

CURRICULUM VITAE

Yoav Yair

Updated: 10.10.2017

Personal

Place and Date of Birth - Israel, 20 January 1958

Marital Status - Married, 2 children

IDF – [1976-1983] Lt. Col. (Res), Air Traffic Control and Air Defense.

Education

1982-1985 Tel-Aviv University, Dept. of Geophysics and Planetary Sciences;

Degree: B. Sc (summa com laude).

1986-1988 Tel-Aviv University, Dept. of Geophysics and Planetary Sciences;

Degree: M.Sc (magna com laude).

1989-1995 Tel-Aviv University, Dept. of Geophysics and Planetary Sciences;

Degree: Ph.D (with distinction).

2003-2013 The Open University of Israel. Degree: B.A. in Humanities (with distinction).

Scholarships

1990 Recipient of the Buchman Fellowship in Tel-Aviv University.

1993 Recipient of the Rashi Scholarship at the Open University for Distinguished Ph.D students.

Academic Appointments

1998 Lecturer. Department of Life and Natural Sciences, the Open University

2005 Senior Lecturer. Department of Life and Natural Sciences, the Open University

2008 Assoc. Professor, Department of Life and Natural Sciences, the Open University

Professional Experience

1985 - 2000 Center for Educational Technology, Tel-Aviv. Specialized in computerized instruction and tutoring; Software designer for educational, military and instructional applications.

1991 - 1999 Scientific advisor for educational programs developed by the School of Education, Tel-Aviv University, in Astronomy and Planetary Sciences.

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| 1994 - 2002 | Head developer and writer of educational software in astronomy, space and earth sciences, Center for Educational Technology, Tel-Aviv. |
| 1991 - 1998 | Mission Scientist in airborne measurements of clouds and aerosols in Israel and Italy, for the Cloud Physics Lab. in Tel Aviv University. Also in charge of lightning detection systems. |
| 1998-2004 | Project Coordinator of the ISA-TAU-NASA space shuttle MEIDEX project (Mediterranean Israeli Dust Experiment – first Israeli astronaut mission). Multiple responsibilities of MOU agreements, negotiations and contracts with foreign companies, budget structure and allocation. Coordination between SELA, IAF, TAU and NASA. |
| 2003 | Mission scientist and coordinator of MEIDEX on the space shuttle Columbia, from mission control in NASA/Goddard Space Flight Center. In charge of the science team, data collecting, payload identification (after the accident). |
| 2004 - | Principal Investigator of the ILAN Project (<u>Imaging of Lightning-induced Atmospheric emissions</u>) funded by the Israeli Academy of Sciences and The Open University. |
| 2004 - 2008 | Porter School of Environmental Studies, Tel-Aviv University, project coordinator for the Israel-Italy joint environmental research initiative. |
| 2011-2014 | Head, MEITAL (Inter-University Center for Learning Technologies) |

Administrative Activities

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| 2000 - 2001 | Head, Department of Telecommunications and Tele-learning (TELEM), The Open University of Israel. |
| 2001 - 2003 | Head, Projects Department, Center for Technology in Distance Education, The Open University of Israel. |
| 2004 - 2009 | Director, Center for Technology in Distance Education ("SHOAM"), The Open University |
| 2009 - 2012 | Dean, Development and Learning Technologies, The Open University |
| 2013 | Head, Physics Group, The Open University |
| 2014 | Head, Department of Life and Natural Sciences, The Open University |
| 2014- | Dean, School of Sustainability, Interdisciplinary Center (IDC) Herzliya |

Fields of Research

- Remote sensing of clouds and precipitation in relation to lightning activity
- Planetary Lightning – Jupiter, Saturn and Venus
- Thunderstorms and upper atmospheric Transient Luminous Events (TLEs).
- Meteor showers in relation to TLEs
- Space-based observations of global lightning activity
- Misconception in Astronomy and Science Education
- Dissemination of Technology in Distance Education
- Space weather effects
- Fair weather atmospheric electricity

