

## Publication List

1. V.I. Yukalov, Moscow Univ. Phys. Bull. **25**, 49–53 (1970).  
Existence of a wave function for a subsystem.
2. V.I. Yukalov, Moscow Univ. Phys. Bull. **26**, 22–26 (1971).  
Concept of distinctness for quantum subsystems.
3. V.I. Yukalov, Moscow Univ. Phys. Bull. **27**, 59–64 (1972).  
Symmetry principle in quantum mechanics.
4. V.I. Yukalov, Proc. Moscow Univ. Phys. **59**, 91–98 (1972).  
Symmetry problems of identical particles.
5. V.I. Yukalov, Theor. Math. Phys. **17**, 1244–1248 (1973).  
On the description of quasiparticles by Green functions.
6. V.I. Yukalov, Phys. Solid State **15**, 299–301 (1973).  
Spin–wave resonance in paramagnetic metals.
7. V.I. Yukalov, Phys. Met. Metallogr. **36**, 8–11 (1973).  
Spin–wave excitation in paramagnetic metals.
8. V.I. Yukalov, Russ. Phys. J. **17**, 1–3 (1974).  
Spin waves in paramagnetic metals.
9. V.I. Yukalov, Tech. Phys. **20**, 694–696 (1975).  
Spin–Maxwell dispersion in the presence of a boundary.
10. V.I. Yukalov, Radiophys. Quantum Electron. **18**, 767–771 (1975).  
Penetration of electromagnetic field through metal.
11. V.I. Yukalov, Philos. Sci. **18**, 145–147 (1975).  
Causality problem in quantum physics.
12. V.I. Yukalov, Theor. Math. Phys. **26**, 274–281 (1976).  
Remarks on quasiaverages.
13. V.I. Yukalov, Theor. Math. Phys. **28**, 652–660 (1976).  
Model of a hybrid crystal.
14. V.I. Yukalov, Moscow Univ. Phys. Bull. **31**, 10–15 (1976).  
Theory of perturbations with a strong interaction.
15. V.I. Yukalov, Physica A **89**, 363–372 (1977).  
Quantum crystal with jumps of particles.

16. V.I. Yukalov, *Theor. Math. Phys.* **37**, 1093–1101 (1978).  
Bose condensation into a state with finite momentum.
17. V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1978), pp. 437–444.  
Phase transitions and spontaneous symmetry breaking.
18. V.I. Yukalov, *Ann. Phys. (Berlin)* **491**, 31–39 (1979).  
Quantum theory of localized crystal.
19. V.I. Yukalov, *Czech. J. Phys.* **29**, 1040–1045 (1979).  
Excitation of spin–helicon waves in sodium and potassium.
20. V.I. Yukalov, in *Ionizing Radiation Effects on Properties of Dielectrics and Semiconductors*, edited by M.I. Ryazanov (Atomizdat, Moscow, 1979), pp. 217–220.  
Primary ionization of dielectrics by fast neutrons.
21. V.I. Yukalov, *Physica A* **100**, 431–442 (1980).  
Bose condensation in strongly nonideal systems.
22. V.I. Yukalov, *Acta Phys. Pol. A* **57**, 295–310 (1980).  
Stability and stratification of a quantum liquid mixture.
23. V.I. Yukalov, *Ann. Phys. (Berlin)* **492**, 171–182 (1980).  
Superharmonic approximation for crystal.
24. A.S. Shumovsky and V.I. Yukalov, *Dokl. Phys.* **25**, 361–363 (1980).  
An exactly solvable model of a ferromagnet with paramagnetic nuclei.
25. V.I. Yukalov, *Phys. Lett. A* **81**, 249–251 (1981).  
A new method in the theory of phase transitions.
26. V.I. Yukalov, *Phys. Lett. A* **81**, 433–435 (1981).  
A method to consider metastable states.
27. V.I. Yukalov, *Phys. Lett. A* **83**, 26–28 (1981).  
Pair correlations in superfluid helium.
28. V.I. Yukalov, *Phys. Lett. A* **85**, 68–71 (1981).  
Spontaneous restoration of broken symmetry.
29. V.I. Yukalov, *Physica A* **108**, 402–416 (1981).  
Statistical theory of heterophase fluctuations.
30. V.I. Yukalov, *Physica B* **107**, 233–234 (1981).  
Superfluidity and condensate with nonzero momentum.

31. V.I. Yukalov, *Ann. Phys. (Berlin)* **493**, 419–433 (1981).  
Construction of propagators for quantum crystals.
32. A.S. Shumovsky and V.I. Yukalov, *Chem. Phys. Lett.* **83**, 582–584 (1981).  
On specific-heat anomalies in magnets.
33. A.I. Rudenko and V.I. Yukalov, in *Investigation of Surface and Volume Properties of Solids by Particle Interactions*, edited by M.I. Ryazanov (Energoizdat, Moscow, 1981), pp. 78–83.  
Negative injection current in high-resistance materials.
34. A.S. Shumovsky and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1981), pp. 238–260.  
Problem of description of heterophase fluctuations at phase transitions.
35. A.M. Akhmeteli, A.S. Shumovsky, and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1981), pp. 300–306.  
Spin-phonon interaction in a model of hybrid ferromagnet.
36. I.K. Kudryavtsev, A.S. Shumovsky, and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1981), pp. 318–325.  
On a model of hybrid antiferromagnet.
37. V.I. Yukalov, *Physica A* **110**, 247–256 (1982).  
Spaces of states for heterophase systems.
38. A.S. Shumovsky and V.I. Yukalov, *Physica A* **110**, 518–534 (1982).  
Exact solutions for heterophase ferromagnets.
39. A.S. Shumovsky and V.I. Yukalov, *Dokl. Phys.* **27**, 709–711 (1982).  
Microscopic model of a superconductor with normal-state nuclei.
40. V.I. Yukalov and V.I. Zubov, *Fortschr. Phys.* **31**, 627–672 (1983).  
Localized-particles approach for classical and quantum crystals.
41. A.S. Shumovsky and V.I. Yukalov, in *International School on High Energy Physics*, edited by N.N. Bogolubov (JINR, Dubna, 1983), pp. 223–313.  
Spontaneous symmetry breaking and critical phenomena.
42. E.K. Bashkirov and V.I. Yukalov, in *Selected Topics in Classical and Quantum Physics*, edited by Y.I. Granovsky (Samara University, Samara, 1983), pp. 99–107.  
On microscopic theory of heterophase states in ferroelectrics.
43. N.N. Bogolubov, A.S. Shumovsky, and V.I. Yukalov, *Theor. Math. Phys.* **60**, 921–931 (1984).  
The concept of quasiaverages and spaces of states.

44. A.M. Baldin, R.G. Nazmitdinov, A.V. Chizhov, A.S. Shumovsky, and V.I. Yukalov, *Dokl. Phys.* **29**, 952–954 (1984).  
Coexistence of a hadron phase and a hexaquark phase in nuclear matter.
45. A.M. Baldin, R.G. Nazmitdinov, A.V. Chizhov, A.S. Shumovsky, and V.I. Yukalov, in *Multiquark Interactions and Quantum Chromodynamics*, edited by A.M. Baldin (JINR, Dubna, 1984), pp. 531–543.  
On heterogeneous states in nuclear matter.
46. E.K. Bashkirov and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1984), Vol. 1, pp. 76–82.  
Heterophase phenomena in ferroelectrics.
47. M.A. Boky and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1984), Vol. 1, pp. 170–176.  
Generalization of the Vonsovsky–Ziener model for heterogeneous systems.
48. V.B. Kislinsky and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1984), Vol. 1, pp. 344–349.  
Modified Sherrington–Kirkpatrick model for heterophase spin glass.
49. A.S. Shumovsky and V.I. Yukalov, *Phase States and Transitions* (JINR, Dubna, 1985).
50. V.I. Yukalov, *Phys. Rev. B* **32**, 436–446 (1985).  
Theory of melting and crystallization.
51. V.B. Kislinsky, A.S. Shumovsky, and V.I. Yukalov, *Phys. Lett. A* **109**, 254–256 (1985).  
Metastable heterophase system of the Ising type.
52. A.S. Shumovsky and V.I. Yukalov, *Chem. Phys. Lett.* **117**, 617–621 (1985).  
Equilibrium nucleation: A new type of phase transition.
53. A.S. Shumovsky and V.I. Yukalov, *Phys. Part. Nucl.* **16**, 569–592 (1985).  
Heterophase states in physical systems.
54. E.K. Bashkirov, A.S. Shumovsky, and V.I. Yukalov, *Dokl. Phys.* **30**, 367–369 (1985).  
Dynamics of superradiance in ferroelectrics.
55. A.V. Chizhov, R.G. Nazmitdinov, A.S. Shumovsky, and V.I. Yukalov, *Part. Nucl. Lett.* **7**, 45–50 (1985).  
Behaviour of nucleon–sixquark system on temperature–density plane.
56. V.I. Yukalov, *Part. Nucl. Lett.* **7**, 51–55 (1985).  
Example of antiphase fluctuation: Negative electric current in dielectric.
57. N.N. Bogolubov, M.T. Turaev, A.S. Shumovsky, and V.I. Yukalov, *Part. Nucl. Lett.* **9**, 5–12 (1985).  
Nonequilibrium self–correlation and superradiance in paramagnet.

58. V.I. Yukalov, *On the Model of Heterophase Superconductor* (JINR, Dubna, 1985).
59. A.M. Baldin, A.S. Shumovsky, and V.I. Yukalov, *Statistical Methods of Describing Quark Degrees of Freedom* (JINR, Dubna, 1985).
60. V.I. Yukalov, *Physica A* **136**, 575–587 (1986).  
Effective Hamiltonians for systems with mixed symmetry.
61. A.V. Chizhov, R.G. Nazmitdinov, A.S. Shumovsky, and V.I. Yukalov, *Nucl. Phys. A* **449**, 660–672 (1986).  
Statistical model of coexisting multi-quark clusters.
62. V.I. Emelyanov and V.I. Yukalov, *Opt. Spectrosc.* **60**, 385–388 (1986).  
Formation of inversion filaments in laser media due to interatomic interactions via the superradiation field.
63. A.M. Baldin, A.S. Shumovsky, and V.I. Yukalov, *Phys. Many-Part. Syst.* **10**, 10–18 (1986).  
Quark matter as a statistical system.
64. N.N. Bogolubov, M.T. Turaev, A.S. Shumovsky, and V.I. Yukalov, *Part. Nucl. Lett.* **14**, 33–40 (1986).  
Collective spontaneous radiation in two - component two-level system.
65. V.I. Yukalov, *Phys. Lett. A* **125**, 95–100 (1987).  
Renormalization of quasi-Hamiltonians under heterophase averaging.
66. V.I. Yukalov, *Physica A* **141**, 352–374 (1987).  
Procedure of quasiaveraging for heterophase mixtures.
67. V.I. Yukalov, *Physica A* **144**, 369–389 (1987).  
Lattice mixtures of fluctuating phases.
68. M.A. Boky, I.K. Kudryavtsev, and V.I. Yukalov, *Solid State Commun.* **63**, 731–735 (1987).  
Critical temperature in heterophase Hubbard model.
69. M.A. Boky, I.K. Kudryavtsev, A.S. Shumovsky, and V.I. Yukalov, *Fizika* **19**, 263–284 (1987).  
Model of antiferromagnet with heterophase fluctuations.
70. A.A. Bakasov and V.I. Yukalov, *Theor. Math. Phys.* **72**, 773–786 (1987).  
Method of reduced description of coherent radiation.
71. A.A. Bakasov, N.N. Bogolubov, A.S. Shumovsky, and V.I. Yukalov, *Theor. Math. Phys.* **72**, 987–998 (1987).  
Kinetics of two-photon superradiance in the case of damped polarization.

