

## LIST OF PUBLICATIONS

Isaac Elishakoff

### A. Theses:

- A.1 I. Elishakoff, *Random Vibrations of Multilayered Shells*, Thesis for the Degree of Master of Science, Dept. of Dynamics and Strength of Machines, Power Engineering Institute and State University, Moscow, Russia, Feb. 1968 (summa cum laude) (advisor: academician V.V. Bolotin).
- A.2 I. Elishakoff, *Vibrational and Acoustical Fields in the Circular Cylindrical Shells Excited by Random Loads*, Thesis for the Degree of Ph. D., Dept. of Dynamics and Strength of Machines, Power Engineering Institute and State University, Moscow, Russia, May 1971, (advisor: academician V.V. Bolotin).

### B. Books

- B.1 I. Elishakoff, *Probabilistic Methods in the Theory of Structures*, Wiley-Interscience, New York, **1983**, XII + pp. 489; ISBN 0-471-87572.
- B.2 Yakov Ben-Haim and I. Elishakoff, *Convex Models of Uncertainty in Applied Mechanics*, Elsevier Science Publishers, Amsterdam, **1990**, XVII + pp. 221; ISBN 0-444-88406-8.
- B.3 Gabriel Cederbaum, I. Elishakoff, Jacob Aboudi and Liviu Librescu, *Random Vibration and Reliability of Composite Structures*, Technomic, Lancaster, **1992**, XIII + pp. 191; ISBN 0-87762-865-3.
- B.4 I. Elishakoff, Yukweng Lin and Liping Zhu, *Probabilistic and Convex Modeling of Acoustically Excited Structures*, Elsevier Science Publishers, Amsterdam, **1994**, VIII + pp. 296; ISBN 0-444-81624-0.
- B.5 I. Elishakoff, *Probabilistic Theory of Structures*, Dover Publications, Mineola, New York, **1999**, XVI + pp. 492; ISBN 0-486-40691-1
- B.6 I. Elishakoff, Yiwei Li and James H. Starnes, Jr., *Non-Classical Problems in the Theory of Elastic Stability*, Cambridge University Press, **2001**, XVI + pp. 336; ISBN 0-521-78210-4.

- B.7 I. Elishakoff and Yongjian Ren, *Large Variation Finite Element Method for Stochastic Problems*, Oxford University Press, **2003**, IX + pp. 260; ISBN 0-19-852631-8.
- B.8 I. Elishakoff, *Safety Factors and Reliability: Friends or Foes?*, Kluwer Academic Publishers, Dordrecht, **2004**, X + pp. 295; ISBN 1-4020-1779-0.
- B.9 I. Elishakoff, *Eigenvalues of Inhomogeneous Structures: Unusual Closed-Form Solutions of Semi-Inverse Problems*, CRC Press, Boca Raton, **2005**, XIV + pp. 729; ISBN 0-8493-2892-6.
- B.10 I. Elishakoff and Makoto Ohsaki, *Optimization and Anti-Optimization of Structures under Uncertainty*, Imperial College Press, London, **2010**, XV+ pp. 402; ISBN-13. 978-1-84816-477-2.
- B.11 I. Elishakoff, D. Pentaras, K. Dujat, C. Versaci, G. Muscolino, J. Storch, S. Bucas, N. Challamel, T. Natsuki, Y.Y. Zhang, C.M. Wang and G. Ghyselinck, *Carbon Nanotubes and Nano Sensors: Vibrations, Buckling, and Ballistic Impact*, ISTE-Wiley, London, **2012**, XIII+pp.421; ISBN-978-1-84821-345-6.
- B.12 I. Elishakoff, *Resolution of Twentieth Century Conundrum in Elastic Stability*, World Scientific/Imperial College Press, Singapore, **2014**; XV+pp.333, ISBN 978-981-4583-53-4.
- B.13 I. Elishakoff, D. Pentaras and C. Gentilini, *Mechanics of Functionally Graded Material Structures*, World Scientific/Imperial College Press, Singapore; pp. 323, ISBN 978-981-4656-58-0, **2015**.
- B.14 I. Elishakoff, *Probabilistic Methods in the Theory of Structures: Random Strength of Materials, Random Vibration, and Buckling*, World Scientific, Singapore, ISBN 978-981-3149-84-7, **2017**.
- B.15 I. Elishakoff: *Probabilistic Methods in the Theory of Structures: Solution Manual to Accompany Probabilistic Methods in the Theory of Structures: Problems with Complete, Worked Through Solutions*, World Scientific, Singapore, ISBN 978-981-3201-10-1, **2018**.
- B.16 I. Elishakoff, *Handbook on Timoshenko-Ehrenfest Beam and Uflyand-Mindlin Plate Theories*, World Scientific, Singapore, ISBN 978-981-3236-51-6, **2020**.
- B.17 Elishakoff, I., *Dramatic Effect of Cross-Correlations in Random Vibrations of Discrete Systems, Beams, Plates, and Shells*, Springer, Nature, Switzerland, ISBN 978---3-030-40394-2, **2020**.

B.18 Vladimir Raizer and Elishakoff I., *Philosophies of Structural Safety and Reliability*, Taylor & Francis, Boca Raton, ISBN 9781003265993, **2022**.

**He is also the editor or co-editor of following 14 books:**

B.19 I. Elishakoff and Richard H. Lyon, (editors), *Random Vibration-Status and Recent Developments*, Elsevier Science Publishers, Amsterdam, **1986**, XX + pp. 565; ISBN 0-444-42665-5.

