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## **Publications:**

### **Books:**

1. S. A. Jafari, Persian translation of *Quantum Theory of Solids*, by E. P. O'Reilly, Isfahan Univ. of Tech. Press, Iran (2005).
2. S. A. Jafari, Persian translation of *Superconductivity, Superfluidity and Condensates*, by J. F. Annett, Isfahan Univ. of Tech. Press, Iran (2014).

### **Refereed Papers:**

1. E. Adibi, A. Habibi, S. A. Jafari, *Phys. Rev. B* **99** (2019) 014204.
2. Z. Jalalimola, S. A. Jafari, *J. Magn. Magn. Mat.* **471** (2019) 220.
3. Z. Jalalimola, S. A. Jafari, *Phys. Rev. B* **98** (2018) 235430.
4. A. Habibi, E. Adibi, S. A. Jafari, *Phys. Rev. B* **98** (2018) 245105.
5. A. Mohajerani, Z. Faraei, S. A. Jafari, *J. Phys. Cond. Mat.* **30** (2018) 50LT01.
6. Z. Faraei, T. Farajollahpour, S. A. Jafari, *Phys. Rev. B* **98** (2018) 195402.
7. Z. Jalalimola, S. A. Jafari, *Phys. Rev. B* **98** (2018) 195415.
8. A. Habibi, S. A. Jafari, S. Rouhani, *Phys. Rev. B* **98** (2018) 035142.
9. T. Farajollahpour, S. A. Jafari, *Phys. Rev. B* **98** (2018) 085136.
10. T. Farajollahpour, S. A. Jafari, *J. Phys. Cond. Mat.* **30** (2017) 015602.
11. Z. Faraei, S. A. Jafari, *Phys. Rev. B* **96** (2017) 134516.
12. M. Salehi, S. A. Jafari, *Sci. Rep.* **7** (2017) 8221.
13. S. A. Jafari, *Phys. Rev. E* **96** (2017) 012159.
14. S. A. Jafari, F. Shahbazi, *Sci. Rep.* **6** (2016) 32720.
15. E. Adibi, S. A. Jafari, *Phys. Rev. B* **93** (2016) 075122.
16. M. Mashkooori, I. Mahyaeh, S. A. Jafari, *J. Phys. Soc. Jan.*, **85** (2016) 014707.
17. Hanif Hadipuor, S. A. Jafari, *Eur. Phys. Jour. B* **88** (2015) 270.
18. Z. Jalali, S. A. Jafari, *J. Phys. Conference Series*, **603** (2015) 012005.
19. M. Mashkooori, I. Mahyaeh, S. A. Jafari, *J. Phys. Conference Series*, **603** (2015) 012015.
20. E. Ahmadi, S. A. Jafari, *J. Phys. Conference Series*, **603** (2015) 012016.
21. M. Salehi, S. A. Jafari, *Ann. Phys.* **359** (2015) 64.
22. M. Mashkooori, S. A. Jafari, *J. Phys. Cond. Mat.* **27** (2015) 156001.
23. M. H. Zare, H. Mosadeq, F. Shahbazi, S. A. Jafari, *J. Phys. Cond. Ma.* **26** (2014) 456004.
24. S. A. Jafari, T. Thoyama, *J. Phys. Cond. Mat.* **26** (2014) 415601.
25. S. A. Jafari, *Eur. Phys. Lett.* **107** (2014) 20005
26. A. Habibi, S. A. Jafari, *J. Phys. Cond. Mat.* **25** (2013) 375501
27. J. Sarabadani, M. Soltani, P. Zakeri, and S. A. Jafari, *Phys. Rev. A* **86** (2012) 022507
28. S. A. Jafari, *J. Phys. Cond. Mat.* **24** (2012) 305601
29. S. A. Jafari, *J. Phys. Cond. Mat.* **24** (2012) 205802.
30. M. Ebrahimkhas, S. A. Jafari, *Eur. Phys. Lett.* **98** (2012) 27009.
31. S. A. Jafari, G. Baskaran, *J. Phys.: Cond. Mat.* **24** (2012) 09560.
32. M. Ebrahimkhas, S. A. Jafari, G. Baskaran, *Int. J. Mod. Phys. B* **26** (2012) 1242006.
33. E. Sarvestani, S. A. Jafari, *Phys. Rev. B* **85** (2012) 024513.

