

Brett D Esry

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8716459/publications.pdf>

Version: 2024-02-01

104
papers

5,277
citations

81434
41
h-index

100535
70
g-index

104
all docs

104
docs citations

104
times ranked

2369
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Frustrated tunnelling ionization during strong-field fragmentation of D ₃ . New Journal of Physics, 2012, 14, 103029. | 1.2 | 42 |
| 2 | Efimov Physics in Heteronuclear Four-Body Systems. Physical Review Letters, 2012, 108, 073201. | 2.9 | 24 |
| 3 | Enhancing the Intense Field Control of Molecular Fragmentation. Physical Review Letters, 2012, 109, 133001. Multiphoton dissociation of HeH _n . $\text{display="inline"}>\langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{below the}$ He _n . $\text{display="inline"}>\langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle (1 \langle \text{mml:math} \rangle T_j ETQ_0 0 0 rgBT / Overlock 10 Tf 50 607 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"))$ | 2.9 | 30 |
| 4 | Dynamics of D ₃ +slow dissociation induced by intense ultrashort laser pulses. Physical Review A, 2012, 85, . Controlling strong-field fragmentation of H _n . $\text{xmlns:mml="http://www.w3.org/1998/Math/MathML"}$ $\text{display="inline"}>\langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mspace width="-0.16em"}/\rangle \langle \text{mml:mspace width="-0.16em"}/\rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{by}$ temporal effects with few-cycle laser pulses. Physical Review A, 2012, 85, . | 1.0 | 19 |
| 5 | Multiphoton Above Threshold Effects in Strong-Field Fragmentation. Physical Review Letters, 2012, 109, 163003. | 2.9 | 54 |
| 6 | New Class of Three-Body States. Physical Review Letters, 2012, 108, 213202. | 2.9 | 10 |
| 9 | Origin of the Three-Body Parameter Universality in Efimov Physics. Physical Review Letters, 2012, 108, 263001. | 2.9 | 143 |
| 10 | Protonium formation in collisions of antiprotons with atomic and molecular hydrogen: a semiclassical study. Radiation Effects and Defects in Solids, 2011, 166, 346-356. | 0.4 | 1 |
| 11 | Universal three-body physics at finite energy near Feshbach resonances. New Journal of Physics, 2011, 13, 035025. Frustrated tunneling ionization during laser-induced D _n . $\text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"}>\langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:math} \rangle \text{fragmentation: Detection of excited metastable}$ D _n . $\text{display="inline"}>\langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle ^* \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{atoms.}$ | 1.2 | 17 |
| 12 | Physical Review A, 2011, 84, . | 1.0 | 48 |
| 13 | Ultracold three-body collisions near narrow Feshbach resonances. Physical Review A, 2011, 83, . | 1.0 | 26 |
| 14 | Cold three-body collisions in hydrogen-hydrogen-alkali-metal atomic systems. Physical Review A, 2011, 83, . | 1.0 | 24 |
| 15 | Comparison of theoretical analyses of intense-laser-induced molecular dissociation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 155005. | 0.6 | 9 |
| 16 | Time-dependent dynamics of an intense laser-induced above-threshold Coulomb explosion. Physical Review A, 2010, 82, . | 1.0 | 23 |
| 17 | Adiabatic hyperspherical study of weakly bound helium-helium-alkali-metal triatomic systems. Physical Review A, 2010, 82, . | 1.0 | 22 |
| 18 | Vibrationally cold CO _n molecules produced by intense ultrashort laser pulses. Physical Review A, 2010, 81, . | 1.0 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Tracing the photodissociation probability of H_2 in intense fields using chirped laser pulses. Physical Review A, 2010, 81, . | | |
| 20 | Colliding Bose-Einstein Condensates to Observe Efimov Physics. Physical Review Letters, 2010, 104, 113201. | 2.9 | 17 |
| 21 | Magnetically Controlled Exchange Process in an Ultracold Atom-Dimer Mixture. Physical Review Letters, 2010, 104, 053201. | 2.9 | 77 |
| 22 | Field-Free Orientation of CO Molecules by Femtosecond Two-Color Laser Fields. Physical Review Letters, 2009, 103, 153002. | 2.9 | 242 |
| 23 | Efimov Trimer Formation via Ultracold Four-Body Recombination. Physical Review Letters, 2009, 102, 133201. | 2.9 | 29 |