72. V.I. Yukalov, in *Problems in Quantum Field Theory*, edited by N.N. Bogolubov (JINR, Dubna, 1987), pp. 62–74.  
 Perturbation theory with respect to a smoothed potential for strongly interacting statistical systems.
73. V.I. Yukalov, in *Problems in Statistical Physics and Field Theory*, edited by Y.I. Zaparovanny (Moscow University, Moscow, 1987), pp. 33–47.  
 On the difference between homophase and heterophase fluctuations.
74. V.I. Yukalov, *Ferroelectrics* **82**, 11–24 (1988).  
 Heterophase fluctuations in ferroelectrics.
75. V.I. Yukalov, *J. Mod. Opt.* **35**, 35–48 (1988).  
 Inversion–polariton filamentation in laser media.
76. V.B. Kislinsky and V.I. Yukalov, *J. Phys. A* **21**, 227–232 (1988).  
 Crossover between short- and long-range interactions in the one-dimensional Ising model.
77. J.F. Kiselev, A.F. Prudkoglyad, A.S. Shumovsky, and V.I. Yukalov, *Mod. Phys. Lett. B* **1**, 409–416 (1988).  
 Discovery of Dicke superradiation by system of nuclear magnetic moments.
78. Y.F. Kiselev, A.F. Prudkoglyad, A.S. Shumovsky, and V.I. Yukalov, *J. Exp. Theor. Phys.* **67**, 413–415 (1988).  
 Detection of superradiant emission from a system of nuclear magnetic moments.
79. E.P. Kadantseva, A.S. Shumovsky, and V.I. Yukalov, *Int. J. Mod. Phys. B* **2**, 255–264 (1988).  
 Superradiation in the two-component two-level system.
80. A.S. Shumovsky and V.I. Yukalov, *Phys. Many-Part. Syst.* **14**, 24–28 (1988).  
 Two-fluid superconductor as an example of heterophase systems.
81. Y.F. Kiselev, A.F. Prudkoglyad, A.S. Shumovsky, and V.I. Yukalov, in *Problems in Quantum Optics*, edited by V.I. Yukalov (JINR, Dubna, 1988), pp. 68–75.  
 Observation of Dicke superradiance in a system of nuclear magnetic moments.
82. V.I. Yukalov, in *Problems in Quantum Optics*, edited by V.I. Yukalov (JINR, Dubna, 1988), pp. 132–150.  
 Possibility of superradiance in rarified systems.
83. A.A. Shanenko and V.I. Yukalov, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin (JINR, Dubna, 1988), Vol. 1, pp. 445–454.  
 Coexistence of multi-quark clusters and quark plasma.

84. A.S. Shumovsky and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1988), pp. 434–443.  
On a new formula for temperature of superconducting transition.
85. V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1988), pp. 444–467.  
Mössbauer effect in magnetic materials.
86. V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by N.N. Bogolubov (JINR, Dubna, 1988), pp. 468–483.  
System of two-level atoms with filamentary structure of excitations.
87. V.I. Yukalov, *Renormalization Group in Statistical Physics: Field-Theory and Iteration Formulations* (JINR, Dubna, 1988).
88. V.I. Yukalov, *Solid State Commun.* **69**, 393–395 (1989).  
Mössbauer-effect probability for heterogeneous matters.
89. V.I. Yukalov, *Physica A* **155**, 519–544 (1989).  
Spin-phonon interactions in heterophase ferromagnets.
90. A.A. Bakasov and V.I. Yukalov, *Physica A* **157**, 1203–1226 (1989).  
Microscopic theory of spin reorientations: Heterophase approach and basic model.
91. A.A. Bakasov and V.I. Yukalov, *Physica A* **162**, 31–66 (1989).  
Microscopic theory of spin reorientations: Thermodynamics and nucleation phenomenon.
92. Y.F. Kiselev, A.S. Shumovsky, and V.I. Yukalov, *Mod. Phys. Lett. B* **3**, 1149–1156 (1989).  
Thermal-noise induced radio frequency superradiance in resonator.
93. V.I. Yukalov, *Mod. Phys. Lett. B* **3**, 1337–1345 (1989).  
Interpretation of magnetic anomalies in Mössbauer spectrum intensity.
94. A.A. Shanenko, A.S. Shumovsky, and V.I. Yukalov, *Int. J. Mod. Phys. A* **4**, 2235–2244 (1989).  
Six-quark clusters in nuclear matter at low temperatures.
95. V.I. Yukalov, *Int. J. Mod. Phys. B* **3**, 311–326 (1989).  
Properties of solids with pores and cracks.
96. E.P. Kadantseva and V.I. Yukalov, *Int. J. Mod. Phys. B* **3**, 465–472 (1989).  
Thermodynamics of solids with regions of disorder.
97. V.I. Yukalov, *Int. J. Mod. Phys. B* **3**, 1691–1702 (1989).  
Algorithm for calculating functions in method of successive approximations.

98. V.I. Yukalov, *Bull. Russ. Acad. Sci. Phys.* **53**, 100–104 (1989).  
Formation of filamentary structures during optical superradiance.
99. V.I. Yukalov, *Int. J. Theor. Phys.* **28**, 1237–1254 (1989).  
Strongly interacting particles with strongly singular potentials.
100. V.I. Yukalov, in *Physics of Transition Metals*, edited by V.G. Baryakhtar (Naukova Dumka, Kiev, 1989), Vol. 2, pp. 165–168.  
Magnetic anomalies under Mössbauer effect.
101. V.I. Yukalov, in *Current Group Analysis*, edited by F.G. Maksudov and K.A. Rustamov (Elm, Baku, 1989), pp. 250–258.  
Methods for breaking the symmetry of statistical systems.
102. V.I. Yukalov, in *Current Topics in Statistical Physics*, edited by I.R. Yukhnovsky (Naukova Dumka, Kiev, 1989), Vol. 2, pp. 114–120.  
Phase probabilities as order parameters.
103. V.I. Yukalov, in *Proceedings of Workshop on Gravitational Wave Emitter and Detector*, edited by A.F. Pisarev (JINR, Dubna, 1989), pp. 66–73.  
Collective effects during nuclear gamma resonance.
104. V.I. Yukalov, in *Statistical Mechanics and Theory of Phase Transitions*, edited by N.N. Bogolubov (Samara University, Samara, 1989), pp. 12–20.  
Tricritical phenomena in strongly fluctuating systems.
105. V.I. Yukalov and A.S. Shumovsky, *Lectures on Phase Transitions* (World Scientific, Singapore, 1990).
106. V.I. Yukalov, *Phys. Rev. A* **42**, 3324–3334 (1990).  
Statistical mechanics of strongly nonideal systems.
107. V.I. Yukalov, *Physica A* **167**, 833–860 (1990).  
Self-similar approximations for strongly interacting systems.
108. V.I. Yukalov, *Physica A* **167**, 861–876 (1990).  
Microscopic theory of spin reorientations: General analysis.
109. V.I. Yukalov, *Nuovo Cimento A* **103**, 1577–1583 (1990).  
Pseudopotential iteration of propagator equations.
110. V.I. Yukalov, *J. Mod. Opt.* **37**, 1361–1376 (1990).  
Inversion–polarization filaments under weak pumping.
111. V.I. Yukalov, *Hyperf. Interact.* **55**, 1165–1168 (1990).  
Anomalous saggings of Mössbauer effect probability at phase transitions.



112. V.I. Yukalov, *Hyperf. Interact.* **56**, 1657–1660 (1990).  
Influence of radiation damage on Mössbauer effect probability.
113. V.I. Yukalov, in *Interaction of Electromagnetic Field with Condensed Matter*, edited by N.N. Bogolubov, A.S. Shumovsky, and V.I. Yukalov (World Scientific, Singapore, 1990), pp. 210–243.  
Short-wave stimulated coherent emission.
114. V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by A.A. Logunov (World Scientific, Singapore, 1990), pp. 298–312.  
Additional order parameters for heterogeneous systems.
115. E.P. Kadantseva, A.A. Shanenko, and V.I. Yukalov, in *Selected Topics in Statistical Mechanics*, edited by A.A. Logunov (World Scientific, Singapore, 1990), pp. 412–422.  
Possibility of matter with quark–hadron coexistence.
116. V.I. Yukalov, *Phys. Rep.* **208**, 395–492 (1991).  
Phase transitions and heterophase fluctuations.
117. V.I. Yukalov, *J. Math. Phys.* **32**, 1235–1239 (1991).  
Method of self-similar approximations.
118. V.I. Yukalov, *Laser Phys.* **1**, 81–84 (1991).  
Formation of superstructures of collective excitations in resonance media.
119. V.I. Yukalov, *Laser Phys.* **1**, 85–98 (1991).  
Influence of nonresonant fields on resonance processes in radiating systems.
120. V.I. Yukalov, *Mod. Phys. Lett. B* **5**, 725–732 (1991).  
Single-particle excitations in superfluid helium.
121. A.J. Coleman and V.I. Yukalov, *Mod. Phys. Lett. B* **5**, 1679–1686 (1991).  
Order indices and mid-range order.
122. V.I. Yukalov, *Int. J. Mod. Phys. B* **5**, 3235–3253 (1991).  
Method of thermodynamic quasiaverages.
123. E.P. Kadantseva, A.A. Shanenko, and V.I. Yukalov, *Phys. Lett. B* **255**, 427–434 (1991).  
Quark–hadron matter at low temperature.
124. V.I. Yukalov, *Proc. Lebedev Phys. Inst.* **188**, 297–300 (1991).  
Group of transformations for continuous iteration.
125. V.I. Yukalov, in *Symmetry and Structural Properties of Condensed Matter*, edited by W. Florek, T. Lulek, and M. Mucha (World Scientific, Singapore, 1991), pp. 141–152.  
Properties of crystals with local symmetry breaking.

