

O. I. Kartavtsev: List of publications 2004–2020

- Multi-cluster decay of atomic nuclei
O. I. Kartavtsev, *Few-Body Systems* **34**, 39 (2004)
- Three- α -cluster structure of the 0^+ states in ^{12}C and the effective $\alpha - \alpha$ interactions
S. I. Fedotov, O. I. Kartavtsev, V. I. Kochkin and A. V. Malykh, *Phys. Rev. C* **70**, 014006 (2004)
- Effect of $dt\mu$ quasi-nucleus structure on energy levels of the $(dt\mu)\text{Xee}$ exotic molecule
O. I. Kartavtsev, A. V. Malykh and V. P. Permyakov, *Phys. Rev. A* **70**, 022504 (2004)
- Lowest energy states of three identical charged particles in a two-dimensional harmonic trap
M. Braun and O. I. Kartavtsev, *Phys. Lett. A* **331**, 437 (2004)
- Effective three-body interactions in the α -cluster model for the ^{12}C nucleus
S. I. Fedotov, O. I. Kartavtsev, and A. V. Malykh, *Eur. Phys. J. A* **26**, 201 (2005)
- Universal low-energy properties of three two-dimensional bosons
O. I. Kartavtsev and A. V. Malykh, *Phys. Rev. A* **74**, 042506 (2006)
- Low-energy three-body dynamics in binary quantum gases
O. I. Kartavtsev and A. V. Malykh, *J. Phys. B* **40**, 1429 (2007)
- Universal description of the rotational-vibrational spectrum of three particles with zero-range interactions
O. I. Kartavtsev and A. V. Malykh, *Pis'ma ZhETF* **86**, 713 (2007) [*JETP Lett.* **86**, 625 (2007)]
- Effective three-body interactions in the α -cluster model for the ^{12}C nucleus
S. I. Fedotov, O. I. Kartavtsev, and A. V. Malykh, In: *Models and Methods in Few- and Many-Body Systems. Proc. of the DST-UNISA-JINR Symposium Ed.: S. A. Sofianos (Pretoria, UNISA Press, 2007)*, pp. 64-73
- Universal three-body dynamics in binary mixtures of ultra-cold atoms
O. I. Kartavtsev and A. V. Malykh, *Few-Body Systems* **44**, 229 (2008)
- Bound states and scattering lengths of three two-component particles with zero-range interactions under one-dimensional confinement
O. I. Kartavtsev, A. V. Malykh, and S. A. Sofianos, *ZhETF* **135**, 419 (2009) [*JETP* **108**, 365 (2009)]
- Consistent description of the $^{12}\text{C}(0_2^+)$ state
S. I. Fedotov, O. I. Kartavtsev, and A. V. Malykh, *Few-Body Systems* **45**, 153 (2009)

- Consistent α -cluster description of the $^{12}\text{C}(0_2^+)$ “Hoyle” resonance
S. I. Fedotov, O. I. Kartavtsev, and A. V. Malykh, *Pis'ma ZhETF* **92**, 715 (2010)
[*JETP Lett.* **92**, 647 (2010)]
- Universal properties of ultra-cold two-component three-body systems
O. I. Kartavtsev and A. V. Malykh, *Vestnik SPbU, ser. 4, No. 3 p. 121* (2010)
- Recent advances in description of few two-component fermions
O. I. Kartavtsev and A. V. Malykh, *Yadernaya Fizika* **77**, 458 (2014)
- Universal description of three two-component fermions
O. I. Kartavtsev and A. V. Malykh, *Europhysics Letters* **115**, 36005 (2016)
- Three two-component fermions with contact interactions: correct formulation and energy spectrum
O. I. Kartavtsev and A. V. Malykh, *arXiv:1904.04943 [cond-mat.quant-gas]*

Recent conference talks

- Exact and qualitative results in the two-species few-body problem
O. I. Kartavtsev, *International Workshop on Few-Body Systems, BLTPH, JINR, Dubna, Russia 2016*
- One-dimensional three-body problem with inverse-square two-body interaction
O. I. Kartavtsev and A. V. Malykh, *International Workshop on Few-Body Systems, BLTPH, JINR, Dubna, Russia 2016*
- Three two-species fermions with contact interactions
O. I. Kartavtsev and A. V. Malykh, *XXII International Conference on Few-Body Problems in Physics (FB22), Universite Caen, IUPAP, CNRS, CEA, Caen, France 2018*
- On the spectrum of three-body states in the one-dimensional harmonic trap
O. I. Kartavtsev, A. V. Malykh, and P. Zhang, *LXIX International Conference on Nuclear Physics "Nucleus 2019", Joint Institute for Nuclear Research, Dubna, Russia*

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