# Xiaosong Zhu

List of Publications by Year
in descending order

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|---|---|---|---|
| 76 papers | 1,717 citations | 257450 24 h-index | 315739 38 g-index |
| 76 all docs | 76 docs citations | 76 times ranked | 647 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Attosecond Probing of Nuclear Dynamics with Trajectory-Resolved High-Harmonic Spectroscopy. Physical Review Letters, 2017, 119, 033201. | 7.8 | 111 |
| 2 | Monitoring ultrafast vibrational dynamics of isotopic molecules with frequency modulation of high-order harmonics. Nature Communications, 2018, 9, 1108. | 12.8 | 102 |
| 3 | Reciprocal-Space-Trajectory Perspective on High-Harmonic Generation in Solids. Physical Review Letters, 2019, 122, 193901. | 7.8 | 96 |
| 4 | Selection rules of high-order-harmonic generation: Symmetries of molecules and laser fields. Physical Review A, 2016, 94, . | 2.5 | 80 |
| 5 | Time-dependent population imaging for high-order-harmonic generation in solids. Physical Review A, 2017, 95, . | 2.5 | 71 |
| 6 | Determination of the Ionization Time Using Attosecond Photoelectron Interferometry. Physical Review Letters, 2018, 121, 253203. | 7.8 | 69 |
| 7 | Real-Time Observation of Molecular Spinning with Angular High-Harmonic Spectroscopy. Physical Review Letters, 2018, 121, 163201. | 7.8 | 60 |
| 8 | Ellipticity-tunable attosecond XUV pulse generation with a rotating bichromatic circularly polarized laser field. Optics Letters, 2017, 42, 1027. | 3.3 | 56 |
| 9 | High-order-harmonic generation of a doped semiconductor. Physical Review A, 2017, 96, . | 2.5 | 54 |
| 10 | Molecular orbital imaging for partially aligned molecules. Optics and Laser Technology, 2017, 87, 79-86. | 4.6 | 42 |
| 11 | Direct imaging of molecular rotation with high-order-harmonic generation. Physical Review A, 2019, 99, . | 2.5 | 39 |
| 12 | Helicity sensitive enhancement of strong-field ionization in circularly polarized laser fields. Optics Express, 2016, 24, 4196. | 3.4 | 38 |
| 13 | Two-center interference in high-order harmonic generation from heteronuclear diatomic molecules. Optics Express, 2011, 19, 436. | 3.4 | 37 |
| 14 | Molecular high-order-harmonic generation due to the recollision mechanism by a circularly polarized laser pulse. Physical Review A, 2015, 91, . | 2.5 | 34 |
| 15 | Diffractive molecular-orbital tomography. Physical Review A, 2017, 95, . | 2.5 | 32 |
| 16 | Orientation dependence of high-order harmonic generation in nanowire. Physical Review A, 2019, 99, . | 2.5 | 32 |
| 17 | Single-shot molecular orbital tomography with orthogonal two-color fields. Optics Express, 2018, 26, 2775. | 3.4 | 31 |
| 18 | Molecular-orbital tomography beyond the plane-wave approximation. Physical Review A, 2014, 89, . | 2.5 | 30 |

