**Lượng tử: Công nghệ hiện đại**

Trong vật lý, lượng tử là số lượng tối thiểu của bất kỳ thực thể vật lý (thuộc tính vật lý) tham gia vào một sự tương tác. Khái niệm cơ bản rằng một thuộc tính vật lý có thể được "lượng tử hóa" được gọi là "giả thuyết lượng tử hóa ".[1] Điều này có nghĩa là độ lớn của thuộc tính vật lý chỉ có thể nhận các giá trị rời rạc bao gồm các bội số nguyên của một lượng tử.

Để hiểu rõ hơn Cục Thông tin KH&CN quốc gia xin giới thiệu một số bài nghiên cứu đã được xuất bản chính thức và các bài viết được chấp nhận đăng trên những cơ sở dữ liệu học thuật chính thống.



**1. Sciencedirect**

1. Service differentiation and fair sharing in distributed quantum computing  
Pervasive and Mobile Computing 8 February 2023 Volume 90 (Cover date: March 2023) Article 101758  
Claudio Cicconetti, Marco Conti, Andrea Passarella  
[https://www.sciencedirect.com/science/article/pii/S1574119223000160/pdfft?md5=ed46ac39eb6a54b3f045b92c75b5946b&pid=1-s2.0-S1574119223000160-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S1574119223000160/pdfft?md5=ed46ac39eb6a54b3f045b92c75b5946b&pid=1-s2.0-S1574119223000160-main.pdf)  
  
2. Qubit control using quantum Zeno effect: Action principle approach  
Annals of Physics 14 January 2023 Volume 450 (Cover date: March 2023) Article 169222  
Komal Kumari, Garima Rajpoot, Sudhir Ranjan Jain  
[https://www.sciencedirect.com/science/article/pii/S0003491623000076/pdfft?md5=35a2296d4583cdc9002577b7de31eaba&pid=1-s2.0-S0003491623000076-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0003491623000076/pdfft?md5=35a2296d4583cdc9002577b7de31eaba&pid=1-s2.0-S0003491623000076-main.pdf)  
  
3. Succinct quantum classification algorithm based on quantum circuit model  
Chinese Journal of Physics Available online 17 February 2023 In press, journal pre-proof  
Xu Zhou, Daowen Qiu  
[https://www.sciencedirect.com/science/article/pii/S0577907323000126/pdfft?md5=2533d0c92e54a378fb386b0635e9b87e&pid=1-s2.0-S0577907323000126-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0577907323000126/pdfft?md5=2533d0c92e54a378fb386b0635e9b87e&pid=1-s2.0-S0577907323000126-main.pdf)  
  
4. The general expressions of heat and work in two representations of quantum mechanics  
Physica A: Statistical Mechanics and its Applications 5 December 2022 Volume 609 (Cover date: 1 January 2023) Article 128389  
Jingyi Chen, Youlin Wang, Shanhe Su  
[https://www.sciencedirect.com/science/article/pii/S0378437122009475/pdfft?md5=acb6ce72760ca7475335b3ed3118c851&pid=1-s2.0-S0378437122009475-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0378437122009475/pdfft?md5=acb6ce72760ca7475335b3ed3118c851&pid=1-s2.0-S0378437122009475-main.pdf)  
  
5. Quantum Machine Learning: Scope for real-world problems  
Procedia Computer Science 31 January 2023 Volume 218 (Cover date: 2023) Pages 2612-2625  
Abhishek Jadhav, Akhtar Rasool, Manasi Gyanchandani  
[https://www.sciencedirect.com/science/article/pii/S1877050923002351/pdfft?md5=a4f66a42c0ad7fbabb83a97196a9caff&pid=1-s2.0-S1877050923002351-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S1877050923002351/pdfft?md5=a4f66a42c0ad7fbabb83a97196a9caff&pid=1-s2.0-S1877050923002351-main.pdf)  
  
6. Quantum field theory based quantum information: Measurements and correlations  
Annals of Physics 28 January 2023 Volume 450 (Cover date: March 2023) Article 169239  
Charis Anastopoulos, Bei-Lok Hu, Konstantina Savvidou  
[https://www.sciencedirect.com/science/article/pii/S0003491623000246/pdfft?md5=1e42b1c863b2a52179bc1fa27a58edea&pid=1-s2.0-S0003491623000246-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0003491623000246/pdfft?md5=1e42b1c863b2a52179bc1fa27a58edea&pid=1-s2.0-S0003491623000246-main.pdf)  
  