Sponsored Research

- 2001 BSF, Measurements of dust from the space shuttle; 180K NIS for 3 years.
- 2003 ISF, Study of sprites in the Eastern Mediterranean; 174K NIS for 3 years.
- 2006 ISF, Investigation of the network behavior of lightning flashes in spatially distant thunderstorms based on space and ground based data; 225K NIS for 3 years.
- 2006 EC, 6th Framework Program Call: FP6-2005-Global-4: FLASH – observations, analysis and modeling of lightning activity in thunderstorms, for use in short term forecasting of flash floods; 145,636 Euro for 3 years
- 2009 ISF, Numerical modeling and laboratory studies of thunderstorms and sprites in planetary atmospheres; 160K NIS for 3 years.
- 2009 MOST, Infrastructure for monitoring space weather (with Prof. Colin Price, TAU), 195 K NIS for 3 years.
- 2012 Ministry of Defense, Investigation of space weather and solar cycle 24. 100K NIS for 1 year.
- 2014 ISF, Ground based and airborne measurements of atmospheric electrical parameters in fair weather and their relation to solar activity. 290K NIS for 3 years.

Membership in Professional Societies

- 1985 - American Geophysical Union, Atmospheric Sciences (AGU)
- 1985 - 2001 Israel Association for Aerosol Research (IAAR)
- 1989 - Israel Astronomical Society
- 1988 - Israel Meteorological Society (IMS)
- 1992 - 2000 American Astronomical Society, Division of Planetary Sciences
- 1999 - International Union of Radio Science (URSI)
- 2006 - American Meteorological Society (AMS)
- 2011- International Astronomical Union (IAU)

Teaching at the Open University Courses

- 1991 - Introduction to Meteorology; course coordinator.
- 1997 - Modern problems in atmospheric science; course coordinator.
- 1997 - 2001 Introduction to astronomy; course coordinator
- 2000 - 2001 Fundamentals of astronomy; course coordinator
- 2002 - Atmospheric Chemistry; course coordinator
- 2003 - 2004 Atoms and Molecules; course coordinator.
- 2003 - 2004 Physical principles in Medicine; course coordinator.
- 2004 Laboratory in Physics A and B; course coordinator

Academic supervision on OpenU courses

1. Introduction to meteorology (20291)
2. Modern problems in atmospheric sciences (20518)
3. Selected topics in atmospheric chemistry (20533)
4. Introduction to Geophysics (20434)
5. Fundamentals of Astronomy (20120)
6. Physical principles in medicine (20329)
7. Introduction to astrophysics (20207)
8. Laboratory in meteorology (20421)

Teaching at the Interdisciplinary Center Herzliya (IDC)

- 2014 Modern atmospheric trends and processes and their impact on air quality
- 2014 Planet earth: a citizen's guide to the 21st century
- 2014 Review and analysis of natural catastrophes and man-made disasters
- 2014 Practicum (projects in sustainability)
- 2015 Introduction to Earth Sciences and Systems
- 2015 Pollution of the atmosphere, soil and oceans
- 2016 Natural disasters

Other Teaching Experience

- 1989- 1992 Teaching assistant, Tel-Aviv university (Atmospheric sciences).
- 1998 -2004 Teaching astronomy and atmospheric sciences at the Kibbutzim College of Education, Tel-Aviv.
- 1996 - 2003 Teaching on-line courses in astronomy and meteorology for science teachers, as part of the TAMID project (Teacher Training) at the Open University.
- 2003 - 2004 Teaching astronomy at the Lewinsky College of education.
- 2008 Taught the course "Atmospheric Electricity" at the Hebrew University of Jerusalem
- 2010 Taught the course "Introduction to Cloud Physics" at Tel-Aviv University
- 2013 Taught the course "Modern problems in atmospheric electricity" for MSc students at the Weizmann Institute of Science

