Gennady Kulikov

List of Publications by Year
in descending order

110 papers	1,457 citations	304743 22 h-index	434195 31 g-index
111 all docs	111 docs citations	111 times ranked	369 citing authors

#	Article	IF	Citations
1	Finite deformation higher-order shell models and rigid-body motions. International Journal of Solids and Structures, 2008, 45, 3153-3172.	2.7	60
2	Refined Global Approximation Theory of Multilayered Plates and Shells. Journal of Engineering Mechanics - ASCE, 2001, 127, 119-125.	2.9	58
3	Exact 3D stress analysis of laminated composite plates by sampling surfaces method. Composite Structures, 2012, 94, 3654-3663.	5.8	56
4	General direction of development of the theory of multilayered shells. Mechanics of Composite Materials, 1988, 24, 231-241.	1.4	54
5	Advanced formulation for laminated composite shells: 3D stress analysis and rigid-body motions. Composite Structures, 2013, 95, 236-246.	5.8	44
6	MITC9 shell finite elements with miscellaneous through-the-thickness functions for the analysis of laminated structures. Composite Structures, 2016, 154, 360-373.	5.8	43
7	Electro-mechanical analysis of composite and sandwich multilayered structures by shell elements with node-dependent kinematics. International Journal of Smart and Nano Materials, 2018, 9, 1-33.	4.2	36
8	A new approach to three-dimensional exact solutions for functionally graded piezoelectric laminated plates. Composite Structures, 2013, 106, 33-46.	5.8	35
9	On the use of sampling surfaces method for solution of 3D elasticity problems for thick shells. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 910-920.	1.6	32
10	Three-dimensional exact analysis of piezoelectric laminated plates via a sampling surfaces method. International Journal of Solids and Structures, 2013, 50, 1916-1929.	2.7	32
11	Multilayered plate elements with node-dependent kinematics for electro-mechanical problems. International Journal of Smart and Nano Materials, 2018, 9, 279-317.	4.2	32
12	Geometrically exact assumed stressâ€“strain multilayered solid-shell elements based on the 3D analytical integration. Computers and Structures, 2006, 84, 1275-1287.	4.4	28
13	Simple and effective elements based upon Timoshenkoâ€“Mindlin shell theory. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 1173-1187.	6.6	27
14	Non-linear strainâ€“displacement equations exactly representing large rigid-body motions. Part I Timoshenkoâ€“Mindlin shell theory. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 851-875.	6.6	27
15	Solution of static problems for a three-dimensional elastic shell. Doklady Physics, 2011, 56, 448-451.	0.7	26
16	Coupled thermoelectroelastic stress analysis of piezoelectric shells. Composite Structures, 2015, 124, 65-76.	5.8	26
17	On the Use of a New Concept of Sampling Surfaces in Shell Theory. Advanced Structured Materials, 2011, , 715-726.	0.5	26
18	Equivalent Single-Layer and Layerwise Shell Theories and Rigid-Body Motionsâ€”Part I: Foundations. Mechanics of Advanced Materials and Structures, 2005, 12, 275-283.	2.6	25

