the overall material stiffness. International Journal of Solids and Structures, 2016, 100-101, 211-222.	1.3	16
115	Effect of elastic contrast on the contribution of helical fibers into overall stiffness of a composites. International Journal of Engineering Science, 2017, 120, 31-50.	2.7	16
116	The role of intermetallics in stress partitioning and damage evolution of AlSi12CuMgNi alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 453-464.	2.6	16
117	Modeling of anisotropic elastic properties of multi-walled zigzag carbon nanotubes. International Journal of Engineering Science, 2019, 144, 103127.	2.7	16
118	Micromechanical modeling of non-linear stress-strain behavior of polycrystalline microcracked materials under tension. Acta Materialia, 2019, 164, 50-59.	3.8	16
119	Incremental compliance and resistance of contacts and contact clusters: Implications of the cross-property connection. International Journal of Engineering Science, 2009, 47, 974-989.	2.7	15
120	On the micromechanical modelling of the effective diffusion coefficient of a polycrystalline material. Philosophical Magazine, 2015, 95, 2046-2066.	0.7	15
121	Effective thermal properties of an aluminum matrix composite with coated diamond inhomogeneities. International Journal of Engineering Science, 2016, 106, 142-154.	2.7	15
122	The influence of anisotropic growth and geometry on the stress of solid tumors. International Journal of Engineering Science, 2017, 119, 40-49.	2.7	15
123	The effect of waviness of a helical inhomogeneity on its stiffness- and conductivity contribution tensors. International Journal of Engineering Science, 2017, 116, 145-154.	2.7	15
124	Overall elastic properties of a material containing inhomogeneities of concave shape. International Journal of Engineering Science, 2018, 132, 30-44.	2.7	15
125	Connection between strength and thermal conductivity of metal matrix composites with uniform distribution of graphite flakes. International Journal of Engineering Science, 2019, 139, 70-82.	2.7	15
126	Connecting Diffraction-Based Strain with Macroscopic Stresses in Laser Powder Bed Fused Ti-6Al-4V. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3194-3204.	1.1	15

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127	Local Minima and Gradients of Stiffness and Conductivity as Indicators of Strength Reduction of Brittle-Elastic Materials. International Journal of Fracture, 2010, 164, 147-154.	1.1	14
128	Connection between elastic and electrical properties of cortical bone. Journal of Biomechanics, 2016, 49, 765-772.	0.9	14
129	Connection between electrical conductivity and diffusion coefficient of a conductive porous material filled with electrolyte. International Journal of Engineering Science, 2017, 121, 108-117.	2.7	14
130	Gassmann equation and replacement relations in micromechanics: A review. International Journal of Engineering Science, 2020, 154, 103344.	2.7	14
131	On the Relationship Between Microstructure of the Cortical Bone and its Overall Elastic Properties. International Journal of Fracture, 1998, 92, 1-8.	1.1	13
132	On the separation of internal and boundary damage from combined measurements of electrical conductivity and vibration frequencies. International Journal of Engineering Science, 2008, 46, 968-975.	2.7	13
133	Rigid toroidal inhomogeneity in an elastic medium. International Journal of Engineering Science, 2011, 49, 61-74.	2.7	13
134	Stress-induced damage evolution in cast AlSi12CuMgNi alloy with one- and two-ceramic reinforcements. Journal of Materials Science, 2017, 52, 10198-10216.	1.7	13
135	On the effective properties of polycrystals with intergranular cracks. International Journal of Solids and Structures, 2019, 156-157, 243-250.	1.3	13
136	A unified methodology for calculation of compliance and stiffness contribution tensors of inhomogeneities of arbitrary 2D and 3D shapes embedded in isotropic matrix â€“ open access software.. International Journal of Engineering Science, 2020, 157, 103390.	2.7	13
137	Effect of stresses on wave propagation in fluid-saturated porous media. International Journal of Engineering Science, 2021, 167, 103519.	2.7	13
138	Cross-property correlations for short fiber reinforced composites with damage and their experimental verification. Composites Part B: Engineering, 2002, 33, 205-213.	5.9	12
139	On a Possible Approximation of Changes in Elastic Properties of a Transversely Isotropic Material due to an Arbitrarily Oriented Crack. International Journal of Fracture, 2008, 153, 169-176.	1.1	12
140	Cross-property connections between overall electric conductivity and fluid permeability of a random porous media with conducting sceleton. International Journal of Engineering Science, 2010, 48, 1702-1708.	2.7	12
141	Non-interaction Approximation in the Problem of Effective Properties. Solid Mechanics and Its Applications, 2013, , 1-95.	0.1	12
142	Toroidal insulating inhomogeneity in an infinite space and related problems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150781.	1.0	12
143	Effective properties of ageing linear viscoelastic media with spheroidal inhomogeneities. International Journal of Engineering Science, 2019, 144, 103104.	2.7	12
144	Replacement relations for a viscoelastic material containing multiple inhomogeneities. International Journal of Engineering Science, 2019, 136, 26-37.	2.7	12