126. E.P. Kadantseva, A.A. Shanenko, and V.I. Yukalov, in *Standard Model and Beyond*, edited by S. Dubnicka, D. Ebert, and A. Sazonov (World Scientific, Singapore, 1991), pp. 201–205.  
Phenomenological model of gluodynamics.
127. E.P. Kadantseva, A.A. Shanenko, and V.I. Yukalov, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin, V.V. Burov, and L.P. Kaptari (World Scientific, Singapore, 1991), pp. 602–607.  
Nonstratified mixture of hadrons and quark plasma.
128. V.I. Yukalov, in *Topics in Application of Nuclear Radiation*, edited by Y.F. Babikova (Energoatomizdat, Moscow, 1991), pp. 33–38.  
Mössbauer spectroscopy of heterophase systems.
129. V.I. Yukalov, *J. Math. Phys.* **33**, 3994–4001 (1992).  
Stability conditions for method of self-similar approximations.
130. T.S. Belozerova, V.K. Henner, and V.I. Yukalov, *Phys. Rev. B* **46**, 682–686 (1992).  
Coherent effects in dipole spin systems.
131. T.S. Belozerova, V.K. Henner, and V.I. Yukalov, *Laser Phys.* **2**, 545–558 (1992).  
Microscopic modelling of coherent spin radiation at magnetic resonance frequencies.
132. V.I. Yukalov, *Laser Phys.* **2**, 559–566 (1992).  
Coherent radiofrequency radiation by electron and nuclear spins.
133. V.I. Yukalov, *Int. J. Mod. Phys. B* **6**, 91–107 (1992).  
Heterostructural fluctuations in superconductors.
134. V.I. Yukalov, E.P. Kadantseva, and A.A. Shanenko, *Nuovo Cimento A* **105**, 371–386 (1992).  
Thermodynamics of quark–hadron matter.
135. A.J. Coleman and V.I. Yukalov, *Nuovo Cimento B* **107**, 535–552 (1992).  
Order indices for boson density matrices.
136. E.P. Kadantseva, A.A. Shanenko, and V.I. Yukalov, *Phys. At. Nucl.* **55**, 435–439 (1992).  
Role of the mixed state in statistical deconfinement models.
137. T.S. Belozerova, V.K. Henner, and V.I. Yukalov, *Comput. Phys. Commun.* **73**, 151–160 (1992).  
Computer simulation of coherent effects in polarized spin systems.
138. T.S. Belozerova, V.K. Henner, and V.I. Yukalov, *Tech. Phys. Lett.* **18**, 404–405 (1992).  
Possibility of coherent emission in a cavity-free spin system.

139. E.P. Yukalova and V.I. Yukalov, *Bulg. J. Phys.* **19**, 12–23 (1992).  
One-dimensional anharmonic oscillator in self-similar approximation.
140. A.M. Umarov and V.I. Yukalov, *Probl. At. Sci. Technol.* **24**, 189–193 (1992).  
Dynamical stability of filamentary structures in radiating systems.
141. E.P. Kadantseva and V.I. Yukalov, in *Renormalization Group*, edited by D.V. Shirkov and V.B. Priezzhev (World Scientific, Singapore, 1992), pp. 218–229.  
Renormalization-group induced convergence for divergent sequences.
142. E.P. Yukalova and V.I. Yukalov, *Phys. Lett. A* **175**, 27–35 (1993).  
Self-similar approximation for an anharmonic oscillator of arbitrary dimensionality.
143. E.P. Yukalova and V.I. Yukalov, *J. Phys. A* **26**, 2011–2019 (1993).  
Spherical anharmonic oscillator in self-similar approximation.
144. E.P. Yukalova and V.I. Yukalov, *Phys. Scr.* **47**, 610–617 (1993).  
Self-similar eigenvalues for Schrödinger operators with power-law potentials.
145. V.I. Yukalov, *Laser Phys.* **3**, 870–894 (1993).  
Coherent radiation from polarized matter.
146. V.I. Yukalov, *Int. J. Mod. Phys. B* **7**, 1711–1730 (1993).  
Self-similar renormalization near unstable fixed points.
147. V.I. Yukalov and E.P. Yukalova, *Int. J. Mod. Phys. B* **7**, 2367–2396 (1993).  
Self-similar renormalization as equation of motion.
148. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Physica A* **197**, 629–666 (1993).  
Statistical models of clustering matter.
149. V.I. Yukalov and E.P. Yukalova, *Physica A* **198**, 573–592 (1993).  
Self-similar approximations for thermodynamic potentials.
150. V.I. Yukalov and E.P. Yukalova, *Can. J. Phys.* **71**, 537–546 (1993).  
Degenerate trajectories and Hamiltonian envelopes in the method of self-similar approximations.
151. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Phys. At. Nucl.* **56**, 372–384 (1993).  
Deconfinement in the heterophase mixture of quark-gluon plasma and hadrons.
152. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Nuovo Cimento A* **106**, 1269–1282 (1993).  
Statistical model of quark-hadron matter.
153. V.I. Yukalov and E.P. Yukalova, *Nuovo Cimento B* **108**, 1017–1042 (1993).  
Self-similar approximations and evolution equations.

154. A.J. Coleman and V.I. Yukalov, *Nuovo Cimento B* **108**, 1377–1397 (1993).  
Order indices and ordering in macroscopic systems.
155. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Hadron. J.* **16**, 1–36 (1993).  
Statistical approach to deconfinement in pure gauge models.
156. V.I. Yukalov and E.P. Yukalova, in *Nonlinear Evolution Equations and Dynamical Systems*, edited by V. Makhankov, I. Puzynin, and O. Pashaev (World Scientific, Singapore, 1993), pp. 18–27.  
Iterative procedure as equation of motion.
157. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, in *Symmetry and Structural Properties of Condensed Matter*, edited by W. Florek, D. Lipinski, and T. Lulek (World Scientific, Singapore, 1993), pp. 237–268.  
Clustering matter as ensemble of quasiparticles.
158. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, in *Proceedings of Workshop on Soft Physics*, edited by G. Bugrij, L. Jenkovsky, and E. Martynov (Academy of Sciences, Kiev, 1993), pp. 111–124.  
Coexistence of quark–gluon plasma and hadrons.
159. V.I. Yukalov and E.P. Yukalova, *Physica A* **206**, 553–580 (1994).  
Higher orders of self–similar approximations for thermodynamic potentials.
160. V.I. Yukalov, *Chem. Phys. Lett.* **229**, 239–243 (1994).  
Influence of structural fluctuations on the dynamical characteristics of solids.
161. E.A. Kochetov and V.I. Yukalov, *Bull. Russ. Acad. Sci. Phys.* **58**, 1235–1248 (1994).  
New theoretical solutions in quantum electronics.
162. T.S. Belozerova, V.K. Henner, and V.I. Yukalov, *Proc. SPIE* **2098**, 86–95 (1994).  
Computer simulation of spin superradiance.
163. E.P. Yukalova and V.I. Yukalov, in *Polarons and Applications*, edited by V.D. Lakhno (Wiley, Chichester, 1994), pp. 467–478.  
Calculation of eigenvalues of Schrödinger operators for arbitrary coupling.
164. V.I. Yukalov and E.P. Yukalova, in *Programming and Mathematical Techniques in Physics*, edited by Y.Y. Lobanov and E.P. Zhidkov (World Scientific, Singapore, 1994), pp. 240–242.  
Application of method of self–similar approximations for eigenvalue problem.
165. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, in *Hadrons and Nuclei from Quantum Chromodynamics*, edited by K. Fujii, Y. Akaishi, and B. Reznik (World Scientific, Singapore, 1994), pp. 109–117.  
Deconfinement in quark–hadron matter.

166. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin and V.V. Burov (JINR, Dubna, 1994), pp. 191–201.  
Statistical model of deconfinement for nonabelian gauge theories.
167. V.I. Yukalov, E.P. Yukalova, and A.A. Shanenko, in *Symmetry Methods in Physics*, edited by A.N. Sissakian, G.S. Pogosyan, and S.I. Vinitzky (JINR, Dubna, 1994), Vol. 2, pp. 592–594.  
Influence of colour symmetry on string tension.
168. V.I. Yukalov, *Phys. Rev. Lett.* **75**, 3000–3003 (1995).  
Origin of pure spin superradiance.
169. V.I. Yukalov and E.P. Yukalova, *Physica A* **213**, 482–499 (1995).  
Chaotic lattice–gas model.
170. V.I. Yukalov, *Physica A* **213**, 500–524 (1995).  
Statistical mechanics of structural fluctuations.
171. A.J. Coleman, E.P. Yukalova, and V.I. Yukalov, *Physica C* **243**, 76–92 (1995).  
Superconductors with mesoscopic phase separation.
172. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **5**, 154–169 (1995).  
Spectral characteristics of anharmonic models in self–similar approximation.
173. E.A. Kochetov and V.I. Yukalov, *Laser Phys.* **5**, 186–198 (1995).  
Some new mathematical methods in quantum optics.
174. V.I. Yukalov, *Laser Phys.* **5**, 526–533 (1995).  
Transient coherent phenomena in radiofrequency region.
175. V.I. Yukalov, *Laser Phys.* **5**, 970–992 (1995).  
Theory of coherent radiation by spin maser.
176. A.J. Coleman, E.P. Yukalova, and V.I. Yukalov, *Int. J. Quantum Chem.* **54**, 211–222 (1995).  
Pairon distributions and the spectra of reduced Hamiltonians.
177. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Dokl. Phys.* **40**, 291–296 (1995).  
Mixed phase of nuclear matter.
178. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Phys. At. Nucl.* **58**, 335–336 (1995).  
Deconfinement: decay or fusion of hadrons?
179. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Part. Nucl. Lett.* **69**, 19–26 (1995).  
Concentrations of hadrons and quark–gluon plasma in mixed phase.

