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personal information

birth date: 1966/10/04
birth place: Tehran, IRAN
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education

- **BSc of electronics engineering:** 1984/10 – 1989/02, Tehran University, Tehran, IRAN
- **MSc of physics:** 1989/02 – 1991/02, Sharif University of Technology, Tehran, IRAN
- **PhD of physics:** 1991/02 – 1993/11, Sharif University of Technology, Tehran, IRAN

employment

- researcher in the Institute for Studies in Theoretical Physics and Mathematics, Tehran, IRAN: 1993/11 – 2001/09
- assistant professor in Tehran University, Tehran, IRAN: 1994/06 – 1998/03
- assistant professor in the Institute for Advanced Studies in Basic Sciences, Zanjan, IRAN: 1998/04 – 1999/08
- associate professor in the Institute for Advanced Studies in Basic Sciences, Zanjan, IRAN: 1999/09 – 2003/12
- associate professor in Alzahra University, Tehran, IRAN: 2004/01
- professor of physics in Alzahra University, Tehran, IRAN: 2004/02 –

professional interests

- teaching
- research
- writing (scientific texts)

courses taught

- mathematical physics
- classical mechanics
- thermodynamics
- quantum mechanics
- electrodynamics
- statistical mechanics
- general mathematics (calculus)
- general relativity
- quantum field theory
- physical chemistry
- general physics
- classical field theory
- waves
- special relativity
- mechanics of continuous media
- electronics
- optics
- astrophysics
- history of science
- English for special purposes
- engineering mathematics
- differential equations

research topics

- general relativity
- discrete physics
- integrability and quantum groups
- two-dimensional gauge theories
- stochastic processes
- conformal and logarithmic-conformal theories
- noncommutative geometry

research papers

1. **M. Khorrami & R. Mansouri**
Spherically symmetric thin walls
Physical Review D **44**, 2 (15 July 1991) 557–559
2. **M. Khorrami & R. Mansouri**
Cylindrically symmetric thin walls in general relativity
Journal of Mathematical Physics **35**, 2 (February 1994) 951–958
3. **M. Khorrami**
Exact solution of the most general minimally coupled one dimensional lattice gauge theories
International Journal of Theoretical Physics **33**, 12 (December 1994) 2297–2316
4. **M. Khorrami, A. Shariati, M. R. Abolhassani, & A. Aghamohammadi**
A triangular deformation of the two-dimensional Poincaré algebra
Modern Physics Letters A **10**, 11 (10 April 1995) 873–883
5. **A. Aghamohammadi, M. Khorrami, & A. Shariati**
Jordanian deformation of $SL(2)$ as a contraction of the Drinfeld-Jimbo deformation of $SL(2)$
Journal of Physics A **28**, 8 (21 April 1995) L225–L231
6. **M. Khorrami**
A general formulation of discrete-time quantum mechanics, restrictions on the action and the relation of unitarity to the existence theorem for initial-value problem
Annals of Physics **224**, 1 (15 November 1995) 951–958
7. **A. Shariati, A. Aghamohammadi, & M. Khorrami**
The universal R matrix for the Jordanian deformation of $sl(2)$, and the contracted forms of $so(4)$
Modern Physics Letters A **11**, 3 (30 January 1996) 187–197
8. **M. Khorrami**
Phase transition in one-dimensional lattice gauge theories
International Journal of Theoretical Physics **35**, 3 (March 1996) 557–568
9. **M. Khorrami, R. Mansouri, & M. Mohazzab**
A decrumpling model of the universe
Helvetica Physica Acta **69**, 3 (November 1996) 237–240
10. **R. Mansouri & M. Khorrami**
The equivalence of Darmois-Israel- and distributional method for thin shells in general relativity
Journal of Mathematical Physics **37**, 11 (November 1996) 5672–5683

