

List of Publications

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Books

Monographs

1. I.V. Lindell: *Methods for Electromagnetic Field Analysis*. Oxford: Clarendon Press, 290pp., 1992; second edition IEEE Press 320pp, 1995, third printing Wiley 2002. ISBN 0-7803-1154-X
2. I.V. Lindell, A.H. Sihvola, S.A. Tretyakov, A.J. Viitanen: *Electromagnetic Waves in Bi-Isotropic and Chiral Media*, Boston: Artech House, 320pp, 1994. ISBN 0-89006-684-1
3. I.V. Lindell: *Differential Forms in Electromagnetics*, New York: Wiley and IEEE Press, 270pp, 2004. ISBN 0-471-64801-9
4. I. Lindell: *Sähkön pitkä historia (Long History of Electricity)*, Helsinki: Gaudeamus/Otatiето 2009, 454pp. ISBN 978-951-672-358-0. **Valtion tiedonjulkistamispalkinto (State Award for Public Information), April 2010**. 2nd printing 2010, 3rd edition 2014.
5. I.V. Lindell: *Multiforms, Dyadics and Electromagnetic Media*, Hoboken, NJ: Wiley and IEEE Press, 2015. ISBN 978-1-118-98933-3.
4. M. Oksanen, I. Lindell: *Aaltojohtojen harjoituksia (Problem Book for Waveguide Theory)*. Espoo: Otatiето 1990, 131pp, ISBN 951-672-093-5
5. A. Sihvola, I. Lindell: *Antenniteorian harjoituksia (Problem Book for Antenna Theory)*. Espoo: Otatiето 1990, 158pp, ISBN 951-672-090-0
6. I. Lindell: *Aaltojohtoteoria (Waveguide Theory)*, Espoo: Otatiето 1990, 299pp. Second totally rewritten edition 1997, 345pp, ISBN 951-672-259-8
7. M. Oksanen, I. Lindell: *Staatillisen kenttäteorian harjoituksia (Problem Book for Static Field Theory)*, Espoo: Otatiето 1991, 126pp, 951-672-135-4
8. I. Lindell: *Sähkötekniikan historia (History of Electrical Engineering)*, Espoo: Otatiето 1994, 377pp, ISBN 951-672-188-5
9. I. Lindell, A. Sihvola: *Sähkömagneettinen kenttäteoria 1: Staatilliset kentät (Electromagnetic Field Theory 1: Static Fields)*, Espoo: Otatiето 1995, 225pp. 2nd revised edition 1999, 3rd edition 2001, 5th printing 2004, ISBN 951-672-326-8

Textbooks

1. I. Lindell: *Radioaaltojen eteneminen (Propagation of Radio Waves)*. Espoo: Otatiето 1986, 207 pp; 2nd edition 1987; 3rd revised and augmented edition 1994, 261pp, ISBN 951-672-227-X
2. I. Lindell: *Antenniteoria, (Antenna Theory)*. Espoo: Otatiето 1986, 222pp; 2nd edition 1987 **(Best textbook of the year prize 1987)**. I. Lindell, K. Nikoskinen: *Antenniteoria*, 3rd revised and augmented edition 1995, 347pp; 4th revised edition 1997. ISBN 951-672-219-9
3. A. Sihvola, I. Lindell: *Radioaaltojen harjoituksia (Problem Book for Radio Wave Propagation)*, Espoo: Otatiето 1988, 82pp, ISBN 951-672-059-5
10. A. Sihvola, I. Lindell: *Sähkömagneettinen kenttäteoria 2: Dynaamiset kentät (Electromagnetic Field Theory 2: Dynamic Fields)*, Espoo: Otatiето 1996, 200pp. 2nd revised edition 2000, 4th revised edition 2004, ISBN 951-672-327-6

