

Liste des publications
de Valentin A. ZAGREBNOV
(mars 2010)

Livres et revues :

1. *The Approximating Hamiltonian Method in Statistical Physics*,
Publishing House of Bulgarian Academy of Sciences, Sofia, 1981 (245 pages) (avec
N.N. Bogolyubov (Jr.), J.G. Brankov, A.M. Kurbatov, N.S. Tonchev)
2. *Kirkwood-Salsburg Operator: Spectral and Topological Properties*,
Section 14 (pp. 167-179), in *Mathematical Foundations of Classical Statistical Me-*
chanics, D.Ya. Petrina et al, Gordon and Breach Science Publishers, New York-
London, 1989
ibid in the 2nd edition, Taylor and Francis, London, 2002
3. *Some Classes of Exactly Soluble Models of Problems in Quantum Statistical Me-*
chanics: The Method of the Approximating Hamiltonian,
Russian Math. Surveys **39**, 1-50 (1984) (avec N.N. Bogolyubov (Jr.), J.G. Brankov,
A.M. Kurbatov, N.S. Tonchev)
4. *On Singular Potential Interactions in Quantum Statistical Mechanics*,
Trans. Moscow Math. Soc. **41**, 101-120 (1980)
5. *Quantum Field Theory in Asymptotically Flat Space-Time*,
Soviet J. Particles and Nuclei **9**, 147-208 (1978) (avec I.V. Volovich et V.P. Frolov)
6. *The Bogoliubov model of Weakly Imperfect Bose-Gas*,
Physics Reports **350** (N 5/6), 291-434 (2001) (avec J.-B. Bru)
7. *Topics in the Theory of Gibbs Semigroups*,
Leuven University Press, Leuven, 2003 (200 pages)

Actes des conférences (eds) :

1. *Mathematical Results in Quantum Mechanics*, Birkhauser Verlag, Basel, 1994
(eds avec M. Demuth, P. Exner, H. Neidhardt)
2. *Mathematical Results in Statistical Mechanics*, World Scientific, Singapore, 1999
(eds avec S. Miracle-Solé et J.Ruiz)
3. *Markov Processes and Related Fields* **9**, 517-840 (2003)
Special issue dedicated to Leonid Pastur on the occasion of his 65th birthday
(eds avec Jean-Michel Combes et Jean Ruiz)

Publications :

1. On Phonon-Phonon Interaction in Liquid Helium,
Moscow Univ. Phys. Bull. N 1, 75-81 (1971)
2. Phonon Interaction in Quantum Liquids (^4He),
Moscow Univ. Phys. Bull. N 5, 568-578 (1971)
3. About Elementary Excitation Interaction in Liquid Helium,
Moscow Univ. Phys. Bull. N 6, 717-720 (1972)
4. Spin-Phonon Interaction in the Ising Model,
Theor. Math. Phys. **10**, 127-142 (1972) (avec V.K. Fedyanin)
5. On Spin-Phonon Interaction in the Ising Model,
Soviet Physics (Izvestiya) **36**, 1390-1394 (1972) (avec V.K. Fedyanin)
6. About Field Theory Methods in the Ising Model,
Theor. Math. Phys. **14**, 272-276 (1973) (avec I.V. Volovich, E.A. Dynin, V.P. Frolov)
7. About Field Theory Methods in the Ising Model II (calculation of the
critical index η),
Theor. Math. Phys. **15**, 417-427 (1973) (avec I.V. Volovich, E.A. Dynin, V.P. Frolov)
8. Infrared Branching Method in the Ising Model I (functional representation),
Acta Phys. Polonica **A45**, 603-612 (1974)
9. Infrared Branching Method in the Ising Model II (correlation function in
critical region),
Acta Phys. Polonica **A45**, 613-624 (1974)
10. On Model Spin Hamiltonians Including Long-Range Ferromagnetic Interaction,
Physica **A78**, 183-186 (1974) (avec J. Brankov et A.S. Shumovskii)
11. An Asymptotically Exact Solution of the Generalized Dicke Model,
Theor. Math. Phys. **22**, 13-20 (1975) (avec J.G. Brankov et N.S. Tonchev)
12. An Exactly Solvable Model for Metal-Insulator Phase Transition,
Physica **A79**, 125-127 (1975) (avec J. Brankov et N. Tonchev)
13. A Rigorous Result on Systems Interacting with a Boson Field,
Soviet Phys. Dokl. **20**, 754-755 (1976) (avec J.G. Brankov et N.S. Tonchev)
14. High Energy Neutron Scattering and the Bose Condensate in He II,
Sov. Phys. JETP **41**, 915-918 (1975) (avec L. Aleksandrov, Zh.A. Kozlov,
V.A. Parfenov, V.B. Priezzhev)
15. Quantum Particle Creation (Hawking Effect) in Non-Stationary Black Holes,
Theor. Math. Phys. **29**, 1012-1021 (1976) (avec I.V. Volovich et V.P. Frolov)
16. On Statistical Mechanics of Systems with Highly Singular Two-Body Potentials,
Ann. of Phys. (N.Y.) **102**, 108-128 (1976)