180. V.I. Yukalov, in *Nonlinear Evolution Equations and Dynamical Systems*, edited by V.G. Makhankov, A.R. Bishop, and D.D. Holm (World Scientific, Singapore, 1995), pp. 216–221.  
Control of coherence by varying nonlinearity.
181. V.I. Yukalov and E.P. Yukalova, in *Nonlinear Evolution Equations and Dynamical Systems*, edited by V.G. Makhankov, A.R. Bishop, and D.D. Holm (World Scientific, Singapore, 1995), pp. 356–364.  
Perturbation theory as dynamical theory.
182. V.I. Yukalov, *Phys. Rev. B* **53**, 9232–9250 (1996).  
Nonlinear spin dynamics in nuclear magnets.
183. V.I. Yukalov and E.P. Yukalova, *Physica A* **223**, 15–33 (1996).  
Evaporation and condensation of clusters.
184. V.I. Yukalov and E.P. Yukalova, *Physica A* **225**, 336–362 (1996).  
Temporal dynamics in perturbation theory.
185. V.I. Yukalov and E.P. Yukalova, *J. Phys. A* **29**, 6429–6442 (1996).  
Asymptotic properties of eigenvalues in variational calculations for double-well oscillators.
186. V.I. Yukalov, *Nucl. Instrum. Meth. Phys. Res. A* **370**, 345–351 (1996).  
Fast polarization reversal of proton spins in solid-state targets.
187. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, *Int. J. Mod. Phys. B* **10**, 669–682 (1996).  
Thermodynamic restriction rules for droplet models.
188. A.J. Coleman and V.I. Yukalov, *Int. J. Mod. Phys. B* **10**, 3505–3515 (1996).  
Relation between microscopic and macroscopic characteristics of statistical systems.
189. V.I. Yukalov and E.P. Yukalova, *Phys. Part. Nucl.* **28**, 37–65 (1997).  
Thermodynamics of strong interactions.
190. V.I. Yukalov, *Physica A* **234**, 725–750 (1997).  
Local stability of dynamical processes in random media.
191. V.I. Yukalov and E.P. Yukalova, *Physica A* **243**, 382–414 (1997).  
Multichannel approach to clustering matter.
192. V.I. Yukalov and S. Gluzman, *Phys. Rev. Lett.* **79**, 333–336 (1997).  
Critical indices as limits of control functions.
193. S. Gluzman and V.I. Yukalov, *Phys. Rev. E* **55**, 3983–3999 (1997).  
Algebraic self-similar renormalization in the theory of critical phenomena.

194. V.I. Yukalov and S. Gluzman, *Phys. Rev. E* **55**, 6552–6565 (1997).  
Self-similar bootstrap of divergent series.
195. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Phys. Rev. A* **56**, 4845–4854 (1997).  
Non-ground-state Bose-Einstein condensates of trapped atoms.
196. V.I. Yukalov, *Phys. Rev. A* **56**, 5004–5013 (1997).  
Nonadiabatic dynamics of atoms in nonuniform magnetic fields.
197. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **236**, 113–119 (1997).  
Negative electric current in semiconductors.
198. V.I. Yukalov, *Laser Phys.* **7**, 58–62 (1997).  
Relaxation regimes of spin maser.
199. V.I. Yukalov, *Laser Phys.* **7**, 998–1013 (1997).  
Escape of neutral atoms from magnetic traps.
200. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **7**, 1076–1085 (1997).  
Anomalous drift of injected carriers in high-resistance materials.
201. V.I. Yukalov, *Braz. J. Phys.* **27**, 260–265 (1997).  
Nonadiabatic regimes of atomic motion in magnetic traps.
202. V.I. Yukalov, *Proc. SPIE* **3239**, 118–128 (1997).  
Non-Dicke superradiance in spin systems.
203. A.A. Shanenko, E.P. Yukalova, and V.I. Yukalov, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin and V.V. Burov (JINR, Dubna, 1997), Vol. 2, pp. 345–354.  
Deconfinement in nuclear matter with finite baryon density.
204. V.I. Yukalov, *Statistical Green's Functions* (Queen's University, Kingston, 1998).
205. S. Gluzman and V.I. Yukalov, *Mod. Phys. Lett. B* **12**, 61–74 (1998).  
Resummation methods for analyzing time series.
206. S. Gluzman and V.I. Yukalov, *Mod. Phys. Lett. B* **12**, 75–84 (1998).  
Renormalization group analysis of October market crashes.
207. S. Gluzman and V.I. Yukalov, *Mod. Phys. Lett. B* **12**, 575–587 (1998).  
Booms and crashes in self-similar markets.
208. V.I. Yukalov, E.P. Yukalova, and S. Gluzman, *Phys. Rev. A* **58**, 96–115 (1998).  
Self-similar interpolation in quantum mechanics.

209. V.I. Yukalov and S. Gluzman, *Phys. Rev. E* **58**, 1359–1382 (1998).  
Self-similar exponential approximants.
210. S. Gluzman and V.I. Yukalov, *Phys. Rev. E* **58**, 4197–4209 (1998).  
Unified approach to crossover phenomena.
211. V.I. Yukalov, E.P. Yukalova, and F.A. Oliveira, *J. Phys. A* **31**, 4337–4348 (1998).  
Renormalization–group solutions for Yukawa potential.
212. V.I. Yukalov, *Physica A* **261**, 482–498 (1998).  
Stabilizing role of mesoscopic fluctuations in spin systems.
213. V.I. Yukalov, J.A. Gonzalez, and C.L. Dias, *Laser Phys.* **8**, 19–24 (1998).  
Stability analysis of nonlinear dynamics in spin masers.
214. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **8**, 890–898 (1998).  
Semiconfinement of atoms in magnetic traps.
215. V.I. Yukalov, *Laser Phys.* **8**, 955–958 (1998).  
Superradiance–multiatomic coherent emission.
216. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **8**, 1029–1038 (1998).  
Spin maser under stationary pumping.
217. V.I. Yukalov, *Laser Phys.* **8**, 1182–1193 (1998).  
Coherent polariton radiation and light localization.
218. V.I. Yukalov, *Laser Phys.* **8**, 1249–1256 (1998).  
Conditions for nuclear–matter lasers.
219. V.I. Yukalov, *Bull. Russ. Acad. Sci. Phys.* **62**, 252–255 (1998).  
Atomic lasers.
220. V.I. Yukalov, *Phys. At. Nucl.* **61**, 1882–1884 (1998).  
Method of scale separation for nonequilibrium nonlinear phenomena.
221. V.I. Yukalov, in *Mathematical Physics*, edited by L.D. Faddeev (Grand Russian Encyclopedia, Moscow, 1998), pp. 46–48.  
Bloch vector and Bloch angle.
222. V.I. Yukalov, in *Mathematical Physics*, edited by L.D. Faddeev (Grand Russian Encyclopedia, Moscow, 1998), pp. 169–170.  
Dicke model.
223. V.I. Yukalov, in *Mathematical Physics*, edited by L.D. Faddeev (Grand Russian Encyclopedia, Moscow, 1998), pp. 177–178.  
Dynamical long–range order.



224. M. Singh, V.I. Yukalov, and W. Lau, in *Nanostructures: Physics and Technology*, edited by Z. Alferov and L. Esaki (Ioffe Institute, St. Petersburg, 1998), p. 327.  
Polariton spontaneous emission superradiance in semiconductor doped with quantum wells or quantum dots.
225. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **253**, 173–180 (1999).  
Cannon for neutral particles.
226. V.I. Yukalov, *Phys. Rev. A* **60**, 721–724 (1999).  
On nonadiabatic dynamics of atoms in nonuniform magnetic fields.
227. V.I. Yukalov, E.P. Yukalova, and M.R. Singh, *Phys. Rev. B* **59**, 10111–10118 (1999).  
Anomalous transient current in nonuniform semiconductors.
228. V.I. Yukalov, M.G. Cottam, and M.R. Singh, *Phys. Rev. B* **60**, 1227–1237 (1999).  
Nonlinear spin dynamics in ferromagnets with electron–nuclear coupling.
229. V.I. Yukalov and E.P. Yukalova, *Ann. Phys. (N.Y.)* **277**, 219–254 (1999).  
Self-similar perturbation theory.
230. V.I. Yukalov, *Physica A* **262**, 467–482 (1999).  
Interplay between mesoscopic and microscopic fluctuations in ferromagnets.
231. V.I. Yukalov and S. Gluzman, *Physica A* **273**, 401–415 (1999).  
Self-similar crossover in statistical physics.
232. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **9**, 531–541 (1999).  
Collimation mechanism for atom lasers.
233. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **9**, 638–644 (1999).  
Transient effect of negative electric current in irradiated semiconductors.
234. V.I. Yukalov and S. Gluzman, *Int. J. Mod. Phys. B* **13**, 1463–1476 (1999).  
Weighted fixed points in self-similar analysis of time series.
235. V.I. Yukalov, M.G. Cottam, and M.R. Singh, *J. Appl. Phys.* **85**, 5627–5629 (1999).  
Nonlinear dynamics of nuclear–electronic spin processes in ferromagnets.
236. V.I. Yukalov, *Opt. Spectrosc.* **87**, 550–554 (1999).  
Coherent optics and localized light.
237. A.J. Coleman and V.I. Yukalov, *Reduced Density Matrices* (Springer, Berlin, 2000).
238. V.I. Yukalov and E.P. Yukalova, *Phys. Part. Nucl.* **31**, 561–602 (2000).  
Cooperative electromagnetic effects.

239. V.I. Yukalov, Phys. Lett. A **278**, 30–34 (2000).  
Turbulent photon filamentation in resonant media.
240. V.I. Yukalov, Mod. Phys. Lett. B **14**, 791–800 (2000).  
Self-similar extrapolation of asymptotic series and forecasting for time series.
241. V.I. Yukalov, Proc. SPIE **4061**, 2–14 (2000).  
Collective phenomena in the interaction of radiation with matter.
242. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, Laser Phys. **10**, 26–30 (2000).  
Excited coherent modes of ultracold trapped atoms.
243. V.I. Yukalov and E.P. Yukalova, Laser Phys. **10**, 64–70 (2000).  
Formation of directed beams from atom lasers.
244. V.I. Yukalov and E.P. Yukalova, Phys. Status Solidi A **177**, 267–276 (2000).  
Ion-beam induced current in high-resistance materials.
245. V.I. Yukalov, Quantum Electron. **30**, 911–916 (2000).  
Collective emission of atoms in photonic bandgap materials.
246. V.I. Yukalov, Bull. Russ. Acad. Sci. Phys. **64**, 1511–1513 (2000).  
Coherent deconfinement of localized light.
247. V.I. Yukalov, Bull. Russ. Acad. Sci. Phys. **64**, 1617–1621 (2000).  
Stochastic quantization in optics.
248. V.I. Yukalov and E.P. Yukalova, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin and V.V. Burov (JINR, Dubna, 2000), Vol. 2, pp. 238–245.  
Equation of state in quantum chromodynamics.
249. V.S. Bagnato, E.P. Yukalova, and V.I. Yukalov, in *Bose-Einstein Condensates and Atom Lasers*, edited by S. Martellucci, A. Chester, A. Aspect, and M. Inguscio (Kluwer, New York, 2000), pp. 201–212.  
Non-ground-state Bose-Einstein condensation.
250. V.I. Yukalov, Phys. Lett. A **284**, 91–98 (2001).  
Principle of pattern selection for nonequilibrium phenomena.
251. V.I. Yukalov, Physica A **291**, 255–274 (2001).  
Probabilistic approach to pattern selection.
252. V.I. Yukalov, Eur. Phys. J. B **20**, 609–617 (2001).  
Self-similar approach to market analysis.

