

# Electron vortices: Beams with orbital angular momentum

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Manipulating Twisted Electron Beams. <i>Physical Review Letters</i> , 2017, 119, 243903.	2.9	26
2	Wave propagation in metamaterials mimicking the topology of a cosmic string. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 045603.	1.0	10
3	Intrinsic Orbital Angular Momentum States of Neutrons. <i>Physical Review Letters</i> , 2018, 120, 090402.	2.9	25
4	Generation of electron vortex states in ionization by intense and short laser pulses. <i>Physical Review A</i> , 2018, 97, .	1.0	11
5	Probing the limits of the rigid-intensity-shift model in differential-phase-contrast scanning transmission electron microscopy. <i>Physical Review A</i> , 2018, 97, .	1.0	20
6	Relativistic spin-orbit interactions of photons and electrons. <i>Physical Review A</i> , 2018, 97, .	1.0	27
7	Estimation of phases with dislocations in paraxial wave fields from intensity measurements. <i>Physical Review A</i> , 2018, 97, .	1.0	7
8	â€Twistedâ€™ electrons. <i>Contemporary Physics</i> , 2018, 59, 126-144.	0.8	40
9	Hidden momentum of electrons, nuclei, atoms, and molecules. <i>Physical Review A</i> , 2018, 97, .	1.0	2
10	Probability of radiation of twisted photons by classical currents. <i>Physical Review A</i> , 2018, 97, .	1.0	30
11	Structured objects in quantum gravity. The external field approximation. <i>International Journal of Modern Physics D</i> , 2018, 27, 1850104.	0.9	3
12	Elastic scattering of twisted electrons by diatomic molecules. <i>Physical Review A</i> , 2018, 98, .	1.0	10
13	Electron-light interactions beyond the adiabatic approximation: recoil engineering and spectral interferometry. <i>Advances in Physics: X</i> , 2018, 3, 1499438.	1.5	26
14	Perturbative representation of ultrashort nonparaxial elegant Laguerre-Gaussian fields. <i>Physical Review A</i> , 2018, 98, .	1.0	3
15	Two-photon annihilation of twisted positrons. <i>Physical Review A</i> , 2018, 98, .	1.0	10
16	Nonclassical correlations of photonic qubits carrying orbital angular momentum through non-Kolmogorov atmospheric turbulence. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2018, 35, 873.	0.8	2
17	Relativistic Quantum Dynamics of Twisted Electron Beams in Arbitrary Electric and Magnetic Fields. <i>Physical Review Letters</i> , 2018, 121, 043202.	2.9	29
18	Efficient orbital angular momentum transfer between plasmons and free electrons. <i>Physical Review B</i> , 2018, 98, .	1.1	35

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19	Crosstalk probability of the bandwidth-limited orbital angular momentum mode of Bessel Gaussian beams in marine-atmosphere turbulence. <i>Optics Communications</i> , 2018, 427, 493-496.	1.0	8
20	Nonlinear Focal Modulation Microscopy. <i>Physical Review Letters</i> , 2018, 120, 193901.	2.9	19
21	Electron dynamics in twisted light modes of relativistic intensity. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	35
22	Propagation of optical orbital-angular-momentum quantum resources via maritime atmospheric turbulence. <i>International Journal of Modern Physics B</i> , 2019, 33, 1950162.	1.0	1
23	Electron Bessel States in High-Energy Ionization. <i>Journal of Physics: Conference Series</i> , 2019, 1206, 012002.	0.3	4
24	Twisted localized solutions of the Dirac equation: Hopfionlike states of relativistic electrons. <i>Physical Review A</i> , 2019, 100, .	1.0	10
25	Semiclassical probability of radiation of twisted photons in the ultrarelativistic limit. <i>Physical Review D</i> , 2019, 99, .	1.6	26
26	Twisting and tweezing the spin wave: on vortices, skyrmions, helical waves, and the magnonic spiral phase plate. <i>Journal of Optics (United Kingdom)</i> , 2019, 21, 124001.	1.0	14
27	Non-Kolmogorov atmospheric turbulence and orbital angular momentum of entangled states for optical communication. <i>Results in Physics</i> , 2019, 15, 102676.	2.0	7
28	High-Angular Splitting Electron Vortex Beams Generated by Topological Defects. <i>Microscopy and Microanalysis</i> , 2019, 25, 88-89.	0.2	3
29	Demonstration of High Efficiency Diffractive Optics for Electrons Fabricated with Ion Beam Gas-Assisted Etching. <i>Microscopy and Microanalysis</i> , 2019, 25, 922-923.	0.2	0
30	Dynamics of an orbital polarization of twisted electron beams in electric and magnetic fields. <i>EPJ Web of Conferences</i> , 2019, 204, 10008.	0.1	0
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34	Spin and orbital angular momenta of acoustic beams. <i>Physical Review B</i> , 2019, 99, .	1.1	92
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36	Ultrafast generation and control of an electron vortex beam via chiral plasmonic near fields. <i>Nature Materials</i> , 2019, 18, 573-579.	13.3	120

