# Nikolai D Zhigadlo

List of Publications by Year
in descending order



| 180 | 5,010 | 94381 37 | 114418 63 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 184 | 184 | 184 | 4573 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Inhomogeneity of charge-density-wave order and quenched disorder in a high-Tc superconductor. Nature, 2015, 525, 359-362. | 13.7 | 250 |
| 2 | Type-1.5 Superconductivity. Physical Review Letters, 2009, 102, 117001. | 2.9 | 230 |
| 3 | Carbon substitution inMgB2single crystals:â€ƒStructural and superconducting properties. Physical Review B, 2005, 71, . | 1.1 | 226 |
| 4 | Direct observation of spinâ€“orbit coupling in iron-based superconductors. Nature Physics, 2016, 12, 311-317. | 6.5 | 170 |
| 5 | High magnetic-field scales and critical currents in SmFeAs(O,ÂF) crystals. Nature Materials, 2010, 9, 628-633. | 13.3 | 125 |
| 6 | Single crystals of LnFeAsO1âˆ’xFx (Ln=La, Pr, Nd, Sm, Gd) and Ba1âˆ’xRbxFe2As2: Growth, structure and superconducting properties. Physica C: Superconductivity and Its Applications, 2009, 469, 370-380. | 0.6 | 120 |
| 7 | Single crystals of superconducting SmFeAsO<sub>1âˆ’x</sub>F<sub>y</sub>grown at high pressure. Journal of Physics Condensed Matter, 2008, 20, 342202. | 0.7 | 119 |
| 8 | Al substitution inMgB2crystals: Influence on superconducting and structural properties. Physical Review B, 2005, 71, . | 1.1 | 110 |
| 9 | Observation of Leggettâ€™s Collective Mode in a Multiband<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Superconductor. Physical Review Letters, 2007, 99, 227002. | 2.9 | 109 |
| 10 | Topological Type-II Dirac Fermions Approaching the Fermi Level in a Transition Metal Dichalcogenide NiTe<sub>2</sub>. Chemistry of Materials, 2018, 30, 4823-4830. | 3.2 | 101 |
| 11 | Evidence of nodeless superconductivity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>FeSe</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.85</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>a muon-spin-rotation study of the in-plane magnetic penetration depth. Physical Review B, 2008, 78, . | 1.1 | 100 |
| 12 | Magnetic penetration depth of single-crystalline<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SmFeAsO</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review B, 2009, 79, . | 1.1 | 99 |
| 13 | Snapshots of the retarded interaction of charge carriers with ultrafast fluctuations in cuprates. Nature Physics, 2015, 11, 421-426. | 6.5 | 92 |
| 14 | Bilayer Lateral Heterostructures of Transition-Metal Dichalcogenides and Their Optoelectronic Response. ACS Nano, 2019, 13, 12372-12384. | 7.3 | 89 |
| 15 | Distinct Pseudogap and Quasiparticle Relaxation Dynamics in the Superconducting State of Nearly Optimally Doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SmFeAsO</mml:mi><mml:mn>0.8</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">F</mml:mi><mml:mn>0.2</mml:mn></mml:msub></mml:math>Single Crystals. Physical Review Letters, 2009, 102, 117002. | 2.9 | 85 |
| 16 | Superconductivity in the geometrically frustrated pyrochloreRbOs2O6. Physical Review B, 2004, 70, . | 1.1 | 75 |
| 17 | Single crystals of MgB2: Synthesis, substitutions and properties. Physica C: Superconductivity and Its Applications, 2007, 456, 3-13. | 0.6 | 74 |
| 18 | Huge critical current density and tailored superconducting anisotropy in SmFeAsO0.8F0.15 by low-density columnar-defect incorporation. Nature Communications, 2013, 4, 2655. | 5.8 | 70 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Crystal growth, structure, and superconducting properties of theÎ²-pyrochloreKOs2O6. Physical Review B. 2006. 73. | 1.1 | 63 |
| 20 | High-pressure flux growth, structural, and superconducting properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>L</mml:mi><mml:mi>n</mml:mi></mml:mrow></mml:math>FeAsO | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Weak anharmonic effects inMgB2: A comparative inelastic x-ray scattering and Raman study. Physical Review B, 2007, 75, . | 1.1 | 41 |
