## Robert Sang

## List of Publications by Year in descending order

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430754 434063 1,119 87 18 31 citations h-index g-index papers 88 88 88 1103 docs citations times ranked citing authors all docs

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Attosecond angular streaking and tunnelling time in atomic hydrogen. Nature, 2019, 568, 75-77.  | 13.7 | 190       |
| 2  | Laserâ€Reduced Graphene: Synthesis, Properties, and Applications. Advanced Materials Technologies, 2018, 3, 1700315.  | 3.0  | 116       |
| 3  | Tuning the sub-processes in laser reduction of graphene oxide by adjusting the power and scanning speed of laser. Carbon, 2019, 141, 83-91.   | 5.4  | 68        |
| 4  | Quantum Electrodynamic Shifts of Rydberg Energy Levels between Parallel Metal Plates. Physical Review Letters, 1998, 81, 5784-5787.   | 2.9  | 45        |
| 5  | Observing electron localization in a dissociating H2+ molecule in real time. Nature Communications, 2017 8, 15849<br>Measurement of laser intensities approaching 10 <mml:math< td=""><td>5.8</td><td>38</td></mml:math<>   | 5.8  | 38        |
| 6  | xmIns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msup><mml:mrow<br>/&gt;<mml:mn>15</mml:mn></mml:mrow<br></mml:msup> W/cm <mml:math<br>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"&gt;<mml:msup><mml:mrow<br>/&gt;<mml:mn>2</mml:mn></mml:mrow<br></mml:msup>with an accuracy of 1<mml:math< td=""><td>1.0</td><td>35</td></mml:math<></mml:math<br> | 1.0  | 35        |
| 7  | xmlns:mml="http://www.w3.org/1998/Math/MathML"  display="inline">< mml:mo> % /mml:mo> /mml:mo+ Experimental observation of the elusive double-peak structure in R-dependent strong-field ionization rate of H2+. Scientific Reports, 2015, 5, 13527.  | 1.6  | 32        |
| 8  | Attoclock and the quest for tunnelling time in strong-field physics. JPhys Photonics, 2020, 2, 042002.  | 2.2  | 31        |
| 9  | Relativistic Nondipole Effects in Strong-Field Atomic Ionization at Moderate Intensities. Physical<br>Review Letters, 2019, 123, 093201.  | 2.9  | 30        |
| 10 | Effect of nuclear mass on carrier-envelope-phase-controlled electron localization in dissociating molecules. Physical Review A, 2014, 89, .   | 1.0  | 26        |
| 11 | Carrier-envelope-phase-dependent dissociation of hydrogen. New Journal of Physics, 2013, 15, 023034.  | 1.2  | 25        |
| 12 | The current status of superelastic scattering studies for eNa atom collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 1187-1208.  | 0.6  | 24        |
| 13 | Extreme Ultraviolet Interferometer Using High-Order Harmonic Generation from Successive Sources. Physical Review Letters, 2012, 109, 263902.  | 2.9  | 21        |
| 14 | Precise and Accurate Measurements of Strong-Field Photoionization and a Transferable Laser Intensity Calibration Standard. Physical Review Letters, 2016, 117, 053001.  | 2.9  | 21        |
| 15 | Laser-Based Metastable Krypton Generation. Physical Review Letters, 2018, 121, 093201.  | 2.9  | 21        |
| 16 | Coherent control of the dissociation probability of H2+in ω-3ω two-color fields. Physical Review A, 2016, 93, .   | 1.0  | 20        |
| 17 | Measurement of the photoionization cross section of the(2p)(3p)5D33state of neon. Physical Review A, 2006, 73, .  | 1.0  | 19        |
| 18 | Measurement of low-energy total absolute atomic collision cross sections with the metastableP23state of neon using a magneto-optical trap. Physical Review A, 2008, 78, .   | 1.0  | 19        |