17. A Compressible Dicke Model (exact solution),
Physica **A86**, 400-416 (1977) (avec A. Klemm)
18. A Nonpolynomial Generalization of Exactly Soluble Models in Statistical Mechanics,
Ann. of Phys. (N.Y.) **107**, 82-97 (1977) (avec J. Brankov et N. Tonchev)
19. An Exactly Soluble Model for Matter Interacting with Radiation,
J. Phys. **A10**, 1987-1993 (1977) (avec A. Klemm et P. Ziesche)
20. On the Definition of the Vacuum in the Gravitational Field: The η -vacuum,
Theor. Math. Phys. **33**, 843-852 (1977) (avec I.V. Volovich et V.P. Frolov)
21. On Dicke-type Hamiltonians with Hidden Variables,
Physica **A92**, 599-615 (1978) (avec A. Klemm)
22. Singular Interaction Potentials in Classical Statistical Mechanics,
Theor. Math. Phys. **36**, 784-797 (1978) (avec L.A. Pastur)
23. On a Class of Exactly Soluble Statistical Mechanical Models with
Nonpolynomial Interactions,
J. Stat. Phys. **20**, 317-330 (1979) (avec J. Brankov et N. Tonchev)
24. Phase Transitions in Spin Systems with Frustration,
Theor. Math. Phys. **44**, 703-707 (1980) (avec V.B. Priezzhev)
25. Gauge Symmetry and Phase Transitions in the Random Spin Systems,
Acta Phys. Polonica **A57**, 661-666 (1980) (avec V.B. Priezzhev)
26. On the Families of Gibbs Semigroups,
Commun. Math. Phys. **76**, 269-276 (1980)
27. On the Solutions of Correlation Equations for Classical Continuous Systems,
Physica **A109**, 403-424 (1981)
28. Toward Description of Universal Critical Behaviour of Structural Phase Transition,
Ferroelectrics **35**, 253-259 (1981) (avec S. Stamenkovič, N.M. Plakida,
V.L. Aksenov)
29. Spectral Properties of Kirkwood-Salsburg and Kirkwood-Ruelle Operators,
J. Stat. Phys. **27**, 577-591 (1982)
30. A New Proof and Generalization of the Bogolyubov-Ruelle Theorem,
Theor. Math. Phys. **51**, 570-579 (1982)
31. A Lattice Model of Liquid Crystals with Matrix Order Parameter,
J. Phys. **A15**, L639-L642 (1982) (avec N. Angelescu)
32. On the Description of the Phase Transition in the Husimi-Temperley Model,
J. Phys. **A16**, 2217-2224 (1983) (avec J. Brankov)
33. The Approximating Hamiltonian Method for an Infinite-Mode Dicke-Maser Model
with A^2 -term,
Zeitschrift für Physik **B55**, 75-85 (1984)

