CURRICULUM VITAE

OLE KROGH ANDERSEN, DIRECTOR

1942	Born in Copenhagen
1966	Masters Degree in Electronic Engineering, Technical University of Denmark, Department of Electrophysics (Prof.s W. Frank and A. Nielsen)
1969	Technical Licentiate in Solid State Physics; Technical University of Denmark, Department of Electrophysics (Prof. A.R. Mackintosh)
1969 – 70	Research Associate; University of Pennsylvania, Physics Department (Prof. J.R. Schrieffer)
1970 – 72	Universitetsadjunkt (Assistant Professor); University of Copenhagen, Ørsted Laboratory, Department of Solid State Physics
1972 – 78	Lektor (Associate Professor); Technical University of Denmark, Department of Electrophysics
1978 –	Director at the Max-Planck-Institut für Festkörperforschung in Stuttgart Managing Director 1983-1985, 1997-1999

HONORS AND MEMBERSHIPS

1978	Brinch Prize; Danish Physical Society
1980	Hewlett-Packard Europhysics Prize; European Physical Society
1978 –	Scientific Member of the Max-Planck-Society
1982 –	Honorary Professor; University of Stuttgart, Physics Faculty
1982 –	Foreign Member of the Royal Danish Academy of Sciences
1992 –	Foreign Member of the Ukrainian Academy of Sciences
1993 –	Fellow of the American Physical Society
2002	Ernst Mach Medal of the Chech Academy of Sciences

PhD STUDENTS AT THE UNIVERSITY OF STUTTGART

1986	Franz Beeler	Calculation of deep impurity states in silicon
1989	Peter Blöchl	Total energies, forces, and metal-semiconductor junctions
1989	Richard Dronskowski	Electronic structure calculations for M_6X_8-clusters
1993	Uwe Schönberger	Atomic and electronic structure of metal-metaloxide interfaces
1993	Andreas Emil Kumm	Potential parameters for the periodic system and their use
1995	Erik Koch	Supershells in metallic clusters
1996	Harald König	Absorption of polarized x-rays as a local probe in solids
1999	Valeria Meregalli	Electron-phonon coupling and properties of doped $BaBiO_3$
2005	Oliver Rösch	Electron-phonon interaction in strongly correlated materials
2006	Eva Zurek	Density-functional theory (DFT) studies of solids and molecules

HABILITATIONS

2003	Jens Kortus	Electronic structure, magnetic ordering, and phonons in molecules and solids Technical University, Bergakademie Freiberg
2004	Erik Koch	The doped Fullerenes: A family of strongly correlated systems University of Stuttgart

MEMBERSHIPS OF COMMITTEES

1990 – 91	Minister of Education's Steering commitee for reviewing physics in Denmark
1993 – 98	Hewlett-Packard Europhysics Prize Committee, Chairman 1995-98
1993 – 96	HCM Network Management Board, Vice-chair
1993 – 98	Scientific supervisory committee for the Niels Bohr Institute for Astrophysics, Physics, and Geophysics, Copenhagen
1995 – 01	Board of the condensed matter division of the EPS; Vice-chair 1998 – 2001
1995	Co-chair of the 7th Int Workshop on Comp CM Physics, Trieste, 11-15/1
1996	Chairman of the 1st $\Psi_{\mathbf{k}}$-Conference, Schwäbisch Gmünd, 17-21/9
1996 –	Scientific evaluation committee in condensed matter, ICTP, Trieste
1996 –	Scientific supervisory committee, SISSA, Trieste
1999 – 03	Evaluation Panels for the Swedish Natural Science Research Council
2000	Advisory board for the National Research Institute for Metals, Tsukuba
2002	Scientific panel for selection of research centers, INFM, Genova
2002	Organisation with G. Kotliar, A. Georges, and A. Lichtenstein of the program "Realistic Theories of Correlated Electron Materials" 29/7-20/12 Institute for Theoretical Physics, Univ of California in Santa Barbara
2006	Scientific panel for selection of Centers of Excellence, Lundbeck Foundation
	Various Appointment Committees
	Various Conference Advisory Committees
	Organization of various Symposia

