# Jan Steinhoff

List of Publications by Year
in descending order



| 57 | 3,013 | 136950 32 | 161849 54 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 57 | 57 | 57 | 1319 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Gravitational Bremsstrahlung and Hidden Supersymmetry of Spinning Bodies. Physical Review Letters, 2022, 128, 011101. | 7.8 | 70 |
| 2 | SUSY in the sky with gravitons. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 51 |
| 3 | Conservative and radiative dynamics in classical relativistic scattering and bound systems. Physical Review Research, 2022, 4, . | 3.6 | 34 |
| 4 | High-accuracy simulations of highly spinning binary neutron star systems. Physical Review D, 2022, 105, . | 4.7 | 2 |
| 5 | Gravitational waves from spinning binary black holes at the leading post-Newtonian orders at all orders in spin. , 2022, , . | | 0 |
| 6 | Relativistic effective action of dynamical gravitomagnetic tides for slowly rotating neutron stars. Physical Review Research, 2021, 3, . | 3.6 | 17 |
| 7 | Classical black hole scattering from a worldline quantum field theory. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 119 |
| 8 | Classical Gravitational Bremsstrahlung from a Worldline Quantum Field Theory. Physical Review Letters, 2021, 126, 201103. | 7.8 | 96 |
| 9 | Radiation-reaction force and multipolar waveforms for eccentric, spin-aligned binaries in the effective-one-body formalism. Physical Review D, 2021, 104, . | 4.7 | 30 |
| 10 | Spin effects on neutron star fundamental-mode dynamical tides: Phenomenology and comparison to numerical simulations. Physical Review Research, 2021, 3, . | 3.6 | 35 |
| 11 | Complete conservative dynamics for inspiralling compact binaries with spins at the fourth post-Newtonian order. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 029. | 5.4 | 29 |
| 12 | Tidal response from scattering and the role of analytic continuation. Physical Review D, 2021, 104, . | 4.7 | 17 |
| 13 | Quasicircular inspirals and plunges from nonspinning effective-one-body Hamiltonians with gravitational self-force information. Physical Review D, 2020, 101, . | 4.7 | 34 |
| 14 | Detweilerâ€™s redshift invariant for extended bodies orbiting a Schwarzschild black hole. Physical Review D, 2020, 102, . | 4.7 | 8 |
| 15 | Fourth post-Newtonian effective-one-body Hamiltonians with generic spins. Physical Review D, 2020, 101, . | 4.7 | 16 |
| 16 | Gravitational spin-orbit and aligned <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>spin</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> couplings through third-subleading post-Newtonian orders. Physical Review D, 2020, 102, . | 4.7 | 35 |
| 17 | Gravitational Spin-Orbit Coupling through Third-Subleading Post-Newtonian Order: From First-Order Self-Force to Arbitrary Mass Ratios. Physical Review Letters, 2020, 125, 011103. | 7.8 | 37 |
| 18 | Spinning-black-hole scattering and the test-black-hole limit at second post-Minkowskian order. Physical Review D, 2019, 99, . | 4.7 | 91 |

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|---|---|---|---|
| 19 | Breakdown of the classical double copy for the effective action of dilaton-gravity at NNLO. Physical Review D, 2019, 100, . | 4.7 | 44 |
| 20 | Effective action of dilaton gravity as the classical double copy of Yang-Mills theory. Physical Review D, 2019, 99, . | 4.7 | 71 |
| 21 | Energetics of two-body Hamiltonians in post-Minkowskian gravity. Physical Review D, 2019, 99, . | 4.7 | 107 |
| 22 | Hamiltonians and canonical coordinates for spinning particles in curved space-time. Classical and Quantum Gravity, 2019, 36, 075003. | 4.0 | 26 |
| 23 | Theory-agnostic framework for dynamical scalarization of compact binaries. Physical Review D, 2019, 100, . | 4.7 | 18 |
| 24 | Spin-multipole effects in binary black holes and the test-body limit. Physical Review D, 2018, 97, . | 4.7 | 28 |
| 25 | Hairy binary black holes in Einstein-Maxwell-dilaton theory and their effective-one-body description. Physical Review D, 2018, 98, . | 4.7 | 31 |
| 26 | Gravitational waves from spinning binary black holes at the leading post-Newtonian orders at all orders in spin. Physical Review D, 2018, 97, . | 4.7 | 15 |
| 27 | Effective action model of dynamically scalarizing binary neutron stars. Physical Review D, 2017, 96, . | 4.7 | 26 |
| 28 | EFTofPNG: a package for high precision computation with the effective field theory of post-Newtonian gravity. Classical and Quantum Gravity, 2017, 34, 244001. | 4.0 | 26 |
| 29 | Distinguishing boson stars from black holes and neutron stars from tidal interactions in inspiraling binary systems. Physical Review D, 2017, 96, . | 4.7 | 119 |
| 30 | Spin effects on the dynamics of compact binaries. , 2017, , . | | 0 |
| 31 | Effects of Neutron-Star Dynamic Tides on Gravitational Waveforms within the Effective-One-Body Approach. Physical Review Letters, 2016, 116, 181101. | 7.8 | 204 |
| 32 | Canonical Hamiltonian for an extended test body in curved spacetime: To quadratic order in spin. Physical Review D, 2016, 93, . | 4.7 | 47 |
| 33 | Dynamical tides in general relativity: Effective action and effective-one-body Hamiltonian. Physical Review D, 2016, 94, . | 4.7 | 151 |
| 34 | Next-to-next-to-leading order gravitational spin-squared potential via the effective field theory for spinning objects in the post-Newtonian scheme. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 008-008. | 5.4 | 72 |
| 35 | Next-to-next-to-leading order gravitational spin-orbit coupling via the effective field theory for spinning objects in the post-Newtonian scheme. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 011-011. | 5.4 | 70 |
| 36 | Leading order finite size effects with spins for inspiralling compact binaries. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 78 |

