# Jiaqiang Q Yan

## List of Publications by Citations



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|---|---|---|---|
| 260 papers | 17,554 citations | 60 h-index | 128 g-index |
| 284 ext. papers | 21,405 ext. citations | 8 avg, IF | 6.69 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 260 | Electrically tunable excitonic light-emitting diodes based on monolayer WSe2 p-n junctions. *Nature Nanotechnology*, **2014**, 9, 268-72 | 28.7 | 1202 |
| 259 | Electrical control of neutral and charged excitons in a monolayer semiconductor. *Nature Communications*, **2013**, 4, 1474 | 17.4 | 1007 |
| 258 | Optical generation of excitonic valley coherence in monolayer WSe2. *Nature Nanotechnology*, **2013**, 8, 634-8 | 28.7 | 1001 |
| 257 | Observation of long-lived interlayer excitons in monolayer MoSe2-WSe2 heterostructures. *Nature Communications*, **2015**, 6, 6242 | 17.4 | 896 |
| 256 | Monolayer semiconductor nanocavity lasers with ultralow thresholds. *Nature*, **2015**, 520, 69-72 | 50.4 | 545 |
| 255 | Magnetic control of valley pseudospin in monolayer WSe2. *Nature Physics*, **2015**, 11, 148-152 | 16.2 | 529 |
| 254 | Proximate Kitaev quantum spin liquid behaviour in a honeycomb magnet. *Nature Materials*, **2016**, 15, 733-40 | 27 | 524 |
| 253 | Signatures of moir□trapped valley excitons in MoSe/WSe heterobilayers. *Nature*, **2019**, 567, 66-70 | 50.4 | 486 |
| 252 | Effects of Co substitution on thermodynamic and transport properties and anisotropic Hc2 in Ba(Fe1□Cox)2As2 single crystals. *Physical Review B*, **2008**, 78, | 3.3 | 483 |
| 251 | Valley-polarized exciton dynamics in a 2D semiconductor heterostructure. *Science*, **2016**, 351, 688-91 | 33.3 | 451 |
| 250 | Spectroscopic evidence for a type II Weyl semimetallic state in MoTe. *Nature Materials*, **2016**, 15, 1155-1160 | 27 | 372 |
| 249 | High mobility WSe2 p- and n-type field-effect transistors contacted by highly doped graphene for low-resistance contacts. *Nano Letters*, **2014**, 14, 3594-601 | 11.5 | 341 |
| 248 | Neutron scattering in the proximate quantum spin liquid □-RuCl. *Science*, **2017**, 356, 1055-1059 | 33.3 | 317 |
| 247 | Electrical control of second-harmonic generation in a WSe2 monolayer transistor. *Nature Nanotechnology*, **2015**, 10, 407-11 | 28.7 | 300 |
| 246 | Oxygen stoichiometry, ferromagnetism, and transport properties of La2□NiMnO6+□*Physical Review B*, **2003**, 68, | 3.3 | 286 |
| 245 | Ferroelectric switching of a two-dimensional metal. *Nature*, **2018**, 560, 336-339 | 50.4 | 280 |
| 244 | Low-Resistance 2D/2D Ohmic Contacts: A Universal Approach to High-Performance WSe2, MoS2, and MoSe2 Transistors. *Nano Letters*, **2016**, 16, 1896-902 | 11.5 | 266 |

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| 243 | Spin–layer locking effects in optical orientation of exciton spin in bilayer WSe2. *Nature Physics*, **2014**, 10, 130-134 | 16.2 | 243 |
| 242 | Similarities between structural distortions under pressure and chemical doping in superconducting BaFe2As2. *Nature Materials*, **2009**, 8, 471-5 | 27 | 243 |
| 241 | Interlayer Exciton Optoelectronics in a 2D Heterostructure p-n Junction. *Nano Letters*, **2017**, 17, 638-643 | 11.5 | 193 |
| 240 | Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. *Nature Nanotechnology*, **2014**, 9, 436-42 | 28.7 | 185 |