Invited Tutorials and Courses

- 2004 NATO Advanced Study Institute, Corte, Corsica, France
- 2006 ISSI workshop: Planetary Atmospheric Electricity, Bern, Switzerland
- 2008 COST Action P18 Lightning summer school, Kitten, Bulgaria
- 2009 Summer School on sprites, Corte, Corsica, France
- 2009 Workshop on Transient Luminous Events, Taiwan
- 2010 ISSI workshop: Dynamic coupling between Earth's atmospheric and plasma environments, Bern, Switzerland
- 2012-2017 ERCA winter school on atmospheres, Grenoble, France
- 2014 TAE-IS summer school, Collioure, France

- 2015 European Space Agency (ESTEC)
- 2016 Invited lecturer, GIAN program of the Government of India, at the University of Mumbai. The course: "From thunderstorms to climate".

Membership in Professional Committees

- 2004 - 2006 Israel Ministry of Education, academic committee for the MUTAV program (science literacy for non-specializing high school students).
- 2004 - 2006 Israel Ministry of Education, task-force committee for the preparation to the PISA/TIMMS international assessment tests.

Membership in Editorial Boards

- 1999 - 2001 "Eureka" - educational publication for science teachers. Member.
- 2001 - "National Geographic" Israeli version; Scientific advisor.
- 2003 - 2015 "Rosh Gadol", science journal for young readers
- 2016 - Editor in Chief, The Open Atmospheric Science Journal

Service

- Frequent reviewer (over 70 papers in the last 8 years):
 1. Journal of Geophysical Research [Atmospheres] [Space Physics]
 2. Environmental Research Letters (ERL)
 3. Geophysical Research Letters (GRL)
 4. Astrophysical Journal
 5. Atmospheric Research
 6. Natural Hazards and Earth System Science (NHSS)
 7. Natural Hazards (NHZ)
 8. Monthly Weather Review (MWR)
 9. Journal of Atmospheric and Solar -Terrestrial Physics (JASTP)
 10. NSF (National Science Foundation, US)
- Guest Editor, [Environmental Research Letters](#)
- Editor In Chief (since 7/2016) of The Open Atmospheric Science Journal
- Columnist for ACM "Inroads" on Distance Education(2013-2014)
- Member of "Ba'Sha'ar" – voluntary lectures in the periphery, Israel
- Organizing committee, seminars on digital books, Jerusalem International Book Fair (2011, 2013)
- Organizer and speaker at numerous Open University and IDC public outreach events ("Researcher's Night" – an EU sponsored event)

- Steering committee of the Chais Research Center for Innovation in Learning Technologies, The Open University (since established, 2006 until 2014)
- Representing Israel in COST actions:
 - P18 Physics of Lightning
 - ES1005 Space weather effects on climate [TOSCA]
 - CA15211 ElectroNet
- Lead Convener / co-convener
 - EGU Lightning sessions 2007-2017
 - EPSC Planetary Lightning session 2011, 2013
 - AGU Planetary lightning sessions 2008, 2012
 - JpGU Lightning session 2008-2011