34. On Condensation of One-Dimensional Nonideal Boson Gas,
Phys. Lett. **A113**, 8-10 (1985) (avec V.I. Papoyan)
35. A Generalized Quasi-average Approach to the Description of the Limit States of the
n-Vector Curie-Weiss Ferromagnet,
J. Stat. Phys. **41**, 323-334 (1985) (avec N. Angelescu)
36. Description of Limit Gibbs States for the Curie-Weiss-Ising Model,
Theor. Math. Phys. **66**, 72-80 (1986) (avec J. Brankov et N. Tonchev)
37. On the Problem of the Equivalence of Ensembles for Bose Systems (Ideal Bose Gas),
Izvestiya Akademii Nauk Armyanskoi SSR **21**, 176-183 (1986) (avec V.I. Papoyan)
38. The Ensembles Equivalence Problem for Bose Systems (Ideal Bose Gas),
Soviet J.Contemp.Physics **24**, 176-184 (1986) (avec V.I. Papoyan)
39. The Ensemble Equivalence Problem for Bose Systems (Nonideal Bose Gas),
Theor. Math. Phys. **69**, 1240-1253 (1986) (avec V.I. Papoyan)
40. Exactly Soluble Model for Structural Phase Transition with a Gaussian
Type Anharmonicity,
Physica **A145**, 262-272 (1987) (avec S. Stamenović et N. Tonchev)
41. Storing Extensively Many Weighted Patterns in a Saturated Neural Network,
J. Phys. **A20**, 3989-3999 (1987) (avec J.L. van Hemmen)
42. One-dimensional Random Field Ising Model and Discrete Stochastic Mapping,
J. Stat. Phys. **47**, 939-946 (1987) (avec U. Behn)
43. Van der Waals Limit of an Interacting Bose Gas in a Weak External Field,
Phys. Rev. **A35**, 4763-4769 (1987) (avec Ph. de Smedt)
44. Models of a Structural Phase Transition with General Anharmonicity and Disorder,
J. Stat. Phys. **53**, 835-852 (1988) (avec J.L. van Hemmen)
45. The Large Deviation Principle for the Kac Distribution,
Helv. Phys. Acta **61**, 1063-1078 (1988) (avec J. Lewis et J.V. Pulé)
46. The Trotter-Lie Formula for Gibbs Semigroups,
J. Math. Phys. **29**, 888-891 (1988)
47. One-dimensional Markovian Field Ising Model: Physical Properties and
Characteristics of Discrete Stochastic Mapping,
J. Phys. **A21**, 2151-2165 (1988) (avec U. Behn)
48. Comment on the Random-Field Ising Model as a Dynamical System,
Phys. Rev. **B38**, 7115-7116 (1988) (avec U. Behn)
49. The Little-Hopfield Model: Recursion Relations for Retrieval Pattern Errors,
Sov. Phys. JETP **95**, 271-279 (1989) (avec A.S. Chvyrov)
50. Perturbations of Gibbs Semigroups,
Commun. Math. Phys. **120**, 653-664 (1989)

51. The Trotter-Kato Product Formula for Gibbs Semigroups,
Commun. Math. Phys. **131**, 333-346 (1990) (avec H. Neidhardt)
52. Dynamics of a Multi-Layered Perceptron Model: a Rigorous Result,
J. de Physique **51**, 1129-1138 (1990) (avec A.E. Patrick)
53. On the Trotter Product Formula for Gibbs Semigroups,
Ann. der Physik **47**(7 Folge), 183-191 (1990) (avec H. Neidhardt)
54. On Generalized Bose-Einstein Condensation in the Almost-ideal Boson Gas,
Helv. Phys. Acta **63**, 557-564 (1990) (avec V.I.V. Papoyan)
55. One Dimensional Random Field Ising Model: Residual Entropy, Magnetization
and the “Perestroika” of the Ground State,
Physica **A167**, 481-493 (1990) (avec U. Behn, V.B. Priezzhev)
56. Parallel Dynamics for an Extremely Diluted Neural Network,
J. Phys. **A23**, L1323-L1329 (1990) (avec A.E. Patrick)
57. On the Parallel Dynamics for the Little-Hopfield Model,
J. Stat. Phys. **63**, 59-71 (1991) (avec A.E. Patrick)
58. Main Overlap Dynamics for Multistate Neural Networks,
J. Phys. **A24**, L637-L647 (1991) (avec A.E. Patrick, P. Picco, J. Ruiz)
59. A Probabilistic Approach to Parallel Dynamics for the Little-Hopfield Model,
J. Phys. **A24**, 3413-3426 (1991) (avec A.E. Patrick)
60. Analyticity and Independence on the Classical Boundary Conditions of the Infinite
Volume
Thermal KMS States for a Class of Continuous Systems,
Helv. Phys. Acta **64**, 1225-1246 (1991) (avec R. Gielerak)
61. Random Infinite-Volume Gibbs States for the Curie-Weiss Random Field
Ising Model,
J. Stat. Phys. **66**, 139-164 (1992) (avec J.M.G. Amaro de Matos, A.E. Patrick)
62. Parallel Dynamics for an Extremely Diluted Neural Network (comment),
J. Phys. **A25**, 1009-1011 (1992) (avec A. Patrick)
63. On Bogoliubov’s Model of Superfluidity,
J. Phys. **A25**, 3473-3491 (1992) (avec N. Anghel et A. Verbeure)
64. Phase Transitions and Algebra of Fluctuation Operators in an Exactly Soluble
Model of Quantum Anharmonic Crystal,
J. Stat. Phys. **69**, 329-359 (1992) (avec A. Verbeure)
65. Regularization and Convergence for Singular Perturbations,
Commun. Math. Phys. **149**, 573-586 (1992) (avec N. Neidhardt)
66. On the Parallel Dynamics of the Q-State Potts and Q-Ising Neural Networks,
J. Stat. Phys. **70**, 1099-1119 (1993) (avec D. Bollé et B. Vinck)