| 239 | Low-temperature crystal and magnetic structure of α-RuCl3. *Physical Review B*, **2016**, 93, | 3.3 | 174 |
| 238 | Ultrathin nanosheets of CrSiTe3: a semiconducting two-dimensional ferromagnetic material. *Journal of Materials Chemistry C*, **2016**, 4, 315-322 | 7.1 | 171 |
| 237 | Bond-length fluctuations and the spin-state transition in LCoO3 (L=La, Pr, and Nd). *Physical Review B*, **2004**, 69, | 3.3 | 164 |
| 236 | Dome-shaped magnetic order competing with high-temperature superconductivity at high pressures in FeSe. *Nature Communications*, **2016**, 7, 12146 | 17.4 | 161 |
| 235 | Excitations in the field-induced quantum spin liquid state of α-RuCl3. *Npj Quantum Materials*, **2018**, 3, | 5 | 160 |
| 234 | Structural transition and anisotropic properties of single-crystalline SrFe2As2. *Physical Review B*, **2008**, 78, | 3.3 | 158 |
| 233 | Linear temperature dependence of resistivity and change in the Fermi surface at the pseudogap critical point of a high-Tc superconductor. *Nature Physics*, **2009**, 5, 31-34 | 16.2 | 151 |
| 232 | Mobility improvement and temperature dependence in MoSe2 field-effect transistors on parylene-C substrate. *ACS Nano*, **2014**, 8, 5079-88 | 16.7 | 146 |
| 231 | Unconventional London penetration depth in single-crystal Ba(Fe0.93Co0.07)2As2 superconductors. *Physical Review Letters*, **2009**, 102, 127004 | 7.4 | 144 |
| 230 | Strong spin-lattice coupling in CrSiTe3. *APL Materials*, **2015**, 3, 041515 | 5.7 | 142 |
| 229 | Crystal growth and magnetic structure of MnBi2Te4. *Physical Review Materials*, **2019**, 3, | 3.2 | 140 |
| 228 | Excitonic luminescence upconversion in a two-dimensional semiconductor. *Nature Physics*, **2016**, 12, 323-327 | 16.2 | 135 |
| 227 | Ferromagnetism in LaCoO3. *Physical Review B*, **2004**, 70, | 3.3 | 129 |
| 226 | Trion formation dynamics in monolayer transition metal dichalcogenides. *Physical Review B*, **2016**, 93, | 3.3 | 127 |

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|---|---|---|---|
| 225 | Control of two-dimensional excitonic light emission via photonic crystal. *2D Materials*, **2014**, 1, 011001 | 5.9 | 124 |
| 224 | Anisotropic magnetotransport and exotic longitudinal linear magnetoresistance in WTe2 crystals. *Physical Review B*, **2015**, 92, | 3.3 | 124 |
| 223 | Enhancement of the Nernst effect by stripe order in a high-T(c) superconductor. *Nature*, **2009**, 458, 743-5 | 50.4 | 117 |
| 222 | Imaging exciton□polariton transport in MoSe2 waveguides. *Nature Photonics*, **2017**, 11, 356-360 | 33.9 | 115 |
| 221 | Femtosecond switching of magnetism via strongly correlated spin-charge quantum excitations. *Nature*, **2013**, 496, 69-73 | 50.4 | 114 |
| 220 | Intrinsic structural distortion and superexchange interaction in the orthorhombic rare-earth perovskites RCrO3. *Physical Review B*, **2010**, 81, | 3.3 | 94 |
| 219 | Coherent Electronic Coupling in Atomically Thin MoSe2. *Physical Review Letters*, **2014**, 112, | 7.4 | 88 |
| 218 | Magnetic correlations in the quasi-two-dimensional semiconducting ferromagnet CrSiTe3. *Physical Review B*, **2015**, 92, | 3.3 | 87 |
| 217 | Magnetic phase transition in single crystals of the chiral helimagnet Cr1/3NbS2. *Physical Review B*, **2013**, 87, | 3.3 | 86 |
| 216 | Bulk modulus anomaly in RCoO3 (R=La, Pr, and Nd). *Physical Review B*, **2005**, 71, | 3.3 | 80 |