PhD and Msc Students

1. Mrs. Michal Ganot – M.Sc, Department of Geophysics and Planetary Sciences, Tel-Aviv University (with Prof. Colin Price)
2. Mr. Gady Binshtok – M.Sc, Department of Geography, Tel-Aviv University (with Prof. Hadas Saaroni)
3. Mr. Elyakom Vadislavsky – M.Sc, Institute of Earth Science, Hebrew University of Jerusalem (with Dr. Carynelissa Erlich)
4. Mr. Roy Yaniv – M.Sc., Department of Geophysics and Planetary Sciences, Tel-Aviv University (with Prof. Colin Price)
5. Dr. Mustafa Asfur – Post Doc, after graduation from Tel-Aviv University
6. Mrs. Meital Hans – PhD, Department of Science Education, Techniyon (with Prof. Yael Kali).
7. Mrs. Masada Tzabari-Tzemach - M.Sc, Institute of Earth Science, Hebrew University of Jerusalem (with Dr. Carynelissa Erlich)
8. Ms. Na'ama Reicher - M.Sc, Department of Geophysics and Planetary Sciences, Tel-Aviv University (with Prof. Colin Price)
9. Mrs. Shahar Rozalis – M.Sc., Porter School for Environmental Studies, Tel-Aviv University (with Prof. Colin Price and Prof. Efrat Morin).
10. Mrs. Sigalit Shalev - M.Sc, Department of Geography, Tel-Aviv University (with Prof. Hadas Saaroni and Dr. Baruch Ziv)
11. Mrs. Daria Dubrovin – Ph.D., Department of Geophysics and Planetary Sciences, Tel-Aviv University (with Prof. Colin Price)
12. Mr. Yaakov Buchris – M.A, Department of Psychology and Education, The Open University (with Prof. Yaron Schur)
13. Mr. Eran Livni - M.A, Department of Psychology and Education, The Open University.
14. Mr. Roy Yaniv – Ph.D. [active], Department of Geophysics and Planetary Sciences, Tel-Aviv University (with Prof. Colin Price)
15. Mr. Shai Katz – M.Sc. [active] Department of Earth Sciences, Tel-Aviv University (with Prof. Colin Price)

List of Publications

Thesis and Dissertation

1986-1988 Tel-Aviv University, Dept. of Geophysics and Planetary Sciences; Degree: M.Sc (magna com laude). Thesis title: A numerical model for the charging of polydispersed aerosol particles by attachment of atmospheric ions. Thesis advisor: Prof. Zev Levin.

1989-1995 Tel-Aviv University, Dept. of Geophysics and Planetary Sciences; Degree: Ph.D (with distinction). Thesis title: Jupiter's water clouds - a detailed numerical model of cloud growth charge separation and lightning formation. Thesis advisors: Prof. Zev Levin and Dr. Shalva Tzivion.

Open University Course Development

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| 1991 - 1994 | Introduction to Meteorology (with B. Ziv) |
| 1995 - 1999 | Introduction to Astronomy (with E. Leibowitz) |
| 1996 - 1998 | Modern problems in atmospheric sciences |
| 1998 - 2001 | Fundamentals of Astronomy (with N. Brosch, M. Meidav) |
| 2002 - 2003 | Topics in Atmospheric Chemistry (with I. Dotan) |
| 2003 - 2006 | Introduction to Geophysics (by A. Ginzburg; as internal OU reference) |
| 2003 - 2006 | Laboratory in Meteorology (with B. Ziv) |

Open University Books

1. Yair, Y. and B. Ziv, 1994: An introduction to Meteorology. The Open University, Tel- Aviv, Israel, 411 pp. (in Hebrew).
2. Yair Y., 1999: "The Universe" a study guide to the course "Introduction to astronomy", The Open University, Tel-Aviv, Israel, 180pp. (in Hebrew).
3. Yair Y. and I. Dothan, 2003: "Topics in atmospheric chemistry", Study guide, the Open University of Israel (in Hebrew).
4. Ziv, B. and Y. Yair, 2006: Laboratory in Meteorology. The Open University, Tel- Aviv, Israel, 100 pp. (in Hebrew).
5. Yair Y., and O. Kovo, 2011: "The Universe" a study guide to the course "Introduction to astronomy" (Revised), The Open University, Ra'anana, Israel, 190pp. (in Hebrew).
6. Yair, Y. and B. Ziv, 2012: An introduction to Meteorology, Units 1-4 (Updated and revised). The Open University, Ra'anana, Israel, 316 pp. (in Hebrew).
7. Yair, Y. and B. Ziv, 2014: An introduction to Meteorology, Units 5-7 (Updated and revised). The Open University, Ra'anana, Israel, 264 pp. (in Hebrew).

