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	Effective elastic properties and thermal conductivity of isotropic rocks containing concave pores. Application to oolitic limestones. European Journal of Environmental and Civil Engineering, 2022, 26, 2985-3008.	1.0	1
2	Characterization of Physical Properties of a Porous Material in Terms of Tortuosity of the Porous Space: A Review. Advanced Structured Materials, 2022, , 399-427.	0.3	1
3	Investigation on elastic properties and unconventional plasticity of 316L stainless steel processed by selective laser melting technology. Progress in Additive Manufacturing, 2022, 7, 1169-1181.	2.5	4
4	Micromechanical behavior of annealed Ti-6Al-4V produced by Laser Powder Bed Fusion. European Journal of Materials, 2022, 2, 186-201.	0.8	3
5	A new methodology for evaluation of thermal or electrical conductivity of the skeleton of a porous material. International Journal of Engineering Science, 2021, 158, 103397.	2.7	8
6	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
7	Evaluation of the incremental compliances of non-elliptical contacts by treating them as external cracks. European Journal of Mechanics, A/Solids, 2021, 85, 104114.	2.1	4
8	Effective elastic properties of transversely isotropic materials with concave pores. Mechanics of Materials, 2021, 153, 103665.	1.7	4
9	Effect of saturation on the viscoelastic properties of dentin. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 114, 104143.	1.5	3
10	Micromechanics-based rock-physics model for inorganic shale. Geophysics, 2021, 86, MR105-MR116.	1.4	7
11	Micromechanical modeling of a cracked elliptically orthotropic medium. International Journal of Engineering Science, 2021, 161, 103454.	2.7	4
12	Arbitrarily loaded circular crack in a piezoelectric solid of the symmetry class 6. Acta Mechanica, 2021, 232, 2659.	1.1	1
13	Conductivity and elastic stiffness of spherical particle composite with partially disordered microstructure. International Journal of Engineering Science, 2021, 162, 103473.	2.7	6
14	Orientation order parameters and effective conductivity of a 2-D solid with partially disordered array of circular inhomogeneities. Mathematics and Mechanics of Solids, 2021, 26, 1204-1218.	1.5	0
15	Effect of Different Landscapes on Heat Load to Buildings. Land, 2021, 10, 733.	1.2	3
16	Effective properties of periodic composites: Irrelevance of one particle homogenization techniques. Mechanics of Materials, 2021, 159, 103918.	1.7	5
17	Quantifying deep cryogenic treatment extent and its effect on steel properties. International Journal of Engineering Science, 2021, 167, 103521.	2.7	5
18	Effect of stresses on wave propagation in fluid-saturated porous media. International Journal of Engineering Science, 2021, 167, 103519.	2.7	13

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19	Stress-induced damage evolution in cast AlSi12CuMgNi alloy with one- and two-ceramic reinforcements. Part II: effect of reinforcement orientation. Journal of Materials Science, 2020, 55, 1049-1068.	1.7	7
20	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
21	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
22	Determination of macroscopic stress from diffraction experiments: A critical discussion. Journal of Applied Physics, 2020, 128, 025103.	1.1	9
23	Effect of saturation on the elastic properties and anisotropy of cortical bone. International Journal of Engineering Science, 2020, 155, 103362.	2.7	8
24	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
25	Gassmann equation and replacement relations in micromechanics: A review. International Journal of Engineering Science, 2020, 154, 103344.	2.7	14
26	Effect of non-planar cracks with islands of contact on the elastic properties of materials. International Journal of Solids and Structures, 2020, 191-192, 307-314.	1.3	2
27	Ellipsoidal inhomogeneity in elliptically orthotropic elastic solid. International Journal of Solids and Structures, 2020, 206, 282-291.	1.3	5
28	Effect of spherical pores coalescence on the overall conductivity of a material.. Mechanics of Materials, 2020, 148, 103463.	1.7	8
29	Evolution of the effective elastic properties of metal matrix composites during the synthesis. International Journal of Engineering Science, 2020, 153, 103307.	2.7	7
30	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
31	Explaining Deviatoric Residual Stresses in Aluminum Matrix Composites with Complex Microstructure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3104-3113.	1.1	4
32	Numerical computation of compliance contribution tensor of a concave pore embedded in a transversely isotropic matrix. International Journal of Engineering Science, 2020, 152, 103306.	2.7	5
33	Copper-graphite composite: Shear modulus, electrical resistivity, and cross-property connections. International Journal of Engineering Science, 2020, 149, 103232.	2.7	19
34	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
35	Compliance contribution tensor of an arbitrarily oriented ellipsoidal inhomogeneity embedded in an orthotropic elastic material. International Journal of Engineering Science, 2020, 149, 103222.	2.7	8
36	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