7. tqix.pis: A toolbox for quantum dynamics simulation of spin ensembles in Dicke basis  
Computer Physics Communications 8 February 2023 Volume 286 (Cover date: May 2023) Article 108686  
Nguyen Tan Viet, Nguyen Thi Chuong, Le Bin Ho  
[https://www.sciencedirect.com/science/article/pii/S0010465523000310/pdfft?md5=3818f3967b3c92ff67915849caae06e3&pid=1-s2.0-S0010465523000310-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0010465523000310/pdfft?md5=3818f3967b3c92ff67915849caae06e3&pid=1-s2.0-S0010465523000310-main.pdf)

8. Quantum grayscale image encryption and secret sharing schemes based on Rubik’s Cube  
Physica A: Statistical Mechanics and its Applications 12 January 2023 Volume 612 (Cover date: 15 February 2023) Article 128482  
Hua-Kun Wang, Guang-Bao Xu, Dong-Huan Jiang  
[https://www.sciencedirect.com/science/article/pii/S0378437123000377/pdfft?md5=c6afcc904790b9b75bce22047278fdb6&pid=1-s2.0-S0378437123000377-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0378437123000377/pdfft?md5=c6afcc904790b9b75bce22047278fdb6&pid=1-s2.0-S0378437123000377-main.pdf)  
  
9. Coherence-induced quantum forces  
Physica B: Condensed Matter 20 November 2022 Volume 650 (Cover date: 1 February 2023) Article 414515  
Tarek A. Elsayed  
[https://www.sciencedirect.com/science/article/pii/S0921452622008006/pdfft?md5=b179573420c1962f6fde11d12f47db08&pid=1-s2.0-S0921452622008006-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0921452622008006/pdfft?md5=b179573420c1962f6fde11d12f47db08&pid=1-s2.0-S0921452622008006-main.pdf)  
  
10. Towards solving the BCS Hamiltonian gap in near-term quantum computers  
Results in Physics 28 November 2022 Volume 44 (Cover date: January 2023) Article 106131  
Nahum SáIvan S. Oliveira, Itzhak Roditi  
[https://www.sciencedirect.com/science/article/pii/S2211379722007458/pdfft?md5=1daa5433c972feb3eb69cd1ebd610264&pid=1-s2.0-S2211379722007458-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S2211379722007458/pdfft?md5=1daa5433c972feb3eb69cd1ebd610264&pid=1-s2.0-S2211379722007458-main.pdf)  
  
11. A Survey on Quantum Computing for Internet of Things Security  
Procedia Computer Science 31 January 2023 Volume 218 (Cover date: 2023) Pages 2191-2200  
Diksha Chawla, Pawan Singh Mehra  
[https://www.sciencedirect.com/science/article/pii/S1877050923001953/pdfft?md5=04650f48ec20c982defaee5ded5c7ebb&pid=1-s2.0-S1877050923001953-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S1877050923001953/pdfft?md5=04650f48ec20c982defaee5ded5c7ebb&pid=1-s2.0-S1877050923001953-main.pdf)  
  
12. Rapid solution of logical equivalence problems by quantum computation algorithm  
Applied Soft Computing 24 November 2022 Volume 132 (Cover date: January 2023) Article 109844  
Mohammed Zidan, Salem F. Hegazy, Salah S. A. Obayya  
[https://www.sciencedirect.com/science/article/pii/S1568494622008936/pdfft?md5=0b854ebb9e8d1f853a1c7f3be743faf5&pid=1-s2.0-S1568494622008936-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S1568494622008936/pdfft?md5=0b854ebb9e8d1f853a1c7f3be743faf5&pid=1-s2.0-S1568494622008936-main.pdf)  
  
13. An improved quantum algorithm for data fitting  
Physica A: Statistical Mechanics and its Applications30 January 2023Volume 613 (Cover date: 1 March 2023)Article 128521  
Jiancheng LeiTingting SongKejia Zhang  
[https://www.sciencedirect.com/science/article/pii/S0378437123000766/pdfft?md5=25fb917aba5b6901b4e168966c43163c&pid=1-s2.0-S0378437123000766-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0378437123000766/pdfft?md5=25fb917aba5b6901b4e168966c43163c&pid=1-s2.0-S0378437123000766-main.pdf)  
  