Educational Books (K-12)

1. Harel, Y., Y. Yair and S. Meiri, 1997: In View of the Sky. A textbook in astronomy for 7-9 grade students. Ramot University Press, Israel (in Hebrew).
2. Yair, Y., R. Mintz and S. Litvak, 1997: "Touch the Sky, Touch the Universe", K-12 Educational CD-ROM on astronomy and space science. Published by the Center for Educational Technology.
3. Yair, Y., R. Klein, R. Mintz, 1998: "Sea-Wind", K-12 Educational CD-ROM on atmospheric sciences. Published by the Center for Educational Technology.
4. Schur, Y., R. Brandt and Y. Yair, 2002: "A thinking journey to Mars", Astronomy text-book for the MUTAV program, Center for Educational Technology, 150 pp (in Hebrew).
5. Yair, Y., Segev, M. and B. Savir, 2006: Journey through the Atmosphere: selected topics in weather and climate. A textbook in geography for 7-9 grade students. Center for Educational Technology, Israel, 108 pp (in Hebrew).

Chapters in Books

1. Williams, E. R. and **Y. Yair**, 2006: The microphysical and electrical properties of sprite producing thunderclouds. In: "Sprites, Elves and Intense Lightning Discharges", M. Fullekrug et al. (eds.), 57-83, Springer (Printed in the Netherlands).
2. **Yair, Y.**, 2010: eLearning in Israel: A case study of technology in distance education: the Open University of Israel. In: *Cases on challenges facing E-learning and national development: Institutional Studies and Practices*, U. Demirai, Editor, Anadolu University, Turkey, Vol. I, chap. 13, 293-317.
3. Meishar-Tal, H., **Y. Yair** and E. Tal-Elhasid, 2010: Institutional Implementation of Wikis in higher education: the case of the Open University of Israel (OUI), p. 215-230, in: Veletsianos, G., editor: *Emerging Technologies in Distance Education*, Athabasca University Press, Canada, ISBN 978-1-897425-76-
4. Yaniv, R., A.D. Devir, **Y. Yair**, C. Price, B. Ziv and N. Reicher, 2009: Calibration of CCD cameras for sprites and elves measurements, *Amer. Inst. of Phys. Conf. Proc.*, vol. 1118, p. 92-98.
5. Fischer, G., D. A. Gurnett and **Y. Yair**, 2011: Extraterrestrial lightning and its past and future research. p. 19-38, In: *Lightning: formation, properties and types*, edited by M. D. Wood, Nova Science Publishers, ISBN 978-1-61122-198-5.
6. **Yair Y.**, 2015: Thunderstorms, lightning and cosmic rays. In: *Earth's climate response to a changing sun*. Coordinators: J. Liliensten, T. Dudok de Wit and K. Matthes. P. 293-296. DOI: 10.1051/978-2-7958-1733-7.c136. Published by EDP sciences, France, 345 pp.
7. Yair, Y., 2017: The Mediterranean basin in an era of climate change. In: *Congreso Internacional Laudato Si de Ecología Integral y Medio Ambiente*; Murcia 2017; ISBN 978-84-16045-77-8; pages 920-932 (In print)
8. Yair, Y., 2017: E-learning in Israel. In press.

Editor, Books

1. F. Leblanc, K.L. Aplin, **Y. Yair**, R.G. Harrison, J.P. Lebreton and M. Blanc (Eds.) Planetary Atmospheric Electricity, Space Sciences Series of ISSI vol.30, 2008, 532pp.
2. T. D. de Wit, I. Ermolli, M. Haberreiter, H. Kambezidis, M.M. Lam, J. Lilensten, K. Matthes, I. Mirinova, H. Schmidt, A. Seppälä, E. Tanskanen, K. Tourpali and **Y. Yair** (Eds.), Earth's climate response to a changing sun. Published by EDP sciences, France, 2015, 345 pp.

