

# Sergey I Popkov

## List of Publications by Year in descending order

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72  
papers

611  
citations

623574

14  
h-index

713332

21  
g-index

72  
all docs

72  
docs citations

72  
times ranked

265  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Magnetization asymmetry of type-II superconductors in high magnetic fields. Journal of Applied Physics, 2011, 109, .   | 1.1 | 40        |
| 2  | General regularities of magnetoresistive effects in the polycrystalline yttrium and bismuth high-temperature superconductor systems. Physics of the Solid State, 2011, 53, 922-932.  | 0.2 | 29        |
| 3  | Bacterial Ferrihydrite Nanoparticles: Preparation, Magnetic Properties, and Application in Medicine. Journal of Superconductivity and Novel Magnetism, 2018, 31, 2297-2304.  | 0.8 | 29        |
| 4  | Mechanism of the hysteretic behavior of the magnetoresistance of granular HTSCs: The universal nature of the width of the magnetoresistance hysteresis loop. Journal of Experimental and Theoretical Physics, 2009, 108, 241-248.                        | 0.2 | 28        |
| 5  | Magnetoresistance hysteresis in granular HTSCs as a manifestation of the magnetic flux trapped by superconducting grains in YBCO + CuO composites. Journal of Experimental and Theoretical Physics, 2007, 105, 1174-1183.                                | 0.2 | 27        |
| 6  | Size effects in the formation of an uncompensated ferromagnetic moment in NiO nanoparticles. Journal of Applied Physics, 2019, 126, .  | 1.1 | 27        |
| 7  | Magnetoresistive effect in bulk composites 1-2-3 YBCO + CuO and 1-2-3 YBCO + BaPb <sub>1-x</sub> Sr <sub>x</sub> O <sub>3</sub> and their application as magnetic field sensors at 77 K. Superconductor Science and Technology, 2004, 17, 175-181.       | 1.8 | 20        |
| 8  | Magnetization loop and critical current of porous Bi-based HTS. Physica C: Superconductivity and Its Applications, 2006, 434, 135-137.   | 0.6 | 20        |
| 9  | Compression of a magnetic flux in the intergrain medium of a YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> granular superconductor from magnetic and magnetoresistive measurements. Journal of Applied Physics, 2011, 110, 093918.                     | 1.1 | 20        |
| 10 | Exchange bias in nano-ferrihydrite. Journal of Applied Physics, 2016, 120, .   | 1.1 | 19        |
| 11 | Thermally activated dissipation in a novel foamed Bi-based oxide superconductor in magnetic fields. Superconductor Science and Technology, 2007, 20, 491-494.  | 1.8 | 17        |
| 12 | Magnetic and dielectric properties of the PbFeBO <sub>4</sub> single crystal. Journal of Magnetism and Magnetic Materials, 2014, 353, 23-28.   | 1.0 | 17        |
| 13 | Magnetoresistance hysteresis of bulk textured Bi <sub>1.8</sub> Pb <sub>0.3</sub> Sr <sub>1.9</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> +Ag ceramics and its anisotropy. Physica C: Superconductivity and Its Applications, 2010, 470, 61-67. | 0.6 | 16        |
| 14 | Temperature behavior of the antiferromagnetic susceptibility of nanoferrihydrite from the measurements of the magnetization curves in fields of up to 250 kOe. Physics of the Solid State, 2017, 59, 1940-1946.  | 0.2 | 16        |
| 15 | Synthesis, microstructure, and the transport and magnetic properties of Bi-containing high-temperature superconductors with a porous structure. Technical Physics Letters, 2003, 29, 986-988.  | 0.2 | 14        |
| 16 | Mechanism of formation of a negative magnetoresistance region in granular high-temperature superconductors. Physics of the Solid State, 2009, 51, 1105-1109.   | 0.2 | 13        |
| 17 | Pinning in a porous high-temperature superconductor Bi <sub>2</sub> 223. Physics of the Solid State, 2011, 53, 2409-2414.  | 0.2 | 13        |
| 18 | Specific features in the hysteretic behavior of the magnetoresistance of granular high-temperature superconductors. Physics of the Solid State, 2012, 54, 2155-2164.   | 0.2 | 13        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Pulsed Field-Induced Magnetization Switching in Antiferromagnetic Ferrihydrite Nanoparticles. <i>Physics of the Solid State</i> , 2018, 60, 1973-1978.  | 0.2 | 13        |
| 20 | Magnetic properties of NiO nano particles: Contributions of the antiferromagnetic and ferromagnetic subsystems in different magnetic field ranges up to 250 kOe. <i>Physics of the Solid State</i> , 2017, 59, 1547-1552.   | 0.2 | 12        |
| 21 | Pinning enhancement by heterovalent substitution in $Y_{1-x}RE_xBa_2Cu_3O_{7-\delta}$ . <i>Superconductor Science and Technology</i> , 2008, 21, 085015.  | 1.8 | 11        |
| 22 | Preparation, microstructure, magnetic and transport properties of bulk textured $Bi_{1.8}Pb_{0.3}Sr_{1.9}Ca_2Cu_3O_x$ and $Bi_{1.8}Pb_{0.3}Sr_{1.9}Ca_2Cu_3O_x+Ag$ ceramics. <i>Superconductor Science and Technology</i> , 2008, 21, 105019.                                 | 1.8 | 11        |
| 23 | Magnetic Field Dependence of Intergrain Pinning Potential in Bulk Granular Composites YBCO + CuO Demonstrating Large Magneto-Resistive Effect. <i>Journal of Superconductivity and Novel Magnetism</i> , 2008, 21, 243-247.   | 0.8 | 10        |
| 24 | Contributions from Inter-grain Boundaries to the Magneto-resistive Effect in Polycrystalline High-T C Superconductors. The Underlying Reason of Different Behavior for YBCO and BSCCO Systems. <i>Journal of Superconductivity and Novel Magnetism</i> , 2011, 24, 2129-2136. | 0.8 | 10        |
| 25 | Specific features of magnetic properties of ferrihydrite nanoparticles of bacterial origin: A shift of the hysteresis loop. <i>Physics of the Solid State</i> , 2016, 58, 287-292.  | 0.2 | 10        |
| 26 | The mechanisms responsible for broadening of the resistive transition under magnetic field in the Josephson junction network realized in bulk YBCO+CuO composites. <i>Physica C: Superconductivity and Its Applications</i> , 2006, 435, 12-15.                               | 0.6 | 9         |
| 27 | Current-voltage characteristics of a foamed $Bi_{1.8}Pb_{0.3}Sr_2Ca_2Cu_3O_x$ high-temperature superconductor with fractal cluster structure. <i>Physics of the Solid State</i> , 2006, 48, 207-212.  | 0.2 | 9         |
| 28 | Magneto-resistance of porous polycrystalline HTSC: Effect of the transport current on magnetic flux compression in intergranular medium. <i>Physics of the Solid State</i> , 2014, 56, 1542-1547.   | 0.2 | 8         |
| 29 | Relaxation of the remanent resistance of granular HTSC Y-Ba-Cu-O + CuO composites after magnetic field treatment. <i>Physics of the Solid State</i> , 2008, 50, 1014-1021.  | 0.2 | 7         |
| 30 | High-temperature superconductor based composites: Large magneto-resistance in weak magnetic fields. <i>Technical Physics Letters</i> , 2001, 27, 952-955.   | 0.2 | 6         |
| 31 | Low-temperature resistivity of polycrystalline $(La_{0.5}Eu_{0.5})_{0.7}Pb_{0.3}MnO_3$ in a magnetic fields. <i>Journal of Physics: Conference Series</i> , 2010, 200, 052025.  | 0.3 | 6         |
| 32 | Low-temperature resistance and magneto-resistance hysteresis in polycrystalline $(La_{0.5}Eu_{0.5})_{0.7}Pb_{0.3}MnO_3$ . <i>Journal of Applied Physics</i> , 2011, 109, 053711.  | 1.1 | 6         |
| 33 | Magnetic phase diagram of the olivine-type $Mn_2GeO_4$ single crystal estimated from magnetic, resonance and thermodynamic properties. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 136003.   | 0.7 | 6         |
| 34 | Pulsed solenoid with nanostructured Cu-Nb wire winding. <i>Journal of Surface Investigation</i> , 2015, 9, 111-115.   | 0.1 | 6         |
| 35 | Superconductivity on Interfaces of Non-superconducting Granules $La_2CuO_4$ and $La_{1.56}Sr_{0.44}CuO_4$ . <i>Journal of Superconductivity and Novel Magnetism</i> , 2018, 31, 3867-3874.  | 0.8 | 6         |
| 36 | Dynamic Magnetization Switching in NiO Nanoparticles: Pulsed Field Magnetometry Study. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 405-411.   | 0.8 | 6         |