253. V.I. Yukalov, *Eur. Phys. J. D* **13**, 83–91 (2001).  
Coherent effects under suppressed spontaneous emission.
254. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Laser Phys.* **11**, 455–459 (2001).  
Nonground state condensates of ultracold trapped atoms.
255. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **11**, 546–554 (2001).  
Enhancement of nuclear spin superradiance by electron resonator.
256. P.W. Courteille, V.S. Bagnato, and V.I. Yukalov, *Laser Phys.* **11**, 659–800 (2001).  
Bose-Einstein condensation of trapped atomic gases.
257. V.I. Yukalov and E.P. Yukalova, *Int. J. Mod. Phys. B* **15**, 2433–2453 (2001).  
Possibility of turbulent crystals.
258. V.I. Yukalov, *Opt. Spectrosc.* **91**, 515–518 (2001).  
Photon filamentation in resonant media with high Fresnel numbers.
259. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Proc. SPIE* **4243**, 150–155 (2001).  
Dynamic critical phenomena in trapped Bose gases.
260. V.I. Yukalov, *Proc. SPIE* **4605**, 237–244 (2001).  
Optical turbulent structures.
261. V.I. Yukalov and E.P. Yukalova, in *Symmetry and Structural Properties of Condensed Matter*, edited by T. Lulek, B. Lulek, and A. Wal (World Scientific, Singapore, 2001), pp. 383–393.  
Crystal symmetry and time scales.
262. V.I. Yukalov and E.P. Yukalova, in *Relativistic Nuclear Physics and Quantum Chromodynamics*, edited by A.M. Baldin, V.V. Burov, and A.I. Malakhov (JINR, Dubna, 2001), Vol. 1, pp. 109–126.  
Do we understand what is deconfinement?
263. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Laser Phys.* **12**, 231–239 (2002).  
Critical effects in population dynamics of trapped Bose-Einstein condensates.
264. V.I. Yukalov, *Laser Phys.* **12**, 1089–1103 (2002).  
Superradiant operation of spin masers.
265. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Laser Phys.* **12**, 1325–1331 (2002).  
Spectrum of coherent modes for trapped Bose gas.
266. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **297**, 412–422 (2002).  
Magnetic semiconfinement of neutral atoms.

267. V.I. Yukalov, *Physica A* **310**, 413–434 (2002).  
Matrix order indices in statistical mechanics.
268. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. Lett.* **88**, 257601-4 (2002).  
Processing information by punctuated spin superradiance.
269. V.I. Yukalov, *Phys. Rev. E* **65**, 056118–11 (2002).  
Stochastic instability of quasi-isolated systems.
270. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Phys. Rev. A* **66**, 025602–4 (2002).  
Self-similar approximations for a trapped Bose-Einstein condensate.
271. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Phys. Rev. A* **66**, 043602–19 (2002).  
Nonlinear coherent modes of trapped Bose-Einstein condensates.
272. A. Moura and V.I. Yukalov, *Int. J. Fract.* **118**, 63–68 (2002).  
Self-similar extrapolation for the law of acoustic emission before failure of heterogeneous materials.
273. V.I. Yukalov and E.P. Yukalova, *Chaos Solit. Fract.* **14**, 839–861 (2002).  
Self-similar structures and fractal transforms in approximation theory.
274. V.I. Yukalov and E.P. Yukalova, *J. Phys. A* **35**, 8603–8613 (2002).  
Topological coherent modes for nonlinear Schrödinger equation.
275. E.P. Yukalova and V.I. Yukalov, *J. Comput. Meth. Sci. Eng.* **2**, 287-291 (2002).  
Numerical modeling of transport processes in semiconductors.
276. V.V. Serov, V.L. Derbov, S.I. Vinitzky, and V.I. Yukalov, *Proc. SPIE* **4706**, 124–129 (2002).  
Nonground stationary states of Bose condensate of trapped neutral atoms.
277. V.I. Yukalov, *Proc. SPIE* **4706**, 130–140 (2002).  
Interplay between quantum and coherent effects in optics.
278. V.I. Yukalov, in *Encyclopedia of Nuclear Magnetic Resonance*, edited by D.M. Grant and R.K. Harris (Wiley, Chichester, 2002), Vol. 9, pp. 697–711.  
Nuclear spin superradiance.
279. V.I. Yukalov, *Phys. Lett. A* **308**, 313–318 (2003).  
Irreversibility of time for quasi-isolated systems.
280. V.I. Yukalov, *Physica A* **320**, 149–168 (2003).  
Expansion exponents for nonequilibrium systems.
281. V.I. Yukalov, S. Gluzman, and D. Sornette, *Physica A* **328**, 409–438 (2003).  
Summation of power series by self-similar factor approximants.

282. V.I. Yukalov, Phys. Rev. Lett. **90**, 167905–4 (2003).  
Entanglement measure for composite systems.
283. S. Gluzman, V.I. Yukalov, and D. Sornette, Phys. Rev. E **67**, 026109–13 (2003).  
Self-similar factor approximants.
284. V.I. Yukalov, Phys. Rev. A **68**, 022109–14 (2003).  
Quantifying entanglement production of quantum operations.
285. V.I. Yukalov, Mod. Phys. Lett. B **17**, 95–103 (2003).  
Evolutional entanglement in nonequilibrium processes.
286. S. Gluzman, D. Sornette, and V.I. Yukalov, Int. J. Mod. Phys. C **14**, 509–527 (2003).  
Reconstructing generalized exponential laws by self-similar exponential approximants.
287. V.I. Yukalov, Int. J. Mod. Phys. B **17**, 2333–2358 (2003).  
Mesoscopic phase fluctuations: General phenomenon in condensed matter.
288. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, Laser Phys. **13**, 551–561 (2003).  
Resonant Bose condensate: Analog of resonant atom.
289. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, Laser Phys. **13**, 861–870 (2003).  
Coherent resonance in trapped Bose condensates.
290. V.I. Yukalov and E.P. Yukalova, Phys. Part. Nucl. **35**, 348–382 (2004).  
Coherent nuclear radiation.
291. V.I. Yukalov and E.P. Yukalova, Laser Phys. Lett. **1**, 50–53 (2004).  
Stratification of moving multicomponent Bose-Einstein condensates.
292. V.I. Yukalov, Laser Phys. Lett. **1**, 435–461 (2004).  
Principal problems in Bose-Einstein condensation of dilute gases.
293. V.I. Yukalov, K.P. Marzlin, and E.P. Yukalova, Laser Phys. **14**, 565–570 (2004).  
Multiple coupling of topological coherent modes of trapped atoms.
294. V.I. Yukalov, Laser Phys. **14**, 1403–1414 (2004).  
Entanglement production under collective radiation.
295. V.I. Yukalov, A. Moura, and H. Nechad, J. Mech. Phys. Solids **52**, 453–465 (2004).  
Self-similar law of energy release before materials fracture.
296. V.I. Yukalov, K.P. Marzlin, and E.P. Yukalova, Phys. Rev. A **69**, 023620–16 (2004).  
Resonant generation of topological modes in trapped Bose-Einstein gases.
297. V.I. Yukalov and E.P. Yukalova, Phys. Rev. A **70**, 053828–11 (2004).  
Atomic squeezing under collective emission.

298. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. B* **70**, 224516–12 (2004).  
Mesoscopic phase separation in anisotropic superconductors.
299. V.I. Yukalov and S. Gluzman, *Int. J. Mod. Phys. B* **18**, 3027–3046 (2004).  
Extrapolation of power series by self-similar factor and root approximants.
300. V.I. Yukalov, *Laser Phys. Lett.* **2**, 156–161 (2005).  
Number-of-particle fluctuations in systems with Bose-Einstein condensate.
301. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **2**, 302–308 (2005).  
Absence of spin superradiance in resonatorless magnets.
302. V.I. Yukalov, *Laser Phys. Lett.* **2**, 356–361 (2005).  
Spin superradiance versus atomic superradiance.
303. V.I. Yukalov and M.D. Girardeau, *Laser Phys. Lett.* **2**, 375–382 (2005).  
Fermi-Bose mapping for one-dimensional Bose gases.
304. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **2**, 506–511 (2005).  
Normal and anomalous averages for systems with Bose-Einstein condensate.
305. V.I. Yukalov, *Phys. Lett. A* **340**, 369–374 (2005).  
No anomalous fluctuations exist in stable equilibrium systems.
306. V.I. Yukalov and E.P. Yukalova, *Eur. Phys. Lett.* **70**, 306–312 (2005).  
Coherent radiation by molecular magnets.
307. K.P. Marzlin and V.I. Yukalov, *Eur. Phys. J. D* **33**, 253–263 (2005).  
Dynamics of Bose-Einstein condensates in one-dimensional optical lattices in the presence of transverse resonances.
308. V.I. Yukalov, *Phys. Rev. B* **71**, 184432–15 (2005).  
Nonlinear spin relaxation in strongly nonequilibrium magnets.
309. H. Kleinert and V.I. Yukalov, *Phys. Rev. E* **71**, 026131–11 (2005).  
Self-similar variational perturbation theory for critical exponents.
310. V.I. Yukalov, *Phys. Rev. E* **72**, 066119–18 (2005).  
Fluctuations of composite observables and stability of statistical systems.
311. V.I. Yukalov, *Phys. Rev. A* **72**, 033608–6 (2005).  
Modified semiclassical approximation for trapped Bose gases.
312. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **72**, 063611–10 (2005).  
Optimal trap shape for a Bose gas with attractive interactions.

