



September 10, 2010

Curriculum Vitae : Eleftherios (Lefteris) N. Economou

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- Home: Skordylon 58 & Sitias, 71202, Heraklio, Crete, Greece.

Personal data:

- Married to Athanasia Paganou
- Father of a daughter, Sophia

Education:

- Diploma, Technical University of Athens..... 1958-63
- M.S., University of Chicago..... 1966-67
- Ph.D., University of Chicago..... 1966-69

Academic Positions:

- Professor emeritus, University of Crete..... 2007-
- Researcher, FORTH..... 1983-
- Professor of Physics, University of Crete..... 1981-2007
- Professor of Physics, Chair of Theoretical Physics,
University of Athens 1978-81
- Professor of Physics, University of Virginia..... 1979-81
- Associate Professor of Physics, University of Virginia..... 1973-79
- Assistant Professor of Physics, University of Virginia..... 1970-73
- Research Associate, University of Chicago..... 1969-70
- Teaching and Research Assistant, University of Chicago..... 1966-69
- Visiting Professor at various Universities (University of Chicago, Université
de Lausanne, Princeton University, Iowa State Un., George Mason Un.).
- Consultant (Exxon Research Corporation, Naval Research Lab, USA). 1980-88
- Associate member, Ames Lab, ISU..... 1992-

Academic achievements:

- **as given by the Web of Science**

● Papers and Conference Proceedings	: 253
● Papers without Conference Proceedings	: 236
● h – index	: 49
● Citations to papers and Proceedings	: 7442
● Citations to my books, etc	: >1645
<u>Total citations</u>	: >9087

- **in further details**

● Papers in refereed journals	: 220
● Chapters in books (invited)	: 16
● Conference proceedings	: 32
● Abstract in the Bulletin of APS	: 16
● Books:	

1. *E.N. Economou : The Physics of solids: Essentials and beyond*, Springer –Verlag, 2010

2. *E.N. Economou : "Green's functions in Quantum Physics"*, Springer-Verlag, 1979. Second edition 1983, Third edition 2006.

- In addition he has published another six books in greek

3. *E.N. Economou et al : Contemporary Physics Vols 1,2 Crete University Press, 1989, 1991, 4th ed., 2000 (in greek), 5th ed. (2004).*

4. *E.N. Economou : "Symbiosis without future", Crete University Press, 1985, 2nd ed. 1987 (in greek).*

5. *E.N. Economou : "Statistical Physics and Thermodynamics", Crete University Press, 1994, 2nd ed., 2001 (in greek).*

6. *E.N. Economou : "Solid State Physics Vol.I: Metals, Semiconductors, Insulators" Crete University Press, 1997 (in greek).*

7. *E.N. Economou : "Solids I & II" Vols 1,2, Hellenic Open University, 2006 (in greek).*

8. *E.N. Economou: "Solid State Physics. Vol.II: Order, Disorder, Correlations" Crete University Press, 2003 (in Greek)*

as well as several articles in books, encyclopedias, etc in greek

Other activities. Awards:

- He has supervised ten PhD theses at the Universities of Virginia, Athens, and Crete.
- He has co-supervised another six PhD theses.
- He has been elected Fellow of the American Physical Society (1994).
- He received honorary doctorate degrees from Ecole Polytechnique de Grenoble (1994) and the University of Ioannina (2004)
- He was a member of the team which received the Descartes Prize (the highest E.U. award for cooperative research)
- He has given numerous courses in various summer schools.
- He has given over 210 seminars and lectures at various Universities, Research Centers and Conferences throughout the world.
- He has given about 55 "invited talks" in various International conferences.

- He has written several articles for scientific encyclopedia.
- He has obtained several grants to support his research from NSF(USA), Ministry of Research and Technology (Creece), NATO and from the Commission of the European Communities (ESPRIT, SCIENCE, HUMAN CAPITAL MOBILITY, TMR programmes, IST, Integrated Projects).
- He coauthored (with C. M. Soukoulis) the Chapter on Solid State Physics in AIP Physics Desk Reference ed. by E. R. Cohen, D. R. Lide and G. L. Trigg, Springer, New York, 2003, and the article on Disorder and Localization Theory in the Encyclopedia of Condensed Matter Physics, Elsevier (2005).
- He has been a member or a chairman of various International Scientific or Advisor Committees responsible for various International Conferences.
- He is a referee for many scientific journals.
- He served as scientific consultant in the greek edition of Scientific American.
- He was coordinator for the Integrated Program of the E.U. entitled “Molecular Imaging”. (2004 – 2008)
- His research work is dealing with subjects related to the electronic or classical wave motion in amorphous and periodic solids with emphasis on transport properties in semiconductors, on classical wave propagation, and on negative index materials.

