**Curriculum vitae** SHLOMO HAVLIN

## PERSONAL INFORMATION

Family name, First name: Havlin Shlomo

Date of birth: July 21, 1942

Nationality: Israel

URL for web site: havlin.ph.biu.ac.il

## • EDUCATION

1972 PhD: Physics, Bar Ilan University, Israel
1968 MSc: Physics, Tel Aviv University, Israel

## • CURRENT POSITION(S)

1981-present Professor, Department of Physics, Bar Ilan University, Israel.
2016-present Adjunct Professor, Tokyo Institute of Technology, Tokyo, Japan.
2019-present Adjunct Professor, Physics, Boston University, Boston, USA.
2018-present Adjunct Professor, Complexity Science Hub Vienna, Austria

## • PREVIOUS POSITIONS

1999-2001 Dean, Faculty of Exact Sciences, Bar Ila university, Israel.
1996-1999 President, Israel Physical Society, Israel.
1998-2011 Director, Minerva Center for Mesoscopics, Fractals and Neural Networks, Israel
2002-2011 Head, ISF National Excellence Center for Complex Networks, Israel.
1996-2010 Director, Science Beyond 2000- Science Education Unit, Physics, Bar Ilan University, Israel.
1984-1988 Chairman, Department of Physics, Physics, Bar Ilan University, Israel.
1977-1981 Senior Lecturer, department of Physics, Bar-Ilan University, Israel.
1972-1977 Lecturer, department of Physics, Bar-Ilan University, Israel.

*VISITING POSITIONS:*

1978-1979 Royal Society Visiting Fellow, University of Edinburgh, Scotland.
1983-1984 Visiting Scientist, Physical Sciences Laboratory, DCRT, NIH,
1984-1985 Visiting Professor, Boston University, USA.
1989-1991 Visiting Scientist, Physical Sciences Laboratory, DCRT, NIH, USA.

## • AWARDS

2024 Fellow of Network Science Society
2023 Bakhuis Roozeboom Medal, Royal Netherland Academy of Sciences
2021 Complex Systems Society, Senior Scientific Award, International
2021 Honorary Fellow, Institute of Physics, United Kingdom
2018 Israel Prize, Top Prize in Science from the State of Israel
2017 Order of the Star of Italy, President of Italy
2017 Distinguished Scientist Award, Chinese Academy of Sciences
2016 Honorary Professor, Beihang University, China
2014 Rothschild Prize for Physical and Chemical Sciences, Israel
2012 Ehrenfest Colloquium, Leiden University, Netherlands
2010 Lilienfeld Prize in Physics, American Physical Society, USA
2009 Weizmann Prize for Exact Sciences, Israel
2006 Nicholson Medal, American Physical Society
1992 Humboldt Senior Award, Germany

1997 Fellow, American Physical Society
2004-2012 National Excellence Centre Award for Complex Networks, Israel Science Foundation

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• **EDITORIAL BOARDS**:

2021- Frontiers of Network Physiology
2021- Entropy
2008-2018 Europhys. Lett.
2004-2010 New Journal of Physics.
1991-present Physica A.
1991-present International Journal of Fractals.
1991-1995 Journal of Statistical Physics.
2019-present Journal of Phys. Complexity.
2007-present Research Physics Letters.

• **CAREER BREAKS and ACHEIVEMENTS**

Havlin has been a leading figure in the development of network science, with over 900 papers and books in the field of statistical physics, network science, and interdisciplinary physical sciences.
He has chaired many national and international research centers, served as PI for dozens of grants and supervised over 120 graduate students. He has been the former president of the Israel Physical Society and the winner of many national and international prizes. His h-index is 128 (ISI) and 153 (Google Scholar), he is a highly cited scientist since 2018. Over 125,000 citations. Havlin is among the most-cited scientists in Israel.

**SELECTED BOOKS (of 18 total):**

1. B. Gross and S. Havlin, Percolation in Spatial Networks (Cambridge Elements, 2022)
2. J. Gao, A. Bashan, L. Shekhtman and S. Havlin, Introduction to Networks of Networks (IOP publishing 2022)
3.. R. Cohen and S. Havlin, Complex networks: Structure, Robustness and Function (Cambridge University Press, 2010); Translated to Chinese (Cambridge University Press, 2015)
4. D. Ben-Avraham and S. Havlin, Diffusion and Reactions in Fractals and Disordered Systems (Cambridge University Press, 2000; 2nd ed., 2005).
5. A. Bunde and S. Havlin, Fractals in Science (Springer, Berlin, 1st ed. 1994, 2nd ed., 1995).
6. A. Bunde and S. Havlin, Fractals and Disorder (Springer, Berlin, 1st ed. 1992, 2nd ed., 1996)

**10 SELECTED ARTICLES: (over 900 total)**. For more details see http://havlin.biu.ac.il

1. S. Havlin, D. Ben-Avraham, "Diffusion in disordered media," Advances in Physics **36**, 695 (1987). Due to many citations this article was published again in Advances in Physics **51**, 187 (2002). (**2898** citations)
2. C. K. Peng, S. V. Buldyrev, A. L. Goldberger, S. Havlin, F. Sciortino, M. Simons, H. E. Stanley, "Long-range correlations in nucleotide sequences," Nature 356, 168 (1992). (**1850** citations)
3. G. M. Viswanathan, S. V. Buldyrev, S. Havlin, M. G. E. da Luz, E. P. Raposo, H. E. Stanley, "Optimizing the success of random searches," Nature 401, 911 (1999). (**1830** citations)
4. R. Cohen, K. Erez, D. ben-Avraham, S. Havlin, "Resilience of the Internet to random breakdown," Phys. Rev. Lett. 85, 4626 (2000). (**3040** citations). Reprinted in Collection of Complex Network Papers, Princeton University Press (2005).
5. C. Song, S. Havlin and H. A. Makse "Self-similarity of complex networks," Nature 433, 392 (2005). (**1848** cit) Nature Physics, 2, 275 (2006);
6. K Yamasaki, A Gozolchiani, S Havlin, Climate networks around the globe are significantly affected by El Nino Phys. Rev. Lett. 100 (22), 228501(2008) (**401** citations)
7. S. Buldyrev, R. Parshani, G. Paul, H. E. Stanley and S. Havlin " Catastrophic cascade of failures in interdependent networks " Nature 464, 1025 (2010). (**5031** citations)
8. A Majdandzic et al "Spontaneous recovery in dynamical networks", Nature Physics 10 (1), 34 (2014), (**388**cit)
9.D Li, B Fu, Y Wang, G Lu, Y Berezin, HE Stanley, S Havlin, Percolation transition in dynamical traffic network with evolving critical bottlenecks, PNAS 112 (3), 669-672 (2015), (475 citations)
10. I. Bonamassa, et al, "Interdependent Superconducting Networks", Nature Physics, 19, 1163 (2023)