

M. Apostol

Papers in Journal of Theoretical Physics

- 1 On the low-dimensional solids and their melting
M. Apostol
J. Theor. Phys. **1** (1995).
(e-print 9603108, cond-mat@xxx.lanl.gov)
- 2 A few remarks on the Coulomb potential of the ionic lattices
M. Apostol
J. Theor. Phys. **2** (1995).
- 3 Elastic waves in a uniaxial solid
M. Apostol
J. Theor. Phys. **3** (1995).
- 4 On the critical condition of fission of a liquid droplet
M. Apostol
J. Theor. Phys. **4** (1995).
- 5 On a structural distortion effect in the NMR-spectrum of alkali fullerides
M. Apostol
J. Theor. Phys. **5** (1995).
- 6 On a Thomas-Fermi model of "hollow" atom
M. Apostol
J. Theor. Phys. **6** (1995).
(e-print 9607002, chem-ph@xxx.lanl.gov)
- 7 On the structural distortion of the alkali NMR spectrum in Rb₃C₆₀ and K₃C₆₀
M. Apostol
J. Theor. Phys. **7** (1995).
- 8 On the energy spectrum of the C₆₀ fullerene anion
M. Apostol
J. Theor. Phys. **8** (1995).
(e-print 9603150, chem-phys@xxx.lanl.gov)

- 9 On metallic clusters squeezed in atomic cages
M. Apostol
J. Theor. Phys. **9** (1995).
(e-print 9603009, mtrl-th (cond-mat)@xxx.lanl.gov)
- 10 Some remarks on the two-electron atom
M. Apostol
J. Theor. Phys. **10** (1995).
(e-print 9603008, atom-ph@xxx.lanl.gov)
- 11 On defects in solids
M. Apostol
J. Theor. Phys. **11** (1996) (e-print 9603151, cond-mat@xxx.lanl.gov).
- 12 Entropic "sound" in the atmosphere
B.-F. Apostol, S. Stefan and M. Apostol
J. Theor. Phys. **12** (1996) (e-print 9606001, ao-sci@xxx.lanl.gov)
- 13 On a non-linear diffusion equation describing clouds and wreaths of smoke
B.-F. Apostol, S. Stefan and M. Apostol
J. Theor. Phys. **13** (1996).
- 14 On the empirical foundation of probability
M. Apostol
J. Theor. Phys. **14** (1996).
- 15 On certain dimensionality effects in the ideal Bose and Fermi gases
M. Apostol
J. Theor. Phys. **15** (1996).
- 16 Specific heat of charged fermions in magnetic field
M. Apostol
J. Theor. Phys. **16** (1996)
- 17 Two-dimensional charged bosons in magnetic field
M. Apostol
J. Theor. Phys. **17** (1996)
- 18 Fermions in a slab
M. Apostol
J. Theor. Phys. **18** (1996)
- 19 Error estimation for the magnetic field in the accelerator magnets
M. Apostol
J. Theor. Phys. **19** (1996)
- 20 A new derivation of the WKB approximation
B.-F. Apostol
J. Theor. Phys. **20** (1997)

- 21 On the theory of war between "vicious" civilizations
M. Apostol
J. Theor. Phys. **21** (1997)
- 22 eta-superconductivity is an unstable pi-superconductivity
M. Apostol
J. Theor. Phys. **22** (1997)
- 23 On the Bethe ansatz
M. Apostol
J. Theor. Phys. **23** (1997)
- 24 A semi-infinite solid
M. Apostol
J. Theor. Phys. **24** (1997)
- 25 On the diffusion equation
M. Apostol
J. Theor. Phys. **25** (1997)
- 26 On the critical temperature of the Ising ferromagnets
M. Apostol
J. Theor. Phys. **26** (1997)
- 27 On the spherical model of a ferromagnet
M. Apostol
J. Theor. Phys. **27** (1997)
- 28 On the Bose-Einstein condensation
M. Apostol
J. Theor. Phys. **28** (1997)
- 29 On the impossibility of the phase transitions
M. Apostol
J. Theor. Phys. **29** (1997)
- 30 Replacing sums by integrals
M. Apostol
J. Theor. Phys. **30** (1998)
- 31 On a mean-field theory of the Ising ferromagnet
M. Apostol
J. Theor. Phys. **31** (1998)
- 32 On the Fermi sea-displacement operators as exact Bose operators
L. C. Cune and M. Apostol
J. Theor. Phys. **32** (1998)
- 33 On the "bosonization" in two and three dimensions
L. C. Cune and M. Apostol
J. Theor. Phys. **33** (1998)

- 34 On the Fermi sea-displacement operators as "exact Bose"operators
 L. Cune and M. Apostol
J. Theor. Phys. **34** (1998)
- 35 Fermi liquid theory
 M. Apostol
J. Theor. Phys. **35** (1998)
- 36 The basis of the Fermi liquid theory
 M. Apostol
J. Theor. Phys. **36** (1998)
- 37 On the "bosonization" in two and three dimensions
 L. Cune and M. Apostol
J. Theor. Phys. **37** (1999)
- 38 Classical Mechanics and Quantal Mechanics versus Statistical Physics. The Rest of the Universe.
 M. Apostol
J. Theor. Phys. **38** (1999)
- 39 Integrable Systems, Mathematical Physics and Statistical Mechanics
 M. Apostol
J. Theor. Phys. **39** (1999)
- 40 On the Ostwald ripening process
 F. Despa and M. Apostol
J. Theor. Phys. **40** (1999)
- 41 Quasi-classical atoms, ions and atomic clusters
 M. Apostol
J. Theor. Phys. **41** (1999)
- 42 On the self-consistent field of the atoms and Hartree's equations
 M. Apostol
J. Theor. Phys. **42** (1999)
- 43 Building the matter:molecules and chemical bond
 M. Apostol
J. Theor. Phys. **43** (1999)
- 44 Lowest excited electron states in a large atomic cluster
 M. Apostol
J. Theor. Phys. **44** (1999)
- 45 On the atomic binding energy in the Thomas-Fermi model
 M. Apostol
J. Theor. Phys. **45** (1999)
- 46 Comment on "Breakdown of Bohr's correspondence principle"
 M. Apostol
J. Theor. Phys. **46** (2000)