#	Article	IF	Citations
19	A family of ANS fourâ€node exact geometry shell elements in general convected curvilinear coordinates. International Journal for Numerical Methods in Engineering, 2010, 83, 1376-1406.	2.8	25
20	Exact electroelastic analysis of functionally graded piezoelectric shells. International Journal of Solids and Structures, 2014, 51, 13-25.	2.7	24
21	A sampling surfaces method and its application to three-dimensional exact solutions for piezoelectric laminated shells. International Journal of Solids and Structures, 2013, 50, 1930-1943.	2.7	22
22	Solution of three-dimensional problems for thick elastic shells by the method of reference surfaces. Mechanics of Solids, 2014, 49, 403-412.	0.7	22
23	Heat conduction analysis of laminated shells by a sampling surfaces method. Mechanics Research Communications, 2014, 55, 59-65.	1.8	22
24	A sampling surfaces method and its implementation for 3D thermal stress analysis of functionally graded plates. Composite Structures, 2015, 120, 315-325.	5.8	22
25	Non-linear strainâ€"displacement equations exactly representing large rigid-body motions. Part II. Enhanced finite element technique. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 2209-2230.	6.6	21
26	Non-linear geometrically exact assumed stressâ€"strain four-node solid-shell element with high coarse-mesh accuracy. Finite Elements in Analysis and Design, 2007, 43, 425-443.	3.2	21
27	Analysis of initially stressed multilayered shells. International Journal of Solids and Structures, 2001, 38, 4535-4555.	2.7	20
28	Non-linear exact geometry 12-node solid-shell element with three translational degrees of freedom per node. International Journal for Numerical Methods in Engineering, 2011, 88, 1363-1389.	2.8	20
29	A method of solving three-dimensional problems of elasticity for laminated composite plates. Mechanics of Composite Materials, 2012, 48, 15-26.	1.4	20
30	Exact Geometry Piezoelectric Solid-Shell Element Based on the 7-Parameter Model. Mechanics of Advanced Materials and Structures, 2011, 18, 133-146.	2.6	19
31	A hybridâ€mixed fourâ€node quadrilateral plate element based on sampling surfaces method for 3D stress analysis. International Journal for Numerical Methods in Engineering, 2016, 108, 26-54.	2.8	19
32	Numerical solution of problems involving the statics of geometrically nonlinear anisotropic multilayer shells of revolution. Mechanics of Composite Materials, 1981, 17, 294-302.	1.4	18
33	The Use of 9-Parameter Shell Theory for Development of Exact Geometry 12-Node Quadrilateral Piezoelectric Laminated Solid-Shell Elements. Mechanics of Advanced Materials and Structures, 2015, 22, 490-502.	2.6	18
34	An analytical approach to three-dimensional coupled thermoelectroelastic analysis of functionally graded piezoelectric plates. Journal of Intelligent Material Systems and Structures, 2017, 28, 435-450.	2.5	18
35	Non-conventional non-linear two-node hybrid stress-strain curved beam elements. Finite Elements in Analysis and Design, 2004, 40, 1333-1359.	3.2	17
36	Geometrically Exact Four-Node Piezoelectric Solid-Shell Element. Mechanics of Advanced Materials and Structures, 2008, 15, 199-207.	2.6	17

