Nicholas P Butch

List of Publications by Year
in descending order

34 papers	2,291 citations	257450 24 h-index	377865 34 g-index
36 all docs	36 docs citations	36 times ranked	2909 citing authors

#	Article	IF	Citations
1	Nearly ferromagnetic spin-triplet superconductivity. Science, 2019, 365, 684-687.	12.6	351
2	Surface conduction of topological Dirac electrons in bulk insulating Bi2Se3. Nature Physics, 2012, 8, 459-463.	16.7	330
3	Chiral superconductivity in heavy-fermion metal UTe2. Nature, 2020, 579, 523-527.	27.8	193
4	Insulating Behavior in Ultrathin Bismuth Selenide Field Effect Transistors. Nano Letters, 2011, 11, 1925-1927.	9.1	152
5	Extreme magnetic field-boosted superconductivity. Nature Physics, 2019, 15, 1250-1254.	16.7	138
6	Coherent topological transport on the surface of Bi2Se3. Nature Communications, 2013, 4, 2040.	12.8	116
7	Intrinsic Electron-Phonon Resistivity of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Se</mml:mi><mml:mn the Topological Regime. Physical Review Letters, 2012, 109, 166801.	7.8	73
8	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></mml Physical Review B, 2019, 100, .	3.2	69
9	Phase Separation and Suppression of the Structural and Magnetic Transitions in Superconducting Doped Iron Tellurides, Fe_{1+x}Te<sub>1â<sup>y</sub>S_y. Journal of the American Chemical Society, 2010, 132, 13000-13007.	13.7	62
10	Stability and Surface Reconstruction of Topological Insulator Bi₂Se₃ on Exposure to Atmosphere. Journal of Physical Chemistry C, 2014, 118, 20413-20419.	3.1	62
11	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><mml:mn> Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2020, 124, 076401.	7.8	59
12	Ambipolar Surface State Thermoelectric Power of Topological Insulator Bi₂Se₃. Nano Letters, 2014, 14, 1701-1706.	9.1	56
13	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.	1.4	54
14	Chemical control of interstitial iron leading to superconductivity in Fe1+xTe0.7Se0.3. Chemical Science, 2011, 2, 1782.	7.4	53
15	Topological Insulator Quantum Dot with Tunable Barriers. Nano Letters, 2012, 12, 469-472.	9.1	50
16	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, .	3.2	48
17	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.	7.1	43
18	Anomalous normal fluid response in a chiral superconductor UTe2. Nature Communications, 2021, 12, 2644.	12.8	38

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19	Electrostatic Coupling between Two Surfaces of a Topological Insulator Nanodevice. Physical Review Letters, 2014, 113, 206801.	7.8	33
20	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></m Physical Review Letters, 2015, 114, 236401.	7.8	32
21	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></m Physical Review B, 2015, 91, .	3.2	32
22	Tuning magnetic confinement of spin-triplet superconductivity. Npj Quantum Materials, 2020, 5, .	5.2	31
23	Air-Stable Electron Depletion of Bi₂Se₃ Using Molybdenum Trioxide into the Topological Regime. ACS Nano, 2014, 8, 6400-6406.	14.6	29
24	Low-temperature crystal structure of the unconventional spin-triplet superconductor UTe₂from single-crystal neutron diffraction. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 137-143.	1.1	26
25	Phase separation and superconductivity in Fe1+xTe0.5Se0.5. Chemical Communications, 2011, 47, 11297.	4.1	22
26	Orbital-selective Kondo lattice and enigmatic f electrons emerging from inside the antiferromagnetic phase of a heavy fermion. Science Advances, 2019, 5, eaaw9061.	10.3	22
27	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> Physical Review B, 2022, 105, .	3.2	20
28	Quantum critical behavior in the asymptotic limit of high disorder in the medium entropy alloy NiCoCr0.8. Npj Quantum Materials, 2017, 2, .	5.2	18
29	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, .	3.2	17
30	Expansion of the high field-boosted superconductivity in UTe2 under pressure. Npj Quantum Materials, 2021, 6, .	5.2	15
31	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:mn> Physical Review B, 2016, 94, .	3.2	14
32	High temperature singlet-based magnetism from Hundâ€™s rule correlations. Nature Communications, 2019, 10, 644.	12.8	12
33	Symmetry of magnetic correlations in spin-triplet superconductor UTe2. Npj Quantum Materials, 2022, 7, .	5.2	11
34	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	3.2	10