Administrative Positions:

- **Director General and Chairman of the Governing Board of the Foundation for Research and Technology-Hellas (FORTH)** 1983-2004
- Vice Chairman, National Advisory Research Council, Greece..... 1988-91
- Chairman, Committee for Physical Sciences and Engineering, National Advisory Research Council, Greece..... 1988-91
- General Secretary for Research & Technology, Greece..... 1987-88
- Member, Governing Board, University of Crete..... 1981-86
- Chairman, Technical Council, University of Crete..... 1982-86
- Chairman, Physics Dept., University of Crete..... 1981-82
- Dean, School of Sciences, University of Crete..... 1981-82
- Member, Technical Council, University of Crete..... 1990-92
- Member, Scientific Council, NRC "Democritos", Greece..... 1988-90

Administrative achievements:

- His most important achievement is his role in the creation of FORTH, which has managed to occupy a prominent position in the European research scene.
- He played a key role in creating CRETE UNIVERSITY PRESS, the main University Press in Greece

Selected European Activities:

- **Member, Committee for the European Development of Science and Technology (CODEST)** 1983-87
- Member, Committee for the Evaluation of the European Framework Programme for Science and Technology in connection with the Cohesion Issue..... 1990-91
- Advisor, Committee for the evaluation of the SCIENCE programme..... 1990
- Invited speaker in the "FORUM for Science, Technology and Society" organized by the European Parliament..... 1990
- Invited speaker in "NATO SCIENCE FORUM 90", Biaritz..... 1990
- Invited panelist in "IT FORUM (ESPRIT)" and in ESPRIT BASIC RESEARCH conference..... 1989-1990
- Invited panelist in "Round Table on Synchrotron Radiation Facilities..... 1990
- Referee/Expert for the Commission of the European Communities
- Invited Speaker, "International Conference for Innovation and technology Transfer", Brussels June 1992
- Member, Physics Committee for the "Human Capital and Mobility" programme of CEC..... 1992- 1994
- Member, Physics Panel for the "Training and Mobility for Researchers" programme of the European Union 1995- 1996
- Member, High level Panel for the Mid-term evaluation of the New Instruments of the 6th Framework Programme.....2003-2004

PUBLICATIONS

A: Eight books
(see p.2)

B: Papers in refereed journals

1. E.N. Economou and K.L. Ngai, Phys. Rev. Letters 20, 547 (1968). “Interaction of the ac Josephson Current with Surface Plasmons”.
2. K.L. Ngai, E.N. Economou and Morrel H. Cohen, Phys. Rev. Letters 22, 1375 (1969). “Theory of inelastic Electron-Surface Plasmon Interactions in Metal-Semiconductor Tunnel Junctions”.
3. E.N. Economou, Phys. Rev. 182, 539 (1969). “Surface Plasmons in Thin Films”.
4. K.L. Ngai, E.N. Economou and Morrel H. Cohen, Phys. Rev. Letters 24, 61 (1970). “Theory of Surface Plasmon Excitation in LEED and in Photoemission”.
5. E.N. Economou and Morrel H. Cohen, Phys. Rev. Letters 24, 218 (1970). “Energy Bands in One-Dimensional Aperiodic Potentials”.
6. E.N. Economou, S. Kirkpatrick, Morrel H. Cohen and T.P. Eggarter, Phys. Rev. Letters 25, 520 (1970). “Localization in Disordered Materials : Binary Alloys”.
7. E.N. Economou and Morrel H. Cohen, Materials Research Bulletin 5, 577 (1970). “Anderson’s Theory of Localization and the Mott-CFO Model”.
8. E.N. Economou and Morrel H. Cohen, Phys. Rev. Letters 25, 1445 (1970). “Localization in Disordered Materials: Existence of Mobility Edges”.
9. E.N. Economou and Morrel H. Cohen, Phys. Rev. 4, 396 (1971), “Localization in One-Dimensional Disordered System”.
10. K. L. Ngai and E.N. Economou, Phys. Rev. 4B, 2132 (1971). “Theory of Electron-Surface Plasmons Interactions in Tunneling, Low Energy Electron Diffraction and in Photoemission”.
11. E.N. Economou and K.L. Ngai, Phys. Rev. 4B, 4105 (1971). “Surface-plasmon Excitation by Electron Tunneling”.

