

Projekta Izp-2018/1-0173 rezultāti

Kvantiskuma priekšrocības fizikālie aspekti informācijas un mērījumu tehnoloģijās

Oriģināli zinātniskie raksti, kas publicēti zinātniskos žurnālos, rakstu krājumos vai konferenču rakstu krājumos, kuri ir indeksēti datu bāzēs Web of Science Core Collection, SCOPUS vai ERIH PLUS

1. Ambainis, A.; Gilyén, A.; Jeffery, S.; Kokainis, M. Quadratic speedup for finding marked vertices by quantum walks. - 52nd Annual ACM SIGACT Symposium on Theory of Computing, STOC, 2020, Association for Computing Machinery: pp 412-424, <https://doi.org/10.1145/3357713.3384252>
2. Kokainis, M.; Prūsis, K.; Vihrovs, J.; Kashcheyevs, V.; Ambainis, A. Strong dispersion property for the quantum walk on the hypercube. - J. Phys. Math. Theor., 2022, 55 (49), <https://doi.org/10.1088/1751-8121/aca6b9>
3. Reifert, D.; Kokainis, M.; Ambainis, A.; Kashcheyevs, V.; Ubbelohde, N. A random-walk benchmark for single-electron circuits. - Nat. Commun., 2021, 12 (1), <https://doi.org/10.1038/s41467-020-20554-w>
4. Locane, E.; Brouwer, P. W.; Kashcheyevs, V. Time-energy filtering of single electrons in ballistic waveguides. - New J. Phys., 2019, 21 (9), <https://doi.org/10.1088/1367-2630/ab3fbb>
5. Hohls, F.; Kashcheyevs, V.; Stein, F.; Wenz, T.; Kaestner, B.; Schumacher, H. W. Controlling the error mechanism in a tunable-barrier nonadiabatic charge pump by dynamic gate compensation. - Phys. Rev. B., 2022, 105 (20), <https://doi.org/10.1103/PhysRevB.105.205425>
6. Kashcheyevs, V. Single-electron turnstile stirring quantized heat flow. - Nature Nanotechnology, 2022, <https://doi.org/10.1038/s41565-021-01069-x>