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|----|---|-----|-----------|
| 19 | Self-focusing in air with phase-stabilized few-cycle light pulses. Optics Letters, 2010, 35, 1653.  | 1.7 | 19        |
| 20 | Experimental ionization of atomic hydrogen with few-cycle pulses. Optics Letters, 2011, 36, 3660.   | 1.7 | 18        |
| 21 | Benchmarking strong-field ionization with atomic hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 204003.   | 0.6 | 18        |
| 22 | Observation of dynamic Stark resonances in strong-field excitation. Physical Review A, 2020, 101, .   | 1.0 | 18        |
| 23 | Carrier-envelope phase effects in above-threshold ionization of atomic hydrogen. New Journal of Physics, 2013, 15, 033002.  | 1.2 | 16        |
| 24 | Isotope Effect in Tunneling Ionization of Neutral Hydrogen Molecules. Physical Review Letters, 2016, 117, 083003.   | 2.9 | 16        |
| 25 | Transverse electron momentum distributions in strong-field ionization: nondipole and Coulomb focusing effects. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 154005. | 0.6 | 16        |
| 26 | Localized Surface Plasmon Enhanced Laser Reduction of Graphene Oxide for Wearable Strain Sensor. Advanced Materials Technologies, 2021, 6, 2001191.   | 3.0 | 16        |
| 27 | Lithographic pattern formation via metastable state rare gas atomic beams. Nanotechnology, 2004, 15, 1356-1362.   | 1.3 | 15        |
| 28 | Plasma plumes produced by laser ablation of Al with single and double pulse schemes. Optics Letters, 2018, 43, 6081.  | 1.7 | 14        |
| 29 | A hexapole magnetic guide for neutral atomic beams. Review of Scientific Instruments, 2009, 80, 073105.   | 0.6 | 13        |
| 30 | Transverse electron momentum distribution in tunneling and over the barrier ionization by laser pulses with varying ellipticity. Scientific Reports, 2016, 6, 19002.                          | 1.6 | 13        |
| 31 | Optical pumping of the Na D2 transition with elliptically polarized light. Journal of Modern Optics, 1999, 46, 787-800.   | 0.6 | 12        |
| 32 | A high flux metastable atomic discharge source with three-dimensional translation. Measurement Science and Technology, 2003, 14, N5-N8.   | 1.4 | 12        |
| 33 | Quantitative comparison of rare-gas cold cathode discharge metastable atomic beam sources. Review of Scientific Instruments, 2004, 75, 5056-5058.   | 0.6 | 12        |
| 34 | Absolute metastable atom-atom collision cross section measurements using a magneto-optical trap. Review of Scientific Instruments, 2007, 78, 073102.  | 0.6 | 11        |
| 35 | Internal-quantum-state engineering using magnetic fields. Physical Review A, 2001, 63, .  | 1.0 | 8         |
| 36 | Time-resolved nuclear dynamics in bound and dissociating acetylene. Structural Dynamics, 2018, 5, 044302.   | 0.9 | 8         |

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|----|---|-----|-----------|
| 37 | Laser-Induced Graphitization of Diamond Under 30 fs Laser Pulse Irradiation. Journal of Physical Chemistry Letters, 2022, 13, 2679-2685.                        | 2.1 | 8         |
| 38 | Structure formation in atom lithography using geometric collimation. Applied Physics B: Lasers and Optics, 2011, 105, 703-713.                                  | 1.1 | 6         |
| 39 | Optical control of collision dynamics in a metastable neon magneto-optical trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 245202. | 0.6 | 6         |
| 40 | Wavelength and intensity effects on the dissociation of H2+ in intense laser fields. Physical Review A, 2016, 94, .   | 1.0 | 6         |
| 41 | The interaction of excited atoms and few-cycle laser pulses. Scientific Reports, 2016, 6, 34101.  | 1.6 | 6         |
| 42 | Measuring laser carrier-envelope-phase effects in the noble gases with an atomic hydrogen calibration standard. Physical Review A, 2017, 96, .                  | 1.0 | 6         |
| 43 | Towards creation of iron nanodots using metastable atom lithography. Nanotechnology, 2006, 17, 1166-1170.   | 1.3 | 5         |
| 44 | Population dynamics in a metastable neon magneto-optical trap. Physical Review A, 2013, 87, .   | 1.0 | 5         |
| 45 | Spatio-temporal optimization of a laser produced Al-plasma: Generation of highly ionized species. Physics of Plasmas, 2016, 23, .                               | 0.7 | 5         |
| 46 | Carrier-Envelope Phase-Dependent Strong-Field Excitation. Physical Review Letters, 2022, 128, 173201.   | 2.9 | 5         |
| 47 | Characterisation of stray electric fields in niobium cavities using ultra-high resolution spectroscopy. Optics Communications, 1997, 141, 273-278.              | 1.0 | 3         |
| 48 | Cathode design for a low-velocity metastable neon cold cathode discharge source. Measurement Science and Technology, 2001, 12, N17-N21.                         | 1.4 | 3         |
| 49 | Advanced Gouy phase high harmonics interferometer. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 094006.                               | 0.6 | 3         |
| 50 | Effect of double pulse laser irradiation on the dynamics of picosecond laser-produced plasma. Physics of Plasmas, 2020, 27, .                                   | 0.7 | 3         |
| 51 | Strong-field ionization of argon: Electron momentum spectra and nondipole effects. Physical Review A, 2022, 105, .  | 1.0 | 3         |
| 52 | Electron superelastic scattering from states of atomic sodium and rubidium. Canadian Journal of Physics, 1996, 74, 977-983.                                     | 0.4 | 2         |
| 53 | Ellipticity-dependent fragmentation of acetylene dications. Physical Review A, 2018, 97, .  | 1.0 | 2         |
| 54 | Optical pumping of the Na D2 transition with elliptically polarized light. , 0, .   |     | 2         |