12. E.N. Economou, Solid State Communications 9, 1317 (1971). "Localized Eigenstates in Disordered Systems : Applications to Photons".
13. J. Ruvalds, E.N. Economou and K.L. Ngai, Phys. Rev. Lett. 27, 417 (1971). "Electron Coupling to Bound Phonon Pairs".
14. E.N. Economou and Morrel H. Cohen, Phys. Rev. B5, 2931 (1972). "Existence of Mobility Edges in Anderson's Model for Random Lattices".
15. E.N. Economou, Phys. Rev. Lett, 28, 1206 (1972). "Localized Magnetic Excitations in Substitutionally Disordered Antiferromagnets".
16. E.N. Economou and C. Papantriantafillou, Solid State Communications 11, 197 (1972).
17. E.N. Economou, J. Ruvalds and K.L. Ngai, Phys. Rev. Lett 29, 110 (1972). "Theory of Multiple Spin-Flip Raman Scattering in Semiconductors".
18. K.L. Ngai, E.N. Economou and J. Ruvalds, Phys. Rev. B6, 2506 (1972). "Electron-Phonon Resonance and Magneto-Optic Properties of Semiconductors".
19. E.N. Economou, Journal de Physique 33, C3-145 (1972). "Localized Eigenstates in Disordered Systems".
20. D.C. Licciardello and E.N. Economou, Solid State Communications 12, 1275 (1973). "Short Range Order and the Metal-Insulator Transition in Disordered Systems".
21. T.P. Eggarter, Morrel H. Cohen and E.N. Economou, Solid State Communications 12, 1013 (1973). "Localization and Averaged Green's Function".
22. K.L. Ngai, J. Ruvalds and E.N. Economou, Phys. Rev. Lett. 31, 166 (1973). "Bound Magnon-Phonon Pair in Metamagnetic Systems".
23. E.N. Economou and C. Papantriantafillou, Phys. Rev. Lett. 32, 1130 (1974). "New Results in One-Dimensional Systems".

24. C.A. Pfeiffer, E.N. Economou and K.L. Ngai, Phys. Rev. B10, 3038 (1974).
“Surface Polaritons in a Circularity Cylindrical Interface : Surface Plasmons”.
25. D.C. Licciardello and E.N. Economou, Solid State Communications 15, 969 (1974). “A New Criterion for Localization in Anderson’s Models for Disordered Lattices”.
26. K.L. Ngai and E.N. Economou, Solid State Communications 15, 1387 (1974).
“Polarization Properties of Surface Plasma Radiation Excited by Electrons”.
27. D.C. Licciardello and E.N. Economou, Phys. Rev. B11, 3697 (1975). “Study of Localization in Anderson’s Model for Random Lattices”.
28. E.N. Economou and K.L. Ngai, Solid State Communications, 17, 1155 (1975)
“Surface Plasmons in Layered Structures and their Role in Superconductivity”.
29. E.N. Economou, K.L. Ngai, K.L. Reinecke, J. Ruvalds and R.S. Silbergliitt, Phys. Rev. B13, 3135 (1976). “Magnon-Phonon Coupling in Metamagnetic Systems”.
30. C. Papatriantafillou, E.N. Economou and T.P. Eggarter, Phys. Rev. B13, 910 (1976), “Eigenfunctions in 1-D Disordered Systems : I Formalism”.
31. C. Papatriantafillou and E.N. Economou, Phys. Rev. B13, 920 (1976).
“Eigenfunctions in 1-D Disordered Systems : II. Results and Discussion”.
32. E.N. Economou and P.D. Antoniou, Sol. St. Comm. 21, 285 (1977).
“Localization of Off-Diagonal Disorder”.
33. P.D. Antoniou and E.N. Economou, Phys. Rev. B16, 3768 (1977). “Absence of Anderson’s Transition in Random Lattices with Off-Diagonal Disorder”.
34. E.N. Economou and C.T. White, Phys. Rev. Lett. 38, 289 (1977). “A Self-Consistent Approximation to the Hubbard Model”.
35. C.T. White and E.N. Economou, Phys. Rev. B15, 3742 (1977). “Self-Consistent Approach to Alloys Exhibiting Partial Order”.