- 47 Comment on "Breakdown of Bohr's correspondence principle"
 M. Apostol
J. Theor. Phys. **47** (2000)
- 48 Comment on "Breakdown of Bohr's correspondence principle"
 M. Apostol
J. Theor. Phys. **48** (2000)
- 49 Universal geometric forms and magic numbers for homo-atomic metallic clusters
 L. Cune and M. Apostol
J. Theor. Phys. **49** (2000)
- 50 Metallic clusters
 L. Cune and M. Apostol
J. Theor. Phys. **50** (2000)
- 51 Iron-ethylene cluster $\text{Fe}_{13}(\text{C}_2\text{H}_2)_6$
 L. Cune and M. Apostol
J. Theor. Phys. **51** (2000)
- 52 Some notes on Comment on "Breakdown of Bohr's correspondence principle"
 M. Apostol
J. Theor. Phys. **52** (2000).
- 53 Ionization potential for metallic clusters
 L. Cune and M. Apostol
J. Theor. Phys. **53** (2000)
- 54 On the atomic binding energy in the Thomas-Fermi model
 L. Cune and M. Apostol
J. Theor. Phys. **54** (2000)
- 55 Effective hamiltonian for the molecular binding
 M. Apostol
J. Theor. Phys. **55** (2000)
- 56 Metallic cohesion
 M. Apostol
J. Theor. Phys. **56** (2000)
- 57 On superluminal effects
 L. Cune and M. Apostol
J. Theor. Phys. **57** (2000)
- 58 Research Project on Chemical Bond and Matter Aggregation
 M. Apostol
J. Theor. Phys. **58** (2000)
- 59 Ultrafast thermoelectric conduction
 M. Apostol
J. Theor. Phys. **59** (2000)

- 60 The Chemical Bond in Condensed Matter
M. Apostol
J. Theor. Phys. **60** (2000)
- 61 Seminar on Chemical Bond
M. Apostol
J. Theor. Phys. **61** (2000)
- 62 Quanta of viscosity
M. Apostol
J. Theor. Phys. **62** (2001)
- 63 Some remarks on statistical motion
M. Apostol
J. Theor. Phys. **63** (2001)
- 64 Some remarks on the thermoelements' "figure of merit"
M. Apostol
J. Theor. Phys. **64** (2001)
- 65 Thermoelectrics
M. Apostol
J. Theor. Phys. **65** (2001)
- 66 Ultrafast thermoelectric conduction
M. Apostol and M. Nedelcu
J. Theor. Phys. **66** (2001)
- 67 Pulse-like thermoelectric transport
M. Apostol
J. Theor. Phys. **67** (2001)
- 68 On pulse-like thermoelectric transport
M. Apostol
J. Theor. Phys. **68** (2001)
- 69 On pulse-like thermoelectric transport
M. Apostol
J. Theor. Phys. **69** (2001)
- 70 Transit and delay times in wave propagation
M. Apostol
J. Theor. Phys. **70** (2001)
- 71 Atomic Clusters, Poznan talk, September 2001
M. Apostol
J. Theor. Phys. **71** (2001)
- 72 Bose-Einstein condensation and superfluidity
M. Apostol
J. Theor. Phys. **72** (2001)

- 73 On quantal trajectories and chemical reactivity
M. Apostol
J. Theor. Phys. **73** (2001)
- 74 On the rate of the chemical reactions and the teleportation of the wavepackets
M. Apostol
J. Theor. Phys. **74** (2001)
- 75 On the Levenberg-Marquardt minimization procedure
M. Apostol
J. Theor. Phys. **75** (2002)
- 76 Electric flow through a ferromagnet-superconductor junction
M. Apostol and L. C. Cune
J. Theor. Phys. **76** (2002)
- 77 Metallic clusters deposited on surfaces
L. C. Cune and M. Apostol
J. Theor. Phys. **77** (2002)
- 78 Atomic clusters and nanostructures
L. C. Cune and M. Apostol
J. Theor. Phys. **78** (2002)
- 79 Metallic clusters deposited on surfaces. Puszczykowo Talk 2002
M. Apostol
J. Theor. Phys. **79** (2002)
- 80 A critical point theory of the earthquakes
B.-F. Apostol and M. Apostol
J. Theor. Phys. **80** (2002)
- 81 Transferring Power to a Resistive External Circuit in a Pulsed Thermoelectric Conduction
M. Apostol
J. Theor. Phys. **81** (2002)
- 82 Metallic Clusters deposited on surfaces
L. C. Cune and M. Apostol
J. Theor. Phys. **82** (2002)
- 83 Amplification factors in oscillatory motion
B.-F. Apostol and M. Apostol
J. Theor. Phys. **83** (2002)
- 84 Opening talk on the Course of Theoretical Physics, February 6, 2003
M. Apostol
J. Theor. Phys. **84** (2003)
- 85 On a non-linear wave equation in elasticity
B. F. Apostol
J. Theor. Phys. **85** (2003)

