# Nicholas Butch

List of Publications by Year
in descending order

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| 70 | 3,019 | 172207 | 161609 |
|---|---|---|---|
| papers | citations | 29 h-index | 54 g-index |

| 70 | 70 | 70 | 3290 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Global perspectives of the bulk electronic structure of URu<sub>2</sub>Si<sub>2</sub> from angle-resolved photoemission. Electronic Structure, 2022, 4, 013001. | 1.0 | 4 |
| 2 | Interplay between magnetism and superconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>UTe</mml:mi></mml:mrow><mml:mn>2</m Physical Review B, 2022, 105, . | 1.1 | 20 |
| 3 | Symmetry of magnetic correlations in spin-triplet superconductor UTe2. Npj Quantum Materials, 2022, 7, . | 1.8 | 11 |
| 4 | CHESS: The future direct geometry spectrometer at the second target station. Review of Scientific Instruments, 2022, 93, . | 0.6 | 9 |
| 5 | Possible coexistence of antiferromagnetic and ferromagnetic spin fluctuations in the spin-triplet superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">UTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> revealed by <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Te</mml:mi><mml:mprescripts /><mml:none /><mml:mn>125</mml:mn></mml:mmultiscripts></mml:math> NMR under pressure. Physica | 1.1 | 10 |
| 6 | Topologically driven linear magnetoresistance in helimagnetic FeP. Npj Quantum Materials, 2021, 6, . | 1.8 | 18 |
| 7 | Anomalous normal fluid response in a chiral superconductor UTe2. Nature Communications, 2021, 12, 2644. | 5.8 | 38 |
| 8 | Comparison of Two Different Synthesis Methods of Single Crystals of Superconducting Uranium Ditelluride. Journal of Visualized Experiments, 2021, , . | 0.2 | 4 |
| 9 | Multicomponent superconducting order parameter in UTe <sub>2</sub>. Science, 2021, 373, 797-801. | 6.0 | 83 |
| 10 | Coupled spin waves and crystalline electric field levels in candidate multiferroic ErFeO3. Journal of Applied Physics, 2021, 130, . | 1.1 | 6 |
| 11 | Expansion of the high field-boosted superconductivity in UTe2 under pressure. Npj Quantum Materials, 2021, 6, . | 1.8 | 15 |
| 12 | Suppressed-moment 2-k order in the canonical frustrated antiferromagnet Gd2Ti2O7. Npj Quantum Materials, 2021, 6, . | 1.8 | 10 |
| 13 | Effect of chemical substitution on the skyrmion phase in Cu2OSeO3. Physical Review B, 2020, 102, . | 1.1 | 1 |
| 14 | Tuning magnetic confinement of spin-triplet superconductivity. Npj Quantum Materials, 2020, 5, . | 1.8 | 31 |
| 15 | Quantum-critical scale invariance in a transition metal alloy. Communications Physics, 2020, 3, . | 2.0 | 22 |
| 16 | Quantum oscillations from networked topological interfaces in a Weyl semimetal. Npj Quantum Materials, 2020, 5, . | 1.8 | 9 |
| 17 | Three-dimensional magnetism and the Dzyaloshinskii-Moriya interaction in S = 3/2 kagome staircase Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub>. Science Advances, 2020, 6, eaay9709. | 4.7 | 8 |
| 18 | Ungapped magnetic excitations beyond Hidden Order in URu2â^'xRexSi2. Philosophical Magazine, 2020, 100, 1282-1288. | 0.7 | 1 |