| 24 | Laser-induced multiphoton dissociation branching ratios for H_2 . Physical Review Letters, 2009, 102, . | 1.0 | 20 |
| 25 | Ultracold Three-Body Collisions near Overlapping Feshbach Resonances. Physical Review Letters, 2009, 103, 083202. | 2.9 | 40 |
| 26 | Suppressed Dissociation of H_2 by Reduced Dipole Coupling. Physical Review Letters, 2009, 103, 103006. | 2.9 | 17 |
| 27 | Benchmark Measurements of Nonlinear Dynamics in Intense Ultrashort Laser Pulses. Physical Review Letters, 2009, 103, 103004. | 2.9 | 47 |
| 28 | The short-range three-body phase and other issues impacting the observation of Efimov physics in ultracold quantum gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 044016. | 0.6 | 64 |
| 29 | Conditions for Efimov physics for finite-range potentials. Physical Review A, 2009, 80, . | 1.0 | 15 |
| 30 | Three-body recombination in cold helium–helium–alkali-metal-atom collisions. Physical Review A, 2009, 80, . | 1.0 | 39 |
| 31 | Dissociation and ionization of an HD+ beam induced by intense 395-nm ultrashort laser pulses. Physical Review A, 2009, 80, . | 1.0 | 8 |
| 32 | Enhancement of carrier-envelope phase effects in photoexcitation of alkali atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 191001. | 0.6 | 2 |
| 33 | Permanent dipole transitions remain elusive in HD+ strong-field dissociation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 121003. | 0.6 | 12 |
| 34 | Rotational dynamics of dissociating H ⁺ in a short intense laser pulse. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 091001. | 0.6 | 23 |
| 35 | Alternative paths to observing Efimov physics. Few-Body Systems, 2008, 43, 63-68. | 0.7 | 2 |
| 36 | Ultracold atom-molecule collisions with fermionic atoms. Physical Review A, 2008, 77, . | 1.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Suppression of Molecular Decay in Ultracold Gases without Fermi Statistics. Physical Review Letters, 2008, 100, 163201. | 2.9 | 21 |
| 38 | High kinetic energy release upon dissociation and ionization of an mml:math $\text{mathvariant="normal"} \text{N} \text{mml:mi} \text{mml:mn} 2 \text{mml:mn} \text{mml:none} \text{mml:none}$ $\text{mml:mo} + \text{mml:mo}$ beam by intense few-cycle laser pulses. Physical Review A, 2008, 78, . | 1.0 | 10 |
| 39 | Adiabatic hyperspherical study of triatomic helium systems. Physical Review A, 2008, 78, . | 1.0 | 72 |
| 40 | Elusive enhanced ionization structure for mml:math $\text{mathvariant="normal"} \text{H} \text{mml:mi} \text{mml:mn} 2 \text{mml:mn} \text{mml:none} \text{mml:none}$ $\text{mml:mo} + \text{mml:mo}$ in intense ultrashort laser pulses. Physical Review A, 2008, 78, . | 1.0 | 38 |
| 41 | Intensity dependence in the dissociation branching ratio of mml:math $\text{mathvariant="normal"} \text{ND} \text{mml:mtext}$ $\text{mml:mrow} \text{mml:msup} \text{mml:mrow} \text{mml:mtext}$ $\text{mml:mo} + \text{mml:mo}$ $\text{mml:mo}^{10} \text{mml:mo}^{19} \text{mml:m}$ intense femtosecond laser pulses. Physical Review A, 2008, 77, . | 1.0 | 10 |
| 42 | Isotopic pulse-length scaling of molecular dissociation in an intense laser field. Physical Review A, 2008, 78, . | 1.0 | 8 |
| 43 | Role of nuclear rotation in dissociation of mml:math $\text{mathvariant="normal"} \text{H} \text{mml:mi} \text{mml:mn} 2 \text{mml:mn} \text{mml:none} \text{mml:none}$ $\text{mml:mo} + \text{mml:mo}$ in a short laser pulse. Physical Review A, 2008, 77, . | 1.0 | 52 |
| 44 | Enhancing High-Order Above-Threshold Dissociation of mml:math $\text{mathvariant="normal"} \text{H} \text{mml:mi} \text{mml:mn} 2 \text{mml:mn} \text{mml:mo} + \text{mml:mo}$ $\text{mml:msup} \text{mml:mtext}$ Beams with Few-Cycle Laser Pulses. Physical Review Letters, 2008, 100, 133001. | 2.9 | 86 |
| 45 | Three-body recombination in one dimension. Physical Review A, 2007, 76, . | 1.0 | 29 |
| 46 | General Theory of Carrier-Envelope Phase Effects. Physical Review Letters, 2007, 99, 220406. | 2.9 | 115 |
| 47 | Determining laser-induced dissociation pathways of multielectron diatomic molecules: Application to the dissociation of O ₂ + by high-intensity ultrashort pulses. Physical Review A, 2007, 75, . | 1.0 | 48 |