11. **A. Aghamohammadi, M. Khorrami, & A. Shariati**
Toda theories as contractions of affine Toda theories
Physics Letters B **389**, 2 (12 December 1996) 260–263
12. **M. Khorrami**
Symmetries in discrete-time mechanics
Annals of Physics **252**, 2 (15 December 1996) 357–361
13. **M. Khorrami, A. Shariati, & A. Aghamohammadi**
 $SL_h(2)$ -symmetric torsionless connections
Letters in Mathematical Physics **40**, 1 (April 1997) 95–99
14. **M. Alimohammadi & M. Khorrami**
 n -Point functions of two dimensional Yang-Mills theories on Riemann surfaces
International Journal of Modern Physics A **12**, 11 (30 April 1997) 1959–1965
15. **A. Aghamohammadi, M. Alimohammadi, & M. Khorrami**
A pseudo-conformal representation of the Virasoro algebra
Modern Physics Letters A **12**, 18 (14 June 1997) 1349–1353
16. **M. R. Rahimi Tabar, A. Aghamohammadi, & M. Khorrami**
The logarithmic conformal field theories
Nuclear Physics B **497**, 1,2 (21 June 1997) 555–566
17. **A. Shafiekhani & M. Khorrami**
Exactly and quasi-exactly solvable models on the basis of $OSp(2|1)$
Modern Physics Letters A **12**, 22 (20 July 1997) 1655–1661
18. **M. Khorrami & A. Alimohammadi**
Observables of the generalized 2-D Yang-Mills theories on arbitrary surfaces: a path integral approach
Modern Physics Letters A **12**, 30 (28 September 1997) 2265–2270
19. **A. Alimohammadi & M. Khorrami**
Greens functions of 2-dimensional Yang-Mills theories on nonorientable surfaces
Zeitschrift für Physik C **76**, 4 (December 1997) 729–731
20. **A. Alimohammadi, M. Khorrami, & A. Aghamohammadi**
Large- N limit of the generalized two-dimensional Yang-Mills theories
Nuclear Physics B **510**, 1,2 (19 January 1998) 313–323
21. **M. Khorrami, A. Aghamohammadi, & M. R. Rahimi Tabar**
Logarithmic conformal theories with continuous weights
Physics Letters B **419**, 1–4 (12 February 1998) 179–185

22. **M. Alimohammadi, V. Karimipour, & M. Khorrami**
Exact solution of a one-parameter family of asymmetric exclusion processes
Physical Review E **57**, 6 (June 1998) 6370–6376
23. **M. Khorrami, A. Aghamohammadi, & M. Alimohammadi**
Derivation of quantum theories: Symmetries and the exact solution of the derived system
International Journal of Modern Physics A **13**, 16 (30 June 1998) 2833–2840
24. **M. Khorrami, A. Aghamohammadi, & A. M. Ghezelbash**
Logarithmic $N=1$ superconformal field theories
Physics Letters B **13**, 3,4 (5 November 1998) 283–288
25. **M. Khorrami & A. Aghamohammadi**
Derivation of theories: structures of the derived system in terms of those of the original system in classical mechanics
Il Nuovo Cimento B **113**, 11 (November 1998) 1361–1371
26. **V. Karimipour & M. Khorrami**
Anisotropic Heisenberg magnet with long-range interactions. Integrability and phase structure
International Journal of Theoretical Physics **38**, 3 (March 1999) 971–984
27. **A. Aghamohammadi, M. Alimohammadi, & M. Khorrami**
Uniqueness of the minimum of the free energy of the 2-D Yang-Mills theory at large N
Modern Physics Letters A **14**, 12 (10 April 1999) 751–758
28. **A. M. Ghezelbash, M. Khorrami, & A. Aghamohammadi**
Logarithmic conformal field theories and AdS correspondence
International Journal of Modern Physics A **14**, 16 (30 June 1999) 2581–2591
29. **R. Mansouri, F. Nasser, & M. Khorrami**
Effective time variation of G in a model universe with variable space dimension
Physics Letters A **259**, 3, 4 (16 August 1999) 194–200
30. **F. Roshani & M. Khorrami**
Asymmetric one-dimensional exclusion processes: A two-parameter exactly solvable example
Physical Review E **60**, 3 (September 1999) 3393–3395
31. **A. Shariati & M. Khorrami**
Equivalence principle and radiation by a uniformly accelerated charge
Foundations of Physics Letters **12**, 5 (October 1999) 427–439