| 215 | Directional interlayer spin-valley transfer in two-dimensional heterostructures. *Nature Communications*, **2016**, 7, 13747 | 17.4 | 80 |
| 214 | High-Performance WSe Phototransistors with 2D/2D Ohmic Contacts. *Nano Letters*, **2018**, 18, 2766-2771 | 11.5 | 79 |
| 213 | Evolution of structural, magnetic, and transport properties in MnBi2□SbxTe4. *Physical Review B*, **2019**, 100, | 3.3 | 77 |
| 212 | A parity-breaking electronic nematic phase transition in the spin-orbit coupled metal CdReO. *Science*, **2017**, 356, 295-299 | 33.3 | 76 |
| 211 | Flux growth at ambient pressure of millimeter-sized single crystals of LaFeAsO, LaFeAsO1□Fx, and LaFe1□CoxAsO. *Applied Physics Letters*, **2009**, 95, 222504 | 3.4 | 75 |
| 210 | Gapless Dirac surface states in the antiferromagnetic topological insulator MnBi2Te4. *Physical Review B*, **2020**, 101, | 3.3 | 70 |
| 209 | LSGM-Based Solid Oxide Fuel Cell with 1.4 W/cm2 Power Density and 30 Day Long-Term Stability. *Journal of the Electrochemical Society*, **2005**, 152, A1511 | 3.9 | 68 |
| 208 | Single-crystal high entropy perovskite oxide epitaxial films. *Physical Review Materials*, **2018**, 2, | 3.2 | 68 |

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| 207 | Long-Range Antiferromagnetic Order in a Rocksalt High Entropy Oxide. *Chemistry of Materials*, **2019**, 31, 3705-3711 | 9.6 | 66 |
| 206 | Unusual Exciton-Phonon Interactions at van der Waals Engineered Interfaces. *Nano Letters*, **2017**, 17, 1194-1199 | 11.5 | 63 |
| 205 | Magnetism and electronic structure of La2ZnIrO6 and La2MgIrO6: Candidate Jeff=12 Mott insulators. *Physical Review B*, **2013**, 87, | 3.3 | 63 |
| 204 | Antiferromagnetic Resonance and Terahertz Continuum in □-RuCl_{3}. *Physical Review Letters*, **2017**, 119, 227201 | 7.4 | 62 |
| 203 | NMR search for the spin nematic state in a LaFeAsO single crystal. *Physical Review Letters*, **2012**, 109, 247001 | 7.4 | 62 |
| 202 | The emergent field of high entropy oxides: Design, prospects, challenges, and opportunities for tailoring material properties. *APL Materials*, **2020**, 8, 040912 | 5.7 | 62 |
| 201 | Pseudogap temperature T* of cuprate superconductors from the Nernst effect. *Physical Review B*, **2018**, 97, | 3.3 | 60 |
| 200 | Magnetic coupling between Sm3+ and the canted spin in an antiferromagnetic SmFeO3 single crystal. *Physical Review B*, **2012**, 86, | 3.3 | 57 |
| 199 | Valley phonons and exciton complexes in a monolayer semiconductor. *Nature Communications*, **2020**, 11, 618 | 17.4 | 55 |
| 198 | Twisting phonons in complex crystals with quasi-one-dimensional substructures. *Nature Communications*, **2015**, 6, 6723 | 17.4 | 52 |
| 197 | Origin of the phase transition in IrTe2: Structural modulation and local bonding instability. *Physical Review B*, **2013**, 88, | 3.3 | 51 |
| 196 | High-T_{c} Superconductivity in FeSe at High Pressure: Dominant Hole Carriers and Enhanced Spin Fluctuations. *Physical Review Letters*, **2017**, 118, 147004 | 7.4 | 51 |
| 195 | Atomic-scale observation of structural and electronic orders in the layered compound □-RuCl. *Nature Communications*, **2016**, 7, 13774 | 17.4 | 50 |
| 194 | Nature of Ho magnetism in multiferroic HoMnO3. *Physical Review Letters*, **2008**, 100, 217201 | 7.4 | 49 |