- 86 On the cubic anharmonic oscillator
 B. F. Apostol
J. Theor. Phys. **86** (2003)
- 87 On linear anharmonic oscillators and self-consistent harmonic approximation
 M. Apostol
J. Theor. Phys. **87** (2003)
- 88 Advanced Materials
 M. Apostol
J. Theor. Phys. **88** (2003)
- 89 On a non-linear wave equation in elasticity
 B. F. Apostol
J. theor. Phys. **89** (2003)
- 90 On a missing reference to *J. Theor. Phys.* **26** 107 (1997)
 M. Apostol
J. Theor. Phys. **90** (2003)
- 91 A pulse thermoelectric machine
 M. Apostol
J. Theor. Phys. **91** (2003)
- 92 Einstein's Physics (Lecture two of the Course of Theoretical Physics)
 M. Apostol
J. Theor. Phys. **92** (2004)
- 93 On parametric excitations of magnetization under electric flows
 L. C. Cune and M. Apostol
J. Theor. Phys. **93** (2004)
- 94 On superfluid spectrum of He⁴
 L. C. Cune and M. Apostol
J. Theor. Phys. **94** (2004)
- 95 An introduction to theoretical seismology
 B.-F. Apostol and M. Apostol
J. Theor. Phys. **95** (2004)
- 96 A few Nanocomments on NanoScience and NanoTechnology
 M. Apostol
J. Theor. Phys. **96** (2004)
- 97 Science and Computations (Lecture three of the Course of Theoretical Physics)
 M. Apostol
J. Theor. Phys. **97** (2005)
- 98 On probabilities (Lecture four of the Course of Theoretical Physics)
 M. Apostol
J. Theor. Phys. **98** (2005)

- 99 Power-law distributions and avalanche phenomena
M Apostol
J. Theor. Phys. **99** (2005)
- 100 On distributions with isolated points and a condensation phenomenon
M Apostol
J. Theor. Phys. **100** (2005)
- 101 “Equivalent circuits” for pulse-operating thermoelements
M Apostol and L C Cune
J. Theor. Phys. **101** (2005)
- 102 Euler's transform and a generalized Omori's law
B F Apostol
J. Theor. Phys. **102** (2005)
- 103 Euler's transform and a generalized Omori's law
B F Apostol
J. Theor. Phys. **103** (2005)
- 104 Generalized Omori's law and a self-generating process
B F Apostol
J. Theor. Phys. **104** (2005)
- 105 A model of seismic focus and related statistical distributions of earthquakes
B F Apostol
J. Theor. Phys. **105** (2005)
- 106 Omori's law for seismic foreshocks and aftershocks
B F Apostol
J. Theor. Phys. **106** (2005)
- 107 A Bayesian theory for seismic foreshocks and aftershocks
B F Apostol
J. Theor. Phys. **107** (2005)
- 108 A model of seismic focus and related statistical distributions of earthquakes
B F Apostol
J. Theor. Phys. **108** (2005)
- 109 Principles of earthquake forecasting. Short-term prediction. Application to
Vrancea, Romania
apoma Laboratory
J. Theor. Phys. **109** (2005)
- 110 Short-term seismic activity. Next-Earthquake Time-Magnitude Distributions
apoma Laboratory
J. Theor. Phys. **110** (2005)
- 111 Scaling and universal power laws
apoma laboratory
J. Theor. Phys. **111** (2005)

- 112 Scaling and universal temporal distribution of nearest-neighbours pairs of earthquake
apoam Laboratory
J. Theor. Phys. **112** (2005)
- 114 Kepler's problem
M Apostol
J. Theor. Phys. **114** (2005)
- 115 A three-body problem: the Sun, the Earth and the Moon
M Apostol
J. Theor. Phys. **115** (2005)
- 116 A peculiar motion in Coulomb potential and a new route of quantizing the Hydrogen atom
M Apostol
J. Theor. Phys. **116** (2005)
- 117 Moon's problem. A three-body problem. (Lecture five of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **117** (2005)
- 118 Theory of perturbation for a three-body gravitational bound-state
M Apostol
J. Theor. Phys. **118** (2005)
- 119 Scaling and universal power-laws in time series of seismic events
apoma Laboratory
J. Theor. Phys. **119** (2005)
- 120 Moon's problem. (A three-body problem). An investigation into “intractability” and “uncomputability” in Theoretical Physics
M Apostol
J. Theor. Phys. **120** (2005)
- 121 Principles of Earthquake Forecasting. Short-term prediction. Application to Vrancea
apoma Laboratory
J. Theor. Phys. **121** (2005)
- 122 Hadronization of the quark-gluon plasma
apoma Laboratory
J. Theor. Phys. **122** (2006)
- 123 The condensation of matter. A model of phase transition of the first kind.
M Apostol
J. Theor. Phys. **123** (2006)

- 124 On the thermodynamics of classical liquids
M Apostol
J. Theor. Phys. **124** (2006)
- 125 On the thermodynamics of liquids
M Apostol
J. Theor. Phys. **125** (2006)
- 126 On the thermoconductivity of liquids, their fluctuations, viscosity and diffusion coefficient
M Apostol
J. Theor. Phys. **126** (2006)
- 127 On the van der Waals equation
L C Cune and M Apostol
J. Theor. Phys. **127** (2006)
- 128 Elastic scattering in short-range potentials (Lecture six of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **128** (2006)
- 129 Elastic scattering in short-range potentials
M Apostol
J. Theor. Phys. **129** (2006)
- 130 Bound states in short-range potentials
M Apostol
J. Theor. Phys. **130** (2006)
- 131 Coulomb scattering
M Apostol
J. Theor. Phys. **131** (2006)
- 132 Nuclear cohesion. Weizsacker mass formula and statistical equilibrium in atomic nuclei
M Apostol
J. Theor. Phys. **132** (2006)
- 133 Inelastic collisions
M Apostol
J. Theor. Phys. **133** (2006)
- 134 On composite particles in relativistic mechanics, asymptotic freedom and nuclear forces
M Apostol
J. Theor. Phys. **134** (2006)