67. About the Luttinger Model,
J. Math. Phys. **34** (2), 785-800 (1993) (avec A. Verbeure)
68. Multifractality in Forgetful Memories,
Physica D - Nonlinear Phenomena **D68**, 401-415 (1993) (avec U. Behn,
J.L. van Hemmen, R. Kühn, A. Lange)
69. A Pair Hamiltonian Model of a Non-Ideal Boson Gas,
Ann. Inst. Henri Poincaré, Physique Théorique **59**, 421-444 (1993) (avec J.V. Pulé)
70. Quantum Critical Fluctuations in an Anharmonic Crystal Model,
Rept. Math. Phys. **33**, 265-272 (1993) (avec A. Verbeure)
71. Retrieval and Chaos in Extremely Diluted Q-Ising Neural Network,
J. Stat. Phys. **74**, 565-582 (1994) (avec D. Bollé, G. M. Shim, B. Vinck)
72. Gaussian, Non-Gaussian Critical Fluctuations in the Curie-Weiss Model,
J. Stat. Phys. **75**, 1137-1152 (1994) (avec A. Verbeure)
73. Peierls-Fröhlich Instability and Kohn Anomaly,
J.Stat.Phys. **76**, 159-182 (1994) (avec J.V. Pulé et A. Verbeure)
74. On the Parallel Dynamics of Diluted Clock Neural Network,
Physica **A208**, 305-321, (1994) (avec D. Gandolfo et J. Ruiz)
75. Singular Perturbations, Regularization and Extension Theory,
Operator Theory: Advances and Applications **70**, 299-306, Birhauser Verlag,
Basel (1994) (avec H. Neidhardt)
76. Quantum Fluctuations in the Many-Body Problem,
Operator Theory: Advances and Applications **70**, 207-212 , Birhauser Verlag, Basel
(1994) (avec A. Verbeure)
77. Critical Fluctuation Operators for a Quantum Model of Ferroelectric,
Physica **A212**, 398-414 (1994) (avec A. Car)
78. Dynamics of Quantum Fluctuations in an Anharmonic Crystal Model,
J. Stat. Phys. **79**, 377-393 (1995) (avec A. Verbeure)
79. On the Purity of the Limiting Gibbs State for the Ising Model on the Bethe Lattice,
J. Stat. Phys. **79**, 473-482 (1995) (avec P.M. Bleher et J. Ruiz)
80. Collective Excitations in the Anharmonic Crystal,
Physica **A215**, 394-404 (1995) (avec A. Verbeure)
81. On Long-Range Order in Low-Dimensional Lattice-Gas Models of Nematic
Liquid Crystals,
Physics Letters **A200**, 433-437 (1995) (avec N. Angelescu et S. Romano)
82. Computer Simulation Study of a Two-Dimensional Nematic Lattice Model
with Long-Range Isotropic Interactions,
Int.J.of Modern Phys. **B9**, 859-873 (1995) (avec N. Angelescu et S. Romano)

83. Cooperative Phenomenon in B/Si (111) Segregation,
Europhys.Letters **30**, 145-150 (1995) (avec D. Gandolfo, J. Ruiz, F. Thibaudau)
84. No-Go Theorem for Quantum Structural Phase Transitions,
J.Phys. **A28**, 5415-5421 (1995) (avec A. Verbeure)
85. Quantum Fluctuations at Metal-Insulator Transitions of Doped Systems,
Physica **A227**, 301-313 (1996) (avec D. Gandolfo, N. Tonchev, A. Verbeure)
86. One-Dimensional Random-Field Ising Model : Gibbs State and Structure
of Ground States,
J. Stat. Phys. **84**, 1077-1093 (1996) (avec P.M. Bleher et J. Ruiz)
87. Long-Range Order in a Lattice-Gas Model of Nematic Liquid Crystals,
Physica **A232**, 737-746 (1996)
88. Towards the Right Hamiltonian for Singular Perturbations via Regularization
and Extension Theory,
Reviews in Math.Phys. **8**, 715-740 (1996) (avec H. Neidhardt)
89. Huge Instabilities Driven by Quantum Fluctuations,
J.Phys.Studies **1**, 333-342 (1997)
90. On the Right Hamiltonian for Singular Perturbations : General Theory,
Reviews in Math.Phys. **9**, 609-633 (1997) (avec H. Neidhardt)
91. Algebraic Structure of Quantum Fluctuations,
J.Stat.Phys. **89**, 633-653 (1997) (avec B.Momont et A.Verbeure)
92. Superfluidity III,
J.Phys. **A30**, 4895-4913 (1997) (avec N.Angelescu et A.Verbeure)
93. Quantum Critical Fluctuations in a Ferroelectric Model:
Quasi-Average Approach,
J.Math.Phys. **39**, 921-930 (1998) (avec P.Joussot)
94. Mechanism of Porous-Silicon Luminiscence ,
Phys.Rev. **B57**, 1382-1385 (1998) (avec F.Bentosela et P.Exner)
95. Defect-Mediated Kinetic Roughening in Low-Temperature MBE Growth
of Si/Si (111),
Europhys.Lett. **41**, 519-524 (1998) (avec B.Gallas, I.Berbezier, J.Derrien,
D.Gandolfo, J.Ruiz)
96. Electron Trapping by a Current Vortex ,
J.Phys. **A31**, L305-L311 (1998) (avec F.Bentosela et P.Exner)
97. On Error Estimates for the Trotter-Kato Product Formula ,
Lett.Math.Phys. **44**, 169-186 (1998) (avec H. Neidhardt)
98. Orientational Ordering Transition in a Continuous-Spin Ferrofluid ,
Physica **A253**, 483-497 (1998) (avec S.Romano)

