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Employment

Professor Emeritus

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Department of Electronics and Nanoengineering
Aalto University
1 May 2024 → present

Research outputs

Electromagnetic Boundary Conditions Defined by Reflection Properties of Eigen Plane Waves.

Lindell, I. V. & Sihvola, A., 2021, In: Progress in Electromagnetics Research B. 94, p. 37-52 16 p.

Generalization of Perfect Electromagnetic Conductor Boundary

Lindell, I. V. & Sihvola, A., Nov 2020, In: IEEE Transactions on Antennas and Propagation. 68, 11, p. 7406-7413 8 p., 9104017.

Rumsey's reaction concept generalized

Lindell, I. V. & Sihvola, A., 1 Jan 2020, In: PROGRESS IN ELECTROMAGNETICS RESEARCH LETTERS. 89, p. 1-6 6 p.

Self-dual boundary conditions in electromagnetics

Lindell, I. V. & Sihvola, A., 1 Jan 2020, In: Progress in Electromagnetics Research. 167, p. 41-54 14 p.

Boundary conditions in electromagnetics

Lindell, I. & Sihvola, A., Oct 2019, Hoboken, NJ, USA: Wiley. 272 p. (IEEE Press Series on Electromagnetic Wave Theory)

Matched waves and unexpected resonances: Variety of boundary conditions

Sihvola, A. & Lindell, I. V., 1 Sept 2019, In: The Radio Science Bulletin. 2019, 370, p. 34-44 11 p., 8956142.

On linear and sesquilinear boundary conditions in electromagnetics

Lindell, I. V. & Sihvola, A., 1 Sept 2019, *Proceedings of the 2019 21st International Conference on Electromagnetics in Advanced Applications, ICEAA 2019*. IEEE, 8879372

Unimodular Magnetolectric Media

Sihvola, A. & Lindell, I., 2019, In: Progress In Electromagnetics Research M. 81, p. 13-20 8 p.

Matched Waves for Impedance Boundaries

Sihvola, A. & Lindell, I. V., 24 Sept 2018, *2018 2nd URSI Atlantic Radio Science Meeting, AT-RASC 2018*. IEEE, 3 p. 8471539

On General Boundary Conditions

Lindell, I. V. & Sihvola, A., 24 Sept 2018.

General boundary conditions in electromagnetics

Lindell, I. & Sihvola, A., 2018, *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*. United States: IEEE, p. 2247-2248 (Digest of the IEEE Antennas and Propagation Society International Symposium).

Electromagnetic Wave Reflection from Boundaries defined by General Linear and Local Conditions

Lindell, I. V. & Sihvola, A., Sept 2017, In: IEEE Transactions on Antennas and Propagation. 65, 9, p. 4656-4663 8 p.

Generalized Soft-and-Hard/DB boundary

Lindell, I. & Sihvola, A., 2017, In: IEEE Transactions on Antennas and Propagation. 65, 1, p. 226-233

On the most general linear and local boundary conditions

Lindell, I., 2017, *2017 XXXIInd General Assembly and Scientific Symposium of the International Union of Radio Science (URSI GASS)*. IEEE, 4 p.

Classifications of electromagnetic media

Lindell, I. V., 2015, *2015 1st URSI Atlantic Radio Science Conference (URSI AT-RASC)*. IEEE, 7302919

Numerical Analyses of the Realization of the D'B' Boundary Condition for Planar Surfaces

Sihvola, A. & Lindell, I. V., 2011, *PIERS 2011 SUZHOU: PROGRESS IN ELECTROMAGNETICS RESEARCH SYMPOSIUM*. Electromagnetics Academy, p. 1063-1067 5 p. (Progress in Electromagnetics Research Symposium).

On the classification of electromagnetic media (invited)

Lindell, I. V., 2010, *2010 URSI International Symposium on Electromagnetic Theory*. Berlin, Germany: IEEE, p. 767-770

DB boundary as isotropic soft surface

Lindell, I. V. & Sihvola, A. H., 2008, *Asia-Pacific Microwave Conference, Hong Kong, China, December 16-20, 2008*. Hong Kong, China, p. 4

Factorization and Green dyadics for a new class of bi-anisotropic media using duality

Olyslager, F., Lindell, I. & Puska, L., 1999, Espoo, p. 13, (Sähkömagnetiikan laboratorion julkaisusarja; no. Report 302).

Duality transformation and Green dyadics for bi-anisotropic media

Lindell, I. & Ruotanen, L., 1998, *Bianisotropics'98, 7th International Conference on Complex Media, Braunschweig, Germany, 3-6 June 1998*. Braunschweig, Germany, p. 5-8

Conditions for the parameter dyadics of lossless bi-anisotropic media

Lindell, I., Sihvola, A., Puska, P. & Ruotanen, L., 1994, Espoo, p. 8, (Sähkömagnetiikan laboratorion julkaisusarja; no. 184).

Electromagnetic waves in chiral and bi-isotropic media

Lindell, I., Sihvola, A., Tretyakov, S. & Viitanen, A. J., 1994, Artech House. 332 p.

Plane wave propagation in an anisotropic chiral medium with isotropic permittivity and permeability

Viitanen, A. J. & Lindell, I. V., 1993, Espoo, (Sähkömagnetiikan laboratorion julkaisusarja; no. 152).

Plane-wave propagation in a transversely bianisotropic uniaxial medium

Lindell, I. V., Viitanen, A. J. & Koivisto, P. K., 1993, Espoo: Teknillinen korkeakoulu, (Sähkömagnetiikan laboratorion julkaisusarja; no. 133).

Plane wave propagation in a uniaxial bianisotropic medium with an application to a polarization transformer

Viitanen, A. J. & Lindell, I. V., 1993, In: International journal of infrared and millimeter waves. 14, 10, p. 1993-2010

Planewave propagation in a uniaxial bianisotropic medium with an application to a polarization transformer

Viitanen, A. J. & Lindell, I. V., 1993, Espoo, (Sähkömagnetiikan laboratorion julkaisusarja; no. 132).

Analysis of chiral mixtures

Sihvola, A. H. & Lindell, I. V., 1992, In: Journal of Electromagnetic Waves and Applications. 6, 5-6, p. 553-572

Karl F Lindman - the last Hertzian and a harbinger of electromagnetic chirality

Lindell, I. V., Sihvola, A. H. & Kurkijärvi, J., 1992, In: The Radioscientist. 3, 2, p. 38-53

Karl F Lindman - the last Hertzian and a harbinger of electromagnetic chirality

Lindell, I. V., Sihvola, A. H. & Kurkijärvi, J., 1992, In: IEEE Antennas and Propagation Magazine. 34, 3, p. 24-30

Activities

Coordinate-free classifications of electromagnetic media and boundaries

Lindell, I. (Speaker)

24 Jul 2016 → 25 Jul 2016