| 38 | Influence of carbon substitution on the heat transport in single crystallineMgB2. Physical Review B, 2005, 71, . | 1.1 | 37 |
| 39 | Tuning of competing magnetic and superconducting phase volumes in LaFeAsO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.945</mml:mn></mml:mrow></mml:msub></mml:math>F<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.055</mml:mn></mml:mrow></mml:msub></mml:math>by hydrostatic pressure. Physical Review B, 2011, 84, . | 1.1 | 37 |
| 40 | Pressure-induced electronic phase separation of magnetism and superconductivity in CrAs. Scientific Reports, 2015, 5, 13788. | 1.6 | 37 |
| 41 | Structural phase transition and superlattice misfit strain of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>R</mml:mi><mml:mtext>FeAsO</mml:mtext></mml:mrow></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Anisotropic reversible mixed-state properties of superconducting carbon-dopedMg(B1â^'xCx)2single crystals. Physical Review B, 2006, 74, . | 1.1 | 24 |
| 56 | High-pressure magnetic state of MnP probed by means of muon-spin rotation. Physical Review B, 2016, 93, . | 1.1 | 24 |
| 57 | High-temperature phase changes in RuSr2GdCu2O8 and physical properties. Physica C: Superconductivity and Its Applications, 2003, 387, 347-358. | 0.6 | 23 |
| 58 | Inelastic x-ray scattering study of collective electron excitations inMgB2. Physical Review B, 2005, 71, . | 1.1 | 23 |
| 59 | Multi-gap superconductivity in MgB2: Magneto-Raman spectroscopy. Physica C: Superconductivity and Its Applications, 2007, 456, 75-82. | 0.6 | 23 |
| 60 | Evidence of spin-density-wave order inRFeAsO1â^'xFxfrom measurements of thermoelectric power. Physical Review B, 2009, 79, . | 1.1 | 23 |
| 61 | Vortex structure in superconducting iron pnictide single crystals. JETP Letters, 2009, 90, 299-302. | 0.4 | 23 |
| 62 | An infrared spectroscopic study of Li2B4O7. Journal of Physics Condensed Matter, 2001, 13, 6551-6561. | 0.7 | 22 |
| 63 | Superconducting vortex profile from fixed point measurements the â€œLazy Fishermanâ€•tunneling microscopy method. Applied Physics Letters, 2005, 86, 212503. | 1.5 | 22 |
| 64 | Influence of Mg deficiency on crystal structure and superconducting properties in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>MgB</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:ms crystals. Physical Review B, 2010, 81, . | 1.1 | 22 |
| 65 | Structure, magnetism, and superconductivity in SmFeAs<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>P<mml:m <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>O<mml:math | 1.1 | 22 |
| 66 | Point-contact Andreev-reflection spectroscopy in segregation-free Mg<sub>1â^'x</sub>Al<sub>x</sub>B<sub>2</sub>single crystals up tox= 0.32. Journal of Physics Condensed Matter, 2008, 20, 085225. | 0.7 | 21 |
| 67 | Observation of Well-Ordered Metastable Vortex Lattice Phases in Superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Using Small-Angle Neutron Scattering. Physical Review Letters, 2012, 108, 167001. | 2.9 | 21 |
| 68 | Observation of topological surface states in the high-temperature superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> Physical Review B, 2019, 100, . | 1.1 | 21 |
| 69 | Chiral singlet superconductivity in the weakly correlated metal LaPt3P. Nature Communications, 2021, 12, 2504. | 5.8 | 21 |
| 70 | High-Pressure Synthesis and Characterization of a New Series of V-Based Superconductors (Cu0.5V0.5)Sr2Can-1CunOy. Chemistry of Materials, 1999, 11, 2185-2190. | 3.2 | 20 |
| 71 | New ferromagnets of Sr8ARe3Cu4O24 (A=Sr, Ca) with an ordered perovskite structure. Journal of Solid State Chemistry, 2003, 175, 366-371. | 1.4 | 20 |