Articles in Refereed Journals

(Impact factor, Citations) (* is corresponding author)

1. **Yair Y.** and Z. Levin, 1989: Charging of polydispersed aerosol particles by attachment of atmospheric ions. *Jour. Geophys. Res.*, 94, D11, 13,085-13,091. (3.6, 19)
2. **Yair, Y.**, Z. Levin, and S. Tzivion 1992: Water-cumulus in Jupiter's atmosphere: Numerical experiments with an axisymmetric cloud model. *Icarus* **98**, 72–81. (3.2, 18)
3. **Yair, Y.** and Z. Levin, 1994: Intra-cloud and cloud-to-ground lightning discharges in Israeli thunderstorms. *Bull. Israeli. Met. Soc.*, 3, 1,20-28 (in Hebrew). (2.9)
4. **Yair, Y.**, Levin, Z. and S. Tzivion, 1995: Lightning generation in a Jovian thundercloud: results from an axisymmetric numerical cloud model, *Icarus*, **114**, 278-299. (3.2, 39)
5. **Yair, Y.**, Levin, Z. and S. Tzivion, 1995: Microphysical processes and dynamics of a Jovian thundercloud. *Icarus*, **115**, 421-434. (3.2, 35)
6. Levin, Z., **Y. Yair** and B. Ziv, 1996: Positive cloud-to-ground flashes and wind shear in Tel-Aviv thunderstorms. *Geophys. Res. Lett.*, 23, 17, 2231-2234. (4.4, 20)
7. **Yair, Y.**, Levin, Z. and S. Tzivion, 1998: Model interpretation of Jovian lightning activity and Galileo's probe results. *J. Geophys. Res.*, 103, D12, 14,157-14,166. (3.6, 13)
8. **Yair, Y.**, Levin Z. and O. Altaratz, 1998: Lightning phenomenology in the Tel-Aviv area from 1989 to 1996. *J. Geophys. Res.*, 103, D8, 9015-9025. (3.6, 22)
9. Altaratz, O., Levin Z. and **Y. Yair**, 1998: Positive ground flashes in Israel thunderstorms. *Bull. Isr. Met. Soc.*, Vol. 5, 1, 27-36. (2.9)
10. Mintz, R., S. Litvak and **Yair, Y.***, 2001: 3D-Virtual Reality in Science Education: Implication for Astronomy Teaching. *Jour. Comp. Math. Sci. Educ.*, 20 (3), 293-305. (- , 83)
11. Altaratz, O., Levin Z. and **Y. Yair**, 2001: Winter thunderstorms in Israel – a study with lightning location systems and weather radar. *Month. Weath. Rev.*, 129, 5, 1259-1266. (3.6, 9)
12. Fullekgfrug, M., C. Price, **Y. Yair** and E. Williams, 2002: Intense oceanic lightning. *Annal. Geo.*, 20, 133-137. (1.7, 42)
13. **Yair, Y.**, Schur, Y. and R. Mintz, 2003: A “Thinking Journey” to the Planets using Scientific Visualization Technologies. *Jour. Science Ed. Tech.*, 12 (1), 43-49. (1.2, 31)
14. **Yair, Y.**, C. Price, Z. Levin, J. Joseph, P. Israelevitch, A. Devir, M. Moalem, B. Ziv and M. Asfur. 2003: Sprite observations from the space shuttle during the