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145	Quantitative characterization of microstructures of plasma-sprayed coatings and their conductive and elastic properties. , 2004, 386, 164-164.		12
146	Mathematical model of cavitation during resin film infusion process. Composite Structures, 2000, 48, 197-203.	3.1	11
147	Elastic Compliance of an Annular Crack. International Journal of Fracture, 2001, 110, 51-54.	1.1	11
148	On the Possibility of Approximation of Irregular Porous Microstructure by Isolated Spheroidal Pores. International Journal of Fracture, 2006, 139, 129-136.	1.1	11
149	Effect of Pore Distribution on Elastic Stiffness and Fracture Toughness of Porous Materials. International Journal of Fracture, 2009, 160, 189-196.	1.1	11
150	Evaluation of the Growth of Dislocations Density in Fatigue Loading Process via Electrical Resistivity Measurements. International Journal of Fracture, 2013, 179, 229-235.	1.1	11
151	On the possibility to represent effective properties of a material with inhomogeneities in terms of concentration parameters. International Journal of Solids and Structures, 2015, 52, 197-204.	1.3	11
152	Creep and relaxation contribution tensors for spheroidal pores in hereditary solids: fraction-exponential operators approach. Acta Mechanica, 2016, 227, 217-227.	1.1	11
153	Effective thermal expansion coefficient of a sintered glassâ€“eucryptite composite. Journal of Materials Science, 2017, 52, 11314-11325.	1.7	11
154	On the bounds of applicability of two-step homogenization technique for porous materials. International Journal of Engineering Science, 2018, 123, 117-126.	2.7	11
155	Extension of Maxwell homogenization scheme for piezoelectric composites containing spheroidal inhomogeneities. International Journal of Solids and Structures, 2018, 135, 125-136.	1.3	11
156	Randomly oriented cracks in a transversely isotropic material. International Journal of Solids and Structures, 2018, 150, 222-229.	1.3	11
157	The effect of multiple contacts between crack faces on crack contribution to the effective elastic properties. International Journal of Solids and Structures, 2019, 163, 75-86.	1.3	11
158	Title is missing!. International Journal of Fracture, 2000, 101, 1-8.	1.1	10
159	Microstructure and elastic properties of sintered hydroxyapatite. International Journal of Fracture, 2004, 130, L183-L190.	1.1	10
160	Modeling of Porous Rock: Digitization and Finite Elements Versus Approximate Schemes Accounting for Pore Shapes. International Journal of Fracture, 2007, 143, 369-375.	1.1	10
161	Elasticityâ€“conductivity connections for contacting rough surfaces: An overview. Mechanics of Materials, 2009, 41, 375-384.	1.7	10
162	On the effect of interactions of inhomogeneities on the overall elastic and conductive properties. International Journal of Solids and Structures, 2014, 51, 4531-4543.	1.3	10

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163	Greenâ€™s function for piezoelectric 622 hexagonal crystals. International Journal of Engineering Science, 2014, 84, 18-28.	2.7	10
164	Overall thermal conductivity of a fiber reinforced composite with partially debonded inhomogeneities. International Journal of Engineering Science, 2016, 98, 99-109.	2.7	10
165	Local fields and effective conductivity tensor of ellipsoidal particle composite with anisotropic constituents. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170472.	1.0	10
166	Connections between anisotropic tensors of thermal conductivity and thermal expansion coefficients. International Journal of Engineering Science, 2018, 122, 1-13.	2.7	10
167	Principle of equivalent microstructure in micromechanics and its connection with the replacement relations. Thermal conductivity problem. International Journal of Engineering Science, 2019, 144, 103126.	2.7	10
168	Effect of pore shapes on the overall electrical conductivity of cathode material in Li-ion batteries. International Journal of Engineering Science, 2020, 146, 103187.	2.7	10
169	Multiscale modeling of fluid permeability of a non-homogeneous porous media. International Journal of Engineering Science, 2012, 56, 99-110.	2.7	9
170	Effective thermal conductivity of a composite with thermo-sensitive constituents and related problems. International Journal of Engineering Science, 2014, 80, 124-135.	2.7	9
171	Micromechanical modeling of neutron irradiation induced changes in yield stress and electrical conductivity of zircaloy. International Journal of Engineering Science, 2017, 120, 119-128.	2.7	9
172	Replacement relations for thermal conductivities of heterogeneous materials having different matrices. Mechanics of Materials, 2018, 121, 50-56.	1.7	9
173	Maxwell scheme for internal stresses in multiphase composites. Mechanics of Materials, 2019, 129, 320-331.	1.7	9
174	Determination of macroscopic stress from diffraction experiments: A critical discussion. Journal of Applied Physics, 2020, 128, 025103.	1.1	9
175	Plastic yield surfaces of anisotropic porous materials in terms of effective electric conductivities. Mechanics of Materials, 2006, 38, 908-923.	1.7	8
176	Cross-Property Connections for Fiber-Reinforced Composites with Transversely Isotropic Constituents. International Journal of Fracture, 2007, 142, 299-306.	1.1	8
177	Approximate Representation of a Compliance Contribution Tensor for a Cylindrical Inhomogeneity Normal to the Axis of Symmetry of a Transversely Isotropic Material. International Journal of Fracture, 2012, 174, 237-244.	1.1	8
178	Electrical resistivity of cortical bone: Micromechanical modeling and experimental verification. International Journal of Engineering Science, 2013, 62, 106-112.	2.7	8
179	On the connections between plasticity parameters and electrical conductivities for austenitic, ferritic, and semi-austenitic stainless steels. International Journal of Engineering Science, 2016, 105, 28-37.	2.7	8
180	Effect of saturation on the elastic properties and anisotropy of cortical bone. International Journal of Engineering Science, 2020, 155, 103362.	2.7	8

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181	Effect of spherical pores coalescence on the overall conductivity of a material.. Mechanics of Materials, 2020, 148, 103463.	1.7	8
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