SELECTED PUBLICATIONS

Numbers of citations are italicized

[1] O.K. Andersen:
Electronic structure of the fcc transition metals Ir, Rh, Pt and Pd
Phys. Rev. B 2, 883-906 (1970). *370*

[2] O. Jepson and O.K. Anderson:
The electronic structure of hcp Ytterbium; tetrahedron method
Solid State Commun. 9, 1763-1767 (1971). *1040*

[3] O.K. Andersen:
Linear methods in band theory
Phys. Rev. B 12, 3060-3083 (1975). *3760*
According to Physics Today, June 2005, p 50,
this is the 7th most cited paper in 110 years of the Physical Review Series.

[4] O.K. Andersen, J. Madsen, U.K. Poulsen, O. Jepsen and J. Kollar:
Magnetic ground state properties of transition metals
Physica B 86-88, 249 (1977). *270*

[5] O.K. Andersen, W. Klose and H. Nohl:
Electronic structure of Chevrel-phase high-critical-field superconductors.
Phys.Rev. B17, 1209 (1978). *240*

[6] O. Gunnarsson, O. Jepsen and O.K. Andersen:
Self-consistent impurity calculations in the atomic-spheres approximation
Phys. Rev. B 27, 7144-7168 (1983). *300*

[7] O.K. Andersen and O. Jepsen:
Explicit, first-principles tight-binding theory
Phys. Rev. Lett. 53, 2571-2574 (1984). *1235*

[8] O.K. Andersen, O. Jepsen and D. Glötzel:
Canonical Description of the Band Structures of Metals
in: Highlights of Condensed-Matter Theory, Course LXXXIX,
Eds.: F. Bassani et al., pg. 59-176, International School of Physics 'Enrico Fermi', Varenna, Italy, North-Holland, 1985. *880*

[9] O.K. Andersen, Z. Pawlowska, O. Jepsen:
Illustration of the linear muffin-tin-orbital tight-binding representation;
Compact orbitals and charge density in Si.
Phys.Rev. B34, 5253-5269 (1986). *370*

[10] O.K. Andersen, O. Jepsen and M. Sob:
Linearized Band Structure Methods
in: The Electronic Band Structure and its Applications, Lecture Note Series, Vol. 283, pp. 1-57, Ed. M.Yussouff (Springer-Verlag, 1987). *470*

[11] M. Methfessel, C.O. Rodriguez, O.K. Andersen:
Fast full-potential calculations with a converged basis of atom-centered linear muffin-tin orbitals; Structural and dynamic properties of Silicon
Phys.Rev. B40, 2009-2012 (1989). *340*

[12] V. Anisimov, J. Zaanen and O.K. Andersen:
Band theory and Mott-insulators; Hubbard U instead of Stoner I
Phys. Rev. B 44, 943-954 (1991). *640*

[13] S. Satpathy, V.P. Antropov, O.K. Andersen, O. Jepsen, O. Gunnarsson, and A.I. Liechtenstein:
Conduction-band structure of alkali–metal-doped C_{60}.
Phys.Rev. B46, 1773-1793 (1992). *190*

[14] P.E. Bloechl, O. Jepsen, and O.K. Andersen:
Improved tetrahedron method for Brillouin-zone integrations.
Phys.Rev. B49, 16223-16233 (1994). *750*

[15] O.K. Andersen, O. Jepsen, A.I. Liechtenstein, I.I. Mazin:
Plane dimpling and saddle-point bifurcation in the band-structures of optimally doped high-temperature superconductors; a tight-binding model.
Phys.Rev. B49, 4145-4157 (1994). *180*

[16] O.K. Andersen, A.I. Liechtenstein, O. Jepsen and F. Paulsen:
LDA energy bands, low-energy Hamiltonians, t', t'', $t_\perp(\mathbf{k})$, and $J_\perp$
J. Phys. Chem. Solids 56, 1573-1591 (1995). *260*