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|---|---|---|---|
| 19 | Chiral superconductivity in heavy-fermion metal UTe2. Nature, 2020, 579, 523-527. | 13.7 | 193 |
| 20 | Low Energy Band Structure and Symmetries of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>UTe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2020, 124, 076401. | 2.9 | 59 |
| 21 | Enhancement and reentrance of spin triplet superconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">UTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> under pressure. Physical Review B, 2020, 101, . | 1.1 | 48 |
| 22 | Low-temperature crystal structure of the unconventional spin-triplet superconductor UTe<sub>2</sub>from single-crystal neutron diffraction. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 137-143. | 0.5 | 26 |
| 23 | Nearly ferromagnetic spin-triplet superconductivity. Science, 2019, 365, 684-687. | 6.0 | 351 |
| 24 | Coexistence of ferromagnetic fluctuations and superconductivity in the actinide superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>UTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2019, 100, . | 1.1 | 87 |
| 25 | Orbital-selective Kondo lattice and enigmatic f electrons emerging from inside the antiferromagnetic phase of a heavy fermion. Science Advances, 2019, 5, eaaw9061. | 4.7 | 22 |
| 26 | Rapid suppression of the energy gap and the possibility of a gapless hidden order state in URu2â^'xRexSi2. Philosophical Magazine, 2019, 99, 1751-1762. | 0.7 | 3 |
| 27 | High temperature singlet-based magnetism from Hundâ€™s rule correlations. Nature Communications, 2019, 10, 644. | 5.8 | 12 |
| 28 | Point-node gap structure of the spin-triplet superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>UTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2019, 100, . | 1.1 | 69 |
| 29 | Extreme magnetic field-boosted superconductivity. Nature Physics, 2019, 15, 1250-1254. | 6.5 | 138 |
| 30 | New insights into water dynamics of Portland cement paste with nano-additives using quasielastic neutron scattering. Journal of Materials Science, 2019, 54, 4710-4718. | 1.7 | 3 |
| 31 | Precipitating ordered skyrmion lattices from helical spaghetti and granular powders. Physical Review Materials, 2019, 3, . | 0.9 | 12 |
| 32 | Quantum oscillations from the reconstructed Fermi surface in electron-doped cuprate superconductors. New Journal of Physics, 2018, 20, 043019. | 1.2 | 14 |
| 33 | Tricritical point of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>f</mml:mi></mml:math> -electron antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>US</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> driven by high magnetic fields. Physical Review B, 2017, 95, . | 1.1 | 23 |
| 34 | Nonreciprocal Magnons and Symmetry-Breaking in the Noncentrosymmetric Antiferromagnet. Physical Review Letters, 2017, 119, 047201. | 2.9 | 62 |
| 35 | Quantum critical behavior in the asymptotic limit of high disorder in the medium entropy alloy NiCoCr0.8. Npj Quantum Materials, 2017, 2, . | 1.8 | 18 |
| 36 | Distinct magnetic spectra in the hidden order and antiferromagnetic phases in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>URu</mml:mi><mml:mrow><mml:mn>2</mml:m Physical Review B, 2016, 94, . | 1.1 | 14 |

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|---|---|---|---|
| 37 | Emergent order in the kagome Ising magnet Dy3Mg2Sb3O14. Nature Communications, 2016, 7, 13842. | 5.8 | 67 |
| 38 | Emergent ferromagnetism and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>T</mml:mi></mml:math>-linear scattering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>USb</mml:mi><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>at high pressure. Physical Review B, 2016, 93, . | 1.1 | 17 |
| 39 | Pressure-Resistant Intermediate Valence in the Kondo Insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SmB</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow> | 2.9 | 30 |
| 40 | Spectroscopic Determination of the Atomic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi></mml:math>-Electron Symmetry Underlying Hidden Order in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>URu</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></m Physical Review Letters, 2015, 114, 236401. | 2.9 | 32 |
| 41 | Symmetry and correlations underlying hidden order in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>URu</mml:mi><mml:mn>2</mml:mn></mml:mrow></mml:math>. Physical Review B, 2015, 91, . | 1.1 | 32 |
| 42 | Electrostatic Coupling between Two Surfaces of a Topological Insulator Nanodevice. Physical Review Letters, 2014, 113, 206801. | 2.9 | 33 |
| 43 | Multiple high-temperature transitions driven by dynamical structures in NaI. Physical Review B, 2014, 89, . | 1.1 | 12 |
| 44 | Magnetothermoelectric properties of Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 87, . | 1.1 | 49 |
| 45 | Tuning magnetism in FeAs-based materials via a tetrahedral structure. Physical Review B, 2012, 86, . | 1.1 | 14 |
| 46 | Structural collapse and superconductivity in rare-earth-doped CaFe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>As<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, . | 1.1 | 145 |
| 47 | Surface conduction of topological Dirac electrons in bulk insulating Bi2Se3. Nature Physics, 2012, 8, 459-463. | 6.5 | 330 |
| 48 | Magnetic interactions in Ge1âˆ’xCrxTe semimagnetic semiconductors. Journal of Applied Physics, 2012, 112, . | 1.1 | 15 |
| 49 | Quantum critical scaling at the edge of Fermi liquid stability in a cuprate superconductor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8440-8444. | 3.3 | 43 |
| 50 | Spatially resolved femtosecond pump-probe study of topological insulator Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:mro | 1.1 | 106 |
| 51 | Noncollinear spin-density-wave antiferromagnetism in FeAs. Physical Review B, 2011, 83, . | 1.1 | 57 |
| 52 | Interplay between magnetism, structure, and strong electron-phonon coupling in binary FeAs under pressure. Physical Review B, 2011, 83, . | 1.1 | 11 |
| 53 | Link between spin fluctuations and electron pairing in copper oxide superconductors. Nature, 2011, 476, 73-75. | 13.7 | 171 |
| 54 | Non-Fermi Liquid Regimes and Superconductivity inÂtheÂLow Temperature Phase Diagrams of Strongly Correlated d- and f-Electron Materials. Journal of Low Temperature Physics, 2010, 161, 4-54. | 0.6 | 54 |