| 193 | Unusually strong orbit-lattice interactions in the RVO3 perovskites. *Physical Review Letters*, **2004**, 93, 235901 | 7.4 | 49 |
| 192 | Atomically resolved spectroscopic study of Sr2IrO4: experiment and theory. *Scientific Reports*, **2013**, 3, 3073 | 4.9 | 48 |
| 191 | Finite field regime for a quantum spin liquid in □RuCl3. *Physical Review B*, **2019**, 100, | 3.3 | 46 |
| 190 | Interplay of Fe and Nd magnetism in NdFeAsO single crystals. *Physical Review B*, **2010**, 82, | 3.3 | 46 |

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| 189 | Unconventional spin dynamics in the honeycomb-lattice material □RuCl3: High-field electron spin resonance studies. *Physical Review B*, **2017**, 96, | 3.3 | 44 |
| 188 | Ruthenium double perovskites: Transport and magnetic properties. *Physical Review B*, **2004**, 69, | 3.3 | 44 |
| 187 | Spin-orbit-driven magnetic structure and excitation in the 5d pyrochlore Cd2Os2O7. *Nature Communications*, **2016**, 7, 11651 | 17.4 | 44 |
| 186 | Chiral anomaly and ultrahigh mobility in crystalline HfTe5. *Physical Review B*, **2016**, 93, | 3.3 | 43 |
| 185 | Electron scattering, charge order, and pseudogap physics in La1.6□Nd0.4SrxCuO4: An angle-resolved photoemission spectroscopy study. *Physical Review B*, **2015**, 92, | 3.3 | 43 |
| 184 | Superexchange interaction in orbitally fluctuating RVO3. *Physical Review Letters*, **2007**, 99, 156401 | 7.4 | 43 |
| 183 | Frustration by competing interactions in the highly distorted double perovskites La2NaB?O6 (B?=Ru, Os). *Physical Review B*, **2013**, 87, | 3.3 | 42 |
| 182 | Bipolar Conduction as the Possible Origin of the Electronic Transition in Pentatellurides: Metallic vs Semiconducting Behavior. *Physical Review X*, **2018**, 8, | 9.1 | 41 |
| 181 | A-type antiferromagnetic order in MnBi4Te7 and MnBi6Te10 single crystals. *Physical Review Materials*, **2020**, 4, | 3.2 | 39 |
| 180 | Competing Magnetic Interactions in the Antiferromagnetic Topological Insulator MnBi_{2}Te_{4}. *Physical Review Letters*, **2020**, 124, 167204 | 7.4 | 38 |
| 179 | Anisotropic susceptibilities in the honeycomb Kitaev system □RuCl3. *Physical Review B*, **2018**, 98, | 3.3 | 37 |
| 178 | Stabilization of charge ordering in La1/3Sr2/3FeO3-delta by magnetic exchange. *Physical Review Letters*, **2007**, 98, 126402 | 7.4 | 36 |
| 177 | Proximity-induced superconducting gap in the quantum spin Hall edge state of monolayer WTe2. *Nature Physics*, **2020**, 16, 526-530 | 16.2 | 35 |
| 176 | Enhanced spin-phonon-electronic coupling in a 5d oxide. *Nature Communications*, **2015**, 6, 8916 | 17.4 | 35 |
| 175 | Structural phase transition and superlattice misfit strain of RFeAsO (R=La, Pr, Nd, Sm). *Physical Review B*, **2010**, 82, | 3.3 | 35 |
| 174 | High pressure floating zone growth and structural properties of ferrimagnetic quantum paraelectric BaFe12O19. *APL Materials*, **2015**, 3, 062512 | 5.7 | 34 |
| 173 | High antiferromagnetic transition temperature of the honeycomb compound SrRu2O6. *Physical Review B*, **2015**, 92, | 3.3 | 33 |
| 172 | Surface-driven electronic structure in LaFeAsO studied by angle-resolved photoemission spectroscopy. *Physical Review B*, **2010**, 82, | 3.3 | 33 |

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| 171 | Thermopower across the stripe critical point of La1.6−xNd0.4SrxCuO4: Evidence for a quantum critical point in a hole-doped high-Tc superconductor. *Physical Review B*, **2009**, 79, | 3.3 | 33 |