- 135 Fluids, fluid vortices and the Theory of Electricity and Magnetism (Lecture seven of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **135** (2006)
- 136 On some experimental observations of quantal beats in positronium two-gamma annihilation in magnetic field
M Apostol
J. Theor. Phys. **136** (2006)
- 137 On a possible coupling between ortho- and parapositronium
M Apostol
J. Theor. Phys. **137** (2006)
- 138 On the effect of the magnetic interactions on the gamma disintegration of the orthopositronium
M Apostol
J. Theor. Phys. **138** (2006)
- 139 Weber's coherent scattering and neutrino detection
M Apostol
J. Theor. Phys. **139** (2006)
- 140 Quantal transitions by change of parameters and in non-inertial motion (Lecture eight of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **140** (2006)
- 141 Twins paradox
M Apostol
J. Theor. Phys. **141** (2006)
- 142 Quantal transitions by change of parameters and in non-inertial motion
M Apostol
J. Theor. Phys. **142** (2006)
- 143 A few notes on the theory of motion (Lecture nine of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **143** (2006)
- 144 Another note on relativistic bound states and composite particles
M Apostol
J. Theor. Phys. **144** (2006)
- 145 Wheather dynamics
S Talpos and M Apostol
J. Theor. Phys. **145** (2006)

- 146 On the Yang-Lee theory of condensation and phase transitions
M Apostol
J. Theor. Phys. **146** (2007)
- 147 The condensation of matter. A model of phase transition of the first kind
M Apostol
J. Theor. Phys. **147** (2007)
- 148 On the thermodynamics of liquids
M Apostol
J. Theor. Phys. **148** (2007)
- 149 On the gas-liquid transition
M Apostol
J. Theor. Phys. **149** (2007)
- 150 Covariance, curved space, motion and quantization (Lecture ten of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **150** (2007)
- 151 Hadronization of the quark-gluon plasma
M Apostol
J. Theor. Phys. **151** (2007)
- 152 The many-body theory. Its logic along the years (dedicated to the memory of O. Dumitrescu)
M Apostol
J. Theor. Phys. **152** (2007)
- 153 A short overview of Physics (Lecture eleven of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **153** (2007)
- 154 Elementary comments on unitary transformations
M Apostol
J. Theor. Phys. **154** (2007)
- 155 Magnetostatic modes excited by spin-transfer torques. The case of a spin valve
M Apostol
J. Theor. Phys. **155** (2007)
- 156 Resonance of the surface waves. The H/V ratio
B F Apostol
J. Theor. Phys. **156** (2007)
- 157 Waves with defects
M Apostol
J. Theor. Phys. **157** (2007)

- 158 A power law spectral line
M Apostol
J. Theor. Phys. **158** (2007)
- 159 Electrical conductivity for localized electrons
M Apostol
J. Theor. Phys. **159** (2007)
- 160 A new derivation of some properties of the orbital motion
M Apostol
J. Theor. Phys. **160** (2007)
- 161 Pulsed thermoelectric machine
M Apostol
J. Theor. Phys. **161** (2007)
- 162 On some diffraction problems for a scalar wave
M Apostol
J. Theor. Phys. **162** (2007)
- 163 Elastic waves on a surface with irregularities
B F Apostol
J. Theor. Phys. **163** (2007)
- 164 On high electric and magnetic pulses
M Apostol and G. Vacca
J. Theor. Phys. **164** (2007)
- 165 On quantized electrical conductance
M Apostol
J. Theor. Phys. **165** (2007)
- 166 Density oscillations in a model of water and other similar liquids
M Apostol and E Preoteasa
J. Theor. Phys. **166** (2008)
- 167 Density oscillations in a classical multi-component plasma
M Apostol
J. Theor. Phys. **167** (2008)
- 168 Density collective oscillations and single-particle excitations in an ensemble of interacting identical particles
M Apostol
J. Theor. Phys. **168** (2008)
- 169 Density oscillations in multi-component molecular mixtures
M Apostol
J. Theor. Phys. **169** (2008)
- 170 Coherent interaction between matter and radiation
M Apostol
J. Theor. Phys. **170** (2008)

- 171 Coherence domains in matter interacting with radiation
M Apostol
J. Theor. Phys. **171** (2008)
- 172 d-wave in high-T_c superconductivity
M Apostol
J. Theor. Phys. **172** (2008)
- 173 Plasmons and polaritons in a semi-infinite electron plasma
M Apostol
J. Theor. Phys. **173** (2008)
- 174 Plasmons and polaritons in a semi-infinite electron plasma
M Apostol and G. Vaman
J. Theor. Phys. **174** (2008)
- 175 Reflected and refracted waves in a semi-infinite plasma
M Apostol and G Vaman
J. Theor. Phys. **175** (2009)
- 176 Plasmons and polaritons in a semi-infinite plasma and a plasma slab
M Apostol and G Vaman
J. Theor. Phys. **176** (2009)
- 177 Electromagnetic eigenmodes in matter. Van der Waals and Casimir forces
M Apostol and G Vaman
J. Theor. Phys. **177** (2009)
- 178 Attraction force between a polarizable point-like particle and a semi-infinte solid
M Apostol and G Vaman
J. Theor. Phys. **178** (2009)
- 179 Diffraction of an electromagnetic plane wave by a spherical particle. Mie's theory revisited
M Apostol and G Vaman
J. Theor. Phys. **179** (2009)
- 180 Elastic waves in a semi-infinite body
B F Apostol
J. Theor. Phys. **180** (2009)
- 181 The effect of inhomogeneities on the propagation of elastic waves in isotropic bodies
B F Apostol
J. Theor. Phys. **181** (2009)
- 182 Plasmons, polaritons and diffraction of the electromagnetic field in cylindrical geometries
M Apostol and G Vaman
J. Theor. Phys. **182** (2009)