32. **M. Alimohammadi, V. Karimipour, & M. Khorrami**
A two-parametric family of exclusion processes and its exact solution
Journal of Statistical Physics **97**, 1,2 (October 1999) 373–394
33. **M. Khorrami & M. Alimohammadi**
Large-N limit of the generalized 2D Yang-Mills theory on cylinder
Nuclear Physics **B577**, 3 (26 June 2000) 609–618
34. **M. Khorrami & V. Karimipour**
Exact determination of the phase structure of a multi-species asymmetric exclusion process
Journal of Statistical Physics **100**, 5,6 (September 2000) 999–1030
35. **A. Aghamohammadi, A. H. Fatollahi, M. Khorrami, & A. Shariati**
Multispecies reaction-diffusion systems
Physical Review **E62**, 4 (October 2000) 4642–4649
36. **A. Aghamohammadi & M. Khorrami**
Similarity transformation in one-dimensional reaction-diffusion systems: the voting model as an example
Journal of Physics **A33**, 44 (10 November 2000) 7843–7856
37. **K. Saaidi & M. Khorrami**
Nonlocal two-dimensional Yang-Mills- and generalized Yang-Mills-theories
International Journal of Modern Physics **A15**, 30 (10 December 2000) 4749–4760
38. **F. Kheirandish & M. Khorrami**
Logarithmic two-dimensional spin-1/3 fractional supersymmetric conformal field theories and the two-point functions
European Physical Journal **C18**, 4 (5 February 2001) 795–797
39. **M. Alimohammadi & M. Khorrami**
On the phase structure of two-dimensional generalized Yang-Mills theories
Nuclear Physics **B597**, 1–3 (12 March 2001) 652–664
40. **M. Khorrami & A. Aghamohammadi**
Phase transition in an asymmetric generalization of the zero-temperature Glauber model
Physical Review **E63**, 4 (April 2001) 042102
41. **F. Kheirandish & M. Khorrami**
Two-dimensional fractional supersymmetric conformal field theories and the two-point functions
International Journal of Modern Physics **A16**, 12 (10 May 2001) 2165–2173

42. **F. Kheirandish & M. Khorrami**
Two-dimensional fractional supersymmetric conformal- and logarithmic conformal- field theories and the two-point functions
European Physical Journal C **20**, 3 (18 May 2001) 593–597
43. **F. Roshani & M. Khorrami**
Solvable multi-species reaction-diffusion processes
Physical Review E **64**, 1 (July 2001) 011101
44. **A. Aghamohammadi & M. Khorrami**
Phase transitions in autonomous reaction-diffusion systems on a one-dimensional lattice with boundaries
Journal of Physics A **34**, 37 (21 September 2001) 7431–7439
45. **N. Majd, A. Aghamohammadi, & M. Khorrami**
Phase transition in an asymmetric generalization of the zero-temperature q -state Potts model
Physical Review E **64**, 4 (October 2001) 046105
46. **M. Alimohammadi, M. Khorrami, & A. Aghamohammadi**
Exactly solvable models through the empty interval method
Physical Review E **64**, 5 (November 2001) 056116
47. **A. Shariati, M. Khorrami, & A. Aghamohammadi**
Autonomous multispecies reaction-diffusion systems with more-than-two-site interactions
Physical Review E **64**, 6 (December 2001) 066102
48. **F. Roshani & M. Khorrami**
Annihilation-diffusion processes: an exactly solvable model
Journal of Mathematical Physics **43**, 5 (May 2002) 2627–2635
49. **K. Saaidi & M. Khorrami**
Large- N limit of the non-local Yang-Mills and generalized Yang-Mills theories on a cylinder
European Physical Journal C **23**, 4 (14 May 2002) 757–760
50. **M. Khorrami & A. Aghamohammadi**
Dynamical phase transitions of a one-dimensional kinetic Ising model with boundaries
Physical Review E **65**, 5 (May 2002) 056129
51. **M. Khorrami, A. Aghamohammadi, & M. Alimohammadi**
Exactly solvable models through the empty interval method, for more-than-two-site interactions
Journal of Physics A **36**, 2 (17 January 2003) 345–357