| 170 | The effect of chemical pressure on the structure and properties of A2CrOsO6 (A=Sr, Ca) ferrimagnetic double perovskite. *Journal of Solid State Chemistry*, **2016**, 238, 46-52 | 3.3 | 32 |
| 169 | Phase transitions and iron-ordered moment form factor in LaFeAsO. *Physical Review B*, **2010**, 82, | 3.3 | 32 |
| 168 | Field evolution of magnons in α-RuCl3 by high-resolution polarized terahertz spectroscopy. *Physical Review B*, **2018**, 98, | 3.3 | 32 |
| 167 | Discovery of log-periodic oscillations in ultraquantum topological materials. *Science Advances*, **2018**, 4, eaau5096 | 14.3 | 32 |
| 166 | Bond competition and phase evolution on the IrTe2 surface. *Nature Communications*, **2014**, 5, 5358 | 17.4 | 31 |
| 165 | Intrinsic axion insulating behavior in antiferromagnetic MnBi6Te10. *Physical Review B*, **2020**, 102, | 3.3 | 30 |
| 164 | Antisite Pairs Suppress the Thermal Conductivity of BAs. *Physical Review Letters*, **2018**, 121, 105901 | 7.4 | 29 |
| 163 | Many-body effects in nonlinear optical responses of 2D layered semiconductors. *2D Materials*, **2017**, 4, 025024 | 5.9 | 28 |
| 162 | Antiferromagnetism in the van der Waals layered spin-lozenge semiconductor CrTe3. *Physical Review B*, **2017**, 95, | 3.3 | 28 |
| 161 | Orbital fluctuations and orbital flipping in RVO3 perovskites. *Physical Review Letters*, **2007**, 99, 197201 | 7.4 | 28 |
| 160 | Opposing spin-canting mechanism in single-crystal LuVO3 and YVO3. *Physical Review B*, **2005**, 72, | 3.3 | 28 |
| 159 | High-temperature magnetostructural transition in van der Waals-layered α-MoCl3. *Physical Review Materials*, **2017**, 1, | 3.2 | 28 |
| 158 | Pressure dependence of the magnetic ground states in MnP. *Physical Review B*, **2016**, 93, | 3.3 | 27 |
| 157 | Neutron-scattering measurements of spin excitations in LaFeAsO and Ba(Fe(0.953)Co(0.047))(2)As(2): evidence for a sharp enhancement of spin fluctuations by nematic order. *Physical Review Letters*, **2015**, 114, 057001 | 7.4 | 26 |
| 156 | Coexistence of Surface Ferromagnetism and a Gapless Topological State in MnBi_{2}Te_{4}. *Physical Review Letters*, **2020**, 125, 117205 | 7.4 | 26 |
| 155 | Intertwined Topological and Magnetic Orders in Atomically Thin Chern Insulator MnBiTe. *Nano Letters*, **2021**, 21, 2544-2550 | 11.5 | 26 |
| 154 | Tuning Fermi Levels in Intrinsic Antiferromagnetic Topological Insulators MnBi2Te4 and MnBi4Te7 by Defect Engineering and Chemical Doping. *Advanced Functional Materials*, **2021**, 31, 2006516 | 15.6 | 26 |

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| 153 | Robust A-Type Order and Spin-Flop Transition on the Surface of the Antiferromagnetic Topological Insulator MnBi_{2}Te_{4}. *Physical Review Letters*, **2020**, 125, 037201 | 7.4 | 25 |
| 152 | Evidence for charge transfer and proximate magnetism in graphene□RuCl3 heterostructures. *Physical Review B*, **2019**, 100, | 3.3 | 24 |
| 151 | Disorder from order among anisotropic next-nearest-neighbor Ising spin chains in SrHo2O4. *Physical Review B*, **2015**, 91, | 3.3 | 24 |
| 150 | Destabilization of Magnetic Order in a Dilute Kitaev Spin Liquid Candidate. *Physical Review Letters*, **2017**, 119, 237203 | 7.4 | 24 |