- 183 Plasmons and diffraction for a circular aperture and a circular disk
M Apostol
J. Theor. Phys. **183** (2009)
- 184 Elastic waves produced in a semi-infinite body by localized external forces
B F Apostol
J. Theor. Phys. **184** (2009)
- 185 On the trajectories of the seismic rays
C Ciucu
J. Theor. Phys. **185** (2010)
- 186 Polaritonic pulses of laser transported electrons
M Apostol and M Ganciu
J. Theor. Phys. **186** (2010)
- 187 Relativistic polaritons: on plasma electrons accelerated by laser pulses
M Apostol
J. Theor. Phys. **187** (2010)
- 188 On a lasing effect controlled by high external electromagnetic fields
M Apostol and M Ganciu
J. Theor. Phys. **188** (2010)
- 189 Coherent polarization driven by external electromagnetic fields
M Apostol and M Ganciu
J. Theor. Phys. **189** (2010)
- 190 On the current theory of lasers
M Apostol
J. Theor. Phys. **190** (2010)
- 191 On the classical interaction of matter with electromagnetic radiation
M Apostol
J. Theor. Phys. **191** (2010)
- 192 Classical interaction of electromagnetic radiation with two-level polarizable matter
M Apostol
J. Theor. Phys. **192** (2010)
- 193 Dynamics of electron-positron pairs in a vacuum polarized by an external field
M Apostol
J. Theor. Phys. **193** (2010)
- 194 Coherent X- and gamma rays from Compton (Thomson) backscattering by a polaritonic pulse
M Apostol and M Ganciu
J. Theor. Phys. **194** (2010)

- 195 Polaritonic pulse and coherent X- and gamma rays from Compton (Thomson) backscattering
 M Apostol and M Ganciu
J. Theor. Phys. **195** (2010)
- 196 Coherent X- and gamma rays from Compton (Thomson) backscattering by a polaritonic pulse
 M Apostol and M Ganciu
J. Theor. Phys. **196** (2010)
- 197 Magic pairs and structural transitions in binary metallic clusters
 L C Cune
J. Theor. Phys. **197** (2010)
- 198 Non-inertial electromagnetic effects in matter. Gyromagnetic effect
 M Apostol
J. Theor. Phys. **198** (2011)
- 199 van der Waals-London electromagnetic forces involving spherical bodies
 M Apostol
J. Theor. Phys. **199** (2011)
- 200 The electromagnetic force (van der Waals-London-Casimir force) for spheres, point-like bodies and a half-space
 M Apostol
J. Theor. Phys. **200** (2011)
- 201 The electromagnetic field in matter
 M Apostol
J. Theor. Phys. **201** (2011)
- 202 The electromagnetic field of linear, or circular, antennas. The dipole approximation
 M Apostol
J. Theor. Phys. **202** (2011)
- 203 Elastic waves in a solid with a rough surface
 B F Apostol
J. Theor. Phys. **203** (2011)
- 204 Scattering of longitudinal waves by a rough surface
 B F Apostol
J. Theor. Phys. **204** (2011)
- 205 Scattering of longitudinal waves (sound) by small inhomogeneities in a fluid
 B F Apostol
J. Theor. Phys. **205** (2011)
- 206 On the molecular forces acting between macroscopic bodies
 M Apostol
J. Theor. Phys. **206** (2011)

- 207 On the molecular forces acting between macroscopic bodies
M Apostol
J. Theor. Phys. **207** (2011)
- 208 Electromagnetic reflection and efraktion for a semi-infinite solid with a rough surface
B F Apostol
J. Theor. Phys. **208** (2011)
- 209 Antennas and fields
M Apostol
J. Theor. Phys. **209** (2012)
- 210 Dynamics of laser pulses in plasma
M Apostol
J. Theor. Phys. **210** (2012)
- 211 Molecular forces acting between macroscopic bodies
M Apostol
J. Theor. Phys. **211** (2012)
- 212 Propagation of electromagnetic pulses through the surface of dispersive bodies
M Apostol
J. Theor. Phys. **212** (2012)
- 213 Reading Brillouin
M Apostol
J. Theor. Phys. **213** (2012)
- 214 Coupled nanoplasmons
M Apostol, S Ilie, A Petrut, M Savu and S Toba
J. Theor. Phys. **214** (2012)
- 215 Electromagnetic field in matter. Surface enhanced Raman spectroscopy
M Apostol, S Ilie, A Petrut, M Savu and S Toba
J. Theor. Phys. **215** (2012)
- 216 A resonant coupling of a localized harmonic oscillator to an elastic medium
B F Apostol
J. Theor. Phys. **216** (2013)
- 217 On the allosteric and related kinetics
M Apostol
J. Theor. Phys. **217** (2013)
- 218 Finite chains
M Apostol
J. Theor. Phys. **218** (2013)
- 219 Electronic edge states in graphene sheets
Oana-Ancuta Dobrescu and M Apostol
J. Theor. Phys. **219** (2013)