52. **A. Aghamohammadi, M. Alimohammadi, & M. Khorrami**
Exactly solvable models through the generalized empty interval method,
for multi-species interactions
European Physical Journal B31, 3 (13 February 2003) 371–378
53. **N. Abed-Pour, A. Aghamohammadi, M. Khorrami, & M. Reza Rahimi Tabar**
Discrete scale invariance, and its logarithmic extension
Nuclear Physics B655, 3 [FS] (14 April 2003) 342–352
54. **M. Khorrami, M. Alimohammadi, & A. Shariati**
Spin 0 and spin 1/2 quantum relativistic particles in a constant gravita-
tional field
Annals of Physics 304, 2 (April 2003) 91–102
55. **M. Khorrami & A. Aghamohammadi**
Static- and dynamical-phase transition in one-dimensional reaction-diffusion
systems with boundaries
Brazilian Journal of Physics 33, 3 (September 2003) 421–430
56. **F. Roshani & M. Khorrami**
Solvable multi-species extensions of the drop-push model
European Physical Journal B36, 1 (November 2003) 99–104
57. **F. Roshani & M. Khorrami**
Exclusion processes and boundary conditions
Modern Physics Letters B18, 1 (10 January 2004) 1–9
58. **A. Aghamohammadi & M. Khorrami**
Dynamical phase transition in the two-point functions of the autonomous
one-dimensional single-species reaction-diffusion systems
European Physical Journal B37, 2 (January 2004) 193–198
59. **A. Aghamohammadi & M. Khorrami**
Exactly solvable models through the generalized empty interval method:
multi-species and more-than-two-site interactions
International Journal of Modern Physics B18, 14 (10 June 2004) 2047–
2055
60. **M. Khorrami & A. Aghamohammadi**
Perturbative calculation of one-point functions of one-dimensional single-
species reaction-diffusion systems
Physical Review E70, 1 (July 2004) 011103
61. **M. Alimohammadi & M. Khorrami**
Large- N limit of the two-dimensional Yang-Mills theory on surfaces with
boundaries
Nuclear Physics B696, 1,2 (September 2004) 55–65

62. **F. Roshani, A. Aghamohammadi, & M. Khorrami**
 Static and dynamic phase transitions in multidimensional voting models on continua
Physical Review E **70**, 5 (November 2004) 056128
63. **F. Roshani & M. Khorrami**
 Asymmetric one-dimensional exclusion processes: a two-parameter discrete-time exactly solvable model
Journal of Physics: Condensed Matter **17**, 14 (13 April 2005) S1269–S1273
64. **F. Roshani & M. Khorrami**
 A family of discrete-time exactly-solvable exclusion processes on a one-dimensional lattice
European Physical Journal B **45**, 3 (June 2005) 399–404
65. **A. Aghamohammadi & M. Khorrami**
 Models solvable through the empty-interval method
European Physical Journal B **47**, 4 (October 2005) 583–586
66. **M. Khorrami & M. Alimohammadi**
 Large- N behavior of the Wilson loops of generalized two-dimensional Yang-Mills theories
Nuclear Physics B **733**, 1,2 (16 January 2006) 123–131
67. **M. Alimohammadi & M. Khorrami**
 Phase transitions of large- N two-dimensional Yang-Mills and generalized Yang-Mills theories in the double scaling limit
European Physical Journal C **47**, 2 (August 2006) 507–512
68. **M. Khorrami & A. Aghamohammadi**
 Phase transition in annihilation-limited processes
European Physical Journal B **56**, 3 (April 2007) 223–227
69. **L. F. Matin, A. Aghamohammadi, & M. Khorrami**
 Exactly solvable reaction diffusion models on a Cayley tree
European Physical Journal B **56**, 3 (April 2007) 243–246
70. **M. Khorrami & M. Alimohammadi**
 Non-Douglas-Kazakov phase transition of two-dimensional generalized Yang-Mills theories
European Physical Journal C **51**, 1 (June 2007) 193–197
71. **A. H. Fatollahi & M. Khorrami**
 Field theories on spaces with linear fuzziness
Europhysics Letters **80**, 2 (October 2007) 20003
72. **A. Shariati, M. Khorrami, & A. H. Fatollahi**
 TeV-photon paradox and space with SU(2) fuzziness
Europhysics Letters **81**, 4 (February 2008) 40003