| 72 | Pr4Fe2As2Te1â^'xO4: A layered FeAs-based superconductor. Physical Review B, 2013, 87, . | 1.1 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Evolution of superconducting gaps in Th-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sm</mml:mi><mml:mrow><mml:mn>1</mml:mn> | 1.1 | 20 |
| 74 | High-field electron spin resonance spectroscopy study of CeFeAsO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mrow | 1.1 | 19 |
| 75 | Growth of whisker-like and bulk single crystals of PrFeAs(O,F) under high pressure. Journal of Crystal Growth, 2013, 382, 75-79. | 0.7 | 19 |
| 76 | Homologous series of high-Tc superconductors (Cu,C)Sr2Canâ^’1CunOy (n=2,5) and (Cu,N,C)Sr2Canâ^’1CunOy (n=3â€“6) synthesized under high pressure. Physica C: Superconductivity and Its Applications, 1998, 307, 177-188. | 0.6 | 18 |
| 77 | de Haasâ€“van Alphen effect investigation of the electronic structure of Al-substitutedMgB2. Physical Review B, 2005, 72, . | 1.1 | 18 |
| 78 | Thermal conductivity of Al-dopedMgB2: Impurity scattering and the validity of the Wiedemann-Franz law. Physical Review B, 2006, 74, . | 1.1 | 18 |
| 79 | Infrared properties ofMg1â^’xAlx(B1â^’yCy)2single crystals in the normal and superconducting state. Physical Review B, 2006, 73, . | 1.1 | 18 |
| 80 | Rearrangement of the antiferromagnetic ordering at high magnetic fields in SmFeAsO and SmFeAsO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>0</mml:mn><mml:mo>.</mml:mo><mml:mn>9</mml:mn></mml:mrow></mml:msub><mml:mrow | 1.1 | 18 |
| 81 | Effect of field-dependent core size on reversible magnetization of high-Îºsuperconductors. Physical Review B, 2006, 74, . | 1.1 | 17 |
| 82 | Dual Character of the Electronic Structure ofYBa2Cu4O8: The Conduction Bands ofCuO2Planes and CuO Chains. Physical Review Letters, 2007, 98, 157002. | 2.9 | 17 |
| 83 | Extreme magnetoresistance and pressure-induced superconductivity in the topological semimetal candidate YBi. Physical Review B, 2019, 99, . | 1.1 | 17 |
| 84 | Measuring the penetration depth anisotropy inMgB2using small-angle neutron scattering. Physical Review B, 2006, 73, . | 1.1 | 16 |
| 85 | Comparative study of neutron irradiation and carbon doping inMgB2single crystals. Physical Review B, 2007, 75, . | 1.1 | 16 |
| 86 | Two-gap superconductivity and topological surface states in TaOsSi. Physical Review B, 2019, 100, . | 1.1 | 16 |
| 87 | Local tunneling study of three-dimensional order parameter in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï€</mml:mi></mml:math>band of Al-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Mg</mml:mi><mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>single | 1.1 | 15 |
| 88 | Anomalies in the Fermi Surface and Band Dispersion of Quasi-One-Dimensional CuO Chains in the High-Temperature SuperconductorYBa2Cu4O8. Physical Review Letters, 2010, 105, 267003. | 2.9 | 15 |
| 89 | Conventional superconductivity and hysteretic Campbell penetration depth in single crystals MgCNi<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 | 15 |
| 90 | Spontaneous growth of diamond from MnNi solvent-catalyst using opposed anvil-type high-pressure apparatus. Journal of Crystal Growth, 2014, 395, 1-4. | 0.7 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | High pressure crystal growth of the antiperovskite centrosymmetric superconductor SrPt3P. Journal of Crystal Growth, 2016, 455, 94-98. | 0.7 | 15 |
| 92 | Growth of bulk single-crystal MnP helimagnet and its structural and NMR characterization. Journal of Alloys and Compounds, 2017, 725, 1027-1034. | 2.8 | 15 |
| 93 | Anomalous asymmetry in the Fermi surface of the high-temperature superconductorYBa2Cu4O8revealed by angle-resolved photoemission spectroscopy. Physical Review B, 2009, 80, . | 1.1 | 14 |
| 94 | Local lattice distortions vs. structural phase transition in NdFeAsO 1 â^' x F x. Physica C: Superconductivity and Its Applications, 2016, 527, 55-62. | 0.6 | 14 |