| 149 | Effects of chemical pressure on the magnetic ground states of the osmate double perovskites SrCaCoOsO6 and Ca2CoOsO6. *Physical Review B*, **2015**, 92, | 3.3 | 24 |
| 148 | Flux growth in a horizontal configuration: An analog to vapor transport growth. *Physical Review Materials*, **2017**, 1, | 3.2 | 24 |
| 147 | Boron arsenide phonon dispersion from inelastic x-ray scattering: Potential for ultrahigh thermal conductivity. *Physical Review B*, **2016**, 94, | 3.3 | 24 |
| 146 | Magnetic Imaging of Domain Walls in the Antiferromagnetic Topological Insulator MnBiTe. *Nano Letters*, **2020**, 20, 2609-2614 | 11.5 | 23 |
| 145 | Slater Insulator in Iridate Perovskites with Strong Spin-Orbit Coupling. *Physical Review Letters*, **2016**, 117, 176603 | 7.4 | 23 |
| 144 | Orbital hybridization in RVO3 perovskites: A high-pressure study. *Physical Review B*, **2009**, 80, | 3.3 | 23 |
| 143 | Determination of the exchange anisotropy in perovskite antiferromagnets using powder inelastic neutron scattering. *Physical Review B*, **2008**, 78, | 3.3 | 23 |
| 142 | Thermal conductivity in the stripe-ordered phase of cuprates and nickelates. *Physical Review B*, **2003**, 68, | 3.3 | 23 |
| 141 | New Mechanism for Ferroelectricity in the Perovskite CaMnTiO Synthesized by Spark Plasma Sintering. *Journal of the American Chemical Society*, **2018**, 140, 2214-2220 | 16.4 | 22 |
| 140 | Incommensurate antiferromagnetism in a pure spin system via cooperative organization of local and itinerant moments. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3287-92 | 11.5 | 22 |
| 139 | Suppression of the antiferromagnetic metallic state in the pressurized MnBi2Te4 single crystal. *Physical Review Materials*, **2019**, 3, | 3.2 | 22 |
| 138 | Size-dependent magnetic properties of high oxygen content YMn2O5+□ multiferroic nanoparticles. *Journal of Applied Physics*, **2009**, 105, 033908 | 2.5 | 21 |
| 137 | Population pulsation resonances of excitons in monolayer MoSe2 with sub-1 □eV linewidths. *Physical Review Letters*, **2015**, 114, 137402 | 7.4 | 20 |
| 136 | Magnetic ordering in the frustrated J1□2 Ising chain candidate BaNd2O4. *Physical Review B*, **2014**, 90, | 3.3 | 20 |

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| 135 | Spin and orbital ordering in Y1−xLaxVO3. *Physical Review B*, **2011**, 84, | 3.3 | 20 |
| 134 | One-Dimensional Edge Transport in Few-Layer WTe. *Nano Letters*, **2020**, 20, 4228-4233 | 11.5 | 19 |
| 133 | Magnetic order and interactions in ferrimagnetic Mn3Si2Te6. *Physical Review B*, **2017**, 95, | 3.3 | 18 |
| 132 | Relaxation Dynamics of Zero-Field Skyrmions over a Wide Temperature Range. *Nano Letters*, **2018**, 18, 7777-7783 | 11.5 | 18 |
| 131 | Magnetism out of antisite disorder in the J=0 compound Ba2YIrO6. *Physical Review B*, **2017**, 96, | 3.3 | 17 |
| 130 | Retaining Large and Adjustable Elastic Strains of Kilogram-Scale Nb Nanowires. *ACS Applied Materials & Interfaces*, **2016**, 8, 2917-22 | 9.5 | 17 |
| 129 | Research Update: Magnetic phase diagram of EuTi1−xBxO3 (B = Zr, Nb). *APL Materials*, **2014**, 2, 110701 | 5.7 | 17 |
| 128 | Structural and magnetic phase transitions in EuTi1−xNbxO3. *Physical Review B*, **2015**, 92, | 3.3 | 17 |
| 127 | Complex itinerant ferromagnetism in noncentrosymmetric Cr11Ge19. *Physical Review B*, **2012**, 85, | 3.3 | 17 |