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37	Replacement relations for elastic composite materials having different matrices and related problems. Acta Mechanica, 2020, 231, 2335-2350.	1.1	1
38	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
39	Modeling of anisotropic elastic properties of multi-walled zigzag carbon nanotubes. International Journal of Engineering Science, 2019, 144, 103127.	2.7	16
40	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
41	Multiscale micromechanical modeling of the elastic properties of dentin. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 100, 103397.	1.5	17
42	Maxwell homogenization scheme for piezoelectric composites with arbitrarily-oriented spheroidal inhomogeneities. Acta Mechanica, 2019, 230, 3613-3632.	1.1	7
43	Evolution of thermo-mechanical properties in the process of alumina manufacturing using laser stereolithography technique. International Journal of Engineering Science, 2019, 144, 103125.	2.7	6
44	Evaluation of the effective viscoelastic properties of a material containing multiple oblate inhomogeneities using fraction-exponential operators. International Journal of Engineering Science, 2019, 144, 103124.	2.7	2
45	Effective properties of ageing linear viscoelastic media with spheroidal inhomogeneities. International Journal of Engineering Science, 2019, 144, 103104.	2.7	12
46	Maxwellâ€™s methodology of estimating effective properties: Alive and well. International Journal of Engineering Science, 2019, 140, 35-88.	2.7	66
47	Effect of pair coalescence of circular pores on the overall elastic properties. International Journal of Solids and Structures, 2019, 172-173, 38-50.	1.3	5
48	KrÃ¶ner method for thermal or electrical conductivity of polycrystals and other aggregates of anisotropic particles. International Journal of Engineering Science, 2019, 136, 67-77.	2.7	5
49	Effective electrical conductivity of transversely isotropic rocks with arbitrarily oriented ellipsoidal inclusions. Mechanics of Materials, 2019, 133, 174-192.	1.7	21
50	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
51	Modeling of the overall elastic behavior of a transversely isotropic material reinforced with arbitrarily oriented transversely isotropic platelets. Mechanics of Materials, 2019, 132, 77-85.	1.7	7
52	Construction of the simplified analytical solution of the flat punch indentation contact problem. AIP Conference Proceedings, 2019, , .	0.3	3
53	On the effective properties of polycrystals with intergranular cracks. International Journal of Solids and Structures, 2019, 156-157, 243-250.	1.3	13
54	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

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55	Maxwell scheme for internal stresses in multiphase composites. Mechanics of Materials, 2019, 129, 320-331.	1.7	9
56	Replacement relations for a viscoelastic material containing multiple inhomogeneities. International Journal of Engineering Science, 2019, 136, 26-37.	2.7	12
57	Micromechanical modeling of non-linear stress-strain behavior of polycrystalline microcracked materials under tension. Acta Materialia, 2019, 164, 50-59.	3.8	16
58	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
59	Viscoelasticity and plasticity mechanisms of human dentin. Physics of the Solid State, 2018, 60, 120-128.	0.2	4
60	Effect of cylindrical fibers, with cross-sections formed by two circular arcs, on the overall conductivity of a composite. International Journal of Solids and Structures, 2018, 138, 264-276.	1.3	7
61	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
62	Viscoelastic effective properties for composites with rectangular cross-section fibers using the asymptotic homogenization method. Advanced Structured Materials, 2018, , 203-222.	0.3	4
63	Replacement relations for thermal conductivities of heterogeneous materials having different matrices. Mechanics of Materials, 2018, 121, 50-56.	1.7	9
64	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
65	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
66	Mechanical behavior of porous Si3N4 ceramics manufactured with 3D printing technology. Journal of Materials Science, 2018, 53, 4796-4805.	1.7	32
67	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
68	Connections between anisotropic tensors of thermal conductivity and thermal expansion coefficients. International Journal of Engineering Science, 2018, 122, 1-13.	2.7	10
69	Extension of Maxwell homogenization scheme for piezoelectric composites containing spheroidal inhomogeneities. International Journal of Solids and Structures, 2018, 135, 125-136.	1.3	11
70	Microstructural analysis and mechanical properties of concrete reinforced with polymer short fibers. International Journal of Engineering Science, 2018, 133, 210-218.	2.7	20
71	Randomly oriented cracks in a transversely isotropic material. International Journal of Solids and Structures, 2018, 150, 222-229.	1.3	11
72	Overall elastic properties of a material containing inhomogeneities of concave shape. International Journal of Engineering Science, 2018, 132, 30-44.	2.7	15