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|---|---|---|---|
| 55 | The pressure-temperature phase diagram of URu2Si2 under hydrostatic conditions. Materials Research Society Symposia Proceedings, 2010, 1264, 1. | 0.1 | 0 |
| 56 | Antiferromagnetic critical pressure in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>URu</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub> hydrostatic conditions. Physical Review B, 2010, 82, . | 1.1 | 55 |
| 57 | Evidence of a universal and isotropic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mi>Î”</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi>k</mml:mi> in 122-type iron pnictide superconductors over a wide doping range. Physical Review B, 2010, 82, . | 1.1 | 21 |
| 58 | Degree of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>5</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:math>electron localization in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>URu</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub> Electron energy-loss spectroscopy and spin-orbit sum rule. Physical Review B, 2010, 82, . | 1.1 | 36 |
| 59 | Resistivity at low temperatures in electron-doped cuprate superconductors. Physical Review B, 2010, 82, . | 1.1 | 11 |
| 60 | The suppression of hidden order and the onset of ferromagnetism in URu2Si2via Re substitution. Journal of Physics Condensed Matter, 2010, 22, 164204. | 0.7 | 20 |
| 61 | Evolution of Critical Scaling Behavior near a Ferromagnetic Quantum Phase Transition. Physical Review Letters, 2009, 103, 076404. | 2.9 | 50 |
| 62 | Josephson effect between electron-doped and hole-doped iron pnictide single crystals. Applied Physics Letters, 2009, 95, 062510. | 1.5 | 34 |
| 63 | Hydrostaticity and hidden order: effects of experimental conditions on the temperatureâ€“pressure phase diagram of URu<sub>2</sub>Si<sub>2</sub>. High Pressure Research, 2009, 29, 335-343. | 0.4 | 10 |
| 64 | Resource Letter Scy-3: Superconductivity. American Journal of Physics, 2008, 76, 106-118. | 0.3 | 8 |
| 65 | Suppression of Hidden Order and Emergence of Ferromagnetism in URu2-xRexSi2. Materials Research Society Symposia Proceedings, 2008, 1104, 1. | 0.1 | 0 |
| 66 | Evolution of Superconducting and Hidden Order Phases in URu2Si2 Under Applied Pressure. Materials Research Society Symposia Proceedings, 2008, 1104, 1. | 0.1 | 0 |
| 67 | The evolution of the ordered states of single-crystal URu<sub>2</sub>Si<sub>2</sub>under pressure. Journal of Physics Condensed Matter, 2008, 20, 095225. | 0.7 | 24 |
| 68 | Tuning of Hidden Order and Superconductivity in URu2Si2 by Applied Pressure and Re Substitution. Materials Research Society Symposia Proceedings, 2006, 986, 1. | 0.1 | 0 |
| 69 | Non-Fermi-Liquid Behavior within the Ferromagnetic Phase inURu2â^'xRexSi2. Physical Review Letters, 2005, 94, 046401. | 2.9 | 65 |
| 70 | Disorder effects near a magnetic instability in CePtSi1â^'xGex (x=0, 0.1). Physical Review B, 2004, 70, . | 1.1 | 13 |