

Publications by
Univ. Prof. Dr. Markus Arndt

University of Vienna

Quantum Nanophysics Group

Faculty of Physics

Vienna Center for Quantum Science & Technology, VCQ

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A) Publications listed in the Science Citation Index

1. G. Wachter, S. Kuhn, S. Minniberger, C. Salter, P. Asenbaum, J. Millen, M. Schneider, J. Schalko, U. Schmid, A. Felgner, D. Hüser, M. Arndt, M. Trupke, *Silicon microcavity arrays with open access and a finesse of half a million*, **Light: Science & Applications** **8:37, 1-7 (2019)**.
2. C. Brand, M. Debiossac, T. Susi, F. Aguillon, J. Kotakoski, P. Roncin, M. Arndt *Coherent diffraction of hydrogen through the 246 pm lattice of graphene* **New J. Phys.** (2019), DOI: 10.1088/1367-2630/ab05ed
3. F. Kiařka, B. Stickler, K. Hornberger, Y.Y. Fein, P. Geyer, L. Mairhofer, S. Gerlich, M. Arndt, *Concepts for long-baseline high-mass matter-wave interferometry* **Phys. Scr.** **94 (2019)** DOI: 10.1088/1402-4896/aaf243
4. J. Schätti, P. Rieser, U. Sezer, G. Richter, P. Geyer, G. G. Rondina, D. Häussinger, M. Mayor, A. Shayeghi, V. Köhler, M. Arndt *Pushing the mass limit for intact launch and photoionization of large neutral biopolymers* **Commun. Chem.** **1, 93 (2018)**, DOI: 10.1038/s42004-018-0095-y
5. B. A. Stickler, B. Papendell, S. Kuhn, B. Schriniski, J. Millen, M. Arndt and K. Hornberger *Probing macroscopic quantum superpositions with nanorotors* **New J. Phys.** **20, 122001 (2018)**, DOI: 10.1088/1367-2630/aaece4
6. C. Brand, B.A. Stickler, C. Knobloch, A. Shayeghi, K. Hornberger, M. Arndt *Conformer-selection by matter-wave interference* **Phys. Rev. Lett.** **121, 173002 (2018)**, DOI: 10.1103/PhysRevLett.121.173002
7. L. Mairhofer, S. Eibenberger, A. Shayeghi, and M. Arndt *A quantum ruler for magnetic deflectometry.* **Entropy** **20, 516 (2018)** DOI: 10.3390/e20070516
8. M. Debiossac, J. Schätti, M. Kriegleder, P. Geyer, A. Shayeghi, M. Mayor, M. Arndt. V. Köhler *Tailored photocleavable peptides: Fragmentation and neutralization pathways in high vacuum* **Phys. Chem. Chem. Phys.** **20, 11412--11417 (2018)** DOI: 10.1039/c8cp01058g
9. J. Rodewald, N. Dörre, A. Grimaldi, P. Geyer, L. Felix, M. Mayor, A. Shayeghi and M. Arndt *Isotope-selective high-order interferometry with large organic molecules in free fall* **New J. Phys.** **20, 033016 (2018)**, doi.org/10.1088/1367-2630/aaade2
10. S. Kuhn, G. Wachter, F. Wieser, J. Millen, M. Schneider, J. Schalko, U. Schmid, M. Trupke, & M Arndt *Nanoparticle detection in an open-access silicon microcavity* **Appl. Phys. Lett.** **111, 253107 (2017)**, DOI: 10.1063/1.5008492
Editor's Pick
11. S. Kuhn, B. A. Stickler, A. Kosloff, F. Patolsky, K. Hornberger, M. Arndt and J. Millen *Optically driven ultra-stable nanomechanical rotor* **Nature Comm.** **8 (1) (2017)** DOI: 10.1038/s41467-017-01902-9
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12. J. P. Cotter, C. Brand, C. Knobloch, Y. Lilach, O. Cheshnovsky, M. Arndt
In search of multipath interference using large molecules
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15. J. Schätti, U. Sezer, S. Pedalino, J. P. Cotter, M. Arndt*, M. Mayor and V. Köhler*
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New avenues for matter-wave-enhanced spectroscopy,
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Towards two-dimensional all-carbon heterostructures via ion beam patterning of single-layer graphene
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29. J. P. Cotter, S. Eibenberger, L. Mairhofer, X. Cheng, P. Asenbaum, M. Arndt; K. Walter, S. Nimmrichter, K. Hornberger
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44. M. Sclafani, T. J. Juffmann, C., Knobloch, M., Arndt
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