| 95 | Nonadiabatic effects in the phonon dispersion of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mg</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 93, . | 1.1 | 14 |
| 96 | Point-contact spectroscopy in Co-doped CaFe2As2: nodal superconductivity and topological Fermi surface transition. Superconductor Science and Technology, 2012, 25, 065007. | 1.8 | 13 |
| 97 | Strain-Induced Enhancement of the Electron Energy Relaxation in Strongly Correlated Superconductors. Physical Review X, 2014, 4, . | 2.8 | 13 |
| 98 | Disorder effects and current percolation in FeAs-based superconductors. Superconductor Science and Technology, 2010, 23, 054006. | 1.8 | 12 |
| 99 | Critical current anisotropy in Nd-1111 single crystals and the influence of neutron irradiation. Superconductor Science and Technology, 2014, 27, 044009. | 1.8 | 12 |
| 100 | Pairing of weakly correlated electrons in the platinum-based centrosymmetric superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrPt</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">P</mml:mi></mml:mrow></mml:math>. Physical Review B, 2015, 91, . | 1.1 | 12 |
| 101 | Crystal structure and magnetic properties of some Mn2Sb-based alloys. Crystal Research and Technology, 1990, 25, 165-169. | 0.6 | 11 |
| 102 | High-pressure synthesis and superconductivity of Ca2â^'xNaxCuO2Cl2. Physica C: Superconductivity and Its Applications, 2007, 460-462, 372-373. | 0.6 | 11 |
| 103 | Quantum oscillations of the superconductor LaRu2P2: Comparable mass enhancementÎ»â‰ˆ1in Ru and Fe phosphides. Physical Review B, 2011, 84, . | 1.1 | 11 |
| 104 | Persistence of Metastable Vortex Lattice Domains inMgB2in the Presence of Vortex Motion. Physical Review Letters, 2013, 111, 107002. | 2.9 | 11 |
| 105 | Doping influence on Sm1 â^' x Th x OFeAs superconducting properties: Observation of the effect of intrinsic multiple Andreev reflections and determination of the superconducting parameters. JETP Letters, 2014, 99, 136-145. | 0.4 | 11 |
| 106 | Magnetic states of MnP: muon-spin rotation studies. Journal of Physics Condensed Matter, 2017, 29, 164003. | 0.7 | 11 |
| 107 | Structural instability of Bi2.2Sr18CaCu2O8+x single crystal: An X-ray diffraction study in the temperature range 5-273 K. Phase Transitions, 1993, 43, 167-171. | 0.6 | 10 |
| 108 | Normal state bottleneck and nematic fluctuations from femtosecond quasiparticle relaxation dynamics in Sm(Fe,Co)AsO. Physical Review B, 2013, 87, . | 1.1 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Quantitative imaging of flux vortices in the type-II superconductor MgB<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>using cryo-Lorentz transmission electron microscopy. Physical Review B, 2013, 88, . | 1.1 | 10 |
| 110 | Superconducting order parameter and bosonic mode in hydrogen-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>NdFeAsO</mml:mi><mml:mrow><mml:mn mathvariant="normal">H</mml:mi><mml:mrow><mml:mn>0.36</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> revealed by multiple-Andreev-reflection spectroscopy. Physical Review B, 2019, 100, . | 1.1 | 10 |
| 111 | Point-Contact Andreev-Reflection Spectroscopy in Fe-Based Superconductors: Multigap Superconductivity and Strong Electronâ€“Boson Interaction. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1297-1301. | 0.8 | 9 |
| 112 | Magnetic structure of individual flux vortices in superconducting MgB<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>derived using transmission electron microscopy. Physical Review B, 2013, 87, . | 1.1 | 9 |
| 113 | Slow magnetic fluctuations and superconductivity in fluorine-doped NdFeAsO. Physical Review B, 2015, 91, . | 1.1 | 9 |
| 114 | Probing two- and three-dimensional electrons in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml soft x-ray angle-resolved photoemission. Physical Review B, 2015, 91, . | 1.1 | 9 |