73. **H. Komaie-Moghaddam, A. H. Fatollahi, & M. Khorrami**
Field theory amplitudes in a space with $SU(2)$ fuzziness
European Physical Journal C **53**, 4 (February 2008) 679–688
74. **H. Komaie-Moghaddam, M. Khorrami, & A. H. Fatollahi**
Loop diagrams in space with $SU(2)$ fuzziness
Physics Letters B **661**, 2–3 (20 March 2008) 226–232
75. **A. Aghamohammadi & M. Khorrami**
The Fokker-Planck equation, and stationary densities
International Journal of Theoretical Physics **47**, 6 (June 2008) 1630–1638
76. **L. Lavaei-Yanesi & M. Khorrami**
Phase structure of the quartic-cubic generalized two dimensional Yang Mills $U(N)$ on the sphere
Journal of Mathematical Physics **49**, 7 (July 2008) 073514
77. **A. H. Fatollahi, A. Shariati, & M. Khorrami**
Quantum mechanics on space with $SU(2)$ fuzziness
European Physical Journal C **60**, 3 (April 2009) 489–494
78. **M. Khorrami, A. H. Fatollahi, & A. Shariati**
Poisson structure on a space with linear $SU(2)$ fuzziness
Journal of Mathematical Physics **50**, 7 (July 2009) 072902
79. **A. Aghamohammadi & M. Khorrami**
Nonuniform autonomous one-dimensional exclusion nearest-neighbor reaction-diffusion models
European Physical Journal B **74**, 2 (March 2010) 159–164;
DOI: 10.1140/epjb/e2010-00061-2
80. **A. Shariati, M. Khorrami, & A. H. Fatollahi**
Statistical mechanics of free particles on space with Lie type noncommutativity
Journal of Physics A **43**, 28 (16 July 2010) 285001;
DOI: 10.1088/1751-8113/43/28/285001
81. **M. Khorrami & A. Aghamohammadi**
Dynamical phase transition in one-dimensional kinetic Ising model with nonuniform coupling constants
Journal of Statistical Mechanics: Theory and Experiment (October 2010) P10019;
DOI: 10.1088/1742-5468/2010/10/P10019
82. **L. Ramezan & M. Khorrami**
Spin 0 and spin 1/2 particles in a spherically symmetric static gravity and a Coulomb field
International Journal of Theoretical Physics **49**, 11 (November 2010) 2918–2928;
DOI: 10.1007/s10773-010-0484-1

83. **Amir H. Fatollahi, Mohammad Khorrami, Ahmad Shariati, & Amir Aghamohammadi**
 Classification of matrix-product ground states corresponding to one-dimensional chains of two-state sites of nearest neighbor interactions
Physical Review A **83**, 4 (April 2011) 042108;
 DOI: 10.1103/PhysRevA.83.042108
84. **Amir Aghamohammadi & Mohammad Khorrami**
 Nonuniform autonomous one-dimensional exclusion nearest-neighbor reaction-diffusion models
Journal of Physics A **44**, 34 (28 August 2011) 345002;
 DOI: 10.1088/1751-8113/44/34/345002
85. **Mohammad Khorrami, Ahmad Shariati, Amir Aghamohammadi, & Amir H. Fatollahi**
 Lack of anomalous diffusion in linear translationally-invariant systems determined by only one initial condition
Physics Letters A **376**, 5 (16 January 2012) 687–691;
 DOI: 10.1016/j.physleta.2011.10.076
86. **Amir Aghamohammadi, Cina Aghamohammadi, & Mohammad Khorrami**
 Externally driven one-dimensional Ising model
Journal of Statistical Mechanics: Theory and Experiment (February 2012) P02004;
 DOI: 10.1088/1742-5468/2012/02/P02004
87. **A. A. Masoudi, S. Hosseinabadi, J. Davoudi, M. Khorrami, & M. Kohandel**
 Statistical analysis of radial interface growth
Journal of Statistical Mechanics: Theory and Experiment (February 2012) L02001;
 DOI: 10.1088/1742-5468/2012/02/L02001
88. **M. Khorrami & A. Aghamohammadi**
 Autonomous models solvable through the full interval method
European Physical Journal B **85**, 4 (April 2012) 134;
 DOI: 10.1140/epjb/e2012-20979-3
89. **Mohammad Khorrami & Amir Aghamohammadi**
 One-dimensional kinetic Ising model with nonuniform coupling constants
International Journal of Theoretical Physics **51**, 5 (May 2012) 1529-1537;
 DOI: 10.1007/s10773-011-1029-y