- 220 Some relativistic notes
M Apostol
J. Theor. Phys. **220** (2013)
- 221 On the frequency shift of piezoelectric sensors and associated damping of the signal
B F Apostol
J. Theor. Phys. **221** (2013)
- 222 On the phase diagram of Quantum Chromodynamics
M Apostol
J. Theor. Phys. **222** (2013)
- 223 Coupling of (ultra-) relativistic atomic nuclei with photons
M Apostol and M Ganciu
J. Theor. Phys. **223** (2013)
- 224 QCD
M Apostol
J. Theor. Phys. **224** (2013)
- 225 On the damping coefficient of oscillators and waves
B F Apostol
J. Theor. Phys. **225** (2013)
- 226 A note on the time evolution of the waves
B F Apostol
J. Theor. Phys. **226** (2014)
- 227 Quasi-classical dynamics in condensed matter
M Apostol
J. Theor. Phys. **227** (2014)
- 228 Parametric dipolar resonance
M Apostol
J. Theor. Phys. **228** (2014)
- 229 Parametric resonance in molecular resonance spectra
M Apostol
J. Theor. Phys. **229** (2014)
- 230 Giant dipole oscillations and ionization of heavy atoms by intense electromagnetic fields
M Apostol
J. Theor. Phys. **230** (2014)
- 231 Parametric resonance in rotation molecular spectra
M Apostol and L C Cune
J. Theor. Phys. **231** (2015)

- 232 Quasi-classical dynamics: harmonic-oscillator approximation to some quantum-mechanical systems, especially in condensed matter
M Apostol
J. Theor. Phys. **232** (2015)
- 233 Motion of an electric charge under the action of laser fields
M Apostol
J. Theor. Phys. **233** (2015)
- 234 On the dissociation (fragmentation) of atoms, molecules, atomic clusters and atomic nuclei in strong laser fields
M Apostol
J. Theor. Phys. **234** (2015)
- 235 Rotation molecular spectra in static electric fields
M Apostol and L C Cune
J. Theor. Phys. **235** (2015)
- 236 Displaced logarithmic profile of the velocity distribution in the boundary layer of a turbulent flow over an unbounded flat surface
S Talpos and M Apostol
J. Theor. Phys. **236** (2015)
- 237 Elastic equilibrium of the half-space revisited. Mindlin and Boussinesq problems
B F Apostol
J. Theor. Phys. **237** (2015)
- 238 Elastic waves equation with localized sources in isotropic half-space
B F Apostol
J. Theor. Phys. **238** (2015)
- 239 Primary and secondary seismic waves generated by localized seismic sources
B F Apostol
J. Theor. Phys. **239** (2016)
- 240 Elastic deformation of a half-space under the action of a tensorial force.
General solution for the half-space with point forces
B F Apostol
J. Theor. Phys. **240** (2016)
- 241 General solution to the elastic deformation of the half-space with point forces
B F Apostol
J. Theor. Phys. **241** (2016)
- 242 Deformation of an isotropic elastic half-space under the action of point forces.
General solution
B F Apostol
J. Theor. Phys. **242** (2016)

- 243 Vibration eigenfrequencies of a homogeneous elastic sphere with large radius
 B F Apostol
J. Theor. Phys. **243** (2016)
- 244 Preliminary tremor, main shock and the "tail" produced by earthquakes on
 Earth's surface
 B F Apostol
J. Theor. Phys. **244** (2016)
- 245 On the Lamb problem. Forced vibrations of an isotropic elastic half-space
 B F Apostol
J. Theor. Phys. **245** (2016)
- 246 Electric charges in high-intensity laser fields
 M Apostol
J. Theor. Phys. **246** (2016)
- 247 Non-relativistic electric charge in electromagnetic field
 M Apostol
J. Theor. Phys. **247** (2016)
- 248 On the measurement process in Quantum Mechanics
 M Apostol
J. Theor. Phys. **248** (2016)
- 249 Preliminary tremor, main shock and the seismic tail produced by earthquakes
 on Earth's surface
 B F Apostol
J. Theor. Phys. **249** (2016)
- 250 Other few remarks on the motion. Vibrations of macroscopic ensembles of
 particles (Lecture twelve of the Course of Theoretical Physics)
 M Apostol
J. Theor. Phys. **250** (2016)
- 251 On the role of boundary conditions in the wave motion propagated in semi-
 infinite solids and fluids
 M Apostol
J. Theor. Phys. **251** (2016)
- 252 Normal modes and coupled harmonic oscillators in structural engineering, the
 model of the embedded bar and amplification factors
 B F Apostol
J. Theor. Phys. **252** (2016)
- 253 Elastic waves interacting with a plane surface
 B F Apostol
J. Theor. Phys. **253** (2016)

- 254 Singular solutions of the wave equation: a model description of the tsunami phenomenon
M Apostol
J. Theor. Phys. **254** (2016)
- 255 Ten naive commentaries of the non-expert layman M. Apostol on the Seismological Problem
B F Apostol
J. Theor. Phys. **255** (2016)
- 256 On unphysical terms in the elastic Hertz potentials
M Apostol
J. Theor. Phys. **256** (2017)
- 257 On the boundary conditions in fluids
M Apostol
J. Theor. Phys. **257** (2017)
- 258 Vibrations of fluids
M Apostol
J. Theor. Phys. **258** (2017)
- 259 On the Landau damping and the penetration depth in a plasma model (Lecture thirteenth of the Course of Theoretical Physics)
M Apostol
J. Theor. Phys. **259** (2017)
- 260 Penetration depth of a longitudinal electric field in a semi-infinite classical plasma
M Apostol
J. Theor. Phys. **260** (2017)
- 261 On the solar neutrino problem
M Apostol
J. Theor. Phys. **261** (2017)
- 262 Damping (reaction) force for a charge in high-intensity radiation field
M Apostol
J. Theor. Phys. **262** (2017)
- 263 On the Stokes problem and its tensorial generalization in the theory of the elastic waves
B. F. Apostol
J. Theor. Phys. **263** (2017)
- 264 Secondary elastic waves from the plane surface of a half-space
B. F. Apostol
J. Theor. Phys. **264** (2017)