| 126 | Two-dimensional magnetic interactions in LaFeAsO. *Physical Review B*, **2013**, 87, | 3.3 | 17 |
| 125 | Magnetic structures and interplay between rare-earth Ce and Fe magnetism in single-crystal CeFeAsO. *Physical Review B*, **2013**, 88, | 3.3 | 17 |
| 124 | Frustrated superexchange interaction versus orbital order in a LaVO3 crystal. *Physical Review Letters*, **2008**, 100, 046401 | 7.4 | 17 |
| 123 | Magnetic order in single crystals of Na3Co2SbO6 with a honeycomb arrangement of 3d7Co2+ ions. *Physical Review Materials*, **2019**, 3, | 3.2 | 17 |
| 122 | A practical guide for crystal growth of van der Waals layered materials. *Journal of Applied Physics*, **2020**, 128, 051101 | 2.5 | 17 |
| 121 | Linear magnetoresistance in the low-field limit in density-wave materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 11201-11206 | 11.5 | 16 |
| 120 | Evidence of an Improper Displacive Phase Transition in Cd_{2}Re_{2}O_{7} via Time-Resolved Coherent Phonon Spectroscopy. *Physical Review Letters*, **2018**, 120, 047601 | 7.4 | 16 |
| 119 | Electron-phonon coupling and thermal transport in the thermoelectric compound Mo3Sb7−xTex. *Physical Review B*, **2015**, 92, | 3.3 | 16 |
| 118 | Native defects in antiferromagnetic topological insulator MnBi2Te4. *Physical Review Materials*, **2020**, 4, | 3.2 | 16 |

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| 117 | Surface superconductivity in the type II Weyl semimetal TaIrTe. *National Science Review*, **2020**, 7, 579-587 | 10.8 | 16 |
| 116 | Binder jet additive manufacturing method to fabricate near net shape crack-free highly dense Fe-6.5 wt.% Si soft magnets. *Heliyon*, **2019**, 5, e02804 | 3.6 | 16 |
| 115 | Revisiting the Kitaev material candidacy of Ir4+ double perovskite iridates. *Physical Review B*, **2019**, 99, | 3.3 | 15 |
| 114 | The Crystal Structure and Magnetic Behavior of Quinary Osmate and Ruthenate Double Perovskites La ABBNO ( A = Ca, Sr; B = Co, Ni; BN= Ru, Os). *Inorganic Chemistry*, **2018**, 57, 2989-3001 | 5.1 | 15 |
| 113 | Structural and magnetic properties of the 5d2 double perovskites Sr2BReO6 (B=Y, In). *Physical Review B*, **2016**, 93, | 3.3 | 15 |
| 112 | Crystal and magnetic structures and physical properties of a new pyroxene NaMnGe2O6 synthesized under high pressure. *Journal of the American Chemical Society*, **2013**, 135, 2776-86 | 16.4 | 15 |
| 111 | Structural phase transition in Ba(Fe0.973Cr0.027)2As2 single crystals. *Physical Review B*, **2009**, 80, | 3.3 | 15 |
| 110 | Magnetic and structural transitions in La0.4Na0.6Fe2As2 single crystals. *Physical Review B*, **2015**, 91, | 3.3 | 14 |
| 109 | Role of magnetic exchange energy on charge ordering in R1/3Sr2/3FeO3 (R=La,Pr,andNd). *Physical Review B*, **2011**, 84, | 3.3 | 14 |
| 108 | Oscillations of the thermal conductivity in the spin-liquid state of □-RuCl3. *Nature Physics*, **2021**, 17, 915-919 | 19.2 | 14 |
| 107 | Site Mixing for Engineering Magnetic Topological Insulators. *Physical Review X*, **2021**, 11, | 9.1 | 14 |
| 106 | Zero-field □R search for a time-reversal-symmetry-breaking mixed pairing state in superconducting Ba1□KxFe2As2. *Physical Review B*, **2014**, 89, | 3.3 | 13 |
| 105 | The hybrid lattice of K(x)Fe(2-y)Se2: where superconductivity and magnetism coexist. *Scientific Reports*, **2013**, 3, 2047 | 4.9 | 13 |