90. **Amir Aghamohammadi & Mohammad Khorrami**
 The spectrum and the phase transition of models solvable through the full interval method
Journal of Statistical Mechanics: Theory and Experiment (July 2012) P07023;
 DOI: 10.1088/1742-5468/2012/07/P07023
91. **Ahmad Shariati, Mohammad Khorrami, & Amir H. Fatollahi;**
 Dirac theory on a space with linear Lie type fuzziness
International Journal of Modern Physics A **27**, 20 (10 August 2012) 1250105;
 DOI: 10.1142/S0217751X12501059
92. **A. A. Masoudi, M. Khorrami, M. Stastna, & M. Kohandel**
 Dynamics of radial fractional growing surfaces
Europhysics Letters **100**, 1 (October 2012) 16004;
 DOI: 10.1209/0295-5075/100/16004
93. **Mohammad Khorrami**
 Comment on “Trouble with the Lorentz law of force: incompatibility with special relativity and momentum conservation”
Physical Review Letters **110**, 8 (22 February 2013) 089404;
 DOI: 10.1103/PhysRevLett.110.089404
94. **Mohammad Khorrami, Amir H. Fatollahi, & Ahmad Shariati**
 Gauge theory on a space with linear Lie type fuzziness
International Journal of Modern Physics A **28**, 8 (30 March 2013) 1350021;
 DOI: 10.1142/S0217751X13500218
95. **Amir H. Fatollahi, Ahmad Shariati, & Mohammad Khorrami**
 On the relation between the spin and the magnetic moment of the proton
Chinese Journal of Physics **51**, 3 (June 2013) 435–440
96. **Amir Aghamohammadi, Amir H. Fatollahi, Mohammad Khorrami, & Ahmad Shariati**
 Entropy as a measure of diffusion
Physics Letters A **377**, 28–30 (15 October 2013) 1677–1681;
 DOI: 10.1016/j.physleta.2013.05.15
97. **Mohammad Khorrami & Amir Aghamohammadi**
 A suspended rope wrapped around a cylinder
European Journal of Physics **35**, 2 (March 2014) 025008;
 DOI: 10.1088/0143-0807/35/2/025008
98. **Mohammad Khorrami & Amir Aghamohammadi**
 Phase transitions in a reaction–diffusion model on a line with boundaries
Journal of Mathematical Physics **55**, 3 (March 2014) 033301;
 DOI: 10.1063/1.4868216

99. **Ahmad Shariati, Amir Aghamohammadi, Amir H. Fatollahi, & Mohammad Khorrami**
Some correlation functions in matrix product ground states of one dimensional chains
Reports on Mathematical Physics **73**, 2 (April 2014) 201–211
100. **Amir H. Fatollahi, Ahmad Shariati, & Mohammad Khorrami**
Closedness of orbits in a space with $SU(2)$ Poisson structure
International Journal of Modern Physics A **29**, 17 (June 2014) 1450081;
DOI: 10.1142/S0217751X1450081X
101. **Mohammad Khorrami & Amir Aghamohammadi**
Autonomous models on a Cayley tree
Journal of Statistical Mechanics: Theory and Experiment (July 2014) P07017;
DOI: 10.1088/1742-5468/2014/07/P07017
102. **Zeinab Mohammadi, Amir Aghamohammadi, & Mohammad Khorrami**
The most general autonomous two-lane diffusion
Journal of Statistical Mechanics: Theory and Experiment (September 2014) P09028;
DOI: 10.1088/1742-5468/2014/09/P09028
103. **L. Hedayatifar, A. A. Masoudi, M. Khorrami, M. Stastna, & M. Kohandel**
Non-local fractional growing surfaces: planar and radial geometries
Journal of Physics A: Mathematical and Theoretical **47**, 45 (15 November 2014) 455003;
DOI: 10.1088/1751-8113/47/45/455003
104. **Amir Aghamohammadi & Mohammad Khorrami**
Lattice models solvable through the full interval method on links
Journal of Statistical Physics **157**, 6 (December 2014) 1320–1330;
DOI: 10.1007/s10955-014-1097-5
105. **M. Feshanjerdi, A. A. Masoudi, & M. Khorrami**
Surface coupling effects on the adhesive contact between an elastic solid and a hard substrate with randomly rough, self-affine fractal surfaces
Journal of Statistical Mechanics: Theory and Experiment (February 2015) P02018;
DOI: 10.1088/1742-5468/2015/02/P02018
106. **Marjan-S. Mirahmadi, Amir H. Fatollahi, & Mohammad Khorrami**
The similarity of attractive and repulsive forces on a lattice
International Journal of Modern Physics A **30**, 23 (30 July 2015) 1550112;
DOI: 10.1142/S0217732315501126