| 48 | HD+ in a short strong laser pulse: Practical consideration of the observability of carrier-envelope phase effects. Physical Review A, 2007, 76, . | 1.0 | 45 |
| 49 | Three-body systems with attractive l^∞ -potentials. Physical Review A, 2007, 75, . | 1.0 | 6 |
| 50 | Ultracold three-body collisions and the role of the Efimov effect. Nuclear Physics A, 2007, 790, 742c-746c. | 0.6 | 0 |
| 51 | A molecule at three laid bare. Nature, 2006, 440, 289-290. | 13.7 | 24 |
| 52 | Preference for breaking the O-H bond over the O-D bond following HDO ionization by fast ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 1701-1710. | 0.6 | 21 |
| 53 | Mass dependence of ultracold three-body collision rates. Physical Review A, 2006, 73, . | 1.0 | 48 |
| 54 | Above Threshold Coulomb Explosion of Molecules in Intense Laser Pulses. Physical Review Letters, 2006, 97, 013003. | 2.9 | 80 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Enhancing the observability of the Efimov effect in ultracold atomic gas mixtures. <i>Physical Review A</i> , 2006, 73, . | 1.0 | 53 |
| 56 | Dissociation of H ₂ +in intense femtosecond laser fields studied by coincidence three-dimensional momentum imaging. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 85 |
| 57 | Laser-assisted charge transfer in He ₂ ++H collisions. <i>Physical Review A</i> , 2006, 73, . | 1.0 | 25 |
| 58 | Highlighting the angular dependence of bond softening and bond hardening of H+2in an ultrashort intense laser pulse. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, L251-L257. | 0.6 | 18 |
| 59 | Dissociation and ionization of molecular ions by ultra-short intense laser pulses probed by coincidence 3D momentum imaging. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005, 233, 56-61. | 0.6 | 20 |
| 60 | Bond rearrangement caused by sudden single and multiple ionization of water molecules. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005, 233, 284-292. | 0.6 | 15 |
| 61 | Manifestations of the Efimov effect for three identical bosons. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 24 |
| 62 | Scattering Length Scaling Laws for Ultracold Three-Body Collisions. <i>Physical Review Letters</i> , 2005, 94, 213201. | 2.9 | 96 |
| 63 | Dissociation and Ionization of H ₂ +by Ultrashort Intense Laser Pulses Probed by Coincidence 3D Momentum Imaging. <i>Physical Review Letters</i> , 2005, 95, 073002. | 2.9 | 92 |
| 64 | Transverse excitations of ultracold matter waves upon propagation past abrupt waveguide changes. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 5 |
| 65 | Lattice approach for [±] H ₂ +collisions. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 6 |
| 66 | HD+photodissociation in the scaled coordinate approach. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 19 |
| 67 | Disentangling the volume effect through intensity-difference spectra: application to laser-induced dissociation of H ₂ . <i>Optics Letters</i> , 2005, 30, 664. | 1.7 | 52 |
| 68 | Classical aspects of ultracold atom wave packet motion through microstructured waveguide bends. <i>Physical Review A</i> , 2004, 69, . | 1.0 | 36 |
| 69 | Limits on Universality in Ultracold Three-Boson Recombination. <i>Physical Review Letters</i> , 2004, 93, 123201. | 2.9 | 89 |
| 70 | Manifestations of vortices during ultracold-atom propagation through waveguides. <i>Physical Review A</i> , 2004, 70, . | 1.0 | 5 |
| 71 | A revised formula for 3-body recombination that cannot exceed the unitarity limit. <i>Nuclear Physics A</i> , 2004, 737, 119-124. | 0.6 | 7 |
| 72 | Controlling HD+and H ₂ +Dissociation with the Carrier-Envelope Phase Difference of an Intense Ultrashort Laser Pulse. <i>Physical Review Letters</i> , 2004, 93, 163601. | 2.9 | 186 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Mechanism for the destruction of H ₃ ⁺ ions by electron impact. <i>Nature</i> , 2001, 412, 891-894. | 13.7 | 168 |
| 74 | The helium trimer has no bound rotational excited states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, L203-L210. | 0.6 | 20 |