| 104 | Electronic, magnetic, and thermodynamic properties of the kagome layer compound FeSn. *Physical Review Materials*, **2019**, 3, | 3.2 | 13 |
| 103 | Moir□trions in MoSe/WSe heterobilayers. *Nature Nanotechnology*, **2021**, 16, 1208-1213 | 28.7 | 13 |
| 102 | Fragile singlet ground-state magnetism in the pyrochlore osmates R2Os2O7 (R=Y and Ho). *Physical Review B*, **2016**, 93, | 3.3 | 12 |
| 101 | Localized-itinerant dichotomy and unconventional magnetism in SrRuO. *Scientific Reports*, **2017**, 7, 11742 | 4.9 | 12 |
| 100 | Realizing gapped surface states in the magnetic topological insulator MnBi2□SbxTe4. *Physical Review B*, **2020**, 102, | 3.3 | 12 |

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| 99 | Defect-driven ferrimagnetism and hidden magnetization in MnBi2Te4. *Physical Review B*, **2021**, 103, | 3.3 | 12 |
| 98 | Evolution of Magnetic Double Helix and Quantum Criticality near a Dome of Superconductivity in CrAs. *Physical Review X*, **2018**, 8, | 9.1 | 12 |
| 97 | Chemical disorder and spin-liquid-like magnetism in the van der Waals layered 5d transition metal halide Os0.55Cl2. *Physical Review B*, **2019**, 99, | 3.3 | 11 |
| 96 | Hidden one-dimensional spin modulation in a three-dimensional metal. *Nature Communications*, **2014**, 5, 4218 | 17.4 | 11 |
| 95 | Flux growth and physical properties of Mo3Sb7 single crystals. *Physical Review B*, **2013**, 87, | 3.3 | 11 |
| 94 | Nature of Magnetic Excitations in the High-Field Phase of □-RuCl_{3}. *Physical Review Letters*, **2020**, 125, 037202 | 7.4 | 11 |
| 93 | Spin-liquid ground state in the frustrated J1□2 zigzag chain system BaTb2O4. *Physical Review B*, **2015**, 92, | 3.3 | 10 |
| 92 | Log-periodic quantum magneto-oscillations and discrete-scale invariance in topological material HfTe. *National Science Review*, **2019**, 6, 914-920 | 10.8 | 10 |
| 91 | Magnetic phase transition in the low-dimensional compound BaMn2Si2O7. *Physical Review B*, **2013**, 88, | 3.3 | 10 |
| 90 | In situ high energy x-ray synchrotron diffraction study of the synthesis and stoichiometry of LaFeAsO and LaFeAsO1□Fy. *Journal of Applied Physics*, **2009**, 105, 123912 | 2.5 | 10 |
| 89 | Spin-state transitions in PrCoO3 studied with neutron powder diffraction. *Physical Review B*, **2011**, 84, | 3.3 | 10 |
| 88 | Zooming on the quantum critical point in Nd-LSCO. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S12-S13 | 1.3 | 10 |
| 87 | Coupling of photonic crystal cavity and interlayer exciton in heterobilayer of transition metal dichalcogenides. *2D Materials*, **2020**, 7, 015027 | 5.9 | 10 |
| 86 | Spin-lattice coupling mediated multiferroicity in (ND4)2FeCl5□D2O. *Physical Review B*, **2016**, 94, | 3.3 | 10 |
| 85 | Intrinsic donor-bound excitons in ultraclean monolayer semiconductors. *Nature Communications*, **2021**, 12, 871 | 17.4 | 10 |
| 84 | Interference evidence for Rashba-type spin splitting on a semimetallic WTe2 surface. *Physical Review B*, **2016**, 94, | 3.3 | 9 |
| 83 | Polarization-resolved Raman spectroscopy of □RuCl3 and evidence of room-temperature two-dimensional magnetic scattering. *Physical Review B*, **2019**, 100, | 3.3 | 9 |
| 82 | Flux requirements for the growth of RFeAsO (R=rare earth) superconductors. *Applied Physics Letters*, **2011**, 98, 072504 | 3.4 | 9 |

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