265. Of longitudinal fields in Electromagnetism
M. Apostol
J. Theor. Phys. **265** (2017)
266. On the stability of a classical plasma
M. Apostol and L. C. Cune
J. Theor. Phys. **266** (2017)
267. Ions "diffracted" on electromagnetic radiation
M. Apostol
J. Theor. Phys. **267** (2017)
268. A note on the electromagnetic interaction. Radiation-induced fragmentation (dissociation) of quantum-mechanical assemblies
M. Apostol
J. Theor. Phys. **268** (2017)
269. On the ionization of atoms by electromagnetic radiation
M. Apostol
J. Theor. Phys. **269** (2017)
270. Ions diffracted by electromagnetic radiation. Charges scattered by radiation field
M. Apostol
J. Theor. Phys. **270** (2017)
271. Scattering of non-relativistic quantum charge in electromagnetic radiation
M. Apostol
J. Theor. Phys. **271** (2017)
272. Scattering of non-relativistic charged-particles by electromagnetic radiation
M. Apostol
J. Theor. Phys. **272** (2017)
273. A note on the ionization of atoms by electromagnetic radiation
M. Apostol
J. Theor. Phys. **273** (2017)
274. Scattering of non-relativistic charged particles by electromagnetic radiation
M. Apostol
J. Theor. Phys. **274** (2017)
275. Some comments on the bound-state disintegration by electromagnetic radiation(electromagnetic effect on the alpha decay)
M. Apostol
J. Theor. Phys. **275** (2017)
276. Spectral line of stimulated emission in magnetic resonance
M. Apostol
J. Theor. Phys. **276** (2017)

277. Excited states of heavy atoms
M. Apostol
J. Theor. Phys. **277** (2017)
278. The inverse problem in Seismology. Seismic moment and energy of earthquakes
B. F. Apostol
J. Theor. Phys. **278** (2017)
279. Seismic moment deduced from quasi-static surface displacement in seismogen zones
B. F. Apostol
J. Theor. Phys. **279** (2017)
280. Comments upon bound-state charges in electric fields
M. Apostol
J. Theor. Phys. **280** (2017)
281. On the field-assisted emission of protons from the nuclei of the heavy atoms
M. Apostol
J. Theor. Phys. **281** (2018)
282. Analysis of the cross-section of charge scattering by electromagnetic radiation
M. Apostol and L. C. Cune
J. Theor. Phys. **282** (2018)
283. Two notes on ferroelectricity
M. Apostol
J. Theor. Phys. **283** (2018)
284. Dynamics of the electron cloud of heavy atoms in an external electric field
M. Apostol
J. Theor. Phys. **284** (2018)
285. Derivation of the seismic moment from seismic waves
B. F. Apostol
J. Theor. Phys. **285** (2018)
286. High-intensity laser radiation on solid targets
M. Apostol
J. Theor. Phys. **286** (2018)
287. Energy distribution in ionization and dissociation
M. Apostol
J. Theor. Phys. **287** (2018)
288. Black quanta. On the thermodynamics of the black holes
M. Apostol
J. Theor. Phys. **288** (2018)

289. On the ringing of the bells
M. Apostol
J. Theor. Phys. **289** (2018)
290. On the van der Waals equation
M. Apostol
J. Theor. Phys. **290** (2018)
291. Quasiclassical transition probabilities
M. Apostol
J. Theor. Phys. **291** (2018)
292. A note on plasma
M. Apostol
J. Theor. Phys. **292** (2018)
293. Qualitative features of the seismic waves on Earth's surface
B. F. Apostol
J. Theor. Phys. **293** (2018)
294. Seismic source parameters from local seismic records. Earthquake of..., Vrancea, Roamnia
B. F. Apostol and L. C. Cune
J. Theor. Phys. **294** (2018)
295. On an inverse problem in elastic wave propagation
B. F. Apostol
J. Theor. Phys. **295** (2018)
296. Notes on Quantum Electrodynamics and Quantum Field Theory (Lecture 14th of the Course of Theoretical Physics)
M. Apostol
J. Theor. Phys. **296** (2019)
297. A note on the present main line of research in statistical Seismology
M. Apostol
J. Theor. Phys. **297** (2019)
298. A generalized Kostrov representation. Seismic moment and seismic source with both shear-faulting and isotropic mechanism
B. F. Apostol
J. Theor. Phys. **298** (2019)
299. Earthquake distributions and Bath's law
B. F. Apostol
J. Theor. Phys. **299** (2019)
300. Statistical Seismology (Studies in Seismology, I)
B. F. Apostol
J. Theor. Phys. **300** (2019)

301. Drag force through gases and plasma
M. Apostol
J. Theor. Phys. **301** (2019)
302. Cohesive force bewteen macro-, meso- and nanoscopic bodies, double layer and surface plasmons
M. Apostol
J. Theor. Phys. **302** (2019)
303. On the stability of lyophobic colloids and suspensions (Double-layer vs interface)
M. Apostol
J. Theor. Phys. **303** (2019)
304. On the dynamics of lyophobic colloids
M. Apostol and L. C. Cune
J. Theor. Phys. **304** (2019)
305. A critical survey of the current theories of colloids
M. Apostol
J. Theor. Phys. **305** (2019)
306. On the dynamics of lyophobic colloids
M. Apostol and L. C. Cune
J. Theor. Phys. **306** (2019)
307. Resonant coupling of the electron cloud with the nucleus in heavy atoms. Rate of nucleon emission
M. Apostol
J. Theor. Phys. **307** (2019)
308. On quantum electrodynamics
M. Apostol
J. Theor. Phys. **308** (2019)
309. Electric pulse on a metallic wire
M. Apostol
J. Theor. Phys. **309** (2019)
310. Electromagnetic waves along a wire and the surface of a half-space
M. Apostol
J. Theor. Phys. **310** (2019)
311. Surface plasmon-polaritons
M. Apostol
J. Theor. Phys. **311** (2019)
312. Determination of earthquake parameters
B. F. Apostol
J. Theor. Phys. **312** (2020)