14. A shallow hybrid classical–quantum spiking feedforward neural network for noise-robust image classification  
Applied Soft Computing 10 February 2023 Volume 136 (Cover date: March 2023) Article 110099  
Debanjan Konar, Aditya Das Sarma, Vaneet Aggarwal  
[https://www.sciencedirect.com/science/article/pii/S1568494623001175/pdfft?md5=b7ffe5d960808e01796f6627c8525074&pid=1-s2.0-S1568494623001175-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S1568494623001175/pdfft?md5=b7ffe5d960808e01796f6627c8525074&pid=1-s2.0-S1568494623001175-main.pdf)  
  
15. Quantum k-fold cross-validation for nearest neighbor classification algorithm  
Physica A: Statistical Mechanics and its Applications 30 December 2022 Volume 611 (Cover date: 1 February 2023) Article 128435  
Jing Li, Fei Gao, QiaoYan Wen  
[https://www.sciencedirect.com/science/article/pii/S0378437122009931/pdfft?md5=7579fb80d85970ae5a7f82177c2356f7&pid=1-s2.0-S0378437122009931-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0378437122009931/pdfft?md5=7579fb80d85970ae5a7f82177c2356f7&pid=1-s2.0-S0378437122009931-main.pdf)  
  
16. Hybrid quantum–classical generative adversarial networks for image generation via learning discrete distribution  
Signal Processing: Image Communication 1 November 2022 Volume 110 (Cover date: January 2023) Article 116891  
Nan-Run Zhou, Tian-Feng Zhang, Jun-Yun Wu  
[https://www.sciencedirect.com/science/article/pii/S0923596522001709/pdfft?md5=15a22c7a488a40372575d4e1ad2381b2&pid=1-s2.0-S0923596522001709-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0923596522001709/pdfft?md5=15a22c7a488a40372575d4e1ad2381b2&pid=1-s2.0-S0923596522001709-main.pdf)  
  
17. Quantum bionic advantage on near-term cloud ecosystem  
Optik 6 December 2022 Volume 272 (Cover date: February 2023) Article 170295  
Samih Fadli, Bharat S. Rawal  
[https://www.sciencedirect.com/science/article/pii/S0030402622015534/pdfft?md5=cdd8e3ebe45c6945d140f7f053991b97&pid=1-s2.0-S0030402622015534-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0030402622015534/pdfft?md5=cdd8e3ebe45c6945d140f7f053991b97&pid=1-s2.0-S0030402622015534-main.pdf)  
  
18. Relative phase distribution and the precision of optical phase sensing in quantum metrology  
Optics Communications 6 September 2022 Volume 527 (Cover date: 15 January 2023) Article 128954  
Felipe F. Braz, Tamíris R. Calixto, Pablo L. Saldanha  
[https://www.sciencedirect.com/science/article/pii/S0030401822006010/pdfft?md5=b83a89a403e9bfa93e2fe86cec5e3dae&pid=1-s2.0-S0030401822006010-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0030401822006010/pdfft?md5=b83a89a403e9bfa93e2fe86cec5e3dae&pid=1-s2.0-S0030401822006010-main.pdf)

19. On applying the lackadaisical quantum walk algorithm to search for multiple solutions on grids  
Information Sciences 5 December 2022 Volume 622 (Cover date: April 2023) Pages 873-888  
Jonathan H. A. de Carvalho, Luciano S. de Souza, Tiago A. E. Ferreira  
[https://www.sciencedirect.com/science/article/pii/S0020025522014529/pdfft?md5=560ced795ae4576fd564bb21a88aa7ed&pid=1-s2.0-S0020025522014529-main.pdf](https://www-sciencedirect-com.dbvista.idm.oclc.org/science/article/pii/S0020025522014529/pdfft?md5=560ced795ae4576fd564bb21a88aa7ed&pid=1-s2.0-S0020025522014529-main.pdf)

20. Implication of giant photon bunching on quantum phase transition in the dissipative anisotropic quantum Rabi model  
Physica A: Statistical Mechanics and its Applications 5 December 2022 Volume 609 (Cover date: 1 January 2023) Article 128364  
Tian Ye, Chen Wang, Qing-Hu Chen  
<https://www.sciencedirect.com/science/article/pii/S0378437122009220/pdfft?md5=ad3b56d27736ef3e5537b076881a5021&pid=1-s2.0-S0378437122009220-main.pdf>  
  
21. Witnessing quantum correlations in two coupled quantum dots under intrinsic decoherence  
Alexandria Engineering Journal 20 February 2023 Volume 69 (Cover date: 15 April 2023) Pages 521-527  
Nagwa Ibrahim Mohammed, Hanadi M. Abdelsalam, E. M. Khalil  
<https://www.sciencedirect.com/science/article/pii/S1110016823000807/pdfft?md5=bf5a92db15c71973cd9a7ad16cabded9&pid=1-s2.0-S1110016823000807-main.pdf>

