

Professor E. I. Grigolyuk

See:

https://www.researchgate.net/profile/E_Grigolyuk

Dept. of Physics Moscow State University of Mechanical Engineering

Selected Publications:

É. I. Grigolyuk, "The behavior of a circular plate following stability loss", Vestn. Inzh. Tekh., No. 3, 103–106 (1949).

Grigolyuk, E. I. (1953). On the Strength and Stability of Cylindrical Bimetallic Shells. Engineering Collect, 116:119–148.

Grigolyuk, E. I. "Thin Bimetallic Shells and Plates," Inzhenernyi Sbornik, Vol. 17, 1953, pp 69-120.

Grigolyuk, E. I. "The Elastic Stability of Orthotropic and Layered Conical and Cylindrical Shells, " Collection "Space Systems, " Gosizdatin Structures and Architecture, Vol. III, 1953.

Grigolyuk, E. I. "On the Stability of a Closed Two-Layered Conical Shell, Subjected to Uniform Normal Pressure," Inzhenernyi Sbornik, Vol. 19, 1954, pp. 75-82.

Grigolyuk, E. I. "Equations of Axially Symmetric Bimetallic Elastic Shells, " Inzhenernyi Sbornik, Vol. 18, 1954, pp. 89-98.

E. I. Grigolyuk, "Nonlinear vibrations and stability of shallow shells and rods,"Izv. Akad. Nauk SSSR Mekh. Mashinostr., No. 3, 33–68 (1955).

Grigolyuk, E. I. "Loss of Stability with Large Deflections of a Closed, Multi-Layer Conical Shell under Action of Normal Uniform Surface Pressure, " Inzhenernyi Sbornik Vol. 22, 1955, pp. 111-119.

E. I. Grigolyuk, "Vibrations of circular cylindrical panels subjected to finite deflections,"Prikl. Mat. Mekh., 19, No. 3, 376–382 (1955).

E. I. Grigolyuk, "Elastic stability of orthotropic and multilayer conical and cylindrical shells," in: Calculation of Three-Dimensional Structures [in Russian], No. 3, Gosstroiizdat, Moscow (1955).

Grigolyuk, E.I.: Nonlinear Vibration and Stability of Shallow Shells, Izvestiya Akademii Nauk., SSSR, 3(33),1955 translated in Applied Mechanics Series of Institute of Engineering Research, Univ. of California, 131, 1960

Grigolyuk, E. I. "Calculation for Stability of Bimetallic Cylindrical Shells, " Inzhenernyi Sbornik , Vol. 23, 1956, pp. 28-55.

Grigolyuk, E.I., "Small Vibrations of Thin Elastic Conical Shells", Izvestia AN, USSR Otdelnye Tekhnicheski Nauk, No.6, pp. 35-44, 1956.

Grigolyuk, E. I. "Equations of Three Layer Sandwich Shells with Light Packing, " Izvestia Akademii Nauk SSSR, Otdelniye Teckhnicheskikh Nauk, No. 1, 1957, pp. 77-84

Grigolyuk, E. I., 1957. On the unsymmetrical snapping of shells of revolution. In W. T. Koiter (ed): Proc. IUTAM Symp. On the Theory of Thin Elastic Shells, Delft, Netherlands, pp. 112-121.

Grigolyuk, E. I. "Finite Deflections of Sandwich Shells with a Rigid Core, " Izvestia Akademii Nauk SSSR, Otdelniye Teckhnicheskikh Nauk, No. 1, 1958, pp. 26-34.

Grigolyuk, E. I. "Buckling of Sandwich Construction Beyond the Elastic Limit, " Jour. Mech. Phys. Solid, Vol. 6, July 1958, pp. 253-266

Grigolyuk, E. I. "Stability of Non-Homogeneous Elasto-Plastic Shells," Soviet Physics-Doklady, Vol. 3, No. 2, Dec. 1958, pp. 438-441

Grigolyuk, E. I. and Chulkov, P. P. (1964). A Theory of Visco-Elastic Multilayer Shells Containing a Solid Core at Finite Deflection. Appl. Mech. Tech. Phys, 150(5):1012–1015.

E. I. Grigolyuk and Yu. V. Lipovtsev (1965). Stability of Shells in Creep, Journal of Applied Mechanics and Technical Physics, Vol. 6, No. 4, pp. 71-74

Grigolyuk E.I., Mikhailov A.I. Flutter of three-layer circular conical shell. Soviet Math.Dokl., 1965, v.163, No5, pp.1100-1103. (Russian)

Grigolyuk, E. I. and Kabanov, V. V. (1967). Stability of Circular Cylindrical Shells. Scientific Totals. Moscow. É. I. Grigolyuk and P. P. Chulkov, "Nonlinear equations of flat multilayered shells of regular structure", Izv. Akad. Nauk SSSR, Ser. Mekh. Tverd. Tela, No. 1, 163–169 (1967).

