



中山大學中法核工程与技术学院

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3. 国家自然科学基金应急管理项目, 非阿贝尔规范理论中的新孤子解研究, 2015/01-2015/12, 主持.
4. 国家重点研发计划, 国家大科学装置上GEM 探测器关键技术研发, 2017/04-2019/12, 参加.
5. 国家自然科学基金面上项目, 基于规范场内部结构的强子性质研究, 2016/01-2019/12, 参加.
6. 国家自然科学基金面上项目, 11175215, 规范势分解、夸克囚禁的对偶超导理论和核子结构的相关研究, 2012/01-2015/12, 参加.
7. 国家自然科学基金面上项目, 11175218, 高能重离子碰撞动力学和对称能高密行为研究, 2012/01-2015/12, 参加.

学术论文:

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4. P. M. Zhang, **Liping Zou**(\*) and Yongmin Cho, Regularization of Electroweak Monopole by Charge Screening and BPS Energy Bound, Eur. Phys. J. C 80, 280 (2020).
5. Alexander J. Silenko(\*), Pengming Zhang(\*), **Liping Zou**(\*), Electric Quadrupole Moment and the Tensor Magnetic Polarizability of Twisted Electrons and a Potential for their Measurements (<http://inspirehep.net/record/1720387>), Phys. Rev. Lett. 122, 063201 (2019).
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7. Alexander J. Silenko<sup>(\*)</sup>, Pengming Zhang<sup>(\*)</sup>, **Liping Zou<sup>(\*)</sup>**, Relativistic quantum dynamics of twisted electron beams in arbitrary electric and magnetic fields, Phys. Rev. Lett. 121, 043202 (2018).
8. Alexander J. Silenko<sup>(\*)</sup>, Pengming Zhang<sup>(\*)</sup>, **Liping Zou<sup>(\*)</sup>**, Manipulating Twisted Electron Beams, Phys. Rev. Lett. 119, 243903 (2017).
9. **Liping Zou** ([http://inspirehep.net/author/profile/Zou%2C%20Liping?recid=1717842&ln=zh\\_CN](http://inspirehep.net/author/profile/Zou%2C%20Liping?recid=1717842&ln=zh_CN))<sup>(\*)</sup>, Hans Günter Dosch ([http://inspirehep.net/author/profile/Dosch%2C%20Hans%20G%C3%BCnter?recid=1717842&ln=zh\\_CN](http://inspirehep.net/author/profile/Dosch%2C%20Hans%20G%C3%BCnter?recid=1717842&ln=zh_CN))<sup>(\*)</sup>, Guy F. De Téramond ([http://inspirehep.net/author/profile/De%20T%C3%A9ramond%2C%20Guy%20F.?recid=1717842&ln=zh\\_CN](http://inspirehep.net/author/profile/De%20T%C3%A9ramond%2C%20Guy%20F.?recid=1717842&ln=zh_CN))<sup>(\*)</sup>, Stanley J. Brodsky ([http://inspirehep.net/author/profile/Brodsky%2C%20Stanley%20J.?recid=1717842&ln=zh\\_CN](http://inspirehep.net/author/profile/Brodsky%2C%20Stanley%20J.?recid=1717842&ln=zh_CN))<sup>(\*)</sup>, Isoscalar mesons and exotic states in light front holographic QCD (<http://inspirehep.net/record/1717842>), Phys. Rev. D 99, 114024 (2019).
10. Alexander J. Silenko<sup>(\*)</sup>, Pengming Zhang<sup>(\*)</sup>, **Liping Zou<sup>(\*)</sup>**, Relativistic quantum-mechanical description of twisted paraxial electron and photon beams (<http://inspirehep.net/record/1755495>), Phys. Rev. A(R) 100, 030101 (2019).
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29. Y.M. Cho, D. G. Pak<sup>(\*)</sup>, P. M. Zhang and **Liping Zou**, Weyl symmetric structure of QCD vacuum, Phys. Rev. D 86, 045025 (2012).
30. X. Y. Wang, **Liping Zou**, Z. Q. Wei and P.M. Zhang<sup>(\*)</sup>, Vortex In The Non-Abelian Dual Super-conductor Theory, Rev. Nucl. Phys. 28, 185 (2011).
31. C. K. Wang, **Liping Zou** and P.M. Zhang<sup>(\*)</sup>, Bag model and multi-component dual Ginzburg-Landau theory, Rev. Nucl. Phys. 27, 432 (2010).

#### 会议论文:

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2. A. J. Silenko, P. M. Zhang and **Liping Zou**, Fundamental operators in Dirac quantum mechanics, Journal of Physics: Conference Series 1435 (2020) 012027.
3. Alexander J. Silenko, P. M. Zhang, **Liping Zou**, Dynamics of an orbital polarization of twisted electron beams in electric and magnetic fields (<http://inspirehep.net/record/1728314>), EPJ Web Conf. 204, 10008 (2019).
4. P. M. Zhang, C. K. Wang, **Liping Zou**, D. J. Jia and X. Y. Wang, Wall vortices in the multi-component dual superconductor theory (<http://inspirehep.net/record/1086262>), Hadron and Nuclear Physics 09, 108 (2010) (<https://www.worldscientific.com/worldscibooks/10.1142/7823>).