22. Quantum Tic-Tac-Toe - learning the concepts of quantum mechanics in a playful way  
Computers and Education Open24 January 2023Volume 4 (Cover date: December 2023)Article 100125  
Maurice WeingärtnerTim Weingärtner  
<https://www.sciencedirect.com/science/article/pii/S2666557323000046/pdfft?md5=c74c9b1ee6fc83c1a2dbe478062c545e&pid=1-s2.0-S2666557323000046-main.pdf>

23. QIST: One-dimensional quantum integer wavelet S-transform  
Information Sciences 5 December 2022 Volume 622 (Cover date: April 2023) Pages 999-1013  
Freddy Alejandro Chaurra-Gutierrez, Claudia Feregrino-Uribe, Gustavo Rodriguez-Gomez  
<https://www.sciencedirect.com/science/article/pii/S0020025522014931/pdfft?md5=de1557a7219d11e23bf69e713fe9e45b&pid=1-s2.0-S0020025522014931-main.pdf>

24. When quantum annealing meets multitasking: Potentials, challenges and opportunities  
Array 23 January 2023 Volume 17 (Cover date: March 2023) Article 100282  
Tian Huang, Yongxin Zhu, Tao Luo  
<https://www.sciencedirect.com/science/article/pii/S2590005623000073/pdfft?md5=22aa1753d354cc56d534bfb76c1a6026&pid=1-s2.0-S2590005623000073-main.pdf>

25. Quantum-inspired algorithm for direct multi-class classification  
Applied Soft Computing 29 December 2022 Volume 134 (Cover date: February 2023) Article 109956  
Roberto Giuntini, Federico Holik, Giuseppe Sergioli  
<https://www.sciencedirect.com/science/article/pii/S1568494622010055/pdfft?md5=68eb0e83f5682a180f67ca4c1b08ea0d&pid=1-s2.0-S1568494622010055-main.pdf>

26. A research on incentive method of investment linkage based on the perspective of quantum game  
Finance Research Letters 19 November 2022 Volume 52 (Cover date: March 2023) Article 103511  
Yang Liu, Mengying Cui, Xubin Gao  
<https://www.sciencedirect.com/science/article/pii/S1544612322006870/pdfft?md5=522da825537783353cbb18a2257f6aa1&pid=1-s2.0-S1544612322006870-main.pdf>

27. Quantum Wasserstein isometries on the qubit state space  
Journal of Mathematical Analysis and Applications 28 December 2022 Volume 522, Issue 2 (Cover date: 15 June 2023) Article 126955  
György Pál Gehér, József Pitrik, Dániel Virosztek  
<https://www.sciencedirect.com/science/article/pii/S0022247X22009696/pdfft?md5=179556bfebe9d94bb758064f85f4d8a9&pid=1-s2.0-S0022247X22009696-main.pdf>

28. Numerical and quantum simulation of a quantum disentangled liquid  
Physica A: Statistical Mechanics and its Applications14 February 2023Volume 615 (Cover date: 1 April 2023)Article 128561  
E. AbbasgholinejadS. RaeisiA. Langari  
<https://www.sciencedirect.com/science/article/pii/S0378437123001164/pdfft?md5=506e28ef2bb634c6f4af9c84e2caaf19&pid=1-s2.0-S0378437123001164-main.pdf>

29. A hybrid NEQR image encryption cryptosystem using two-dimensional quantum walks and quantum coding  
Signal Processing 15 December 2022 Volume 205 (Cover date: April 2023) Article 108890  
Wentao Hao, Tianshuo Zhang, Xiaoyi Zhou  
<https://www.sciencedirect.com/science/article/pii/S0165168422004297/pdfft?md5=e13b380fa13429b31017c71b24604c13&pid=1-s2.0-S0165168422004297-main.pdf>

30. Entanglement transfer via chiral and continuous-time quantum walks on a triangular chain  
Physica A: Statistical Mechanics and its Applications 14 January 2023 Volume 612 (Cover date: 15 February 2023) Article 128480  
Utku Sağlam, Mauro Paternostro, Özgür E. Müstecaplıoğlu  
<https://www.sciencedirect.com/science/article/pii/S0378437123000353/pdfft?md5=8d8076d7b2618f702b968d4ecd365705&pid=1-s2.0-S0378437123000353-main.pdf>