99. Exact Phase Diagram of the Bogoliubov Weakly Imperfect Bose-Gas ,
Phys.Lett. **A244**, 371-376 (1998) (avec J.-B.Bru)
100. Kinetic Roughening of Si Surfaces and Surfactant Effect in Low
Temperature Molecular Beam Epitaxy Growth ,
J.Vac.Sci.Technol. **B16**, 1564-1567 (1998) (avec B.Gallas, I.Berbezier,
J.Derrien, D.Gandolfo, J.Ruiz)
101. On Semibounded Restrictions of Self-Adjoint Operators ,
Integ.Equ.Oper.Theory **31**, 458-521 (1998) (avec H. Neidhardt)
102. Quantum Interpretation of Thermodynamic Behaviour of the Bogoliubov
Weakly Imperfect Bose-Gas ,
Phys.Lett. **A247** , 37-41 (1998) (avec J.-B.Bru)
103. Computer Simulation Study of Classical Spin Models in Two Dimensions
with Long-Range Ferromagnetic Interactions Anisotropic in Spin Space ,
Int.J.of Modern Phys. **12**, 1871-1885 (1998) (avec S.Romano)
104. On the Phase Diagram of the Random Field Ising Model on the
Bethe Lattice ,
J.Stat.Phys. **93**, 33-78 (1998) (avec P.M.Bleher et J.Ruiz)
105. On the Interplay of Magnetic and Molecular Forces in Curie-Weiss
Ferrofluid Models ,
J.Stat.Phys. **93**, 79-107 (1998) (avec H.-O.Georgii)
106. Does Each Symmetric Operator Have a Stability Domain ? ,
Reviews in Math.Phys. **10**, 829-850 (1998) (avec H. Neidhardt)
107. Exact Solution of the Bogoliubov Hamiltonian for Weakly Imperfect
Bose Gas ,
J.Phys. **A31**, 9377-9404 (1998) (avec J.-B.Bru)
108. Local Instability and Oscillations of Trajectories in a Diluted Symmetric
Neural Network ,
Network: Comput.Neural Syst. **9**, 563-576 (1998)
(avec D.Gandolfo et M.Sirugue-Collin)
109. Anomalous Electron Trapping by Magnetic Flux Tubes and Electric
Current Vortices,
Operator Theory: Advances and Applications **108**, 191-196 (1999)
(avec F.Bentosela et P.Exner)
110. On the Operator-Norm Convergence of the Trotter-Kato Product Formula,
Operator Theory: Advances and Applications **108**, 323-334 (1999)
(avec H.Neidhardt)
111. Anomalous Electron Trapping by Localized Magnetic Fields ,
J.Phys. **A32**, 3029-3039 (1999) (avec F.Bentosela,R.M.Cavalcanti, P.Exner)