107. **Fatemeh Tajik, Amir Ali Masoudi, & Mohammad Khorrami**
Lateral Casimir force between self-affine rough surfaces
Physica B **485** (15 March 2016) 116–120;
DOI: 10.1016/j.physb.2016.01.016
108. **Mohammad Khorrami & Amir Aghamohammadi**
Liquid rising near walls
Physica Scripta **91**, 3 (March 2016) 035001;
DOI: 10.1088/0031-8949/91/3/035001
109. **Ahmad Shariati, Mohammad Khorrami, & Farhang Loran**
Decoherence in quantum systems in a static gravitational field
Europhysics Letters **115**, 5 (September 2016) 50003;
DOI: 10.1209/0295-5075/115/50003
110. **Mohammad Khorrami**
I. Comment on “Critique and correction of the currently accepted solution of the infinite spherical well in quantum mechanics” by Huang Young-Sea and Thomann Hans-Rudolf
Europhysics Letters **116**, 6 (December 2016) 60010;
DOI: 10.1209/0295-5075/116/60010
111. **M. Feshanjerdi, M. Khorrami, A. A. Masoudi, & M. Razzaghi Kashani**
The hysteretic contribution of friction for the polished rubber on the concrete surface
Applied Surface Science **394** (1 February 2017) 528–533;
DOI: 10.1016/j.apsusc.2016.10.054
112. **M. Feshanjerdi, A. A. Masoudi, & M. Khorrami**
Surface coupling effects on contact mechanics: contact area and interfacial separation between an elastic solid and a hard substrate with randomly rough, self-affine fractal surfaces
Journal of Theoretical and Applied Physics **11**, 1 (March 2017) 71–77;
DOI: 10.1007/s40094-016-0236-6
113. **Fatemeh Tajik, Mehdi Sedighi, Mohammad Khorrami, Amir Ali Masoudi, & George Palasantzas**
Chaotic behavior in Casimir oscillators: a case study for phase-change materials
Physical Review E **96**, 4 (October 2017) 042215;
DOI: 10.1103/PhysRevE.96.042215
114. **Zahra Eidi, Farshid Mohammad-Rafiee, Mohammad Khorrami, & Azam Gholami**
Modelling of Dictyostelium discoideum movement in a linear gradient of chemoattractant
Soft Matter **13**, 44 (28 November 2017) 8209–8222;
DOI: 10.1039/C7SM01568B

115. **Fatemeh Tajik, Mohammad Khorrami, Amir Ali Masoudi, & Fateme Mohammad Dezashibi**
The effect of roughness and correlation on the Casimir torque between two plates
International Journal of Modern Physics B **31**, 32 (30 December 2017) 1750258;
DOI: 10.1142/S0217979217502587
116. **Amir Aghamohammadi & Mohammad Khorrami**
Two-dimensional motion of a rolling non-circular cylinder on a flat horizontal surface
Canadian Journal of Physics **96**, 6 (June 2018) 627–632;
DOI: 10.1139/cjp-2017-0423