313. V.I. Yukalov and E.P. Yukalova, *J. Low Temp. Phys.* **138**, 657–662 (2005).  
Dynamics of nonground-state Bose-Einstein condensates.
314. V.I. Yukalov, K.P. Marzlin, E.P. Yukalova, and V.S. Bagnato, *AIP Conf. Proc.* **770**, 218–227 (2005).  
Topological coherent modes in trapped Bose gas.
315. V.I. Yukalov, in *Encyclopedia of Nonlinear Science*, edited by A. Scott (Routledge, New York, 2005), pp. 69–71.  
Bose-Einstein condensation.
316. V.I. Yukalov, in *Encyclopedia of Nonlinear Science*, edited by A. Scott (Routledge, New York, 2005), pp. 144–147.  
Coherence phenomena.
317. V.I. Yukalov, in *Trends in Spatiotemporal Dynamics in Lasers*, edited by O.G. Calderon and J.M. Guerra (Research Signpost, Kerala, 2005), pp. 193–224.  
Turbulent filamentation in lasers with high Fresnel numbers.
318. V.I. Yukalov, *Laser Phys. Lett.* **3**, 106–111 (2006).  
Kinetic energy of Bose systems and variation of statistical averages.
319. V.I. Yukalov, *Laser Phys. Lett.* **3**, 406–414 (2006).  
Nonequilibrium Bose systems and nonground-state Bose-Einstein condensates.
320. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **16**, 354–359 (2006).  
Entanglement production with multimode Bose-Einstein condensates in optical lattices.
321. V.I. Yukalov, *Laser Phys.* **16**, 511–525 (2006).  
Nonequivalent operator representations for Bose-condensed systems.
322. V.I. Yukalov, *Phys. Lett. A* **359**, 712–717 (2006).  
Self-consistent theory of Bose-condensed systems.
323. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **73**, 022335–10 (2006).  
Regulating entanglement production in multitrapped Bose-Einstein condensates.
324. V.I. Yukalov and H. Kleinert, *Phys. Rev. A* **73**, 063612–9 (2006).  
Gapless Hartree-Fock-Bogolubov approximation for Bose gases.
325. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **74**, 063623–9 (2006).  
Bose-Einstein-condensed gases with arbitrary strong interactions.
326. S. Gluzman and V.I. Yukalov, *J. Math. Chem.* **39**, 47–56 (2006).  
Self-similar power transforms in extrapolation problems.

327. V.I. Yukalov, *Laser Phys. Lett.* **4**, 632–647 (2007).  
Bose-Einstein condensation and gauge symmetry breaking.
328. E.R. Ramos, L. Sanz, V.I. Yukalov, and V.S. Bagnato, *Phys. Lett. A* **365**, 126–130 (2007).  
Ramsey fringes formation during excitation of topological modes in a Bose-Einstein condensate.
329. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **368**, 341–347 (2007).  
Method of self-similar factor approximants.
330. V.I. Yukalov, *Int. J. Mod. Phys. B* **21**, 69–86 (2007).  
Representative ensembles in statistical mechanics.
331. V.I. Yukalov and E.P. Yukalova, *Eur. Phys. J. B* **55**, 93–99 (2007).  
Calculation of critical exponents by self-similar factor approximants.
332. V.I. Yukalov and R. Graham, *Phys. Rev. A* **75**, 023619-16 (2007).  
Bose-Einstein-condensed systems in random potentials.
333. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **76**, 013602-9 (2007).  
Condensate and superfluid fractions for varying interactions and temperature.
334. E.R. Ramos, L. Sanz, V.I. Yukalov, and V.S. Bagnato, *Phys. Rev. A* **76**, 033608-7 (2007).  
Order parameter for the dynamical phase transition in Bose-Einstein condensates with topological modes.
335. V.I. Yukalov, E.P. Yukalova, K.V. Krutitsky, and R. Graham, *Phys. Rev. A* **76**, 053623-11 (2007).  
Bose-Einstein-condensed gases in arbitrarily strong random potentials.
336. E.R. Ramos, L. Sanz, V.I. Yukalov, and V.S. Bagnato, *Nucl. Phys. A* **790**, 776–779 (2007).  
Ramsey-like fringes observation during excitation of coherent modes in a Bose-Einstein condensate.
337. V.I. Yukalov, *J. Phys. Stud.* **11**, 55–62 (2007).  
Structure factor of Bose-condensed systems.
338. V.I. Yukalov and D. Sornette, *Phys. Lett. A* **372**, 6867–6871 (2008).  
Quantum decision theory as quantum theory of measurement.
339. V.I. Yukalov, V.K. Henner, P.V. Kharebov, and E.P. Yukalova, *Laser Phys. Lett.* **5**, 887–893 (2008).  
Coherent spin radiation by magnetic nanomolecules and nanoclusters.



340. V.I. Yukalov, *Ann. Phys. (N.Y.)* **323**, 461–499 (2008).  
Representative statistical ensembles for Bose systems with broken gauge symmetry.
341. E.P. Yukalova, V.I. Yukalov, and S. Gluzman, *Ann. Phys. (N.Y.)* **323**, 3074–3090 (2008).  
Self-similar factor approximants for evolution equations and boundary-value problems.
342. E.R. Ramos, E.A. Henn, J.A. Seman, M.A. Caracanhas, K.M. Magalhaes, K. Helmer-son, V.I. Yukalov, and V.S. Bagnato, *Phys. Rev. A* **78**, 063412–6 (2008).  
Generation of nonground-state Bose-Einstein condensates by modulating atomic inter-  
actions.
343. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **78**, 063610–10 (2008).  
Cold atoms in double-well optical lattices.
344. V.I. Yukalov, V.K. Henner, and P.V. Kharebov, *Phys. Rev. B* **77**, 134427-8 (2008).  
Coherent spin relaxation in molecular magnets.
345. V.I. Yukalov and E.P. Yukalova, *J. Phys. Conf. Ser.* **104**, 012003-11 (2008).  
Entanglement production with Bose atoms in optical lattices.
346. V.K. Henner, V.I. Yukalov, P.V. Kharebov, and E.P. Yukalova, *J. Phys. Conf. Ser.* **129**, 012015-5 (2008).  
Collective spin dynamics in magnetic nanomaterials.
347. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **6**, 235–241 (2009).  
Nonlinear dynamics of ultracold gases in double-well lattices.
348. V.I. Yukalov and V.S. Bagnato, *Laser Phys. Lett.* **6**, 399–403 (2009).  
Generation of nonground-state condensates and adiabatic paradox.
349. V.I. Yukalov, *Laser Phys. Lett.* **6**, 688–695 (2009).  
Particle fluctuations in nonuniform and trapped Bose gases.
350. V.I. Yukalov and D. Sornette, *Laser Phys. Lett.* **6**, 833–839 (2009).  
Scheme of thinking quantum systems.
351. V.I. Yukalov, *Laser Phys.* **19**, 1–110 (2009).  
Cold bosons in optical lattices.
352. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Laser Phys.* **19**, 686–699 (2009).  
Bose systems in spatially random or time-varying potentials.
353. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **373**, 1301–1304 (2009).  
Regulating atomic imbalance in double-well lattices.

354. V.I. Yukalov, D. Sornette, and E.P. Yukalova, *J. Econ. Behav. Org.* **70**, 206–230 (2009).  
Nonlinear dynamical model of regime switching between conventions and business cycles.
355. V.I. Yukalov, *Phys. Rev. A* **79**, 052117–7 (2009).  
Adiabatic theorems for linear and nonlinear Hamiltonians.
356. V.I. Yukalov, D. Sornette, E.P. Yukalova, J.Y. Henry, and J.P. Cobb, *Concepts Phys.* **6**, 179–194 (2009).  
Stable states of biological organisms.
357. D. Sornette, V.I. Yukalov, E.P. Yukalova, J.Y. Henry, D. Schwab, and J.P. Cobb, *J. Biol. Syst.* **17**, 225–267 (2009).  
Endogenous versus exogenous origins of diseases.
358. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Physica D* **238**, 1752–1767 (2009).  
Punctuated evolution due to delayed carrying capacity.
359. V.K. Henner, P.V. Kharebov, and V.I. Yukalov, *Solid State Phen.* **152**, 249–252 (2009).  
Superradiation from molecular nanomagnets.
360. V.I. Yukalov and D. Sornette, *Eur. Phys. J. B* **71**, 533–548 (2009).  
Physics of risk and uncertainty in quantum decision making.
361. V.I. Yukalov and S. Gluzman, *Mol. Phys.* **107**, 2237–2244 (2009).  
Optimization of self-similar factor approximants.
362. V.I. Yukalov and D. Sornette, *Entropy* **11**, 1073–1120 (2009).  
Processing information in quantum decision theory.
363. V.I. Yukalov, *Symmetry* **2**, 40–68 (2010).  
Systems with symmetry breaking and restoration.
364. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. B* **81**, 075308–14 (2010).  
Dynamics of quantum dot superradiance.
365. V.I. Yukalov, *Laser Phys. Lett.* **7**, 467–476 (2010).  
Turbulent superfluid as continuous vortex mixture.
366. V.I. Yukalov, *Laser Phys. Lett.* **7**, 831–836 (2010).  
Fluctuation indices for atomic systems with Bose-Einstein condensate.
367. V.I. Yukalov, E.P. Yukalova, and S. Gluzman, *J. Math. Chem.* **47**, 959–983 (2010).  
Extrapolation and interpolation of asymptotic series by self-similar approximants.

368. S. Gluzman and V.I. Yukalov, *J. Math. Chem.* **48**, 883–913 (2010).  
Self-similar extrapolation from weak to strong coupling.
369. V.I. Yukalov and D. Sornette, *Phys. At. Nucl.* **73**, 559–562 (2010).  
Entanglement production in quantum decision making.
370. V.I. Yukalov and D. Sornette, *Adv. Compl. Syst.* **13**, 659–698 (2010).  
Mathematical structure of quantum decision theory.
371. V.I. Yukalov, *Phys. Part. Nucl.* **42**, 460–513 (2011).  
Basics of Bose-Einstein condensation.
372. V.I. Yukalov, *Phys. Lett. A* **375**, 2797–2801 (2011).  
Nonequilibrium representative ensembles for isolated quantum systems.
373. R.F. Shiozaki, G.D. Telles, V.I. Yukalov, and V.S. Bagnato, *Laser Phys. Lett.* **8**, 393–397 (2011).  
Transition to quantum turbulence in finite-size superfluids.
374. V.I. Yukalov, *Laser Phys. Lett.* **8**, 485–507 (2011).  
Equilibration and thermalization in finite quantum systems.
375. J.A. Seman, E.A. Henn, R.F. Shiozaki, G. Roati, F.J. Poveda-Cuevas, K.M. Magalhães, V.I. Yukalov, M. Tsubota, M. Kobayashi, K. Kasamatsu, and V.S. Bagnato, *Laser Phys. Lett.* **8**, 691–696 (2011).  
Route to turbulence in a trapped Bose-Einstein condensate.
376. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **8**, 804–813 (2011).  
Possibility of superradiance by magnetic nanoclusters.
377. V.I. Yukalov, A. Rakhimov, and S. Mardonov, *Laser Phys.* **21**, 264–270 (2011).  
Quasi-equilibrium mixture of itinerant and localized Bose atoms in optical lattice.
378. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **21**, 1448–1458 (2011).  
Mesoscopic disorder in double-well optical lattices.
379. V.I. Yukalov and D. Sornette, *Theory Decis.* **70**, 283–328 (2011).  
Decision theory with prospect interference and entanglement.
380. V.I. Yukalov, *Phys. Lett. A* **376**, 550–554 (2012).  
Equilibration of quasi-isolated quantum systems.
381. S. Gluzman and V.I. Yukalov, *Phys. Lett. A* **377**, 124–128 (2012).  
Self-similar continued root approximants.
382. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Physica D* **241**, 1270–1289 (2012).  
Modeling symbiosis by interactions through species carrying capacities.