| 115 | Change of the charge modulation during superconducting transition in SmFeAsO 0.91 F 0.09 seen by 57 Fe MÃ¶ssbauer spectroscopy. Journal of Alloys and Compounds, 2016, 658, 520-524. | 2.8 | 9 |
| 116 | High-pressure growth and characterization of bulk MnAs single crystals. Journal of Crystal Growth, 2017, 480, 148-153. | 0.7 | 9 |
| 117 | Unusual behaviour of lithium tetraborate Li2B4O7 at low temperatures: An X-ray diffraction study. Physica Status Solidi A, 1995, 152, 329-339. | 1.7 | 8 |
| 118 | In-plane magnetic penetration depth<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î»</mml:mi><mml:mrow><mml:mi>a</mml:mi><mml:mi>b</mml:mi></mml:mrow></mml:msub xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Ca</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow><mml: mathvariant="normal">Na</mml:mi><mml:mi>x</mml:mi></mml:. Physical Review B, 2007, 76, . | 1.1 | 8 |
| 119 | Analyses of lithium-doped and pure magnesium diboride using ultraviolet nano- and femtosecond laser ablation inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 193-195. | 1.6 | 8 |
| 120 | <math><mi>L</mi></math>4Fe<math><msub><mrow></mrow><mn>2</mn></msub></math>As<math><msub><mrow></mrow><mn>2</mn></msub></math>Te<math><msub><mrow></mrow><mrow><mn>1</mn><mo>â^'</mo><mi>x</mi></mrow></msub></math> <math><msub><mrow></mrow><mrow><mn>4</mn><mo>â^'</mo><mi>y</mi></mrow></msub></math> Crystal growth, characterization, and point-contact Andreev-reflection spectroscopy of the | 1.1 | 8 |
| 121 | noncentrosymmetric superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Mo</mml:mi><mml:mn>3</mml:mn></mml:msub><mml mathvariant="normal">C</mml:mi></mml:math>. Physical Review B, 2018, 97, . | 1.1 | 8 |
| 122 | X-ray diffraction study of the incommensurate structure in Bi2.2Sr1.8CaCu2O8+xsingle crystals. Journal of Physics Condensed Matter, 1994, 6, 8969-8975. | 0.7 | 7 |
| 123 | Light element analysis in oxycarbonate superconductors using EELS. Journal of Electron Microscopy, 2001, 50, 307-310. | 0.9 | 7 |
| 124 | Structural and superconducting properties ofRbOs2O6single crystals. Physical Review B, 2008, 77, . | 1.1 | 7 |
| 125 | Raman Investigations of C-, Li- and Mn-Doped MgB2. Journal of Superconductivity and Novel Magnetism, 2009, 22, 169-172. | 0.8 | 7 |
| 126 | Field-dependent superfluid density in the optimally doped SmFeAsO <sub>1-x</sub> F <sub>y</sub> superconductor. Europhysics Letters, 2010, 91, 47005. | 0.7 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Critical Current Oscillations in the Intrinsic Hybrid Vortex State of SmFeAs(O,F). Physical Review Letters, 2014, 113, 186402. | 2.9 | 7 |
| 128 | High-energy electronic interaction in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi><mml:mrow></mml:mrow> band of high-temperature iron-based superconductors. Physical Review B, 2017, 96, . | 1.1 | 7 |
| 129 | Intrinsic Charge Dynamics in High- Tc AFeAs(O,F) Superconductors. Physical Review Letters, 2018, 120, 087001. | 2.9 | 7 |
| 130 | Spontaneous emission of color centers at 4eV in hexagonal boron nitride under hydrostatic pressure. Superlattices and Microstructures, 2019, 131, 1-7. | 1.4 | 7 |
| 131 | Structural transition kinetics and activated behavior in the superconducting vortex lattice. Physical Review B, 2019, 99, . | 1.1 | 7 |
| 132 | Photoinduced Quasiparticle Relaxation Dynamics inÂNear-optimally Doped SmFeAsO0.8F0.2 Single Crystals. Journal of Superconductivity and Novel Magnetism, 2009, 22, 575-578. | 0.8 | 6 |
| 133 | Possible Multigap Superconductivity in SmFeAsO0.8F0.2: AÂPoint-contact Andreev-reflection Spectroscopy Study. Journal of Superconductivity and Novel Magnetism, 2009, 22, 543-547. | 0.8 | 6 |
| 134 | Multiband superconductivity in LaFeAsO0.9F0.1single crystals probed by high-field vortex torque magnetometry. Physical Review B, 2011, 83, . | 1.1 | 6 |