B.20 I. Elishakoff and Horst Irretier, (editors), *Refined Dynamical Theories of Beams, Plates and Shells and their Applications*, Springer Verlag, Berlin, **1987**, XII + pp. 436; ISBN 3-540-17573-3.

B.21 I. Elishakoff, Johann Arbocz, Charles D. Babcock, Jr. and Avinoam Libai, (editors), *Buckling of Structures-Theory and Experiment*, Elsevier Science Publishers, Amsterdam, **1988**, XX + pp. 449; ISBN 0-444-70474-4.

B.22 S. T. Ariaratnam, Gerhart Schuëller and I. Elishakoff, (editors), *Stochastic Structural Dynamics-Progress in Theory and Applications*, Elsevier Applied Science Publishers, London, **1988**, XX + pp. 375; ISBN 1-85166-211-1.

B.23 Chuh Mei, Howard F. Wolfe and I. Elishakoff, (editors), *Vibration and Behavior of Composite Structures*, ASME Press, New York, **1989**, V + pp. 73; ISBN 0-7918-0397-X.

B.24 Fabio Casciati, I. Elishakoff and J. Brian Roberts, (editors), *Nonlinear Structural Systems under Random Conditions*, Elsevier Science Publishers, Amsterdam, **1990**, pp. 386; ISBN 0-444-88803-9.

B.25 Ahmed K. Noor, I. Elishakoff and Greg Hulbert, (editors), *Symbolic Computations and Their Impact on Mechanics*, ASME Press, New York, **1990**, XV + pp. 376; ISBN 0-7918-0598-0.

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B.27 Y.K. Lin and I. Elishakoff, (editors), *Stochastic Structural Dynamics 1-New Theoretical Developments*, Springer, Berlin, **1991**, XIII + pp. 346; ISBN 3-540-54167-5.

B.28 I. Elishakoff and Y. K. Lin, (editors), *Stochastic Structural Dynamics 2 - New Applications*, Springer, Berlin, **1991**, XIII + pp. 351; ISBN 3-540-54168-3.

B.29 I. Elishakoff (editor), *Whys and Hows in Uncertainty Modeling*, Springer, Vienna, **1999**, VII + pp. 393, ISBN 3-211-83155-X.

B.30 Alexander P. Seyranian and I. Elishakoff (editors), *Modern Problems of Structural Stability*, Springer, Vienna, **2002**, III + pp. 394, ISBN 3-211-83697-7.

B.31 I. Elishakoff (ed.), *Mechanical Vibration: Where Do We Stand*, Springer, Vienna, **2007**, IV + pp. 488, ISBN 3-211-68586-3.

B.32 I. Elishakoff and C. Soize (editors), *Non-Deterministic Mechanics*, Springer, Vienna, **2012**, II+ pp. 356, ISBN 978-3-7091-1305-9.

## C. Original Papers

C.1 I. Elishakoff, "Displacement and stress fields in semi-membrane shells," Proceedings of Moscow Energetics Institute, Dynamics and Strength of Machines, (V. V. Bolotin, ed.), 377-388, 1967 (in Russian).

C.2 V. Bolotin, I. Elishakoff, V. Moskalenko, B. Efimtsoff and N. Sharii, "Methods of determining the random acoustical fields inside the stiffened cylindrical shells," Proceedings of Moscow Energetics Institute, Dynamics and Strength of Machines, (V.V. Bolotin, ed.), 5-26, 1969 (in Russian).

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C.4 I. Elishakoff and Khromatoff, V., "Influence of the supersonic flow on the behavior of panels excited by pressure fluctuations in turbulent boundary layer," Proceedings of Moscow Energetics Institute, Dynamics and Strength of Machines, (V.V. Bolotin, ed.), 55-61, 1970 (in Russian).

C.5 I. Elishakoff, "Determination of cross-spectral densities of outer forces for plates and shells," in Proceedings of 3rd All-Union Conference on Reliability Problems in Structural Mechanics, (V.V. Bolotin and A. Cyras, eds.), Vilnius, 37-44, 1971 (in Russian).

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C.7 Bolotin, V.V. and I. Elishakoff, "Random oscillations in elastic shells containing an acoustic medium," (English translation), *Mechanics of Solids*, 6(5) 99-106, (Allerton Pres, Inc., New York), 1971.

- C.8 I. Elishakoff and Efimtsoff, B., "Vibrations of unbounded plates in a random force field," (English translation), *Soviet Applied Mechanics*, 8(8), 103-107, (Consultants Bureau, New York), 1972.
- C.9 I. Elishakoff, "Random vibrations of a two-span beam," *Israel Journal of Technology*, 11, 317-320, 1973.
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- C.13 I. Elishakoff, "Turbulent flow-excited vibrations of a shallow cylindrical shell", *AIAA Journal*, Vol. 13(9),1179-1182, 1975.
- C.14 I. Elishakoff and Yehuda Stavsky, "Axisymmetric buckling of certain annular composite plates," *International Journal of Solids and Structures*, 11, 1347-1356, 1975.
- C.15 I. Elishakoff and Fred Wiener, "Vibration of an open shallow cylindrical shell," *Journal of Sound and Vibration*, 44, 379-392, 1976.
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- C.17 I. Elishakoff, "On the role of cross-correlations in the random vibrations of shells" *Journal of Sound and Vibration*, 50, 239-252, 1977.
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- C.38 I. Elishakoff, "How to introduce the imperfection sensitivity concept into design," in "Collapse: Buckling of Structures in Theory and Practice," (J.M.T. Thompson and G. B. Hunt, eds.), Cambridge University Press, Cambridge, pp. 345-357, 1983.
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