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|----|--|-----|-----------|
| 55 | Experimental investigation of atomic collisions in time scales varying from nanosecond to microseconds. Journal of Physics: Conference Series, 2010, 212, 012013.              | 0.3 | 1         |
| 56 | Transverse electron momentum distribution in tunneling and over the barrier ionization by strong-field laser pulses. Journal of Physics: Conference Series, 2015, 635, 092073. | 0.3 | 1         |
| 57 | Time-resolved optical emission spectroscopic studies of picosecond laser produced Cr plasma. Physics of Plasmas, 2018, 25, 063505.   | 0.7 | 1         |
| 58 | A versatile two-colour pulse generation setup with active feedback phase-locking. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 134005.               | 0.6 | 1         |
| 59 | Quantum state reconstruction using atom optics. Physical Review A, 2001, 63, .   | 1.0 | O         |
| 60 | Contamination resists in metastable atom lithography. , 0, , .   |     | 0         |
| 61 | Progress Towards the Creation of Iron Nanodots Using Atom Lithography. , 0, , .  |     | O         |
| 62 | A Proposed Nanofabrication Technique Using Optical Masks for Metastable Atom Lithography. , 0, , .   |     | 0         |
| 63 | Light assisted collisions with cold metastable neon atoms. Journal of Physics: Conference Series, 2009, 194, 092006.   | 0.3 | O         |
| 64 | Carrier-envelope phase effects in few-cycle ionisation of atomic hydrogen. , 2011, , .   |     | 0         |
| 65 | Above-threshold ionization in atomic hydrogen using intense few-cycle laser pulses. , $2011,  ,  .$  |     | O         |
| 66 | Optical collisions in a metastable neon MOT. , 2012, , .   |     | 0         |
| 67 | A Zeptosecond Phase Interferometer. Journal of Physics: Conference Series, 2012, 388, 032073.  | 0.3 | O         |
| 68 | Above-threshold ionization in atomic hydrogen using intense, few-cycle laser pulses. Journal of Physics: Conference Series, 2012, 388, 032055.                                 | 0.3 | 0         |
| 69 | Characterisation of the growth of a carbonaceous film on silicon. Thin Solid Films, 2012, 520, 2414-2417.  | 0.8 | O         |
| 70 | Optimized attosecond XUV pulses with zeptosecond timing resolution. , 2013, , .  |     | 0         |
| 71 | Photoionization yield of atomic hydrogen using intense few-cycle pulses. , 2013, , .   |     | 0         |
| 72 | Optimization of Attosecond XUV Pulses. Journal of Physics: Conference Series, 2014, 488, 032009.   | 0.3 | 0         |

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| 73 | Photoionization yield of atomic hydrogen using intense few-cycle pulses. Journal of Physics:<br>Conference Series, 2014, 488, 032045.  | 0.3 | 0         |
| 74 | Carrier-Envelope Phase effect for Dissociation of Molecular Hydrogen. Journal of Physics: Conference Series, 2014, 488, 032027.  | 0.3 | 0         |
| 75 | Effect of Nuclear Mass in Strong-Field Ionization of Hydrogen Molecules and Dissociation of Hydrogen Molecular Ions. Journal of Physics: Conference Series, 2015, 635, 112001. | 0.3 | 0         |
| 76 | The interaction of ultrashort laser pulses and exotic atoms. Journal of Physics: Conference Series, 2015, 635, 092066.   | 0.3 | 0         |
| 77 | Metastable noble gas atoms in strong-field ionization experiments. High Power Laser Science and Engineering, 2016, 4, .  | 2.0 | 0         |
| 78 | Using Phase Shifts from High-order Harmonic Generated Radiation to Study Nuclear Dynamics. , 2016, , .   |     | 0         |
| 79 | Precise calibration of few-cycle laser pulses with atomic hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 243501.                             | 0.6 | 0         |
| 80 | A High Order Harmonic Radiation Zeptosecond Phase Interferometer., 2012,,.   |     | 0         |
| 81 | An extreme ultraviolet interferometer using high order harmonic generation. Journal of Physics: Conference Series, 2014, 488, 012019.  | 0.3 | 0         |
| 82 | New Data from Laser Interrogation of Electron-Atom Collisions Experiments. Australian Journal of Physics, 1996, 49, 499.   | 0.6 | 0         |
| 83 | Dissociative Double Ionization of Acetylen in Strong Laser Field. , 2016, , .  |     | 0         |
| 84 | Percent-level accuracy in measuring strong-field photoionization and laser intensity. , 2016, , .  |     | 0         |
| 85 | Laser-based Noble-gas Metastable Excitation Techniques with Application to Atom Trap Trace Analysis. , $2017,  ,  .$   |     | 0         |
| 86 | Frustrated Tunnel Ionization with Few-cycle Pulses. , 2018, , .  |     | 0         |
| 87 | Towards an Australian Atom-Trap Trace Analysis (ATTA) facility. , 2019, , .  |     | 0         |