36. R. Demarco, E.N. Economou, and D.C. Licciardello, Sol. St. Comm. 21, 687 (1977). "Characteristic Temperatures and Conductivity in the Hubbard Model".
37. B.M. Klein, E.N. Economou and D.A. Papaconstantopoulos, Phys. Rev. Lett. 39, 574 (1977). "Inverse Isotope Effect and the x-dependence of the Superconducting transition Temperature in PdH_x and PdD_x".
38. E.N. Economou, K.L. Ngai and T.L. Reinecke, Phys. Rev. Lett. 39, 157 (1977). "Model for the Electronic Properties of Amorphous Semiconductors".
39. E.N. Economou, C.T. White and R. DeMarco, Phys. Rev. B18, 3946 (1978). "Random One Body Approximation to the Hubbard Model : I. Formalism".
40. C.T. White and E.N. Economou, Phys. Rev. B18, 3959 (1978), B, "Random One Body Approximation to the Hubbard Model : II. Application to One-Dimensional Lattice".
41. R. De Marco, C.T. White and E.N. Economou, Phys. Rev. B18, 3968 (1978). "Random One Body Approximation to the Hubbard Model : III. Application to Higher Dimensional Lattices".
42. E.N. Economou and P. Mihas, J. Phys. C10, 5017 (1977). "Random One Body Approximation to the Hubbard Model magnetic Interactions".
43. K.L. Ngai, T.L. Reinecke and E.N. Economou, Phys. Rev. B17, 790 (1978). "Single and Pair States in Amorphous Semiconductors".
44. E.N. Economou and P. Mihas, Journ. of Magn. and Magn. Mat. 7, 331 (1978). "Magnetic Couplings in the Hubbard Model".
45. D.A. Papaconstantopoulos, B.M. Klein, E.N. Economou and L.L. Boyers, Phys. Rev. B17, 141 (1978).
46. D.C. Licciardello, R. DeMarco and E.N. Economou, Sol. St. Comm. 24, 543 (1977).

47. D.A. Papaconstantopoulos, A. D. Zdetsis and E.N. Economou, Sol. St. Comm. 27, 1189 (1978). "Band Structure and Electron Phonon Interaction in Lead".
48. D.A. Papaconstantopoulos, E.N. Economou, B.M. Klein and L.L. Boyer, J. de Phys. C6-435 (1978). "Superconductivity in Palladium Based Hydrides".
49. D.A. Papaconstantopoulos, E.N. Economou, B.M. Klein and L.L. Boyer, Phys. Rev. B20, 177 (1979). "Electronic Structure and Superconductivity in Pd-Ag-H and Pd-Rh-H Alloys".
50. A.D. Zdetsis, D.A. Papaconstantopoulos and E.N. Economou, J. de Phys. L40, 253 (1979). "Theoretical Calculations of T_c in Lead".
51. E.N. Economou and P.N. Pouloupoulos, Phys. Rev. B20, 4756 (1979). "Ground State Energy of the Half Filled One Dimensional Hubbard Model".
52. A.D. Zdetsis, D.A. Papaconstantopoulos and E.N. Economou, J. Phys. F10, 1149 (1980). "Ab Initio Band Structure of Lead".
53. E.N. Economou and C.M. Soukoulis, Phys. Rev. Lett. 46, 618 (1981). "Static Conductance and Scalling Theory of Localization in One Dimension".
54. D.A. Papaconstantopoulos and E.N. Economou, Phys. Rev. B22, 2903 (1980). "Slater-Koster Parametrization for Si and the Ideal Vacancy Calculation".
55. E.N. Economou and D.A. Papaconstapoulos, Phys. Rev. B23, 2042 (1981). "Theory of Hydrogenated Silicon".
56. A.D. Zdetsis, E.N. Economou and D.A. Papaconstantopoulos, Phys. Rev. B24, 3115 (1981). "Non-Rigid-Muffin-Tin Calculations of the Electron-Phonon Interaction in Simple Metals".
57. C.M. Soukoulis and E.N. Economou, Sol. St. Comm. 37, 409 (1981). "Numerical Calculatiion of the DC Conductance by the Kubo-Greenwood Formula in One Dimensional Disorder Systems".
58. C.M. Soukoulis and E.N. Economou, Phys. Rev. Lett. 45, 1590 (1980). "Localization in Disordered Two Dimensional Systems".