#	Article	IF	Citations
37	A robust, four-node, quadrilateral element for stress analysis of functionally graded plates through higher-order theories. Mechanics of Advanced Materials and Structures, 2018, 25, 1383-1402.	2.6	17
38	Three-dimensional thermal stress analysis of laminated composite plates with general layups by a sampling surfaces method. European Journal of Mechanics, A/Solids, 2015, 49, 214-226.	3.7	16
39	Three-dimensional vibration analysis of layered and functionally graded plates through sampling surfaces formulation. Composite Structures, 2016, 152, 349-361.	5.8	15
40	Computational Models for Multilayered Composite Shells with Application to Tires. Tire Science and Technology, 1996, 24, 11-38.	0.4	15
41	Strong sampling surfaces formulation for layered shells. International Journal of Solids and Structures, 2017, 121, 75-85.	2.7	14
42	Hybrid-mixed ANS finite elements for stress analysis of laminated composite structures: Sampling surfaces plate formulation. Computer Methods in Applied Mechanics and Engineering, 2016, 303, 374-399.	6.6	13
43	Assessment of the sampling surfaces formulation for thermoelectroelastic analysis of layered and functionally graded piezoelectric shells. Mechanics of Advanced Materials and Structures, 2017, 24, 392-409.	2.6	13
44	3D exact thermoelastic analysis of laminated composite shells via sampling surfaces method. Composite Structures, 2014, 115, 120-130.	5.8	12
45	Exact geometry four-node solid-shell element for stress analysis of functionally graded shell structures via advanced SaS formulation. Mechanics of Advanced Materials and Structures, 2020, 27, 948-964.	2.6	12
46	Solution of a coupled problem of thermopiezoelectricity based on a geometrically exact shell element. Mechanics of Composite Materials, 2010, 46, 349-364.	1.4	11
47	Non-linear analysis of multilayered shells under initial stress. International Journal of Non-Linear Mechanics, 2001, 36, 323-334.	2.6	10
48	Calculation of composite structures subjected to follower loads by using a geometrically exact shell element. Mechanics of Composite Materials, 2009, 45, 545-556.	1.4	10
49	Influence of anisotropy on the stress state of multilayer reinforced shells. Soviet Applied Mechanics, 1986, 22, 1166-1170.	0.0	9
50	Finite deformation plate theory and large rigid-body motions. International Journal of Non-Linear Mechanics, 2004, 39, 1093-1109.	2.6	9
51	Equivalent Single-Layer and Layerwise Shell Theories and Rigid-Body Motionsâ€"Part II: Computational Aspects. Mechanics of Advanced Materials and Structures, 2005, 12, 331-340.	2.6	9
52	Exact 3D Thermoelectroelastic Analysis of Piezoelectric Plates through a Sampling Surfaces Method. Mechanics of Advanced Materials and Structures, 2015, 22, 33-43.	2.6	9
53	Sampling surfaces formulation for thermoelastic analysis of laminated functionally graded shells. Meccanica, 2016, 51, 1913-1929.	2.0	9
54	Strong sampling surfaces formulation for laminated composite plates. Composite Structures, 2017, 172, 73-82.	5.8	9

#	Article	IF	Citations
55	Exact geometry SaS solid-shell element for 3D stress analysis of FGM piezoelectric structures. Curved and Layered Structures, 2018, 5, 116-135.	1.3	9
56	Comparative analysis of two algorithms for numerical solution of nonlinearstatic problems for multilayered anisotropic shells of revolution 2. Account of transverse compression. Mechanics of Composite Materials, 1999, 35, 293-300.	1.4	8
57	Efficient mixed Timoshenko-Mindlin shell elements. International Journal for Numerical Methods in Engineering, 2002, 55, 1167-1183.	2.8	8
58	Title is missing!. Mechanics of Composite Materials, 2002, 38, 539-546.	1.4	8
59	Benchmark solutions for the free vibration of layered piezoelectric plates based on a variational formulation. Journal of Intelligent Material Systems and Structures, 2017, 28, 2688-2704.	2.5	8
60	Hybrid-Mixed Solid-Shell Element for Stress Analysis of Laminated Piezoelectric Shells through Higher-Order Theories. Advanced Structured Materials, 2018, , 45-68.	0.5	8
61	Evaluation of shear and membrane locking in refined hierarchical shell finite elements for laminated structures. Advanced Modeling and Simulation in Engineering Sciences, 2019, 6, .	1.7	8
62	Analysis of the second Piolaâ€Kirchhoff stress in nonlinear thick and thin structures using exact geometry SaS solidâ€shell elements. International Journal for Numerical Methods in Engineering, 2019, 117, 498-522.	2.8	8
63	Generalized model of the mechanics of thin-walled structures made of composite materials. Mechanics of Composite Materials, 1989, 24, 537-543.	1.4	7
64	Comparative analysis of two algorithms for numerical solution of nonlinear static problems for multilayer anisotropic shells of revolution. 1. Account of transverse shear. Mechanics of Composite Materials, 1999, 35, 241-248.	1.4	7
65	Title is missing!. Mechanics of Composite Materials, 2002, 38, 397-406.	1.4	7
66	Strong SaS formulation for free and forced vibrations of laminated composite plates. Composite Structures, 2017, 180, 286-297.	5.8	7
67	Finite rotation exact geometry solidâ€shell element for laminated composite structures through extended SaS formulation and 3D analytical integration. International Journal for Numerical Methods in Engineering, 2019, 119, 852-878.	2.8	7
68	Shape Control of Composite Plates with Distributed Piezoelectric Actuators in a Three-Dimensional Formulation. Mechanics of Composite Materials, 2020, 56, 557-572.	1.4	7
69	Multi-layered plate finite element models with node-dependent kinematics for smart structures with piezoelectric components. Chinese Journal of Aeronautics, 2021, 34, 164-175.	5.3	7
70	Exact geometry solid-shell element based on a sampling surfaces technique for 3D stress analysis of doubly-curved composite shells. Curved and Layered Structures, 2015, 3, .	1.3	6
71	Threeâ€dimensional vibration analysis of simply supported laminated cylindrical shells and panels by a strong SaS formulation. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2019, 99, e201800100.	1.6	6
72	Nonlinear displacement-based and hybrid-mixed quadrilaterals for three-dimensional stress analysis through sampling surfaces formulation. Thin-Walled Structures, 2020, 155, 106918.	5.3	6

