

Publications by
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Last updated:
Monday, April 04, 2022

A) Publications listed in the Science Citation Index

1. High finesse microcavities in the optical telecom O-band
J. Fait, S. Putz, G. Wachter, J. Schalko, U. Schmid, M. Arndt, and M. Trupke
Appl. Phys. Lett. **119**, 221112 (2021), DOI: 10.1063/5.0066620
2. *Single-, double-, and triple-slit diffraction of molecular matter-waves*
C. Brand, S. Troyer, C. Knobloch, O. Cheshnovsky, and M. Arndt
Am. J. Phys. **89**, 1132 (2021), DOI: 10.1119/5.0058805
[Am. J. Phys. Cover Page & Editor's Pick](#)
3. W. C.-W. Huang, H. Batelaan, M. Arndt
Kapitza-Dirac Blockade: A Universal Tool for the Deterministic Preparation of Non-Gaussian Oscillator States
Phys. Rev. Lett. **126** (2021), DOI: 10.1103/PhysRevLett.126.253601
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4. C. Brand, M. R. A. Monazam, C. Mangler, Y. Lilach, O. Cheshnovsky, M. Arndt, J. Kotakoski
The morphology of doubly-clamped graphene nanoribbons
2D Materials **8**, 025035 (2021), DOI: 10.1088/2053-1583/abe952
5. C. Brand, F. Kialka, S. Troyer, C. Knobloch, K. Simonovic, B.A. Stickler, K. Hornberger, M. Arndt,
Bragg diffraction of large organic molecules
Phys. Rev. Lett. **125** (2020), DOI: 10.1103/PhysRevLett.125.033604
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6. Y.Y. Fein, A. Shayeghi, F. Kialka, P. Geyer, S. Gerlich, M. Arndt,
Quantum-assisted diamagnetic deflection of molecules
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7. J. Schätti, V. Köhler, M. Mayor, Y.Y. Fein, P. Geyer, L. Mairhofer, S. Gerlich, M. Arndt,
Matter-wave interference and deflection of tripeptides decorated with fluorinated alkyl chains
J Mass Spectrom. (2020), DOI:10.1002/jms.4514
8. A. Shayeghi, P. Rieser, G. Richter, U. Sezer, J.H. Rodewald, P. Geyer, T.J. Martinez, M. Arndt,
Matter-wave interference of a native polypeptide
Nature Comm., **11**, 144 (2020), DOI: 10.1038/s41467-020-15280-2
9. C. Brand, K. Simonovic, F. Kialka, S. Troyer, P., Geyer, M. Arndt,
A fiber-based beam profiler for high-power laser beams in confined spaces and ultra-high vacuum
Optics Express (2020), DOI: 10.1364/OE.387650
10. Y. Y. Fein, F. Kialka, P. Geyer, S. Gerlich, M. Arndt,
Coriolis compensation via gravity in a matter-wave interferometer
New J. Phys. (2020), DOI:10.1088/1367-2630/ab73c5
11. Y. Y. Fein, A. Shayeghi, L. Mairhofer, F. Kialka, P. Rieser, P. Geyer, S. Gerlich, M. Arndt,
Quantum-Assisted Measurement of Atomic Diamagnetism

- Phys. Review X** **10**, 011014 (2020), DOI: 10.1103/PhysRevX.10.011014
12. Y. Y. Fein, P. Geyer, F. Kiařka, S. Gerlich, M. Arndt,
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