31. Masking quantum information in the Kitaev Abelian anyons  
Physica A: Statistical Mechanics and its Applications 19 January 2023 Volume 612 (Cover date: 15 February 2023) Article 128495  
Yao Shen, Fu-Lin Zhang, Chi-Chun Zhou  
<https://www.sciencedirect.com/science/article/pii/S037843712300050X/pdfft?md5=b1d529bade2f60421a57a99bfc69036e&pid=1-s2.0-S037843712300050X-main.pdf>

32. Precipitation and optical properties of PbSexS1-x quantum dots in glasses  
Journal of Non-Crystalline Solids 21 January 2023 Volume 604 (Cover date: 15 March 2023) Article 122156  
Juan Liu, Jingjing Liu, Chao Liu  
<https://www.sciencedirect.com/science/article/pii/S002230932300025X/pdfft?md5=c3faf5adc02cd8bb444d81800f9af65e&pid=1-s2.0-S002230932300025X-main.pdf>

33. QOptCraft: A Python package for the design and study of linear optical quantum systems  
Computer Physics Communications 29 August 2022 Volume 282 (Cover date: January 2023) Article 108511  
Daniel Gómez Aguado, Vicent Gimeno, Juan Carlos Garcia-Escartin  
<https://www.sciencedirect.com/science/article/pii/S0010465522002302/pdfft?md5=81d10fe8230236958f25ce33ce2cabb2&pid=1-s2.0-S0010465522002302-main.pdf>

34. Infinite quantum permutations  
Advances in Mathematics 2 February 2023 Volume 415 (Cover date: 15 February 2023) Article 108887  
Christian Voigt  
<https://www.sciencedirect.com/science/article/pii/S0001870823000300/pdfft?md5=d0206e885a097ff0c0c4de328329ea5b&pid=1-s2.0-S0001870823000300-main.pdf>

35. A multi-color carbon quantum dots based on the coordinated effect of quantum size and surface defects with green synthesis  
Ceramics International Available online 4 February 2023 In press, corrected proof  
Youjun Zhao, Lixin Yu, Xiaoling Zeng  
<https://www.sciencedirect.com/science/article/pii/S0272884223002997/pdfft?md5=eeb537487b91b25ff524655261104e54&pid=1-s2.0-S0272884223002997-main.pdf>

36. Recommender system expedited quantum control optimization  
Physics Open25 November 2022Volume 14 (Cover date: February 2023)Article 100127  
Priya BatraM. Harshanth RamT. S. Mahesh  
<https://www.sciencedirect.com/science/article/pii/S266603262200028X/pdfft?md5=31102cb66ce0dbdb2f34c963dcf87a87&pid=1-s2.0-S266603262200028X-main.pdf>

37. Explainable quantum clustering method to model medical data  
Knowledge-Based SystemsAvailable online 23 February 2023In press, journal pre-proofArticle 110413  
Shradha DeshmukhBikash K. BeheraAhmed Farouk  
<https://www.sciencedirect.com/science/article/pii/S0950705123001636/pdfft?md5=5e106baaecd90a1a97c3771f307bffda&pid=1-s2.0-S0950705123001636-main.pdf>

38. Parameterizing density operators with arbitrary symmetries to gain advantage in quantum state estimation  
Physica A: Statistical Mechanics and its Applications 31 December 2022 Volume 611 (Cover date: 1 February 2023) Article 128427  
Inés Corte, Marcelo Losada, Lorena Rebón  
<https://www.sciencedirect.com/science/article/pii/S0378437122009852/pdfft?md5=d3ea1b17c31e70e57e196bf74202b41e&pid=1-s2.0-S0378437122009852-main.pdf>

39. On compression rate of quantum autoencoders: Control design, numerical and experimental realization  
Automatica 3 November 2022 Volume 147 (Cover date: January 2023) Article 110659  
Hailan Ma, Chang-Jiang Huang, Guo-Yong Xiang  
<https://www.sciencedirect.com/science/article/pii/S0005109822005234/pdfft?md5=f4905b2e828f715af7bd96c1f3ad49b9&pid=1-s2.0-S0005109822005234-main.pdf>

40. Average quantum coherence and its use in probing quantum phase transitions  
Physica A: Statistical Mechanics and its Applications11 November 2022Volume 609 (Cover date: 1 January 2023)Article 128308  
Xin-Yu LiuMing-Liang Hu  
<https://www.sciencedirect.com/science/article/pii/S0378437122008664/pdfft?md5=da38c52cce9c14e26c2f22fcbed3a493&pid=1-s2.0-S0378437122008664-main.pdf>