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|---|---|---|---|
| 19 | Coulomb-corrected molecular orbital tomography of nitrogen. Scientific Reports, 2016, 6, 23236. | 3.3 | 30 |
| 20 | Molecular orbital imaging via above-threshold ionization with circularly polarized pulses. Optics Express, 2011, 19, 13722. | 3.4 | 28 |
| 21 | Tomographic imaging of asymmetric molecular orbitals with a two-color multicycle laser field. Optics Letters, 2012, 37, 5208. | 3.3 | 28 |
| 22 | Scaling Law of High Harmonic Generation in the Framework of Photon Channels. Physical Review Letters, 2018, 120, 223203. | 7.8 | 27 |
| 23 | Wavelength scaling of the cutoff energy in the solid high harmonic generation. Optics Express, 2017, 25, 29216. | 3.4 | 26 |
| 24 | Resonance enhanced high-order harmonic generation in H2+ by two sequential laser pulses. Optics Express, 2017, 25, 17777. | 3.4 | 26 |
| 25 | Nonadiabatic tunnel ionization in strong circularly polarized laser fields: counterintuitive angular shifts in the photoelectron momentum distribution. Optics Express, 2015, 23, 28801. | 3.4 | 25 |
| 26 | Tomography of asymmetric molecular orbitals with a one-color inhomogeneous field. Optics Letters, 2018, 43, 931. | 3.3 | 25 |
| 27 | Ultrafast oscillating-magnetic-field generation based on electronic-current dynamics. Physical Review A, 2019, 99, . | 2.5 | 24 |
| 28 | Laser-polarization-dependent photoelectron angular distributions from polar molecules. Optics Express, 2011, 19, 24198. | 3.4 | 23 |
| 29 | Probing the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ï€</mml:mi><mml:mo>â^’</mml:mo><mml:ms transitions in conjugated compounds with an infrared femtosecond laser. Physical Review A, 2017, 95, . | 2.5 | 20 |
| 30 | Helicity reversion in high-order-harmonic generation driven by bichromatic counter-rotating circularly polarized laser fields. Physical Review A, 2016, 94, . | 2.5 | 19 |
| 31 | Elliptical isolated attosecond-pulse generation from an atom in a linear laser field. Physical Review A, 2020, 102, . | 2.5 | 19 |
| 32 | Huygens-Fresnel Picture for High Harmonic Generation in Solids. Physical Review Letters, 2021, 127, 223201. | 7.8 | 18 |
| 33 | Influence of large permanent dipoles on molecular orbital tomography. Optics Express, 2013, 21, 5255. | 3.4 | 17 |
| 34 | Role of the Coulomb potential on the ellipticity in atomic high-order harmonics generation. Optics Express, 2012, 20, 16275. | 3.4 | 16 |
| 35 | Tomographic reconstruction of molecular orbitals with twofold mirror antisymmetry: Overcoming the nodal plane problem. Physical Review A, 2013, 87, . | 2.5 | 16 |
| 36 | Generation of elliptically polarized attosecond pulses in mixed gases. Physical Review A, 2021, 103, . | 2.5 | 16 |

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| 37 | Ultrafast molecular orbital imaging based on attosecond photoelectron diffraction. Optics Express, 2015, 23, 10687. | 3.4 | 15 |
| 38 | Macroscopic effect of plasmon-driven high-order-harmonic generation. Physical Review A, 2017, 96, . | 2.5 | 15 |
| 39 | Interference of high-order harmonics generated from molecules at different alignment angles. Physical Review A, 2014, 89, . | 2.5 | 14 |
| 40 | High harmonic generation from axial chiral molecules. Optics Express, 2017, 25, 23502. | 3.4 | 14 |
| 41 | Broadband large-ellipticity harmonic generation with polar molecules. Optics Express, 2011, 19, 25084. | 3.4 | 13 |
| 42 | Near-circularly-polarized attosecond pulse generation from carbon monoxide molecules with a combination of linearly and circularly polarized fields. Physical Review A, 2020, 101, . | 2.5 | 13 |
| 43 | Method for direct observation of Bloch oscillations in semiconductors. Optics Express, 2018, 26, 23844. | 3.4 | 13 |
| 44 | Quantum-orbit analysis for yield and ellipticity of high order harmonic generation with elliptically polarized laser field. Optics Express, 2013, 21, 4896. | 3.4 | 12 |
| 45 | Resonance-modulated wavelength scaling of high-order-harmonic generation from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math>. Physical Review A, 2018, 97, . | 2.5 | 12 |
| 46 | Dynamic Core Polarization in High Harmonic Generation from Solids: The Example of MgO Crystals. Physical Review Letters, 2021, 126, 187401. | 7.8 | 12 |
| 47 | Intense isolated attosecond pulse generation in pre-excited medium. Optics Express, 2011, 19, 4728. | 3.4 | 11 |
| 48 | Subpetahertz helicity-modulated high-order harmonic radiation. Physical Review A, 2018, 98, . | 2.5 | 11 |
| 49 | Interference effect in high-order harmonic generation from degenerate current-carrying orbitals of polyatomic molecules. Physical Review A, 2020, 101, . | 2.5 | 11 |
| 50 | Wavelength dependence of high-order harmonic yields in solids. Physical Review A, 2018, 98, . | 2.5 | 10 |
| 51 | Probing rotational wave-packet dynamics with the structural minimum in high-order harmonic spectra. Optics Express, 2014, 22, 6362. | 3.4 | 9 |
| 52 | Anomalous circular dichroism in high harmonic generation of stereoisomers with two chiral centers. Optics Express, 2016, 24, 24824. | 3.4 | 9 |
| 53 | Imprints of the molecular-orbital geometry on the high-harmonic ellipticity. Optics Express, 2012, 20, 20181. | 3.4 | 8 |
| 54 | Molecular photoelectron holography by an attosecond XUV pulse in a strong infrared laser field. Optics Express, 2014, 22, 20421. | 3.4 | 8 |

