

Tanja Mehlstäubler

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

1,085
citations

567281

15
h-index

580821

25
g-index

25
all docs

25
docs citations

25
times ranked

968
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological defect formation and spontaneous symmetry breaking in ion Coulomb crystals. Nature Communications, 2013, 4, 2291.	12.8	220
2	Doppler Cooling and Trapping on Forbidden Transitions. Physical Review Letters, 2001, 87, 123002.	7.8	145
3	Atomic clocks for geodesy. Reports on Progress in Physics, 2018, 81, 064401.	20.1	145
4	Precise determination of micromotion for trapped-ion optical clocks. Journal of Applied Physics, 2015, 118, .	2.5	85
5	Linear Paul trap design for an optical clock with Coulomb crystals. Applied Physics B: Lasers and Optics, 2012, 107, 891-906.	2.2	63
6	A high-precision segmented Paul trap with minimized micromotion for an optical multiple-ion clock. Applied Physics B: Lasers and Optics, 2014, 114, 231-241.	2.2	60
7	Analysis of thermal radiation in ion traps for optical frequency standards. Metrologia, 2015, 52, 842-856.	1.2	46
8	Towards a transportable aluminium ion quantum logic optical clock. Review of Scientific Instruments, 2019, 90, 053204.	1.3	42
9	Controlling systematic frequency uncertainties at the 10^{-18} level in linear Coulomb crystals. Physical Review A, 2019, 99, .	2.5	42
10	Atomic Clocks with Suppressed Blackbody Radiation Shift. Physical Review Letters, 2011, 107, 030801.	7.8	39
11	Probing nanofriction and Aubry-type signatures in a finite self-organized system. Nature Communications, 2017, 8, 15364.	12.8	39
12	Dynamics of topological defects in ion Coulomb crystals. New Journal of Physics, 2013, 15, 103013.	2.9	29
13	Simple vibration-insensitive cavity for laser stabilization at the 10^{-16} level. Applied Physics B: Lasers and Optics, 2014, 116, 203-210.	2.2	20
14	Evaluation of trap-induced systematic frequency shifts for a multi-ion optical clock at the 10^{-19} level. Journal of Physics: Conference Series, 2016, 723, 012027.	0.4	20
15	Structural phase transitions and topological defects in ion Coulomb crystals. Physica B: Condensed Matter, 2015, 460, 114-118.	2.7	19
16	Combined error signal in Ramsey spectroscopy of clock transitions. New Journal of Physics, 2018, 20, 123016.	2.9	16
17	Modelling three-dimensional-quench cooling for alkaline-earth atoms. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S183-S189.	1.4	12
18	Motional heating of spatially extended ion crystals. Quantum Science and Technology, 2021, 6, 034003.	5.8	9

#	ARTICLE	IF	CITATIONS
19	Coherent Excitation of the Highly Forbidden Electric Octupole Transition in ^{172}Yb . Physical Review Letters, 2020, 125, 163001.	7.8	6
20	Nanofriction and motion of topological defects in self-organized ion Coulomb crystals. New Journal of Physics, 2018, 20, 123017.	2.9	6
21	Energy localization in an atomic chain with a topological soliton. Physical Review Research, 2020, 2, .	3.6	6
22	Combined atomic clock with blackbody-radiation-shift-induced instability below 10^{-19} under natural environment conditions. New Journal of Physics, 2021, 23, 023032.	2.9	5
23	Sub-kelvin temperature management in ion traps for optical clocks. Review of Scientific Instruments, 2020, 91, 111301.	1.3	4
24	Creation of double-well potentials in a surface-electrode trap towards a nanofriction model emulator. Quantum Science and Technology, 2021, 6, 024010.	5.8	2
25	Quantum nanofriction in trapped ion chains with a topological defect. Physical Review Research, 2021, 3, .	3.6	2