112. Exactly Soluble Model with Two Kinds of Bose-Einstein Condensations ,
Physica **A268**, 309-325 (1999) (avec J.-B.Bru)
113. Fractional Powers of the Self-Adjoint Operators and Trotter-Kato
Product Formula ,
Integ.Equ.Oper.Theory **35**, 209-231 (1999) (avec H. Neidhardt)
114. Quantum n-Vector Anharmonic Cristal I: $1/n$ - Expansion ,
Commun.Math.Phys. **205**, 81-95 (1999) (avec N.Angelescu et A.Verbeure)
115. Trotter-Kato Product Formula and Operator-Norm Convergence ,
Commun.Math.Phys. **205**, 129-159 (1999) (avec H.Neidhardt)
116. Trotter-Kato Product Formula and Symmetrically-Normed Ideals ,
J.Funct.Anal. **167**, 113-147 (1999) (avec H.Neidhardt)
117. The Bogoliubov Weakly Imperfect Bose-Gas ,
J.Phys.Studies **3**, 239-251 (1999)
118. Operator-Norm Convergence of the Trotter Product Formula for
Sectorial Generators,
Lett.Math.Phys. **50**, 203-211 (1999)(avec V.Cachia)
119. A Model with Coexistence of Two Kinds of Bose Condensations ,
J.Phys. **A33**, 449-464 (2000) (avec J.-B.Bru)
120. The One-Particle Energy Spectrum of Weakly Coupled Quantum Rotators,
J. Math.Phys. **41**, 1-23 (2000) (avec N.Angelescu et R.A.Minlos)
121. Discontinuity of the Magnetization in Diluted $O(n)$ -Models ,
J.Stat.Phys. **98**, 537-549 (2000) (avec L.Chayes et S.B.Shlosman)
122. A Quantum Crystal Model in the Light-Mass Limit: Gibbs States ,
Reviews in Math.Phys. **12**, 981-1032 (2000) (avec R.A.Minlos et A.Verbeure)
123. On Condensations in the Bogoliubov Weakly Imperfect Bose-Gas,
J.Stat.Phys. **99**, 1297-1338 (2000) (avec J.-B.Bru)
124. The Lower Spectral Branch of the Generator of the Stochastic Dynamics
for the Classical Heisenberg Model, Amer.Math.Soc.Transl. **198**, 1-11 .
In: "On Dobrushin's way. From Probability Theory to Statistical Mechanics", ed.
by R.A. Minlos, S.B. Shlosman, Yu.M. Suhov, AMS, Providence (Rhode Island),
2000 (avec N.Angelescu et R.A.Minlos)
125. Generalized Condensation and the Bogoliubov Theory of Superfluidity,
Condensed Matter Physics **3**, 265-275 (2000)
126. Quantum n-Vector Anharmonic Cristal II: Displacement Fluctuations ,
J.Stat.Phys. **100**, 829-851 (2000) (avec N.Angelescu et A.Verbeure)
127. Operator-Norm Convergence of the Trotter Product Formula for
Holomorphic Semigroups,
J.Oper.Theory, **46**, 199-213 (2001)(avec V.Cachia)

128. Accretive Perturbations and Error Estimates for the Trotter Product Formula, *Integ.Equ.Oper.Theory* **39**, 396-412 (2001) (avec V.Cachia et H.Neidhardt)
129. Entropy-Driven Phase Transitions in Multitype Lattice Gas Models, *J.Stat.Phys.* **102**, 35-67 (2001) (avec H.-O.Georgii)
130. Operator-Norm Approximation of Semigroups by Quasi-Sectorial Contractions, *J.Funct.Anal.* **180**, 176-194 (2001) (avec V.Cachia)
131. Rigidity of the Critical Phases on a Cayley Tree, *Moscow Math.J.* **1**, 345-363 (2001) (avec P.Bleher, J.Ruiz, R.Schonmann et S.Shlosman)
132. Note on the Paper "The Norm Convergence of the Trotter-Kato Product Formula with Error Bound" by Ichinose and Tamura, *Commun.Math.Phys.* **221**, 499-510 (2001) (avec Takashi Ichinose, Hideo Tamura et Hiroshi Tamura)
133. Trotter Product Formula for Nonself-Adjoint Gibbs Semigroups, *J.London Math.Soc.* **64**, 436-444 (2001) (avec V.Cachia)
134. Potential Approximations to δ' : an Inverse Klauder Phenomenon with Norm-Resolvent Convergence, *Commun.Math.Phys.* **224**, 593-612 (2001) (avec P. Exner et H.Neidhardt)
135. Comments on the Trotter Product Formula Error-Bound Estimates for Nonself-Adjoint Semigroups, *Integ.Equ.Oper.Theory* **42**, 425-448 (2002) (avec V.Cachia et H.Neidhardt)
136. Berezinskii-Kosterlitz-Thouless Order in Two-Dimension $O(2)$ -Ferrofluid, *J.Stat.Phys.* **106**, 875-893 (2002) (avec C. Gruber et H. Tamura)
137. The Equilibrium States for a Model with Two Kinds of Bose Condensation, *J.Stat.Phys.* **109**, 143-176 (2002) (avec J.-B. Bru et B. Nachtergaele)
138. On the XY Model and Its Generalizations, *Phys.Lett. A* **301**, 402-407 (2002) (avec S. Romano)
139. Ultimate optimal error bound for the Trotter product formula : Gibbs semigroups, in "Functional Analysis" (Proceedings of Ukrainian Math.Congress, Sect.11) 94-99, Kiev Inst.of Mathematics, Kiev (2002)
140. Operator-norm convergence of the Trotter-Kato product formula, in "Functional Analysis" (Proceedings of Ukrainian Math.Congress, Sect.11) 100-102, Kiev Inst.of Mathematics, Kiev (2002) (avec T. Ichinose et H. Neidhardt)
141. On Lattice-Gas Spin Models with Chiral Interactions, *J.Phys.Studies* **6**, 153-163 (2002) (avec S. Romano)
142. Analyticity of the Gibbs State for a Quantum Anharmonic Crystal: No Order Parameter, *Ann.Henri Poincaré* **3**, 921-938 (2002) (avec R.A. Minlos et E.A. Pechersky)