- Mediterranean Israeli Dust Experiment (MEIDEX). *J. Atmos. Sol. Terr. Phys.*, 65, 635-642. (1.4, 34)
15. Hsu, R. R., H.T. Su, A.B. Chen, L.C. Lee, M. Asfur, C. Price and **Y. Yair**, 2003: Transient luminous events in the vicinity of Taiwan. *J. Atmos. Sol. Terr. Phys.*, 65, 561-566. (1.4, 18)
 16. Altaratz, O., Levin Z., **Y. Yair** and B. Ziv, 2003: Lightning Activity over Land and Sea on the Eastern Coast of the Mediterranean. *Month. Weath. Rev.*, 131, 2060-2070. (3.6, 58)
 17. Yair Y. and **Y. Yair**, 2004: "Everything Comes to an End": an Intuitive Rule in Physics and Mathematics. *Science Education*, 594-609, doi:10.1002/sce10142. (3.39, 10)
 18. Ziv, B., **Y. Yair**, K. Pressman and M. Fullekrug, 2004: Verification of the Aviation Center global forecasts of Mesoscale Convective Systems. *Jour. App. Meteor. Clim.*, 43, 720-726. (2.0 ,5)
 19. Israelevich, P., **Yair, Y.**, Devir, A. D., Joseph, J. H., Levin, Z., Mayo, I., Moalem, M., Price, C. and A. Sternlieb, 2004: Transient airglow enhancement observed from the space shuttle Columbia during the MEIDEX sprite campaign. *Geophys. Res. Lett.*, 31, L066124, doi:10.1029/2003GL019110. (4.4, 22)
 20. **Yair, Y.**, P. Israelevich, A. Devir, M. Moalem, C. Price, J. Joseph, Z. Levin, B. Ziv and A. Teller, 2004: New sprites observations from the space shuttle. *J. Geophys. Res.*, Vol. 109, No. D15, D15201/10.1029/2003JD004497. (3.6, 57)
 21. Price, C., E. Greenberg, **Y. Yair**, G. Satori, J. Bor, H. Fukunishi, M. Sato, P. L. Israelevich, M. Moalem, A. Devir, Z. Levin, J. H. Joseph, I. Mayo, B. Ziv and A. Sternlieb, 2004: Ground-based detection of TLE-producing intense lightning during the MEIDEX mission on board the space shuttle Columbia. *Geophys. Res. Lett.*, 31, L20107, doi:10.1029/2004GL020711. (4.4, 24)
 22. **Yair, Y.**, C. Price, B. Ziv, P. L. Israelevich, D. D. Sentamn, F.T. Sao-Sabbas, A. Devir, M. Sato, C. Rodger, M. Moalem, E. Greenberg and O. Yaron, 2005: Space Shuttle observation of an unusual transient atmospheric emission. *Geophys. Res. Lett.*, 32, L02081, doi:10.1029/2004GL021551. (4.4, 13)
 23. Gazit, H., **Y. Yair** and D. Chen, 2006: Emerging Conceptual Understanding of Complex Astronomical Phenomena by Using a Virtual Solar System. *Jour. Science Ed. Tech.* 14, 5/6, 459-470, doi:10.1007/s10956-006-0221-3.
 24. **Yair, Y.**, 2006: Observations of Transient Luminous Events from Earth Orbit. *IEEJ Transaction, Special Issue on Physics of Lightning and Related Phenomena*, Vol. 126, 4, 244-249. Doi: [10.1541/ieejfms.126.244](https://doi.org/10.1541/ieejfms.126.244) [Invited] (- , 4)
 25. **Yair, Y.**, R. Aviv, G. Ravid, R. Yaniv, B. Ziv and C. Price, 2006: Evidence for synchronicity of lightning activity in networks of spatially remote thunderstorms. *Jour. Atmos. Sol. Terr. Phys.*, 68, 1401-1415. (1.4, 14)
 26. Yang, H., Pasko, V. and **Y. Yair**, 2006: Three-dimensional finite-difference time-domain modeling of the Schumann resonance parameters on Titan, Venus and Mars. *Radio Sci.*, 41, RS2S03, doi:10.1029/2005RS003431. (1.2, 53)
 27. Gazit, H., **Y. Yair** and D. Chen, 2006: The gain and pain in taking the pilot seat: Learning dynamics in virtual reality environments. *Virtual Reality*, 10, 3-4, 10.1007/s10055-006-0053-3. (0.9, 5)
 28. Price, C., **Y. Yair** and M. Asfur, 2007: East African Lightning as a precursor of Atlantic hurricane activity. *Geophys. Res. Lett.*, 34, L09805, doi:10.1029/2006GL028884. (4.4, 31)