Refereed Journal Articles and Book Chapters

1. I.V. Lindell: Slope parameter and Q of radial resonators, *IEEE Transactions on Microwave Theory and Techniques*, vol.14, no.2, pp.97-98, February 1966.
2. I.V. Lindell: Two-dimensional electromagnetic field problems specified in terms of a vector admittance function, *Proceedings of the IEEE*, vol.56, no.1, pp.131-132, January 1968.
3. I.V. Lindell: Minimum attenuation of spherical shields, *IEEE Transactions on Antennas and Propagation*, vol.16, no.3, pp.369-371, May 1968.
4. I.V. Lindell: On the formulation of a class of electromagnetic field problems in terms of vector admittance and impedance functions, *Acta Polytechnica Scandinavica*, vol.Ph 78, 1971.
5. I.V. Lindell: Some properties of lossless bianisotropic media, *Proceedings of the IEEE*, vol.60, no.4, pp.463-464, April 1972.
6. I.V. Lindell: On the definiteness of the constitutive parameters of a moving anisotropic medium, *Proceedings of the IEEE*, vol.60, no.5, pp.638-639, May 1972.
7. I.V. Lindell: Wave normal and ray propagation in lossless positive bianisotropic media, *Acta Polytechnica Scandinavica*, vol.El 31, 1972.
8. I.V. Lindell: Coordinate independent dyadic formulation of wave normal and ray surfaces of general anisotropic media, *Journal of Mathematical Physics*, vol.14, no.1, pp.65-67, January 1973.
9. I.V. Lindell: On the quasi-TEM modes in inhomogeneous multiconductor transmission lines, *IEEE Transactions on Microwave Theory and Techniques*, vol.29, no.8, pp.812-817, August 1981.
10. I.V. Lindell: Asymptotic high-frequency modes of homogeneous waveguide structures with impedance boundaries, *IEEE Transactions on Microwave Theory and Techniques*, vol.30, no.10, pp.1087-1093, October 1981.
11. I.V. Lindell: Variational methods for nonstandard eigenvalue problems in waveguide and resonator analysis, *IEEE Transactions on Microwave Theory and Techniques*, vol.30, no.8, pp.1194-1204, August 1982.
12. I.V. Lindell: Complex vector algebra in electromagnetics, *International Journal of Electrical Engineering Education*, vol.20, no.1, pp.33-47, January 1983.
13. I.V. Lindell, A.H. Sihvola: Dielectrically loaded corrugated waveguide: variational analysis of a nonstandard eigenproblem, *IEEE Transactions on Microwave Theory and Techniques*, vol.31, no.7, pp.520-526, July 1983.
14. I.V. Lindell, M.I. Oksanen: Transversely anisotropic optical fiber: variational analysis of a nonstandard eigenproblem, *IEEE Transactions on Microwave Theory and Techniques*, vol.31, no.9, pp.736-745, September 1983.
15. I.V. Lindell: Reply to comment on 'Variational methods for nonstandard eigenvalue problems in waveguide and resonator analysis', *IEEE Transactions on Microwave Theory and Techniques*, vol.31, no.9, pp.788-789, September 1983.
16. I.V. Lindell, E. Alanen: Exact image theory for the Sommerfeld half-space problem. Part I: Vertical magnetic dipole, *IEEE Transactions on Antennas and Propagation*, vol.32, no.2, pp.126-133, February 1984.
17. I.V. Lindell, M.I. Oksanen: Asymptotic analysis of weakly guiding anisotropic optical fibers, *Journal of the Optical Society of America A*, vol.1, no.1, pp.87-95, January 1984.
18. I.V. Lindell: Reaction to response to reply to comments on 'Variational methods for nonstandard eigenvalue problems in waveguide and resonator analysis', *IEEE Transactions on Microwave Theory and Techniques*, vol.32, no.4, pp.475-476, April 1984.
19. I.V. Lindell, E. Alanen: Exact image theory for the Sommerfeld half-space problem. Part

- II: Vertical electric dipole, *IEEE Transactions on Antennas and Propagation*, vol.32, no.8, pp.841-847, August 1984.
20. I.V. Lindell, E. Alanen: Exact image theory for the Sommerfeld half-space problem. Part III: General theory, *IEEE Transactions on Antennas and Propagation*, vol.32, no.10, pp.1027-1032, October 1984.
 21. E. Alanen, I.V. Lindell: Impedance of vertical electric and magnetic dipole above a dissipative ground, *Radio Science*, vol.19, no.6, pp.1469-1474, November-December 1984.
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 23. I.V. Lindell, E. Alanen, K. Mannersalo: Exact image method for impedance computation of antennas above the ground, *IEEE Transactions on Antennas and Propagation*, vol.33, no.9, pp.937-945, September 1985.
 24. I.V. Lindell, E. Alanen, H. von Bagh: Exact image theory for the calculation of fields transmitted through a planar interface of two media, *IEEE Transactions on Antennas and Propagation*, vol.AP-34, no.2, pp.129-137, February 1986. **(S.A. Schelkunoff best paper prize award)**.
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 27. E. Alanen, I.V. Lindell, A.T. Hujanen: Exact image method for field calculation in horizontally layered medium above a conducting ground plane, *IEE Proceedings*, vol.133, Part H, no.4, pp.297-304, August 1986.
 28. I.V. Lindell, E. Alanen, A.T. Hujanen: Exact image theory for the analysis of microstrip structures. *Journal of Electromagnetic Waves and Applications*, vol.1, no.2, pp.95-108, 1987.
 29. I.V. Lindell: Complex space multipole expansion theory with application to scattering from dielectric bodies. *IEEE Transactions on Antennas and Propagation*, vol.35, no.6, pp.683-689, June 1987.
 30. I.V. Lindell, Q. Gu: Theory of time-domain quasi-TEM modes in inhomogeneous multiconductor lines. *IEEE Transactions on Microwave Theory and Techniques*, vol.35, no.10, pp.893-897, October 1987.
 31. I.V. Lindell, K.I. Nikoskinen: Complex space multipole theory for scattering and diffraction problems. *Radio Science*, vol.22, no.6, pp.963-967, November 1987.
 32. I.V. Lindell: Exact image method for Gaussian beam problems involving a planar interface. *Journal of the Optical Society of America A*, vol.4, no.12, pp.2185-2190, December 1987.
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 36. A. Sihvola, I.V. Lindell: Transmission-line analogy for calculating the effective permittivity of mixtures with spherical multilayer scatterers. *Journal of Electromagnetic Waves and Applications*, vol.2, no.8, pp.741-756, 1988.
 37. I.V. Lindell: TE/TM decomposition of electromagnetic sources, *IEEE Transactions on Antennas and Propagation*, vol.36, no.10, pp.1382-1388, October 1988.
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