59. C.M. Soukoulis and E.N. Economou, J. of Phys. C14, 1221 (1981).
“Localization in Disordered Three-Dimensional Systems”.
60. S.N. Pnevmatikos and E.N. Economou, J. of Phys. C14, 2611 (1982). “Localization in 1⁺-Dimension”.
61. C.M. Soukoulis and E.N. Economou, Phys. Rev. B24, 5698 (1981). “Off-Diagonal Disorder in One-Dimensional Systems”.
62. A.C. Fertis, A.N. Andriotis and E.N. Economou, Phys. Rev. B24, 5806 (1981).
“Off-Diagonal Disorder and the Metal-Insulator Transition in Impurity Bands in Semiconductors”.
63. A.N. Andriotis, P.N. Pouloupoulos and E.N. Economou, Sol. St. Comm. 39, 1175 (1981). “Magnetic Phases of the Hubbard Model”.
64. C.M. Soukoulis and E.N. Economou, Physica 107B, 673 (1981). “Localization in Low Dimension”.
65. S. Martinos and E.N. Economou, Phys. Rev. B24, 6908 (1981). “Excitation of Surface Plasmons in Cylinders by Electrons”.
66. D.A. Papaconstantopoulos and E.N. Economou, Phys. Rev. B24, 7233 (1981).
“Calculations of the Electronic Properties of Hydrogenated Silicon”.
67. W.E. Pickett, D.A. Papaconstantopoulos and E.N. Economou, J. de Phys. C4, 769 (1981). “Calculations of Transport Properties in α -Si:H”.
68. E.N. Economou and C.M. Soukoulis, Phys. Rev. Lett. 47, 973 (1981).
69. C.M. Soukoulis and E.N. Economou, Phys. Rev. Lett. 48, 1043 (1982).
“Localization in one Dimensional Lattice in the presence of Incommensurate Potentials”.
70. C.M. Soukoulis, J. Klafter and E.N. Economou, Sol. St. Comm. 44, 833 (1982). “Role of the Incipient Anderson Transition in Electronic Energy Transfer in Mixed Organic Crystals”.

71. W.E. Pickett, D.A. Papaconstantopoulos, and E.N. Economou, Phys. Rev. 28, 2232 (1983). "Theoretical Study of Optical Absorption in Hydrogenated Amorphous Silicon".
72. C.M. Soukoulis, I. Webman, G.S. Grest and E.N. Economou, Phys. Rev. B26, 1838 (1982). "Study of electronic states with off-diagonal disorder in two dimensions".
73. C.T. White, J.W. Mintmire and E.N. Economou, J. Vac. Sci. Technol. 20 (3), 565 (1982). "Model Study of the Effects of Correlations on the XVV-Auger Lineshape of Chemisorbed Species".
74. S.S. Martinos and E.N. Economou, Phys. Rev. 28, 3173 (1983). "Virtual Surface Plasmons in Cylinders".
75. E.N. Economou and C.M. Soukoulis, Phys. Rev. 28, 1093 (1983). "Connection of Localization with the Problem of the Bound State in a Potential Well".
76. E.N. Economou, C.M. Soukoulis and A.D. Zdetsis, Phys. Rev. B30 1686 (84), "Localized States in disordered systems as bound states in potential wells".
77. C.M. Soukoulis, Jorge V. Jose, E.N. Economou and Ping Sheng, Phys. Rev. Lett. 50, 764 (1983). "Localization in Ine-Dimensional Disordered Systems in the Presence of an Electric Field".
78. Morrel H. Cohen, E.N. Economou, and C.M. Soukoulis, Phys. Rev. Lett. 51, 1202 (1983). "Polaron Formation near a Mobility Edge".
79. M.H. Cohen, E.N. Economou, C.M. Soukoulis, J. of Non-Cryst. Sol. 59-60, 15 (1983). "Electron-Phonon Interation Near a Mobility Edge in Disordered Semiconductors".
80. M.H. Cohen, E.N. Economou, C.M. Soukoulis, Phys. Rev. B30, 4493 (84). "The Microscopic Mobility".
81. M.H. Cohen, E.N. Economou, C.M. Soukoulis, Phys. Rev., B29 4496 (84). "Small Bipolaron Formation".