[17] O.K. Andersen, T. Saha-Dasgupta, R.W. Tank, C. Arcangeli, O. Jepsen and G. Krier:
Developing the MTO Formalism, in:
Electronic structure and physical properties of solids; the uses of the LMTO method, Ed.: H. Dreyssé, Springer (2000), 3-84 (Lecture notes in Physics, Vol. 535). *10*

[18] O.K. Andersen and T. Saha-Dasgupta:
Muffin tin orbitals of arbitrary order.
Phys. Rev. B 62 (2000) 16219 (R). *60*

[19] E. Pavarini, I. Dasgupta, T. Saha-Dasgupta, O. Jepsen, and O.K. Andersen:
Band-structure trend in cuprates and correlation with $T_{c\,max}$.
Phys. Rev. Lett. 87 (2001), 047003. *90*

[20] Y. Kong, O.V. Dolgov, O. Jepsen, and O.K. Andersen:
Electron-phonon interaction in the normal and superconducting states of MgB_2.
Phys. Rev. B 64 (2001) 020501 (R). *165*

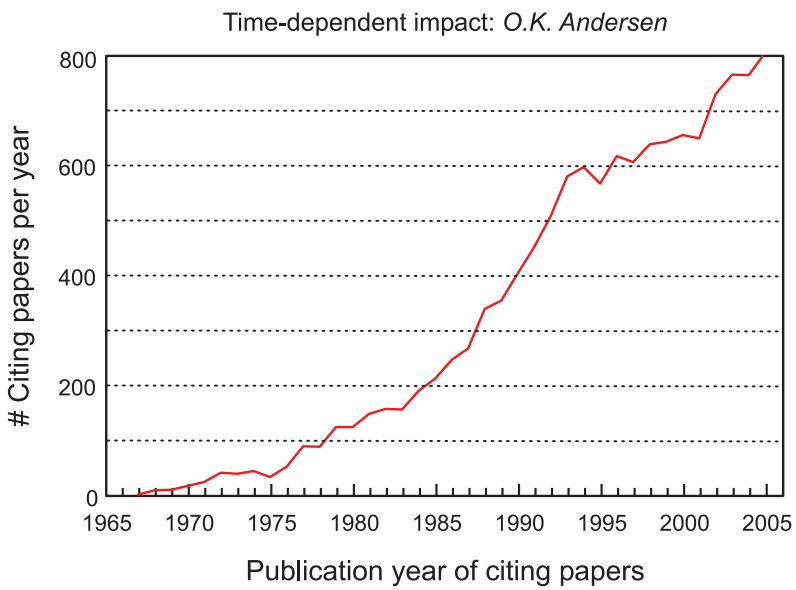
[21] I.I. Mazin, O.K. Andersen, O. Jepsen, O.V. Dolgov, J. Kortus, A.A. Golubov, A.B. Kuzmenko, and D. van der Marel:
Superconductivity in MgB2; clean or dirty?
Phys. Rev. Lett. 89 (2002) 107002. *135*

[22] L. Boeri, J. Kortus, and O.K. Andersen:
Three-dimensional MgB_2-type superconductivity in hole-doped diamond.
Phys. Rev. Lett. 93 (2004) 237002. *21*

[23] E. Pavarini, S. Biermann, A.P. Poteryaev, A.I. Lichtenstein, A. Georges, O.K. Andersen:
Mott transition and suppression of orbital fluctuations
in orthorombic $3d^1$ perovskites.
Phys. Rev. Lett. 92 (2004), 176403. *46*

[24] E. Pavarini, A. Yamasaki, J. Nuss, and O.K. Andersen:
How chemistry controls electron localization in $3d^1$ perovskites;
a Wannier-function study.
New Journal of Physics 7 (2005) 188. *9*

[25] A. Yamasaki, M. Feldbacher, Y.-F. Yang, O.K. Andersen, and K. Held:
Pressure-induced metal-insulator transition in $LaMnO_3$ is not of Mott-Hubbard type.
Phys. Rev. Lett. 96 (2006) 166401. *1*

Andersen's approximately 215 scientific papers (and book-articles) have been cited 18 000 (21 000) times and 60 (64) of them 60 (64) times or more (Hirsch index).

The annual 'sale's curve' of all Andersen's publications is shown below