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73	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
74	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
75	Electrical conductivity of unidirectional carbon fiber composites with epoxy-graphene matrix. International Journal of Engineering Science, 2018, 130, 129-135.	2.7	25
76	Micromechanics of Materials, with Applications. Solid Mechanics and Its Applications, 2018, , .	0.1	89
77	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
78	Effective elastic properties of composites with particles of polyhedral shapes. International Journal of Solids and Structures, 2017, 120, 157-170.	1.3	45
79	Fraction-exponential representation of the viscoelastic properties of dentin. International Journal of Engineering Science, 2017, 111, 52-60.	2.7	23
80	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
81	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
82	Behavior of laminated shell composite with imperfect contact between the layers. Composite Structures, 2017, 176, 539-546.	3.1	19
83	Connection between diffusion coefficient and thermal conductivity of a metal matrix composite. IOP Conference Series: Materials Science and Engineering, 2017, 175, 012051.	0.3	1
84	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
85	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
86	Effective Poroelastic Properties of Materials Containing Pores of Superspherical or Superspheroidal Shapes. , 2017, , .		1
87	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
88	Effective thermal expansion coefficient of a sintered glassâ€“eucryptite composite. Journal of Materials Science, 2017, 52, 11314-11325.	1.7	11
89	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
90	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

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91	Replacement relations for thermal conductivity of a porous rock. International Journal of Rock Mechanics and Minings Sciences, 2017, 97, 64-74.	2.6	20
92	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
93	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
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	Maxwell Homogenization Scheme in Micromechanics: an Overview. MATEC Web of Conferences, 2017, 132, 03017.	0.1	1
96	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
97	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
98	Average phase stress concentrations in multiphase metal matrix composites under compressive loading. International Journal of Engineering Science, 2016, 106, 245-261.	2.7	17
99	Effect of a curved fiber on the overall material stiffness. International Journal of Solids and Structures, 2016, 100-101, 211-222.	1.3	16
100	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
101	Special issue on â€œAdvances in micromechanics of materialsâ€• Acta Mechanica, 2016, 227, 1-1.	1.1	34
102	Copperâ€“graphite composites: thermal expansion, thermal and electrical conductivities, and cross-property connections. Journal of Materials Science, 2016, 51, 7977-7990.	1.7	38
103	Effective thermal properties of an aluminum matrix composite with coated diamond inhomogeneities. International Journal of Engineering Science, 2016, 106, 142-154.	2.7	15
104	Connection between elastic and electrical properties of cortical bone. Journal of Biomechanics, 2016, 49, 765-772.	0.9	14
105	Conservation integrals for two circular holes kept at different temperatures in a thermoelastic solid. International Journal of Solids and Structures, 2016, 85-86, 1-14.	1.3	2
106	Compliance and resistivity contribution tensors of axisymmetric concave pores. International Journal of Engineering Science, 2016, 101, 14-28.	2.7	30
107	On discontinuities of thermal, electric and diffusion fluxes at interfaces of different materials. International Journal of Engineering Science, 2016, 102, 1-3.	2.7	3
108	Green's function for unbounded piezoelectric material of class 6. International Journal of Solids and Structures, 2016, 83, 81-89.	1.3	6

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109	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
110	Through-thickness stress relaxation in bacterial cellulose hydrogel. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 90-98.	1.5	21
111	Effective viscoelastic properties of short-fiber reinforced composites. International Journal of Engineering Science, 2016, 100, 61-73.	2.7	30
112	Overall thermal conductivity of a fiber reinforced composite with partially debonded inhomogeneities. International Journal of Engineering Science, 2016, 98, 99-109.	2.7	10
113	Creep and relaxation contribution tensors for spheroidal pores in hereditary solids: fraction-exponential operators approach. Acta Mechanica, 2016, 227, 217-227.	1.1	11
114	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
115	Time-dependent rheological behaviour of bacterial cellulose hydrogel. Materials Science and Engineering C, 2016, 58, 153-159.	3.8	38
116	The effect of the parameters of inclusions on the effective properties of materials in terms of micromechanics. AIP Conference Proceedings, 2015, , .	0.3	0
117	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
118	Electrical impedance changes due to cracks in planar conductive structural elements. Structural Health Monitoring, 2015, 14, 489-501.	4.3	4
119	Effective properties of linear viscoelastic microcracked materials: Application of Maxwell homogenization scheme. Mechanics of Materials, 2015, 84, 28-43.	1.7	41
120	Numerical evaluation of the Eshelby tensor for a concave superspherical inclusion. International Journal of Engineering Science, 2015, 93, 51-58.	2.7	21
121	Effective elastic properties of a particulate composite with transversely-isotropic matrix. International Journal of Engineering Science, 2015, 94, 139-149.	2.7	17
122	On the micromechanical modelling of the effective diffusion coefficient of a polycrystalline material. Philosophical Magazine, 2015, 95, 2046-2066.	0.7	15
123	Inelastic behaviour of bacterial cellulose hydrogel: In aqua cyclic tests. Polymer Testing, 2015, 44, 82-92.	2.3	45
124	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
125	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
126	Extension of the elasticity-conductivity cross-property connections to impedance of plane microcracked structural elements. International Journal of Engineering Science, 2015, 87, 103-109.	2.7	1