| 75 | Charge Transfer and Elastic Scattering in Very Slow H++D(1s) Half Collisions. <i>Physical Review Letters</i> , 2001, 86, 4803-4806. | 2.9 | 15 |
| 76 | Comment on "Efimov States for H ₄ e Trimers". <i>Physical Review Letters</i> , 2001, 86, 4189-4189. | 2.9 | 6 |
| 77 | Collisions near threshold in atomic and molecular physics. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, R93-R140. | 0.6 | 216 |
| 78 | Charge exchange in slow H++D(1s) collisions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 5329-5341. | 0.6 | 22 |
| 79 | Asymmetric branching ratio for the dissociation of HD+(1s)f. <i>Physical Review A</i> , 2000, 62, . | 1.0 | 17 |
| 80 | Symmetry Breakdown in Ground State Dissociation of HD+. <i>Physical Review Letters</i> , 2000, 85, 58-61. | 2.9 | 32 |
| 81 | Comparative study of He ₃ , Ne ₃ , and Ar ₃ using hyperspherical coordinates. <i>Journal of Chemical Physics</i> , 2000, 113, 2145-2158. | 1.2 | 69 |
| 82 | Validity of the shape-independent approximation for Bose-Einstein condensates. <i>Physical Review A</i> , 1999, 60, 1451-1462. | 1.0 | 69 |
| 83 | Spontaneous spatial symmetry breaking in two-component Bose-Einstein condensates. <i>Physical Review A</i> , 1999, 59, 1457-1460. | 1.0 | 83 |
| 84 | Recombination of Three Atoms in the Ultracold Limit. <i>Physical Review Letters</i> , 1999, 83, 1751-1754. | 2.9 | 366 |
| 85 | Superfluids mixing it up. <i>Nature</i> , 1998, 392, 434-435. | 13.7 | 14 |
| 86 | Prospects for Mixed-Isotope Bose-Einstein Condensates in Rubidium. <i>Physical Review Letters</i> , 1998, 80, 2097-2100. | 2.9 | 95 |
| 87 | Impact of spontaneous spatial symmetry breaking on the critical atom number for two-component Bose-Einstein condensates. <i>Physical Review A</i> , 1998, 58, R3399-R3402. | 1.0 | 12 |
| 88 | Effective potentials for dilute Bose-Einstein condensates. <i>Physical Review A</i> , 1998, 58, 584-597. | 1.0 | 70 |
| 89 | Stable bound states of e++Li and e++Na. <i>Physical Review A</i> , 1998, 58, R4-R7. | 1.0 | 43 |
| 90 | Low-lying excitations of double Bose-Einstein condensates. <i>Physical Review A</i> , 1998, 57, 1265-1271. | 1.0 | 56 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Dominance of short-range correlations in photoejection-induced excitation processes. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997, 30, L641-L647. | 0.6 | 9 |
| 92 | Mean lifetime measurements and calculations of long-lived HeNe ₂ +isotopes. <i>Physical Review A</i> , 1997, 56, 1268-1280. | 1.0 | 9 |
| 93 | Two-Electron Photoejection of He and H α^+ . <i>Physical Review Letters</i> , 1997, 78, 4902-4905. | 2.9 | 64 |
| 94 | Hartree-Fock theory for Bose-Einstein condensates and the inclusion of correlation effects. <i>Physical Review A</i> , 1997, 55, 1147-1159. | 1.0 | 103 |
| 95 | Impact of the Rb ₈₇ singlet scattering length on suppressing inelastic collisions. <i>Physical Review A</i> , 1997, 55, R2511-R2514. | 1.0 | 65 |
| 96 | Hartree-Fock Theory for Double Condensates. <i>Physical Review Letters</i> , 1997, 78, 3594-3597. | 2.9 | 462 |
| 97 | Adiabatic hyperspherical study of the helium trimer. <i>Physical Review A</i> , 1996, 54, 394-401. | 1.0 | 196 |
| 98 | Multichannel spectrum of neutral particles trapped by a wire. <i>Physical Review A</i> , 1996, 54, 3225-3234. | 1.0 | 20 |
| 99 | Mean lifetime measurements of HeH ₂ +(2p $\tilde{l}f$) isotopes. <i>Physical Review A</i> , 1996, 54, 474-479. | 1.0 | 14 |
| 100 | Ionization and excitation of hydrogen molecules by fast proton impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1996, 29, L21-L28. | 0.6 | 32 |
| 101 | Role of the scattering length in three-boson dynamics and Bose - Einstein condensation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1996, 29, L51-L57. | 0.6 | 42 |
| 102 | Excitation and ionization of H(2s) by proton impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 2511-2520. | 0.6 | 10 |
| 103 | Mean lifetime of the bound 2p $\tilde{l}f$ state of HeH ₂ +. <i>Physical Review A</i> , 1994, 49, 1774-1781. | 1.0 | 24 |
| 104 | Close-coupling calculations of electron capture cross sections from the n=2 states of H by protons and alpha particles. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, 1579-1586. | 0.6 | 14 |