34. D. Haberer, et al, *Phys. Status Solidi B*, **248** (2011) 2639.
35. Z. Faraei, S. A. Jafari, V. Daadmehr, *Physica C* **471** (2011) 458.
36. D. Haberer, et al, *Advanced Materials* **23** (2011) 4487.
37. H. Mosadeq, F. Shahbazi, S. A. Jafari, *JPCM*, **23** (2011) 226006.
38. D. Haberer, et al, *Phys. Rev. B* **83** (2011) 165433.
39. M. Hafez, S. A. Jafari, *Eur. Phys. Jour. B* **78** (2010) 323.
40. H. H. Arefi, S. A. Jafari, M. R. Abolhassani, *Eur. Phys. J. B* **77** (2010) 331.
41. M. Alaei, S. A. Jafari, *Phys. Lett. A*, **374** (2010) 3793.
42. M. Hafez, S. A. Jafari, Sh. Adibi, F. Shahbazi, *Phys. Rev. B*, **81** (2010) 245131.
43. M. H. Zare, M. Amini, F. Shahbazi, S. A. Jafari, *J. Phys. Cond. Mat.* **22** (2010) 255503.
44. M. Amini, S. A. Jafari, F. Shahbazi, *Eur. Phys. Lett.* **90** (2010) 17003.
45. M. B. Fathi, S. A. Jafari, *Physica B* **405** (2010) 1658.
46. M. Hafez, S. A. Jafari, M. R. Abolhassani, *Phys. Lett. A* **373** (2009) 4479.
47. M. Amini, S. A. Jafari, F. Shahbazi, *Eur. Phys. Lett.* **87** (2009) 37002 .
48. M. Ebrahimkhas, S. A. Jafari, *Phys. Rev. B* **79** (2009) 205425.
49. S. A. Jafari, *Eur. Phys. J. B* **68** (2009) 537.
50. Z. Noorbakhsh, F. Shahbazi, S. A. Jafari, G. Baskaran, *JPSJ* **78** (2009) 054701.
51. S. A. Jafari, *Int. J. Mod. Phys. B* **23** (2009) 395.
52. S. A. Jafari, *Opt. Commun.* **282** (2009) 317.
53. M. Alaei, S. A. Jafari, H. Akbarzadeh, *J. Phys. Chem. Sol.* **69** (2008) 3283.
54. S. A. Jafari, *Iranian J. Phys. Res.* **8** No. 2 (2008) 113.
55. S. A. Jafari, T. Tohyama, S. Maekawa, *J. Phys. Soc. Jon.* **76** (2007) 044706.
56. S. A. Jafari, T. Tohyama, S. Maekawa, *J. Mag. Mag. Mat.* **310** (2007) 960.
57. S. A. Jafari, T. Tohyama, S. Maekawa, *JPSJ (Letter)* **75** (2006) 083706.
58. S. A. Jafari, T. Tohyama, S. Maekawa, *J. Phys. Soc. Jpn.* **75** (2006) 054703.
59. S. A. Jafari, G. Baskaran, *Eur. Phys. Jour. B* **43** (2005) 175.
60. G. Baskaran, S.A. Jafari, *Phys. Rev. Lett.* **92** (2004) 199702.
61. G. Baskaran, S. A. Jafari, *Phys. Rev. Lett.* **89** (2002) 016402.

#### Preprints:

1. K. Haghighi Mood, S. A. Jafari, E. Adibi, G. Baskaran, M. R. Abolhassani, arXiv: 1107.4208
2. A. Youssefi, M. Ansari-Fard, S. A. Jafari, arXiv: 1608.03948 (2016)
3. A. Habibi, R. Ghadimi, S. A. Jafari, arXiv:1807.01339 (2018)
4. R. Ghadimi, M. Kargarian, S. S. Jafari, arXiv:1812.03316 (2018)

#### In preparation:

1. S. A. Jafari, *The SYK proximity effect*
2. S. A. Jafari, Juergen Koenig, *Theory of inter-valley triplons in two-dimensional Dirac materials*
3. A. Hosseinzadeh, S. A. Jafari, *Many-body localization in one-dimensional ionic Hubbard model*

### Conference Contributions:

1. Asia Pacific Workshop (APW) and workshop on Diluted Magnetic Semiconductors, 1-5 Nov. 2018, Beijing (**Invited Talk**)
2. Conference on quantum dynamics of disordered interacting systems, ICTP, Trieste, Italy, 11-15 July 2018 (**Contributed Talk**)
3. Asia Pacific Workshop, Feb. 2017, Korea (**Invited Talk**)
4. Conference on Interactions and Topology in Dirac systems, ICTP, Trieste, Italy, Aug. 2016 (**Contributed Talk**)
5. Asia Pacific Workshop, Zheijiang University, April 2015, (**Invited Talk**)
6. International workshop on Dirac Electrons in Solids, Univ. of Tokyo, Jan. 2015 (**Contributed Talk**)
7. Advanced mini-workshop on recent progress in graphene, March 2014, Kish, Iran (**Invited Talk**)
8. Fifth International conference in Nanostructures (ICNS5), March 2014, Kish, Iran (**Invited Talk**)
9. National Conference on Advances in Superconductivity, June. 2012, Kashan, Iran (**Invited Talk**)
10. 1st NAREGI international Nanoscience Conference, June 2005, Nara, Japan.
11. National Conference on Condensed Matter and Materials Physics, Jan. 2006 Baroda, India.
12. International Conference on Magnetism, Aug. 2006, Kyoto, Japan.
13. Spectroscopies in Novel Superconductors, Aug. 2006, Sendai, Japan.
14. Novel Quantum Phenomena in Graphene, Dec. 2006, Chennai, India (**Invited Talk**).
15. The international symposium on Anomalous Quantum Materials 2006 and the 5th Asia-Pacific Workshop, Okinawa, Japan.
16. International Symposium on Anomalous Quantum Materials 2008 and the 7th Asia-Pacific Workshop, Tokyo, Japan (**Talk**)
17. Conference on Magnetism, Superconductivity and phase transitions in novel and complex Materials (MSM09), Nov. 2009, Kolkata, India (**Invited Talk**).
18. 3rd Materials Science School for Young Scientists, Aug. 2006, Akiu, Sendai, Japan.
19. 12<sup>th</sup> Condensed Matter meeting, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran, Spring 2006 (**Invited Talk**)

### Lecture notes:

1. S. A. Jafari, *Solid State Physics*, (in Persian), Based on the textbook of Ibach and Luth, Incomplete translation.
2. S. A. Jafari, *Computational Physics* (in Persian), Evolving manuscript.
3. S. A. Jafari, *Many-body quantum theory* (in Persian), Evolving manuscript.