É. I. Grigolyuk and L. A. Fil'shtinskii, Perforated Plates and Shells [in Russian], Nauka, Moscow (1970).
E. I. Grigolyuk and F. N. Shklyarchuk, "Equations of Perturbed Motion of a Body with a Thin-Walled Elastic Shell Partially Pilled with a Liquid," Prikl. Mat. Mekh. 34(3), 401–411 (1970) [J. Appl. Math. Mech. (Engl. Transl.) 34 (3), 379–389 (1970)].

Grigolyuk, E. I., 1971, "S. P. Timoshenko and His Works in the Field of Stability of Deformable Systems," Stability of Beams, Plates and Shells, E. I. Grigolyuk, ed., Nauka, Moscow, pp. 731–800 (in Russian).

Grigolyuk, E. I., 1972, "Problems of Strength, Vibrations and Stability of Engineering Constructions and Their Modeling in Works by S.P. Timoshenko," Theory of Plates and Shells, Kazan' University Publishing, Kazan, Russia, Vol. 9, pp. 3–54 (in Russian).

É. I. Grigolyuk and F. A. Kogan, "The current state of the theory of multilayered shells," Prikl. Mekh., 8, No. 5, 5–17 (1972).

É. I. Grigolyuk, V. I. Mamai, and A. N. Frolov, "Study of stability of nonflat spherical shells with finite displacements on the basis of equations of shell theory", Izv. Akad. Nauk SSSR, Ser. Mekh. Tverd. Tela, No. 5, 154–165 (1972).

V. V. Bolotin and É. I. Grigolyuk, "Stability of elastic and inelastic systems," in: Vol. 3 of the three-volume series Mechanics in the USSR over 50 Years [in Russian], Nauka, Moscow (1972), pp. 325–363.

Grigolyuk, E. I., and Selezov, I. T., 1973, "Nonclassical Theories of Vibrations of Columns, Plates, and Shells," Advances in Science and Technology, Series. Mechanics of Deformable Solids, Vol. 5, VINITI Publishers, Moscow (in Russian).

E. I. Grigolyuk and P. P. Chulkov, Stability and Vibrations of Three-Layer Shells [in Russian], Mashinostroenie, Moscow (1973).

Grigolyuk, E. I. and Mamai, V. I. (1974). About One Variant of Equations in a Theory of Finite Displacements of Shallow Shells. Journal of Applied Mechanics, 10(2):3–13.

E. I. Grigolyuk and A. G. Gorshkov, Nonstationary Hydroelasticity of Shells [in Russian], Sudostroenie, Leningrad (1974).

Grigolyuk, E. I., 1975, "S.P. Timoshenko and His Works in Problems of Mechanics of Deformable Solids and Analysis of Engineering Constructions," S.P. Timoshenko: Static and Dynamic Problems in Theory of Elasticity, Naukova Dumka Publishers, Kiev, pp. 515–542 (in Russian).

E. I. Grigolyuk and V. V. Kabanov, Stability of Shells [in Russian], Nauka, Moscow (1978).

É. I. Grigolyuk and V. I. Mamai, "Methods of reducing nonlinear boundary-values problems to the Cauchy problem", in: Applied Problems of Strength and Plasticity: Methods of Solving Elasticity and Plasticity Problems [in Russian], Izd-vo Gor'k. Univ., Gor'kii (1979), pp. 3–49.

E. I. Grigolyuka and V. I. Mamai, Mechanics of the Deformation of Spherical Shells [in Russian], Mosk. Univ., Moscow (1983).

E. Grigolyuk and V. Tolkachev, Contact Problems in the Theory of Plates and Shells, Mir Publisher, Moscow, 1987

Grigolyuk, E.I. and Kulikov, G.M. (1988), "General Direction of the Development of the Theory of Shells", Mekhanica Kompozitnykh Materialov, No. 2, 287–298.

Grigolyuk, E.I, Kulikov, G.M., 1988, Multilayer Reinforced Shells: Calculation of Pneumatic Tires. Moscow: Mashinostroenie, 288 p. [in Russian].

E.I. Grigolyuk and V.I. Shalashilin, Problems of Nonlinear Deformation: The Continuation Method Applied to Nonlinear Problems in Solid Mechanics, Kluwer Academic Publishers, 1991

Grigolyuk E.I., Mamay V.I.: Nonlinear Deformation of Thin Walled Constructions. Moscow, 1997. Grigolyuk, E. I., 2000, S.P. Timoshenko: Life and Destiny, Krylov State Research Centre, St. Petersburg (in Russian).

Grigolyuk EI, Lopanitsyn YA (2002) The axisymmetric postbuckling behaviour of shallow spherical domes. J Appl Math Mech 4: 605–616

Grigolyuk EI, Lopanitsyn YA (2003) The non-axisymmetric postbuckling behaviour of shallow spherical domes. J Appl Math Mech 6: 809–818

Grigolyuk, E.I. and Lopanitsyn, E.A., Non-axial symmetrical overcritical behavior of flat spherical domes, Prikl. Mat. Mekh., 2003, vol. 67, no. 6, pp. 921–932