383. V.I. Yukalov, *Ann. Phys. (N.Y.)* **327**, 253–263 (2012).  
Decoherence and equilibration under nondestructive measurements.
384. V.I. Yukalov and E.P. Yukalova, *J. Appl. Phys.* **111**, 023911–9 (2012).  
Fast magnetization reversal of nanoclusters in resonator.
385. V.I. Yukalov and D. Sornette, *Eur. Phys. J. Spec. Top.* **205**, 53–64 (2012).  
Statistical outliers and dragon-kings as Bose-condensed droplets.
386. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Eur. Phys. J. Spec. Top.* **205**, 313–354 (2012).  
Extreme events in population dynamics with functional carrying capacity.
387. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **22**, 1070–1080 (2012).  
Double-well optical lattices with atomic vibrations and mesoscopic disorder.
388. V.I. Yukalov, *Laser Phys.* **22**, 1145–1168 (2012).  
Difference in Bose-Einstein condensation of conserved and unconserved particles.
389. V.I. Yukalov and E.P. Yukalova, *J. Phys. Chem. B* **116**, 8435–8448 (2012).  
Statistics of multiscale fluctuations in macromolecular systems.
390. V.I. Yukalov and E.P. Yukalova, *J. Phys. Conf. Ser.* **393**, 012004–9 (2012).  
Coherent spin dynamics of nanomolecules and magnetic nanoclusters.
391. V.I. Yukalov and E.P. Yukalova, *Proc. Sci. (ISHEPP)* **2012**, 046–14 (2012).  
Models of mixed hadron-quark-gluon matter.
392. J.L. Birman, R.G. Nazmitdinov, and V.I. Yukalov, *Phys. Rep.* **526**, 1–91 (2013).  
Effects of symmetry breaking in finite quantum systems.
393. V.I. Yukalov, *Laser Phys.* **23**, 062001–41 (2013).  
Theory of cold atoms: Basics of quantum statistics.
394. V.I. Yukalov and D. Sornette, *Laser Phys.* **23**, 105502–14 (2013).  
Quantum probabilities of composite events in quantum measurements with multimode states.
395. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Laser Phys. Lett.* **10**, 115502–9 (2013).  
Mode interference in quantum joint probabilities for multimode Bose-condensed systems.
396. V.S. Bagnato and V.I. Yukalov, *Prog. Opt. Sci. Photon.* **1**, 377–401 (2013).  
From coherent modes to turbulence and granulation of trapped gases.
397. V.I. Yukalov and E.P. Yukalova, *Comput. Theor. Chem.* **1003**, 37–43 (2013).  
Order indices of density matrices for finite systems.

398. P.V. Kharebov, V.K. Henner, and V.I. Yukalov, *J. Appl. Phys.* **113**, 043902–8 (2013).  
Optimal conditions for magnetization reversal of nanocluster assemblies with random properties.
399. V.I. Yukalov, *Condens. Matter Phys.* **16**, 23002–16 (2013).  
Self-consistent approach for Bose-condensed atoms in optical lattices.
400. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *PLOS One* **8**, 83225–15 (2013).  
Utility rate equations of group population dynamics in biological and social systems.
401. V.I. Yukalov and D. Sornette, *Top. Cogn. Sci.* **6**, 79–90 (2014).  
Conditions for quantum interference in cognitive sciences.
402. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Int. J. Bifur. Chaos* **24**, 1450021–23 (2014).  
Population dynamics with nonlinear delayed carrying capacity.
403. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Int. J. Bifur. Chaos* **24**, 1450117–29 (2014).  
New approach to modeling symbiosis in biological and social systems.
404. V.I. Yukalov and E.P. Yukalova, *J. Supercond. Nov. Magn.* **27**, 919–924 (2014).  
Statistical theory of materials with nanoscale phase separation.
405. V.I. Yukalov and E.P. Yukalova, *AIP Conf. Proc.* **1590**, 71–78 (2014).  
Coherent radiation by quantum dots and magnetic nanoclusters.
406. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *J. Phys. Conf. Ser.* **497**, 012034–11 (2014).  
Quantum probabilities and entanglement for multimode quantum systems.
407. V.I. Yukalov and E.P. Yukalova, *J. Phys. B* **47**, 095302–6 (2014).  
Bose-Einstein condensation in self-consistent mean-field theory.
408. V.I. Yukalov and D. Sornette, *Adv. Compl. Syst.* **17**, 1450016–30 (2014).  
Self-organization in complex systems as decision making.
409. V.I. Yukalov and D. Sornette, *Springer Proc. Phys.* **150**, 37–53 (2014).  
How brains make decisions.
410. V.I. Yukalov, A.N. Novikov, and V.S. Bagnato, *Laser Phys. Lett.* **11**, 095501–7 (2014).  
Formation of granular structures in trapped Bose-Einstein condensates under oscillatory excitations.
411. V.I. Yukalov, *Laser Phys.* **24**, 094015–18 (2014).  
Coherent dynamics of radiating atomic systems in pseudospin representation.

412. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **90**, 013627–7 (2014).  
Ground state of a homogeneous Bose gas of hard spheres.
413. V.I. Yukalov and D. Sornette, *IEEE Trans. Syst. Man Cybern. Syst.* **44**, 1155–1168 (2014).  
Manipulating decision making of typical agents.
414. S. Gluzman and V.I. Yukalov, *Eur. J. Appl. Math.* **25**, 595–628 (2014).  
Extrapolation of perturbation-theory expansions by self-similar approximants.
415. V.I. Yukalov and E.P. Yukalova, *Proc. Sci. (ISHEPP)* **2014**, 080–17 (2014).  
Phase transition in multicomponent field theory at finite temperature.
416. V.I. Yukalov and E.P. Yukalova, *Rom. Rep. Phys.* **67**, 159–185 (2015).  
Statistical models of nonequilibrium Bose gases.
417. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **25**, 035501–7 (2015).  
Optical lattice with heterogeneous atomic density.
418. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **25**, 085801–12 (2015).  
Coherent radiation by magnets with exchange interactions.
419. V.I. Yukalov and D. Sornette, *Lect. Notes Comput. Sci.* **8951**, 146–161 (2015).  
Positive operator-valued measures in quantum decision theory.
420. V.I. Yukalov and K. Ziegler, *Phys. Rev. A* **91**, 023628–12 (2015).  
Instability of insulating states in optical lattices due to collective phonon excitations.
421. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. A* **92**, 052121–8 (2015).  
Evolutional entanglement production.
422. V.I. Yukalov and S. Gluzman, *Phys. Rev. D* **91**, 125023–9 (2015).  
Self-similar interpolation in high-energy physics.
423. V.I. Yukalov, V.K. Henner, and E.P. Yukalova, *J. Phys. Conf. Ser.* **594**, 012006–8 (2015).  
Spin superradiance by magnetic nanomolecules and nanoclusters.
424. A.N. Novikov, V.I. Yukalov, and V.S. Bagnato, *J. Phys. Conf. Ser.* **594**, 012040–7 (2015).  
Numerical simulation of nonequilibrium states in a trapped Bose-Einstein condensate.
425. V.I. Yukalov and D. Sornette, *J. Phys. Conf. Ser.* **594**, 012048–9 (2015).  
Quantum theory of measurements as quantum decision theory.
426. V.I. Yukalov, A.N. Novikov, and V.S. Bagnato, *Phys. Lett. A* **379**, 1366–1371 (2015).  
Realization of inverse Kibble-Zurek scenario with trapped Bose gases.

427. V.I. Yukalov, A.N. Novikov, and V.S. Bagnato, *J. Low Temp. Phys.* **180**, 53–67 (2015).  
Strongly nonequilibrium Bose-condensed atomic systems.
428. S. Gluzman and V.I. Yukalov, *Mathematics* **3**, 510–526 (2015).  
Effective summation and interpolation of series by self-similar root approximants.
429. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Eur. Phys. J. B* **88**, 179–185 (2015).  
Dynamical system theory of periodically collapsing bubbles.
430. V.I. Yukalov and D. Sornette, *Front. Psychol.* **6**, 1538–7 (2015).  
Preference reversal in quantum decision theory.
431. V.I. Yukalov and D. Sornette, *Int. J. Inf. Technol. Decis. Mak.* **14**, 1129–1166 (2015).  
Role of information in decision making of social agents.
432. V.I. Yukalov, V.K. Henner, and T.S. Belozerova, *Laser Phys. Lett.* **13**, 016001–7 (2016).  
Generation of coherent radiation by magnetization reversal in graphene.
433. V.I. Yukalov and E.P. Yukalova, *Laser Phys.* **26**, 045501–14 (2016).  
Bose-condensed atomic systems with nonlocal interaction potentials.
434. V.I. Yukalov, *Laser Phys.* **26**, 062001–74 (2016).  
Theory of cold atoms: Bose-Einstein statistics.
435. V.I. Yukalov and D. Sornette, *Philos. Trans. Roy. Soc. A* **374**, 20150100–15 (2016).  
Quantum probability and quantum decision making.
436. V.I. Yukalov, V.K. Henner, T.S. Belozerova, and E.P. Yukalova, *J. Supercond. Nov. Magn.* **29**, 721–726 (2016).  
Spintronics with magnetic nanomolecules and graphene flakes.
437. V.I. Yukalov and E.P. Yukalova, *J. Supercond. Nov. Magn.* **29**, 3119–3126 (2016).  
Nanoscale phase separation in ferroelectric materials.
438. V.I. Yukalov and K. Ziegler, *J. Phys. Conf. Ser.* **691**, 012014–9 (2016).  
Phonon instability of insulating states in optical lattices.
439. V.I. Yukalov, A.N. Novikov, E.P. Yukalova, and V.S. Bagnato, *J. Phys. Conf. Ser.* **691**, 012019–10 (2016).  
Vortex rings and vortex ring solitons in shaken Bose-Einstein condensate.
440. D. Cohen, V.I. Yukalov, and K. Ziegler, *Phys. Rev. A* **93**, 042101–12 (2016).  
Hilbert-space localization in closed quantum systems.