82. M.H. Cohen, E.N. Economou and C.M. Soukoulis, Phys. Rev. B29, 4500 (84). “Bipolarons in Disordered Media”.
83. C.M. Soukoulis and E.N. Economou, Phys. Rev. Lett. 52, 565 (84). “Fractal Character of Eigenstates in Disordered Systems”.
84. C.M. Soukoulis, M.H. Cohen, and E.N. Economou, Phys. Rev. Lett. 53, 616 (1984). “Exponential Band Tails in Random Systems”.
85. M.H. Cohen, E.N. Economou and C.M. Soukoulis. “Electron transport in amorphous semiconductors”, J. of Non-Cryst. Sol. 66, 285 (1984).
86. A.D. Zdetsis, E.N. Economou, D.A. Papaconstantopoulos and N. Flytzanis. “Electronic and transport properties of hydrogenated amorphous Silicon”, Phys. Rev. B31, 2410 (1985).
87. M.H. Cohen, E.N. Economou and C.M. Soukoulis, Phys. Rev. B32, 8268 (1985). “Band Edge Features in Disordered Systems”.
88. E.N. Economou, C.M. Soukoulis and A.D. Zdetsis, Phys. Rev. B31, 6483 (1985). “Conductivity in Disordered Systems”.
89. E.N. Economou, C.M. Soukoulis, M.H. Cohen and A.D. Zdetsis, Phys. Rev. B31, 6172 (1985). “Quantitative Results near the Band Edges of Disordered Systems”.
90. E.N. Economou, Phys. Rev. B31, 7710 (1985). “Determination of the Conductivity in Disordered Systems by the Potential-well Analogy”.
91. M.H. Cohen, E.N. Economou and C.M. Soukoulis, Suppl. Prog. Theor. Phys. 80, 76 (1985). “A Field Theoretical Formalism for Electron-Phonon Interaction in Doped Semiconductors”.
92. A.D. Zdetsis, C.M. Soukoulis, E.N. Economou and G.S. Grest, Phys. Rev. B32, 7811 (1985). “Localization in Two and Three-dimensional Systems away from the Band Center”.

93. E.N. Economou, A.D. Zdetsis and D.A. Papaconstantopoulos, Journ. of Non-Cryst. Sol. 77/78, 147 (1985). "Calculation of Physical Quantities in α -SiH_x".
94. C.M. Soukoulis, M.H. Cohen, E.N. Economou and A.D. Zdetsis, Journ. of Non-Cryst. Sol. 77/78, 47 (1985). "Electronic Structure at Band Edges".
95. M.H. Cohen, C.M. Soukoulis and E.N. Economou, Journ. of Non-Cryst. Sol. 77/78, 171 (1985). "Optical Absorption in amorphous semiconductors".
96. E.N. Economou, M.H. Cohen and C.M. Soukoulis, Journ. of Non-Cryst. Sol. 77/78, 151 (1985). "DC transport in amorphous semiconductors".
97. A.D. Zdetsis, C.M. Soukoulis and E.N. Economou, Phys. Rev B33, 4936 (1986). "Fractal Character of the Wavefunctions in One-dimensional Incommensurate Systems".
98. C.M. Soukoulis, A.D. Zdetsis and E.N. Economou, Phys. Rev. B34, 2253 (1986). "Localization in 3-D Systems by a Gaussian Random Potential".
99. S. John, C.M. Soukoulis, M.H. Cohen and E.N. Economou, Phys. Rev. Lett. 57, 1777 (1986). "Theory of Electron Band Tails and the Urbach Optical-Absorption Edge".
100. N. Bacalis, E.N. Economou and M.H. Cohen, Phys. Rev. B37, 2714 (1988). "Simple Derivation of Exponential Tails in the Density of States".
101. E.N. Economou, C.M. Soukoulis and M.H. Cohen, Phys. Rev. B37, 4399 (1988). "Localization for Correlated Binary Alloy Disorder".
102. E.N. Economou, N. Bacalis and M.H. Cohen, J. of non-cryst. Solids 97 & 98, 101 (1989), "Exponential tails in DOS"
103. M. H. Cohen, M.Y. Chou, E.N. Economou, S. John and C.M. Soukoulis, IBM J. Res. 32, 82 (1988) "Band Tails, Path Integrals, Instantons, Polarons, and All That".