143. Proof of Bose-Einstein condensation in interacting gases with a one-particle spectral gap,
J.Phys. A: Math. Gen. **36**, L169-L174 (2003) (avec J. Lauwers et A. Verbeure)
144. Bose-Einstein Condensation for Homogeneous Interacting Systems with a One-Particle Spectral Gap,
J.Stat.Phys. **112**, 397-420 (2003) (avec J. Lauwers and A. Verbeure)
145. Trotter-Kato product formula and fractional powers of self-adjoint generators,
J.Funct.Anal. **207**, 33-57 (2004) (avec T. Ichinose et H. Neidhardt)
146. Magnetostriction Transition,
J.Stat.Phys. **114**, 563-574 (2004) (avec S. Shlosman)
147. Bose-Einstein condensation in random potentials,
Comptes Rendus A.S.(Paris), Physique **5**, 129-142 (2004) (avec O. Lenoble et L.A. Pastur)
148. Equilibrium states for the Bose gas,
J.Math.Phys. **45**, 1606-1622 (2004) (avec L. Vandevenne et A. Verbeure)
149. The canonical perfect Bose gas in Casimir boxes,
J.Math.Phys. **45**, 3565-3583 (2004) (avec J.V.Pulé)
150. Models for equilibrium BEC superradiance,
J.Phys. A: Math. Gen. **37**, L321-L328 (2004) (avec J.V.Pulé et A. Verbeure)
151. The approximating Hamiltonian method for the imperfect boson gas,
J.Phys. A: Math. Gen. **37**, 8929-8935 (2004) (avec J.V.Pulé)
152. Random-field quantum spherical ferromagnetic model,
J.Math.Phys. **45**, 3310-3321 (2004) (avec C. Gruber)
153. Do bosons condense in a homogeneous magnetic field ?
J.Stat.Phys. **116**, 1545-1578 (2004) (avec C.D. Cornean et Ph. Briet)
154. A Dicke Type Model for Equilibrium BEC Superradiance,
J.Stat.Phys. **119**, 309-329 (2005) (avec J.V. Pulé et A.F. Verbeure)
155. Models with Recoil for Bose-Einstein Condensation and Superradiance,
J.Phys. A: Math.Gen. **38**, 5173-5192 (2005) (avec J.V. Pulé et A.F.Verbeure)
156. Bose-Einstein condensation in geometrically deformed tubes,
J.Phys. A: Math.Gen. **38**, L463-L470 (2005) (avec P. Exner)
157. One-mode Bose-Einstein Condensation and Bogoliubov Theory,
Markov Processes and Related Fields **11**, 267-282 (2005)
158. On nonhomogeneous Bose condensation,
J.Math.Phys. **46**, 083301-1-8 (2005) (avec J.V. Pulé et A.F. Verbeure)
159. Bogolyubov Approximating Hamiltonian Method for Boson Systems,
Physics of Particles and Nuclei. **36** (Suppl. 1), S65-S68 (2005)