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|---|---|---|---|
| 37 | Spinning gravitating objects in the effective field theory in the post-Newtonian scheme. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 123 |
| 38 | Spin and Quadrupole Contributions to the Motion of Astrophysical Binaries. Fundamental Theories of Physics, 2015, , 615-649. | 0.3 | 15 |
| 39 | Equivalence of ADM Hamiltonian and Effective Field Theory approaches at next-to-next-to-leading order spin1-spin2 coupling of binary inspirals. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 003-003. | 5.4 | 91 |
| 40 | <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>I</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>Q</mml:mi></mml:mrow></mml:math>Rela for Rapidly Rotating Neutron Stars. Physical Review Letters, 2014, 112, . | 7.8 | 89 |
| 41 | Effective action and linear response of compact objects in Newtonian gravity. Physical Review D, 2013, 88, . | 4.7 | 30 |
| 42 | Nextâ€toâ€nextâ€toâ€leading order postâ€Newtonian linearâ€inâ€spin binary Hamiltonians. Annalen Der Physik, 2013, 525, 359-394. | 2.4 | 52 |
| 43 | Canonical angles in a compact binary star system with spinning components: Approximative solution through next-to-leading-order spin-orbit interaction for circular orbits. Physical Review D, 2013, 87, . | 4.7 | 11 |
| 44 | Influence of internal structure on the motion of test bodies in extreme mass ratio situations. Physical Review D, 2012, 86, . | 4.7 | 60 |
| 45 | Elimination of the spin supplementary condition in the effective field theory approach to the post-Newtonian approximation. Annals of Physics, 2012, 327, 1494-1537. | 2.8 | 20 |
| 46 | New Insights on the Matter-Gravity Coupling Paradigm. Physical Review Letters, 2012, 109, 021101. | 7.8 | 124 |
| 47 | Leading-order spin-orbit and spin(1)-spin(2) radiation-reaction Hamiltonians. Physical Review D, 2011, 84, . | 4.7 | 19 |
| 48 | Next-to-leading order spin-orbit and spin(a)-spin(b) Hamiltonians forngravitating spinning compact objects. Physical Review D, 2011, 83, . | 4.7 | 22 |
| 49 | The reduced Hamiltonian for next-to-leading-order spin-squared dynamics of general compact binaries. Classical and Quantum Gravity, 2010, 27, 135007. | 4.0 | 62 |
| 50 | Canonical formulation of gravitating spinning objects at 3.5 post-Newtonian order. Physical Review D, 2010, 81, . | 4.7 | 22 |
| 51 | Multipolar equations of motion for extended test bodies in general relativity. Physical Review D, 2010, 81, . | 4.7 | 77 |
| 52 | Canonical formulation of self-gravitating spinning-object systems. Europhysics Letters, 2009, 87, 50004. | 2.0 | 38 |
| 53 | Comment on two recent papers regarding next-to-leading order spin-spin effects in gravitational interaction. Physical Review D, 2009, 80, . | 4.7 | 22 |
| 54 | Spin-squared Hamiltonian of next-to-leading order gravitational interaction. Physical Review D, 2008, 78, . | 4.7 | 97 |

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| 55 | Next-to-leading order gravitational spin(1)-spin(2) dynamics in Hamiltonian form. Physical Review D, 2008, 77, . | 4.7 | 93 |
| 56 | ADM canonical formalism for gravitating spinning objects. Physical Review D, 2008, 77, . | 4.7 | 92 |
| 57 | A High-Energy Take on Black Hole Encounters. Physics Magazine, 0, 13, . | 0.1 | 0 |