104. C.M. Soukoulis, E.N. Economou and G.S. Grest, Phys. Rev. B36, 8649 (1987), "Localization in quantum percolation : Transfer-matrix calculation in three dimensions".
105. Qiming Li, C.M. Soukoulis and E.N. Economou, Phys. Rev. 37, 8289 (1988), "Universal Behaviour near the band edges for disordered systems : Numerical and CPA studies".
106. Qiming Li, St. Pnevmatikos, E.N. Economou and C.M. Soukoulis, Phys. Rev. B37, 3534 (1988), "Lattice-soliton scattering in nonlinear atomic chains".
107. Qiming Li, C.M. Soukoulis, St. Pnevmatikos and E.N. Economou, Phys. Rev. B38, 11888 (1988), "Scattering Properties of Solitons in Nonlinear Disordered Chains".
108. C.M. Soukoulis, E.N. Economou, G.S. Grest and M.H. Cohen, Phys. Rev. Lett. 62, 575 (1989) "Existence of Anderson Localization of Classical Waves in Random Two Components Media".
109. E.N. Economou and C.M. Soukoulis, Phys. Rev. B40, 7977 (1989) "Calculation of Optical Transport and Localization Quantities".
110. Qiming Li, C.M. Soukoulis, E.N. Economou and G.S. Grest, Phys. Rev. B, 40, 2825 (1989) "Anisotropic tight-binding model for localization".
111. E.N. Economou and A.D. Zdetsis, Phys. Rev., B 40, 1334 (1989) "Classical wave propagation in periodic structures".
112. T. Fraggis, St. Pnevmatikos and E.N. Economou, Phys. Lett. A 142, 361 (1989) "Excitation of the Impurity Mode by Topological Solitons in a ϕ^4 Atomic chain".
113. E.N. Economou, Physica A 167, 215 (1990). "Classical Localization".
114. S. N. Evangelou and E. N. Economou, Phys. Lett. A, 151, 345 (1990). "Eigenvector statistics and multifractal scaling of band random matrices".

115. S. N. Evangelou, N. I. Papanicolaou and E. N. Economou, Phys. Rev. B43, 11171 (91) "Fracton density of states by the maximum entropy method".
116. S. N. Evangelou, and E. N. Economou, J. of Phys. : Condensed matter. 3, 5499 (1991). "Spectral density correlations and eigenfunction fluctuations in one-dimensional quasi-periodic systems".
117. M. Sigalas and E. N. Economou, J. of Sound and Vibration, 158 , 377 (1992) "Elastic and Acoustic Wave Band Structure".
118. S.N. Evangelou and E.N. Economou, Phys. Rev. Lett 68, 361 (1992).
119. "Spectral Density Singularities , Level Statistics , and Localization in a Sparse Random Matrix Ensemble".
120. St. Pnevmatikos, O. Yanovitskii, Th. Fraggis , and E.N. Economou, Phys. Rev. Lett. 68, 2370 (1992) "Polaron Formation in one-Dimensional Quasi-Periodic Systems".
121. A.N. Andriotis, E.N. Economou, Qiming Li, and C.M. Soukoulis Pys. Rev. B47, 9208 (1993) "Phase separation in the Hubbard model".
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