

Barry C Walker

List of Publications by Year in descending order

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32

papers

639

citations

567281

15

h-index

642732

23

g-index

32

all docs

32

docs citations

32

times ranked

598

citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Generation of bright isolated attosecond soft X-ray pulses driven by multicycle midinfrared lasers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2361-7. | 7.1 | 116 |
| 2 | Ultrastrong Field Ionization of Ne+(n=8): Rescattering and the Role of the Magnetic Field. <i>Physical Review Letters</i> , 2005, 94, . | 7.8 | 72 |
| 3 | Nonrelativistic ionization of the L-shell states in argon by a relativistic 1019 W/cm ² laser field. <i>Physical Review A</i> , 2001, 63, . | 2.5 | 66 |
| 4 | Observation of Continuum-Continuum Autler-Townes Splitting. <i>Physical Review Letters</i> , 1995, 75, 633-636. | 7.8 | 52 |
| 5 | Emergence from nonrelativistic strong-field rescattering to ultrastrong-field laser-atom physics: A semiclassical analysis. <i>Physical Review A</i> , 2006, 74, . | 2.5 | 47 |
| 6 | Relativistic MeV Photoelectrons from the Single Atom Response of Argon to a $\lambda = 1019 \text{ nm}$ laser field. <i>Physical Review Letters</i> , 2008, 101, 173002. | 7.8 | 78 |
| 7 | Ionization of Methane in Strong and Ultrastrong Relativistic Fields. <i>Physical Review Letters</i> , 2008, 100, 183001. | 7.8 | 36 |
| 8 | Multielectron ultrastrong laser field ionization of Ar+, Kr+, and Xe+(n=1/2, 9, m=1/2, 9, l=1/2, 12) at intensities from 10 ¹⁵ W cm ⁻² to 10 ¹⁸ W cm ⁻² . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S357-S369. | 1.5 | 30 |
| 9 | TEM ₀₀ terawatt amplification by use of micro-optic spatial mode conversion. <i>Optics Letters</i> , 2003, 28, 2106. | 3.3 | 28 |
| 10 | Enhanced high-order harmonic generation from Xe, Kr, and Ar in a capillary discharge. <i>Physical Review A</i> , 2007, 76, . | 2.5 | 22 |
| 11 | Limits of Strong Field Rescattering in the Relativistic Regime. <i>Physical Review Letters</i> , 2017, 118, 093001. | 7.8 | 20 |
| 12 | Electron momentum states and bremsstrahlung radiation from the ultraintense field ionization of atoms. <i>Optics Express</i> , 2004, 12, 3911. | 3.4 | 19 |
| 13 | Cross-shell multielectron ionization of xenon by an ultrastrong field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, L183-L190. | 1.5 | 17 |
| 14 | Photoionization by an ultraintense laser field: Response of atomic xenon. <i>Physical Review A</i> , 2010, 81, . | 2.5 | 17 |
| 15 | Electron Shell Ionization of Atoms with Classical, Relativistic Scattering. <i>Physical Review Letters</i> , 2013, 110, 203003. | 7.8 | 17 |
| 16 | Classical study of ultrastrong nonperturbative-field interactions with a one-electron atom: Validity of the dipole approximation for the bound-state interaction. <i>Physical Review A</i> , 2012, 85, . | 2.5 | 12 |
| 17 | Self-assembly of epitaxial monolayers for vacuum wafer bonding. <i>Applied Physics Letters</i> , 2006, 89, 223127. | 3.3 | 11 |
| 18 | Molecular ionization of chloromethane in strong fields: nearest neighbor gateway to highly charged ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 165601. | 1.5 | 5 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Classical study of atomic bound state dynamics in circularly polarized ultrastrong fields. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 135601. | 1.5 | 4 |
| 20 | Photoelectron energy spectra from elastic rescattering in ultrastrong laser fields: A relativistic extension of the three-step model. <i>Physical Review A</i> , 2015, 91, . | 2.5 | 2 |
| 21 | MeV photoelectron spectrometer for ultraintense laser interactions with atoms and molecules. <i>Review of Scientific Instruments</i> , 2019, 90, 073104. | 1.3 | 2 |
| 22 | Inner shell excitation by strong field laser rescattering: optimal laser conditions for high energy recollision. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021, 38, 3646. | 2.1 | 2 |
| 23 | Radiation for laser-driven rescattering near the ultimate high-energy cutoff: The single-atom response and bremsstrahlung limit. <i>Physical Review A</i> , 2021, 103, . | 2.5 | 1 |
| 24 | Lorentz deflection of rescattering and high harmonic generation at mid-IR wavelengths. , 2006, , . | 0 | |
| 25 | High harmonic generation from ions in a capillary discharge. , 2006, , . | 0 | |
| 26 | Intense Field Ionization of Methane, Butane, and Octane: Transition from Molecular to Atomic Response. , 2007, , . | 0 | |
| 27 | The effect of focal geometry on radiation from atomic ionization in ultrastrong/ultrafast laser field. , 2007, , . | 0 | |
| 28 | The effect of focal geometry on radiation from atomic ionization in ultrastrong/ultrafast laser field. , 2007, , . | 0 | |
| 29 | Photoelectron angular distributions from the single atom response to a relativistic laser field. , 2007, , . | 0 | |
| 30 | Photoelectron Angular Distributions from the Single Atom Response to a Relativistic Laser Field. , 2007, , . | 0 | |
| 31 | Intense field ionization of methane, butane, and octane: Transition from molecular to atomic response. , 2007, , . | 0 | |
| 32 | Intense field ionization of methane, ethane, butane, and octane: Transition from molecular to atomic response. , 2008, , . | 0 | |