#	Article	IF	Citations
73	Assessment of nonlinear exact geometry sampling surfaces solidâ€shell elements and ANSYS solid elements for <scp>3D</scp> stress analysis of piezoelectric shell structures. International Journal for Numerical Methods in Engineering, 2020, 121, 3795-3823.	2.8	6
74	Axisymmetric deformation of anisotropic multilayer shells of revolution of intricate shapes. Mechanics of Composite Materials, 1982, 17, 437-445.	1.4	5
75	Nonaxisymmetric loading of a prestressed multilayered reinforced shell. Mechanics of Composite Materials, 1990, 26, 254-258.	1.4	5
76	Contact interaction of composite shells, subjected to follower loads, with a rigid convex foundation. Mechanics of Composite Materials, 2010, 46, 43-56.	1.4	5
77	Three-Dimensional Analysis of Metal-Ceramic Shells by the Method of Sampling Surfaces. Mechanics of Composite Materials, 2015, 51, 455-464.	1.4	5
78	Application of strong SaS formulation and enhanced DQ method to 3D stress analysis of rectangular plates. European Journal of Mechanics, A/Solids, 2020, 79, 103861.	3.7	5
79	Contact Problem for a Pneumatic Tire Interacting with a Rigid Foundation. Mechanics of Composite Materials, 2004, 40, 427-436.	1.4	4
80	Three-Dimensional Solution of the Free Vibration Problem for Metal-Ceramic Shells Using the Method of Sampling Surfaces. Mechanics of Composite Materials, 2017, 53, 31-44.	1.4	4
81	Coupled thermoelectroelastic analysis of thick and thin laminated piezoelectric structures by exact geometry solidâ€shell elements based on the sampling surfaces method. International Journal for Numerical Methods in Engineering, 2021, 122, 2446-2477.	2.8	4
82	Three-Dimensional Exact Analysis of Functionally Graded Laminated Composite Plates. Advanced Structured Materials, 2015, , 223-241.	0.5	4
83	Theory and numerical solution of problems of the statics of multilayered reinforced shells. Mechanics of Composite Materials, 1987, 22, 450-457.	1.4	3
84	Local loading of rubber-cord shells of revolution. Mechanics of Composite Materials, 1992, 27, 436-441.	1.4	3
85	Non-linear strainâ€“displacement equations exactly representing large rigid-body motions. Part III. Analysis of TM shells with constraints. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1203-1215.	6.6	3
86	Modeling and analysis of spiral actuators by exact geometry piezoelectric solid-shell elements. Journal of Intelligent Material Systems and Structures, 2020, 31, 53-70.	2.5	3
87	Three-dimensional stress analysis of structures in instability conditions using nonlinear displacement-based and hybrid-mixed quadrilaterals based on SaS formulation. International Journal of Non-Linear Mechanics, 2020, 126, 103540.	2.6	3
88	The contact problem for a geometrically non-linear Timoshenko-type shell. Prikladnaya Matematika I Mekhanika, 2003, 67, 825-836.	0.4	2
89	High-precision stress calculations for composite cylindrical shells with general boundary conditions using strong SaS formulation and extended DQ method. Mechanics of Advanced Materials and Structures, 2022, 29, 3359-3371.	2.6	2
90	Exact geometry SaS-based solidâ€“shell element for coupled thermoelectroelastic analysis of smart structures with temperature-dependent material properties. Acta Mechanica, 2023, 234, 163-189.	2.1	2