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| 55 | Non-dipole effects on high-order harmonic generation towards the long wavelength region. Optics Communications, 2016, 365, 125-132. | 2.1 | 8 |
| 56 | Near-circularly polarized single attosecond pulse generation from nitrogen molecules in spatially inhomogeneous laser fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 015602. | 1.5 | 7 |
| 57 | Momentum gate for tunneling electrons with a circularly polarized control field. Physical Review A, 2018, 98, . | 2.5 | 7 |
| 58 | Cutoff extension of high harmonics via resonant electron injection channels. Physical Review A, 2021, 103, . | 2.5 | 7 |
| 59 | Channel-closing effects of electronic excitation in solids. Optics Express, 2019, 27, 37224. | 3.4 | 7 |
| 60 | Control of the Geometric Phase and Nonequivalence between Geometric-Phase Definitions in the Adiabatic Limit. Physical Review Letters, 2022, 128, 030401. | 7.8 | 7 |
| 61 | Isolated attosecond pulse generation with the stability against the carrier-envelope phase shift and with the high-beam quality from CO gas medium. Optics Express, 2011, 19, 26174. | 3.4 | 6 |
| 62 | Asymmetric molecular-orbital tomography by manipulating electron trajectories. Physical Review A, 2017, 96, . | 2.5 | 6 |
| 63 | Effects of quantum interferences among crystal-momentum-resolved electrons in solid high-order harmonic generation. Physical Review A, 2021, 103, . | 2.5 | 6 |
| 64 | Anomalous ellipticity dependence of the generation of near-threshold harmonics in noble gases. Physical Review A, 2021, 103, . | 2.5 | 6 |
| 65 | Fingerprint of the Interbond Electron Hopping in Second-Order Harmonic Generation. Physical Review Letters, 2022, 128, 027401. | 7.8 | 6 |
| 66 | Molecular orbital imaging with high spatial and temperal resolutions. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 224207. | 0.5 | 4 |
| 67 | Spatial coherence control of xuv supercontinuum generation by two-color laser field. Optics Express, 2011, 19, 9986. | 3.4 | 3 |
| 68 | Polarization control of the high-order harmonics generated from molecules by the carrier envelope phase of few-cycle laser field. Optics Communications, 2021, 485, 126763. | 2.1 | 3 |
| 69 | Plasmon-shaped polarization gating for high-order-harmonic generation. Physical Review A, 2017, 96, . | 2.5 | 2 |
| 70 | Anisotropic Stark effect of carbon monoxide: emergent orbital cooperativity. Molecular Physics, 2020, 118, e1597198. | 1.7 | 2 |
| 71 | Resolving the polarization of high-order harmonic generation by temporal multislit interferometry. Physical Review A, 2021, 104, . | 2.5 | 2 |
| 72 | Macroscopic control of quantum paths in high order harmonics by a weak second harmonic field. Optics Express, 2011, 19, 25125. | 3.4 | 1 |

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|---|---|---|---|
| 73 | High Harmonic Spectroscopy for Molecular Imaging with Coulomb Wave Functions. , 2016, , . | | 0 |
| 74 | Diffractive imaging of molecular orbital. , 2017, , . | | 0 |
| 75 | Two-Center Interference of Heteronuclear Diatomic Molecules in High-Order Harmonic Generation. Springer Proceedings in Physics, 2012, , 253-257. | 0.2 | 0 |
| 76 | Mapping molecular rotational dynamics on the time-dependent spectral minimum. , 2014, , . | | 0 |