| 135 | Vacancies, disorder-induced smearing of the electronic structure, and its implications for the superconductivity of anti-perovskite MgC0.93Ni2.85. Scientific Reports, 2017, 7, 10148. | 1.6 | 6 |
| 136 | Exploring Multi-Component Superconducting Compounds by a High-Pressure Method and Ceramic Combinatorial Chemistry. Journal of Superconductivity and Novel Magnetism, 2017, 30, 79-84. | 0.8 | 6 |
| 137 | Nonequilibrium structural phase transitions of the vortex lattice in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> Physical Review B, 2019, 99, . | 1.1 | 6 |
| 138 | Self-Consistent Two-Gap Approach in Studying Multi-Band Superconductivity of NdFeAsO0.65F0.35. Frontiers in Physics, 2020, 8, . | 1.0 | 6 |
| 139 | Diamagnetism and some peculiarities of interatomic interactions in Cu2Sb. Crystal Research and Technology, 1988, 23, 945-948. | 0.6 | 5 |
| 140 | Phonon softening and MIR absorption in superconducting. Superconductor Science and Technology, 1997, 10, 209-212. | 1.8 | 5 |
| 141 | High-pressure synthesis and properties of a new oxycarbonitrate superconductors in the Sr-Ca-Cu-N-C-O system. Superconductor Science and Technology, 2000, 13, 1246-1251. | 1.8 | 5 |
| 142 | Effect of Heavy Al Doping on MgB2: A Point-Contact Study ofÂCrystals and Polycrystals. Journal of Superconductivity and Novel Magnetism, 2007, 20, 555-558. | 0.8 | 5 |
| 143 | Evidence of a multiple boson emission in Sm 1â^'x Th x OFeAs. Europhysics Letters, 2017, 119, 17007. | 0.7 | 5 |
| 144 | Nodal-to-nodeless superconducting order parameter in LaFeAs1â^'xP x O synthesized under high pressure. Npj Quantum Materials, 2018, 3, . | 1.8 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Superconductivity of underdoped PrFeAs(O,F) investigated via point-contact spectroscopy and nuclear magnetic resonance. Physical Review B, 2020, 102, . | 1.1 | 5 |
| 146 | Electron-hole counts in Al-substituted<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>MgB</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> from x-ray Raman scattering. Physical Review B, 2008, 78, . | | |
| 147 | Synthesis and bulk properties of oxychloride superconductor Ca<sub>2-x</sub>Na<sub>x</sub>CuO<sub>2</sub>Cl<sub>2</sub>. Journal of Physics: Conference Series, 2008, 97, 012121. | 0.3 | 4 |
| 148 | The Order-Parameter Symmetry and Fermi Surface Topology of 122 Fe-Based Superconductors: A Point-Contact Andreev-Reflection Study. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1331-1337. | 0.8 | 4 |
| 149 | Non-linear lattice response of Sm oxypnictides to hydrostatic pressure. Journal of Physics and Chemistry of Solids, 2013, 74, 1465-1469. | 1.9 | 4 |
| 150 | Intrinsic Multiple Andreev Reflections in Layered Th-Doped Sm1âˆ'x Th x OFeAs. Journal of Superconductivity and Novel Magnetism, 2016, 29, 673-677. | 0.8 | 4 |
| 151 | Structural studies of metastable and equilibrium vortex lattice domains in MgB2. New Journal of Physics, 2019, 21, 063003. | 1.2 | 4 |
| 152 | Title is missing!. Superconductor Science and Technology, 2000, 13, 1424-1427. | 1.8 | 3 |
| 153 | Effect of C and Li doping on the rf magnetic susceptibility inMgB2single crystals. Physical Review B, 2008, 78, . | 1.1 | 3 |
| 154 | Vortex lock-in transition and evidence for transitions among commensurate kinked vortex configurations in single-layered Fe arsenides. Physical Review B, 2013, 87, . | 1.1 | 3 |
| 155 | Influence of heat treatment conditions on the phase composition and superconducting properties of Bi1.6Pb0.4Sr1.98K0.02Ca2Cu3F0.8Oy ceramic. Technical Physics Letters, 1997, 23, 548-549. | 0.2 | 2 |
| 156 | Influence of potassium and fluorine on the formation and properties of the high-temperature 2223 phase in a (Bi, Pb)-Sr-Ca-Cu-O system. Technical Physics Letters, 1998, 24, 374-376. | 0.2 | 2 |