441. V.I. Yukalov, *Phys. Rev. E* **94**, 012106–14 (2016).  
Statistical systems with nonintegrable interaction potentials.
442. V.I. Yukalov and D. Sornette, *Front. Phys.* **4**, 12–9 (2016).  
Inconclusive quantum measurements and decisions under uncertainty.
443. S. Gluzman and V.I. Yukalov, *Eur. Phys. J. Plus* **131**, 340–21 (2016).  
Self-similarly corrected Padé approximants for the indeterminate problem.
444. M. Favre, A. Wittwer, H.R. Heinemann, V.I. Yukalov, and D. Sornette, *PLOS One* **11**, 0168045–29 (2016).  
Quantum decision theory in simple risky choices.
445. S. Gluzman and V.I. Yukalov, *J. Math. Chem.* **55**, 607–622 (2017).  
Additive self-similar approximants.
446. V.I. Yukalov and D. Sornette, *Entropy* **19**, 112–30 (2017).  
Quantum probabilities as behavioral probabilities.
447. V.I. Yukalov and E.P. Yukalova, *Eur. Phys. J. Web. Conf.* **138**, 03011–10 (2017).  
Critical temperature in weakly interacting multicomponent field theory.
448. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Int. J. Bifur. Chaos* **27**, 1730013–19 (2017).  
Dynamic transition in symbiotic evolution induced by growth rate variation.
449. V.I. Yukalov and E.P. Yukalova, *J. Phys. Conf. Ser.* **826**, 012021–10 (2017).  
Entanglement production by evolution operator.
450. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **14**, 073001–13 (2017).  
Bose-Einstein condensation temperature of weakly interacting atoms.
451. S. Gluzman and V.I. Yukalov, *Eur. Phys. J. Plus* **132**, 535–15 (2017).  
Critical indices from self-similar root approximants.
452. V.I. Yukalov, *Laser Phys.* **28**, 053001–41 (2018).  
Dipolar and spinor bosonic systems.
453. V.I. Yukalov, A.N. Novikov, and V.S. Bagnato, *Laser Phys. Lett.* **15**, 065501–8 (2018).  
Characterization of nonequilibrium states of trapped Bose-Einstein condensates.
454. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Physica A* **492**, 747–766 (2018).  
Information processing by networks of quantum decision makers.
455. V.I. Yukalov and E.P. Yukalova, *Condens. Matter* **3**, 5–14 (2018).  
Effects of symmetry breaking in resonance phenomena.



456. V.I. Yukalov and D. Sornette, *IEEE Trans. Syst. Man Cybern. Syst.* **48**, 366–381 (2018).  
Quantitative predictions in quantum decision theory.
457. V.I. Yukalov and E.P. Yukalova, *J. Phys. B* **51**, 085301–9 (2018).  
Local condensate depletion at trap center under strong interactions.
458. V.I. Yukalov and E.P. Yukalova, *J. Magn. Magn. Mater.* **465**, 450–456 (2018).  
Influence of quadratic Zeeman effect on spin waves in dipolar lattices.
459. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. B* **98**, 144438–11 (2018).  
Regulating spin reversal in dipolar systems by the quadratic Zeeman effect.
460. V.I. Yukalov and E.P. Yukalova, *Eur. Phys. J. D* **72**, 190–12 (2018).  
Spin dynamics in lattices of spinor atoms with quadratic Zeeman effect.
461. V.I. Yukalov, *Phys. Part. Nucl.* **50**, 141–209 (2019).  
Interplay between approximation theory and renormalization group.
462. V.I. Yukalov and E.P. Yukalova, *Eur. Phys. J. Web Conf.* **204**, 02003–12 (2019).  
Describing phase transitions in field theory by self-similar approximants.
463. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **16**, 065501–6 (2019).  
Mid-range order in trapped quasi-condensates of bosonic atoms.
464. V.I. Yukalov, E.P. Yukalova, and V.A. Yurovsky, *Laser Phys.* **29**, 065502–19 (2019).  
Entanglement production by statistical operators.
465. V.I. Yukalov, *Laser Phys.* **29**, 124007–9 (2019).  
Superradiance by ferroelectrics in cavity resonators.
466. V.I. Yukalov, *Symmetry* **11**, 603–23 (2019).  
Particle fluctuations in mesoscopic Bose systems.
467. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. Res.* **1**, 033136–10 (2019).  
Ultrafast polarization switching in ferroelectrics.
468. S. Gluzman and V.I. Yukalov, *Int. J. Mod. Phys. B* **33**, 1950353–22 (2019).  
Self-similarly corrected Padé approximants for nonlinear equations.
469. V.I. Yukalov, *Physics* **2**, 49–66 (2020).  
Saga of superfluid solids.
470. V.I. Yukalov, *Entropy* **22**, 565–33 (2020).  
Order indices and entanglement production in quantum systems.

471. V.I. Yukalov, *Entropy* **22**, 681–31 (2020).  
Evolutionary processes in quantum decision theory.
472. V.I. Yukalov, *Laser Phys.* **30**, 015501–11 (2020).  
Destiny of optical lattices with strong intersite interactions.
473. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. Res.* **2**, 028002–3 (2020).  
On ultrafast polarization switching in ferroelectrics.
474. V.I. Yukalov, A.N. Novikov, E.P. Yukalova, and V.S. Bagnato, *J. Phys. Conf. Ser.* **1508**, 012006–8 (2020).  
Characteristic quantities for nonequilibrium Bose systems.
475. V.I. Yukalov, *J. Phys. Conf. Ser.* **1508**, 012008–9 (2020).  
From optical lattices to quantum crystals.
476. V.I. Yukalov and E.P. Yukalova, *Phys. Part. Nucl.* **51**, 823–828 (2020).  
Hartree-Fock-Bogolubov method in the theory of Bose-condensed systems.
477. V.I. Yukalov and E.P. Yukalova, *Int. J. Mod. Phys. B* **34**, 2050208–13 (2020).  
Self-similar extrapolation of nonlinear problems from small-variable to large-variable limit.
478. V.I. Yukalov, V.K. Henner, and T.S. Belozerova, in *2D and Quasi-2D Composite and Nanocomposite Materials*, edited by R. McPhedran, S. Gluzman, V. Mityushev, and N. Rylko (Elsevier, Amsterdam, 2020), pp. 45–56.  
Regulating spin dynamics of graphene flakes.
479. V.I. Yukalov and E.P. Yukalova, *Physics* **3**, 829–878 (2021).  
From asymptotic series to self-similar approximants.
480. V.I. Yukalov, *Laser Phys.* **31**, 055201–14 (2021).  
Tossing quantum coins and dice.
481. V.I. Yukalov and E.P. Yukalova, *Phys. Rev. D* **103**, 076019–18 (2021).  
Self-similar extrapolation in quantum field theory.
482. V.I. Yukalov, *J. Math. Econ.* **97**, 102537–12 (2021).  
A resolution of St. Petersburg paradox.
483. V.I. Yukalov and E.P. Yukalova, *Symmetry* **13**, 2379–18 (2021).  
Zeroth-order nucleation transition under nanoscale phase separation.
484. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **425**, 127899–6 (2022).  
Self-similar sequence transformation for critical exponents.

485. V.I. Yukalov and S. Gluzman, *Symmetry* **14**, 332–15 (2022).  
Method of retrieving large-variable exponents.
486. V.I. Yukalov and E.P. Yukalova, *Physica D* **433**, 133188–12 (2022).  
Self-excited waves in complex social systems.
487. V.I. Yukalov, *Soft Comput.* **26**, 2419–2436 (2022).  
Quantification of emotions in decision making.
488. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **19**, 046001–6 (2022).  
Triggering spin reversal in nanomolecules and nanoclusters on demand.
489. V.I. Yukalov, *Laser Phys. Lett.* **19**, 103001–9 (2022).  
Stability of normal quantum-fluid mixtures.
490. V.I. Yukalov and E.P. Yukalova, *Laser Phys. Lett.* **19**, 116001–8 (2022).  
Method of dynamic resonance tuning in spintronics of nanosystems.
491. V.I. Yukalov, E.P. Yukalova, and D. Sornette, *Physica A* **598**, 127365–24 (2022).  
Role of collective information in networks of quantum operating agents.
492. V.I. Yukalov and E.P. Yukalova, *J. Phys. Conf. Ser.* **2249**, 012012–14 (2022).  
Calculating critical temperature and critical exponents by self-similar approximants.
493. A. Rakhimov, T. Abdurakhmonov, Z. Narzikulov, and V.I. Yukalov, *Phys. Rev. A* **106**, 033301–15 (2022).  
Self-consistent theory of a homogeneous binary Bose mixture with strong repulsive interspecies interaction.
494. V.I. Yukalov, *Stud. Syst. Decis. Contr.* **427**, 201–218 (2022).  
Quantum uncertainty in decision theory.
495. V.I. Yukalov and E.P. Yukalova, in *Mechanics and Physics of Structured Media*, edited by I. Andrianov, S. Gluzman, and V. Mityushev (Elsevier, London, 2022), pp. 417–443.  
Statistical theory of structures with extended defects.
496. V.I. Yukalov and E.P. Yukalova, *Phys. Part. Nucl.* **54**, 1–68 (2023).  
Models of mixed matter.
497. V.I. Yukalov, *Physics* **5**, 590–635 (2023).  
Selected topics of social physics: Equilibrium systems.
498. V.I. Yukalov, *Physics* **5**, 704–751 (2023).  
Selected topics of social physics: Nonequilibrium systems.
499. V.I. Yukalov, *Laser Phys.* **33**, 055501–11 (2023).  
Unified theory of quantum crystals and optical lattices with Bose-Einstein condensate.

500. V.I. Yukalov, *Laser Phys.* **33**, 065204–64 (2023).  
Quantum operation of affective artificial intelligence.
501. V.I. Yukalov, E.P. Yukalova, and V.S. Bagnato, *Laser Phys.* **33**, 123001–29 (2023).  
Trapped Bose-Einstein condensates with nonlinear coherent modes.
502. V.I. Yukalov and E.P. Yukalova, *Phys. Lett. A* **457**, 128559–9 (2023).  
Statistical model of a superfluid solid.
503. T. Kovalenko, S. Vincent, V.I. Yukalov, and D. Sornette, *J. Phys. Complex.* **4**, 015009 (2023).  
Calibration of quantum decision theory: Aversion to large losses and predictability of probabilistic choices.
504. V.I. Yukalov and E.P. Yukalova, *Phys. Part. Nucl. Lett.* **20**, 1138–1141 (2023).  
Regulating spin dynamics in magnetic nanomaterials.
505. V.I. Yukalov and E.P. Yukalova, *Algorithms* **16**, 416 (2023).  
Discrete versus continuous algorithms in dynamics of affective decision making.
506. S. Gluzman and V.I. Yukalov, *Axioms* **12**, 1060 (2023).  
Optimized self-similar Borel summation.