41. A secure deterministic remote state preparation via a seven-qubit entangled channel of a two-qubit entangled state under the impact of quantum noise  
Optics Communications15 February 2023Volume 535 (Cover date: 15 May 2023)Article 129352  
Deepak SinghSanjeev KumarBikash K. Behera  
<https://www.sciencedirect.com/science/article/pii/S0030401823000986/pdfft?md5=7fcbd19abcb4bccc429416daa53c6c14&pid=1-s2.0-S0030401823000986-main.pdf>

42. Quantum algorithm for learning secret strings and its experimental demonstration  
Physica A: Statistical Mechanics and its Applications 5 December 2022 Volume 609 (Cover date: 1 January 2023) Article 128372  
Yongzhen Xu, Shihao Zhang, Lvzhou Li  
<https://www.sciencedirect.com/science/article/pii/S037843712200930X/pdfft?md5=2aa490ff990326e6e7971f77a3b077bc&pid=1-s2.0-S037843712200930X-main.pdf>

43. D-NISQ: A reference model for Distributed Noisy Intermediate-Scale Quantum computers  
Information Fusion 9 August 2022 Volume 89 (Cover date: January 2023) Pages 16-28  
Giovanni Acampora, Ferdinando Di Martino, Autilia Vitiello  
<https://www.sciencedirect.com/science/article/pii/S1566253522000951/pdfft?md5=b8aa227f76562332dd1214ec5228c428&pid=1-s2.0-S1566253522000951-main.pdf>

44. Unveiling the Markovian to non-Markovian transition with quantum collision models  
Physics Open 15 February 2023 Volume 15 (Cover date: May 2023) Article 100144  
Willames F. Magalhães, Carlos O. A. Ribeiro Neto, Bertúlio de Lima Bernardo  
<https://www.sciencedirect.com/science/article/pii/S2666032623000091/pdfft?md5=50176874434fad725d8caf30c0c44059&pid=1-s2.0-S2666032623000091-main.pdf>

45. Quantum conditional probabilities and new measures of quantum information  
Annals of Physics 26 November 2022 Volume 448 (Cover date: January 2023) Article 169192  
Jacob A. Barandes, David Kagan  
<https://www.sciencedirect.com/science/article/pii/S0003491622003025/pdfft?md5=d738b45dca845a32d146d711b4cc623a&pid=1-s2.0-S0003491622003025-main.pdf>  
  
46. Oscillatory states of quantum Kapitza pendulum  
Annals of Physics 6 January 2023 Volume 449 (Cover date: February 2023) Article 169218  
Wei He, Chang-Yong Liu  
<https://www.sciencedirect.com/science/article/pii/S0003491623000039/pdfft?md5=9501b505abf5b9572d65e67450347e37&pid=1-s2.0-S0003491623000039-main.pdf>

47. Quantum element method for multi-dimensional nanostructures enabled by a projection-based learning algorithm  
Solid-State Electronics 3 February 2023 Volume 202 (Cover date: April 2023) Article 108610  
Martin Veresko, Ming-Cheng Cheng  
<https://www.sciencedirect.com/science/article/pii/S0038110123000230/pdfft?md5=10c96db42fae130c1439b1c901570868&pid=1-s2.0-S0038110123000230-main.pdf>

48. Thermodynamic signature of topological quantum phase transition in a two-leg Kitaev ladder  
Physica A: Statistical Mechanics and its Applications 28 November 2022 Volume 609 (Cover date: 1 January 2023) Article 128346  
L. J. Ding, Y. X. Xiang  
<https://www.sciencedirect.com/science/article/pii/S0378437122009049/pdfft?md5=32fdd9e30420c6c80a8f6bcb305d9220&pid=1-s2.0-S0378437122009049-main.pdf>

49. The electron gas in the core/shell cylindrical quantum dot: Thermodynamic and diamagnetic properties  
Micro and Nanostructures 8 December 2022 Volume 174 (Cover date: February 2023) Article 207471  
H. Ts. Ghaltaghchyan, D. B. Hayrapetyan, H. A. Sarkisyan  
<https://www.sciencedirect.com/science/article/pii/S2773012322002849/pdfft?md5=4ff97a47976c9bb4698e52246feec22d&pid=1-s2.0-S2773012322002849-main.pdf>

    Nguồn: Cục Thông tin khoa học và công nghệ quốc gia