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127	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
128	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
129	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
130	Micromechanical analysis of the effect of void swelling on elastic and electric properties of irradiated steel. Journal of Nuclear Materials, 2014, 446, 148-154.	1.3	3
131	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
132	Evluation of Strength of Plane Microcracked Structural Elements Via Electrical Resistance Scanning. International Journal of Fracture, 2014, 185, 171-178.	1.1	3
133	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
134	Dipole moments, property contribution tensors and effective conductivity of anisotropic particulate composites. International Journal of Engineering Science, 2014, 74, 15-34.	2.7	32
135	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
136	Micromechanical modeling of elastic properties of cortical bone accounting for anisotropy of dense tissue. Journal of Biomechanics, 2014, 47, 3279-3287.	0.9	19
137	Greenâ€™s function for piezoelectric 622 hexagonal crystals. International Journal of Engineering Science, 2014, 84, 18-28.	2.7	10
138	Evaluation of Changes in Plastic Yield Parameters of Titanium CP-2 using Electrical Resistivity Measurements. International Journal of Fracture, 2014, 187, 179-186.	1.1	3
139	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
140	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
141	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
142	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
143	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
144	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

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145	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
146	Non-interaction Approximation in the Problem of Effective Properties. Solid Mechanics and Its Applications, 2013, , 1-95.	0.1	12
147	Electrical resistivity of cortical bone: Micromechanical modeling and experimental verification. International Journal of Engineering Science, 2013, 62, 106-112.	2.7	8
148	Effect of fiber damage on the overall electrical conductivity of bare carbon fiber strand. International Journal of Fracture, 2013, 183, 275-282.	1.1	4
149	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
150	Numerical Verification of the Cross-Property Connections Between Electrical Conductivity and Fluid Permeability of a Porous Material. International Journal of Fracture, 2012, 177, 81-88.	1.1	3
151	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
152	On the Compliance Contribution Tensor for a Concave Superspherical Pore. International Journal of Fracture, 2012, 177, 199-206.	1.1	35
153	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
154	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
155	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
156	Evaluation of Changes in Dislocation Density in TI-CP2 in the Process of Quasi-Static Loading Using Electrical Resistance Measurements. International Journal of Fracture, 2012, 175, 73-78.	1.1	4
157	Multiscale modeling of fluid permeability of a non-homogeneous porous media. International Journal of Engineering Science, 2012, 56, 99-110.	2.7	9
158	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
159	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
160	On the Elastic Compliance of a Circular Hole with Two Symmetric Radial Cracks Initiated at its Boundary. International Journal of Fracture, 2011, 167, 273-280.	1.1	5
161	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
162	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

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163	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
164	Rigid toroidal inhomogeneity in an elastic medium. International Journal of Engineering Science, 2011, 49, 61-74.	2.7	13
165	Effect of branched cracks on the elastic compliance of a material. International Journal of Engineering Science, 2011, 49, 1062-1077.	2.7	6
166	Analytical Solution for the Bending of a Plate on a Functionally Graded Layer of Complex Structure. Advanced Structured Materials, 2011, , 15-28.	0.3	2
167	Effect of geometric characteristics of a cluster of micro-contacts on its mechanical and electrical properties. International Journal of Theoretical and Applied Multiscale Mechanics, 2010, 1, 308.	0.5	0
168	Mechanical Properties of Carbon Nanotubes Reinforced Composites: Experiment and Analytical Modeling. International Journal of Fracture, 2010, 161, 213-220.	1.1	6
169	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
170	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
171	Incremental elastic compliance and electric resistance of a cylinder with partial loss in the cross-sectional area. International Journal of Engineering Science, 2010, 48, 582-591.	2.7	6
172	Health monitoring of bolted joints via electrical conductivity measurements. International Journal of Engineering Science, 2010, 48, 874-887.	2.7	59
173	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
174	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
175	Effect of Mutual Positions of Individual Contacts on the Overall Resistance and Elastic stiffness of a Cluster of Contacts. International Journal of Fracture, 2009, 160, 101-108.	1.1	2
176	Effect of Pore Distribution on Elastic Stiffness and Fracture Toughness of Porous Materials. International Journal of Fracture, 2009, 160, 189-196.	1.1	11
177	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
178	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
179	Resistances of non-flat cracks and their relation to crack compliances. International Journal of Engineering Science, 2009, 47, 754-766.	2.7	6
180	On relations between geometries of microcontact clusters and their overall properties. International Journal of Engineering Science, 2009, 47, 959-973.	2.7	16

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