#	Article	IF	Citations
91	Three-dimensional thermoelectroelastic analysis of structures with distributed piezoelectric sensors and actuators with temperature-dependent material properties. Mechanics of Advanced Materials and Structures, 2023, 30, 3979-3996.	2.6	2
92	Approximate analysis of nonlinear transversely isotropic triple-layer plates. Mechanics of Composite Materials, 1980, 16, 202-206.	1.4	1
93	Approximate analysis of anisotropic three-layered plates of finite deflection. Mechanics of Composite Materials, 1980, 16, 34-39.	1.4	1
94	Stress-strain state of modern tires. Mechanics of Composite Materials, 1984, 20, 227-238.	1.4	1
95	Effect of shear-stress nonuniformity in modern tires. Mechanics of Composite Materials, 1987, 22, 607-613.	1.4	1
96	Comparative analysis of two approaches to more accurate calculation of laminate shells made of composite materials. Mechanics of Composite Materials, 1989, 24, 804-810.	1.4	1
97	Design of pneumatic tires on the basis of a generalized broken-line hypothesis. Strength of Materials, 1990, 22, 272-277.	0.5	1
98	The shear correction factor in the geometrically nonlinear theory of Timoshenko shells. Doklady Physics, 2002, 47, 145-147.	0.7	1
99	Three-Dimensional Exact Analysis of Laminated Piezoelectric Plates and Shells. Advanced Materials Research, 2013, 745, 1-12.	0.3	1
100	Analytical method for solving three-dimensional thermoelasticity problems for composite shells. Journal of Machinery Manufacture and Reliability, 2014, 43, 132-139.	0.5	1
101	Controlling the Shape of Laminated Composite Plates with Piezoelectric Patches under Thermal Loading Based on the Reference Surface Method. Mechanics of Solids, 2021, 56, 646-660.	0.7	1
102	A variant of the nonlinear theory of elastic multiply flat shells. Mechanics of Composite Materials, 1986, 21, 587-594.	1.4	0
103	Stressed-strained state of shells made of layered composites. Journal of Applied Mechanics and Technical Physics, 1989, 29, 745-750.	0.5	0
104	Analytical method for solving nonlinear multilayer anisotropic plate theory problems. Journal of Applied Mechanics and Technical Physics, 1990, 31, 281-285.	0.5	0
105	Nonaxisymmetric stress-strain state of multilayer anisotropic shells of revolution. Soviet Applied Mechanics, 1990, 26, 1077-1080.	0.0	0
106	Mechanics of structures made of rubber and cord materials. Mechanics of Composite Materials, 1990, 25, 500-509.	1.4	0
107	Thermally forced loading of multilayered anisotropic shells. Mechanics of Composite Materials, 1993, 29, 143-152.	1.4	0
108	Nonaxisymmetric deformation of tangentially loaded multilayered anisotropic shells of revolution. Mechanics of Composite Materials, 1993, 28, 409-413.	1.4	0

#	Article	IF	Citations
109	Axisymmetric deformation of multilayered anisotroic shells of revolution subjected to tangential loads. Mechanics of Composite Materials, 1993, 28, 334-340.	1.4	0
110	On the shear correction factor in the Timoshenko-type shell theory. Doklady Physics, 2001, 46, 797-799.	0.7	0