| 157 | Crystal-edge scanning tunnelling spectroscopy on aluminium-doped magnesium diboride. Superconductor Science and Technology, 2006, 19, 695-698. | 1.8 | 2 |
| 158 | Manifestations of fine features of the density of states in the transport properties ofKOs2O6. Physical Review B, 2007, 75, . | 1.1 | 2 |
| 159 | Point-Contact Spectroscopy in Mn-Doped MgB2 Single Crystals: Effects of Magnetic Impurities in a Two-Band Superconductor. Journal of Superconductivity and Novel Magnetism, 2007, 20, 523-526. | 0.8 | 2 |
| 160 | Probing superconductivity in MgB2confined to magnetic field tuned cylinders by means of critical fluctuations. Journal of Physics Condensed Matter, 2008, 20, 135208. | 0.7 | 2 |
| 161 | Influence of the carbon substitution on the critical current density and AC losses in MgB2 single crystals. European Physical Journal B, 2010, 78, 359-365. | 0.6 | 2 |
| 162 | Influence of carbon on intraband scattering in Mg(B 1-x C x ) 2. Europhysics Letters, 2010, 90, 27009. | 0.7 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Magnetic field penetration in MgB2 single crystals: Pinning and Meissner holes. Low Temperature Physics, 2014, 40, 621-625. | 0.2 | 2 |
| 164 | The role of spinâ€“orbit coupling in the electronic structure of ironâ€based superconductors. Physica Status Solidi (B): Basic Research, 2017, 254, 1600550. | 0.7 | 2 |
| 165 | Crystal growth and characterization of the antiperovskite superconductor MgC1-Ni3-. Journal of Crystal Growth, 2019, 520, 56-61. | 0.7 | 2 |
| 166 | Field angle dependent vortex lattice phase diagram in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2021, 103, . | 1.1 | 2 |
| 167 | Spin-glass-like behavior in SmFeAsO0.8F0.2. Mendeleev Communications, 2022, 32, 305-307. | 0.6 | 2 |
| 168 | HRTEM study of new series of oxycarbonitrate superconductors (Cu,C,N)Sr2Can-1CunOy (n = 1-6). Journal of Electron Microscopy, 2001, 50, 457-463. | 0.9 | 1 |
| 169 | Specific features of the growth of barium chromate crystals from different precursors. Crystallography Reports, 2005, 50, 1064-1067. | 0.1 | 1 |
| 170 | Doping Dependent Quasiparticle Relaxation Dynamics inÂSmFeAsO1â^'x F x Single Crystals: Comparison ofÂSpin-Density Wave and Superconducting States. Journal of Superconductivity and Novel Magnetism, 2011, 24, 489-493. | 0.8 | 1 |
| 171 | Lattice Effects Across the Phase Diagram of Pnictides. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1325-1330. | 0.8 | 1 |
| 172 | Critical fields and fluctuations determined from specific heat and magnetoresistance in the same nanogram SmFeAs(O,F) single crystal. Physical Review B, 2017, 96, . | 1.1 | 1 |
| 173 | Observation of high-Tc superconductivity in inhomogeneous combinatorial ceramics. Solid State Sciences, 2019, 88, 6-12. | 1.5 | 1 |
| 174 | New V-based superconductors (Cu,V)Sr2Can-1CunOy(n=3â€“7) synthesized under high pressure. , 1999, , 375-378. | | 1 |
| 175 | Multiple-Band Andreev Transport in Optimally Doped Superconducting Oxypnictides. JETP Letters, 2020, 112, 491-497. | 0.4 | 1 |
| 176 | Above Tc phonon renormalization in Bi1.7Pb0.3Sr2Ca2Cu3Ox: an infrared spectroscopic study. European Physical Journal D, 1996, 46, 1243-1244. | 0.4 | 0 |
| 177 | LOCAL ELECTRONIC STRUCTURE OF DOPING ATOMS IN MA2Can-1CunO2n+3 HIGH-Tc SUPERCONDUCTORS WITH [M-12(n-1)n] TYPE STRUCTURES. Surface Review and Letters, 2002, 09, 1345-1349. | 0.5 | 0 |
| 178 | Publisher's Note: Magnetic structure of individual flux vortices in superconducting MgB2derived using transmission electron microscopy [Phys. Rev. B87, 144515 (2013)]. Physical Review B, 2013, 87, . | 1.1 | 0 |
| 179 | Pressure induced lattice anomalies in pnictides. Journal of Physics and Chemistry of Solids, 2015, 84, 28-33. | 1.9 | 0 |
| 180 | New oxycarbonitrate superconductors (C1-xNx)Sr2CuO5+y with a 1201-type structure. , 2000, , 98-100. | | 0 |