160. Comments on "Direct equivalence between quantum phase transition phenomena in radiation-matter and magnetic systems: Scaling of entanglement" by J.Reslen *et al*, Europhys. Lett. **72**, 151-152 (2005) (avec J.G. Brankov et N.S. Tonchev)
161. Lower Spectral Branches of a Particle Coupled to a Bose Field, Reviews in Math.Phys. **17**, 1111-1142 (2005) (avec N. Anagelescu et R.A.Minlos)
162. The Casimir effect for the Bose-gas in slabs, Europhys. Lett., **73**, 15-20 (2006) (avec Ph.A. Martin)
163. First-order phase transitions for some generalized XY models, J.Phys. A: Math.Gen. **39**, L439-L445 (2006) (avec A.C.D. van Enter et S. Romano)
164. Mean-Field theory of the Potts gas, J. Phys. A: Math. Gen. **39**, 9045-9053 (2006) (avec H.-O.Georgii, S.Miracle-Solé et J.Ruiz)
165. Gibbs state uniqueness for anharmonic quantum crystal with a nonpolynomial double-well potential, J.Stat.Mechanics: Theory and Experiment **P09002**, 1-29 (2006) (avec A.L.Rebenko)
166. Condensation in a Disordered Infinite-Range Hopping Bose-Hubbard Model, J.Stat.Phys. **124**, 1137-1178 (2006) (avec T.C.Dorlas et L.A.Pastur)
167. Zeno product formula revisited, Integ.Equ.Oper.Theory **57** 67-81 (2007) (avec P.Exner, T.Ichinose et H.Neidhardt)
168. Bose-Einstein condensation in the Luttiger-Sy model, Markov Processes and Related Fields **13**, 441-468 (2007) (avec O.Lenoble)
169. Proof of the variational principle for a pair Hamiltonian boson model, Reviews in Math.Phys. **19**, 157-194 (2007) (avec J.V.Pulé)
170. Bose-Einstein condensation in a random media, J.Phys.Studies **11**, 1-14 (2007)
171. On soluble boson models, J.Math.Phys. **49**, 043302-1-18 (2008) (avec J.V. Pulé et A.F. Verbeure)
172. Quasi-sectorial contractions, J.Funct.Anal. **254**, 2503-2511 (2008)
173. A Trotter-Kato Product Formula for a Class of Non-Autonomous Evolution Equations, Nonlinear Analysis **69**, 1067-1072 (2008) (avec P.-A.Vuillermot et W.F.Wreszinski)
174. Lower Spectral Branches of a Spin-Boson Model, J.Math.Phys. **49**, 102105-1-29 (2008) (avec N. Anagelescu, J.Ruiz et R.A.Minlos)
175. Large Deviations in the Superstable Weakly Imperfect Bose-Gas, J.Stat.Phys. **133**, 379-400 (2008) (avec J.-B.Bru)

176. From Laplacian Transport to Dirichlet-to-Neumann (Gibbs) Semigroups,
J.Math.Phys.(Analysis,Geometry) **4**, 551-568 (2008)
177. Linear non-autonomous Cauchy problems and evolution semigroups,
Adv.Diff.Eqs. **14**, 289-340 (2009) (avec Hagen Neidhardt)
178. Mean-Field Interacting Boson Random Point Fields in Weak Harmonic Traps,
J.Math.Phys. **50**, 023301-1-28 (2009) (avec H.Tamura)
179. The effect of time-dependent coupling on non-equilibrium steady states,
Ann.Henri Poincaré **10**, 61-98 (2009) - arXiv:0708.3931 (avec H.D. Cornean,
H. Neidhardt)
180. A general Trotter-Kato formula for a class of evolution operators,
J.Funct.Anal. **257**, 2246-2290 (2009) (avec Pierre-A. Vuillermot et Walter F.Wreszinski)
181. On the nature of Bose-Einstein condensation in disordered systems,
J.Stat.Phys. **137**, 19-55 (2009) - arXiv:0905.4790v1 (avec Th.Jaeck et J.V.Pulé)
182. Bose condensation in (random) traps,
Condensed Matter Phys. **12**, 559-571 (2009) (avec Th.Jaeck et J.V.Pulé)
183. Overview of the superradiant phase transition: the Dicke model,
J. of Optoelectronics and Advanced Materials **11**, 1142-1149 (2009)
(avec J.G. Brankov et N.S. Tonchev)
184. Erratum: Lower spectral branches of a spin-boson model [J.Math.Phys.49,102105(2008)]
J.Math.Phys. **50**, 129901(4 pages) (2009) (avec N. Anghel, J.Ruiz et R.A.Minlos)
185. Numerical Range and Quasi-Sectorial Contractions,
J.Math Anal.Appl. **336**, 33-34 (2010) - arXiv:0810.3072 (avec Yu.Arlinskii)
186. Large Deviation Principle for Non-Interacting Boson Random Point Processes,
J.Math.Phys. **51**, 023528 (20 pages) (2010) - arXiv:0909.1047 (avec Hiroshi Tamura)
187. On the Existence of the Dynamics for Anharmonic Quantum Oscillator Systems,
Rev.Math.Phys. (2010) - arXiv:0909.2249v1 (avec B.Nachtergaele, B.Schlein, R.Sims,
S.Starr)