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41	Coiling free electron matter waves. <i>New Journal of Physics</i> , 2019, 21, 043018.	1.2	10
42	Odd electron wave packets from cycloidal ultrashort laser fields. <i>Nature Communications</i> , 2019, 10, 658.	5.8	41
43	Electric Quadrupole Moment and the Tensor Magnetic Polarizability of Twisted Electrons and a Potential for their Measurements. <i>Physical Review Letters</i> , 2019, 122, 063201.	2.9	18
44	Structured quantum projectiles. <i>Physical Review A</i> , 2019, 99, .	1.0	2
45	Measurements and Characterization of Twisted Radio Wave Multipath for Indoor Wireless Communication and Security System. , 2019, , .		1
46	Efficient Measurement of the Orbital-Angular-Momentum Spectrum of an Electron Beam via a Dammann Vortex Grating. <i>Physical Review Applied</i> , 2019, 12, .	1.5	6
47	Control of free electron wave packets by polarization-tailored ultrashort bichromatic laser fields. <i>Advances in Physics: X</i> , 2019, 4, 1672583.	1.5	22
48	Atoms in complex twisted light. <i>Journal of Optics (United Kingdom)</i> , 2019, 21, 013001.	1.0	102
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54	Geometry-induced quantum Hall effect and Hall viscosity. <i>Physical Review B</i> , 2020, 102, .	1.1	2

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56	Suppressing dynamical diffraction artefacts in differential phase contrast scanning transmission electron microscopy of long-range electromagnetic fields via precession. <i>Ultramicroscopy</i> , 2020, 219, 113097.	0.8	16
57	Vortex electron generated by microwave photon with orbital angular momentum in a magnetic field. <i>AIP Advances</i> , 2020, 10, .	0.6	14
58	Corrected Off-axis Diffraction Holograms for Electrons. <i>Microscopy and Microanalysis</i> , 2020, 26, 426-427.	0.2	0
59	Vortex structures in photodetachment by few-cycle circularly polarized pulses. <i>Physical Review A</i> , 2020, 102, .	1.0	21
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68	Atomic photoionization dynamics in ultrashort cycloidal laser fields. <i>Physical Review A</i> , 2020, 102, .	1.0	13
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70	Bremsstrahlung from twisted electrons in the field of heavy nuclei. <i>Physical Review A</i> , 2020, 101, .	1.0	10
71	Position and spin in relativistic quantum mechanics. <i>Physical Review A</i> , 2020, 101, .	1.0	27
72	Optical vortex knots and links via holographic metasurfaces. <i>Advances in Physics: X</i> , 2021, 6, .	1.5	9

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76	Detection of magnetic impurities using electron vortex beams. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	2
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78	Chirality-driven topological electronic structure of DNA-like materials. <i>Nature Materials</i> , 2021, 20, 638-644.	13.3	83
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83	A sorter for electrons based on magnetic elements. <i>Ultramicroscopy</i> , 2021, 231, 113287.	0.8	1
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94	Decay of the vortex muon. <i>Physical Review D</i> , 2021, 104, .	1.6	7
95	Radiative recombination of twisted electrons with hydrogenlike heavy ions: Linear polarization of emitted photons. <i>Physical Review A</i> , 2021, 104, .	1.0	2
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97	Structured photoelectron distributions in photodetachment induced by trains of laser pulses: Vortices versus spirals. <i>Physical Review A</i> , 2021, 104, .	1.0	11
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