29. Ganot, M., **Y. Yair***, C. Price, B. Ziv, Y. Sherez, E. Greenberg, A. Devir and R. Yaniv, 2007: First detection of transient luminous events associated with winter thunderstorms in the Eastern Mediterranean. *Geophys. Res. Lett.*, 34, L12801, doi:10.1029/2007GL029528. (4.4, 25)
30. Greeneberg, E., C. Price, **Y. Yair**, M. Ganot, J. Bor and G. Satori, 2007: ELF transients associated with sprites and ELVES in eastern Mediterranean winter thunderstorms. *Jour. Atmos. Sol. Terr. Phys.*, 69, 1569-1586. (1.4, 26)
31. Ziv, B., H. Saaroni, **Y. Yair**, M. Ganot, H. Baarad and D. Isaschari, 2008: Atmospheric factors governing winter thunderstorms in the coastal regions of the eastern Mediterranean. *Theor. Appl. Clim.*, 10.1007/s00704-008-0008-6.
32. Harrison, R. G., K. L. Aplin, F. Leblanc and **Y. Yair**, 2008: Planetary atmospheric electricity. *Space Sci. Rev.*, 137: 5–10, doi: 10.1007/s11214-008-9419-z. (6.283, 23)
33. **Yair Y.**, 2008: Charge generation and separation processes. *Space Sci. Rev.*, 137: 119–131, doi: 10.1007/s11214-008-9348-x. [Invited] (6.283, 22)
34. **Yair Y.**, G. Fischer, F. Simoes, N. Renno and P. Zarka, 2008: Updated review of planetary atmospheric electricity, *Space Sci. Rev.*, 137: 29–49, doi: 10.1007/s11214-008-9349-9. [Invited] (6.283, 33)
35. Simões, F., M. Rycroft, N. Renno, **Y. Yair**, K.L. Aplin and Y. Takahashi, 2008: Schumann resonances as a means of investigating the electromagnetic environment in the solar system. *Space Sci. Rev.*, 137: 455–471, doi: 10.1007/s11214-008-9398-0. (5.0, 16)
36. **Yair, Y.**, 2008: A step further: opening books and educational resources. *ACM SIGCSE Bull.*, 40, 4, 22-23, doi: 10.1145/1473195.1473207
37. Takahashi, Y., J. Yoshida, **Y. Yair**, T. Imamura and M. Nakamura, 2008: Lightning Detection by LAC Onboard the Japanese Venus Climate Orbiter, Planet-C. *Space Sci. Rev.*, 137: 317–334, doi: 10.1007/s11214-008-9400-x
38. Joseph, J. H., O. Yaron, E. Yaroslavich, P. Israelevich, I. Koren, **Y. Yair**, A. Devir, and P. Kischka (2008), Determination of most probable height of desert dust aerosol layer from space, *J. Geophys. Res.*, 113, D20S93, doi:10.1029/2007JD009646. (3.6, 4)
39. **Yair, Y. Y.**, R. Aviv, and G. Ravid (2009), Clustering and synchronization of lightning flashes in adjacent thunderstorm cells from lightning location networks data, *J. Geophys. Res.*, 114, D09210, doi:10.1029/2008JD010738 (3.6, 9)
40. **Yair, Y.**, et al., (2009), Optical observations of transient luminous events associated with winter thunderstorms near the coast of Israel. *Atmospheric Research*, 91(2-4): p. 529-537. (2.8, 23)
41. Vadislavsky, E., **Y. Yair***, C. Erlick, C. Price, E. Greenberg, R. Yaniv, B. Ziv, N. Reicher and A. Devir (2009), Indication for circular organization of column sprite elements associated with Eastern Mediterranean winter thunderstorms. *Jour. Atmos. Sol. Terr. Phys.*, 71, 17-18, 1835-1839. (1.4, 15)
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