- 313. Penetration of oscillating uniform electric fields in metals
 M. Apostol
 J. Theor. Phys. **313** (2020)
- 314. Electric fields in a semi-infinite classical plasma
 M. Apostol
 J. Theor. Phys. **314** (2020)
- 315. Bath's law, correlations and magnitude distributions
 B. F. Apostol
 J. Theor. Phys. **315** (2020)
- 316. Entropy of earthquakes
 B. F. Apostol and L. C. Cune
 J. Theor. Phys. **316** (2020)
- 317. Earthquake correlations and Bath's law
 B. F. Apostol
 J. Theor. Phys. **317** (2020)
- 318. On electromagnetic eigenmodes in matter
 M. Apostol
 J. Theor. Phys. **318** (2020)
- 319. On the structure of the Quantum Electrodynamics
 M. Apostol
 J. Theor. Phys. **319** (2020)
- 320. Electromagnetic field in matter
 M. Apostol
 J. Theor. Phys. **320** (2020)
- 321. The Physics of pure reason (Lecture 15th of the Course of Theoretical Physics)
 M. Apostol
 J. Theor. Phys. **321** (2020)
- 322. Topological conductors
 M. Apostol
 J. Theor. Phys. **322** (2020)
- 323. Time-magnitude correlations and the time avariation of the Gutenberg-Richter parameter in foreshock sequences
 B. F. Apostol and L. C. Cune
 J. Theor. Phys. **323** (2020)
- 324. Particularities of the statistical approach to seismic activity
 M. Apostol
 J. Theor. Phys. **324** (2020)
- 325. Coupled oscillators
 M. Apostol
 J. Theor. Phys. **325** (2020)

- 326. van der Waals equation for a gas mixture
 M. Apostol
J. Theor. Phys. **326** (2021)
- 327. On the theory of the electrolytes
 M. Apostol and L. C. Cune
J. Theor. Phys. **327** (2021)
- 328. Near-field seismic motion
 B. F. Apostol
J. Theor. Phys. **328** (2021)
- 329. On the local magnitude scale of the earthquakes
 B. F. Apostol
J. Theor. Phys. **329** (2021)
- 330. Seismic waves produced by the collapse of a tower
 B. F. Apostol
J. Theor. Phys. **330** (2021)
- 331. Relativistic uncertainties
 M. Apostol
J. Theor. Phys. **331** (2021)
- 332. On the increase of the screening length in highly-concentrated electrolytes
 M. Apostol
J. Theor. Phys. **332** (2021)
- 333. Screening length in concentrated electrolytes
 M. Apostol
J. Theor. Phys. **333** (2021)
- 334. Macroscopic quantum-mechanical scattering. Coherent scattering of neutrinos
 M. Apostol
J. Theor. Phys. **334** (2021)
- 335. Seismic spectrum and spectral response
 B. F. Apostol
J. Theor. Phys. **335** (2022)
- 336. Vibrations of an elastic half-space
 B. F. Apostol
J. Theor. Phys. **336** (2022)
- 337. Vibration eigenfrequencies of an elastic sphere with a large radius
 B. F. Apostol
J. Theor. Phys. **337** (2022)
- 338. Torsion balance
 M. Apostol
J. Theor. Phys. **338** (2022)

339. Equilibrium of a fluid with thermal gradient in uniform gravitational field
 M. Apostol
J. Theor. Phys. **339** (2022)
340. The mainshock equation
 B. F. Apostol
J. Theor. Phys. **340** (2023)
341. Explosion waves
 B. F. Apostol
J. Theor. Phys. **341** (2023)
342. Primary seismic waves
 B. F. Apostol
J. Theor. Phys. **342** (2023)
343. Seismological problem, seismicwaves and the seismic mainshock
 B. F. Apostol
J. Theor. Phys. **343** (2023)
344. On the relevance of the foreshocks in forecasting seismic mainshocks
 B. F. Apostol and L. C. Cune
J. Theor. Phys. **344** (2023)
345. Background seismicity and seismic correlations
 B. F. Apostol
J. Theor. Phys. **345** (2023)
346. Ground motion, seismographgh recordings and seismic spectrum
 B. F. Apostol
J. Theor. Phys. **346** (2023)
347. On the turbulence problem
 M. Apostol
J. Theor. Phys. **347** (2023)
348. On the turbulence problem
 M. Apostol
J. Theor. Phys. **348** (2023)
349. Vorticial liquids and the Navier-Stokes equation
 M. Apostol
J. Theor. Phys. **349** (2023)
350. Isolating layer in foundation-structures
 B.. F. Apostol
J. Theor. Phys. **350** (2023)
351. The Navier-Stokes equation and a fully developed turbulence
 M. Apostol
J. Theor. Phys. **351** (2023)

- 352. On the Navier-Stokes equation
M. Apostol
J. Theor. Phys. **352** (2023)
- 353. Covalent-bond fluctuations measure the direction of the magnetic field
M. Apostol
J. Theor. Phys. **353** (2023)