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|----|---|-----|-----------|
| 37 | Synthesis and Magnetic Properties of the Core-Shell Fe <sub>3</sub> O <sub>4</sub> /CoFe <sub>2</sub> O <sub>4</sub> Nanoparticles. Physics of the Solid State, 2020, 62, 285-290.  | 0.2 | 6         |
| 38 | Time relaxation of residual resistance of HTSC-based composites. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1309-1310.   | 0.6 | 5         |
| 39 | Increase in the magnetization loop width in the Ba <sub>0.6</sub> K <sub>0.4</sub> BiO <sub>3</sub> superconductor: Possible manifestation of phase separation. Journal of Experimental and Theoretical Physics, 2014, 118, 104-110.  | 0.2 | 5         |
| 40 | The synthesis, microstructure, transport and magnetic properties of Bi-based low density HTSC. Journal of Materials Processing Technology, 2005, 161, 58-61.  | 3.1 | 4         |
| 41 | Study of current-voltage characteristics of Bi-based high-temperature superconductors with fractal cluster structure. Physica C: Superconductivity and Its Applications, 2006, 435, 19-22.  | 0.6 | 4         |
| 42 | Mechanisms of dissipation in a Josephson medium based on a high-temperature superconductor in a magnetic field. Physics of the Solid State, 2006, 48, 826-832.  | 0.2 | 4         |
| 43 | Current-voltage characteristics of break junctions of high-T <sub>c</sub> superconductors. Physica C: Superconductivity and Its Applications, 2007, 467, 80-84.   | 0.6 | 4         |
| 44 | Increase in the diamagnetic response from low-density Bi <sub>1.8</sub> Pb <sub>0.3</sub> Sr <sub>1.9</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> high-temperature superconductors and Bi <sub>1.8</sub> Pb <sub>0.3</sub> Sr <sub>1.9</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> + Ag composites. Technical Physics, 2009, 54, 1130-1134. | 0.2 | 4         |
| 45 | Nonmonotonic behavior of magnetoresistance, R(H) hysteresis, and low-temperature heat capacity of the BaPb <sub>0.75</sub> Bi <sub>0.25</sub> O <sub>3</sub> superconductor in a magnetic field: Possible manifestations of phase separation. Journal of Experimental and Theoretical Physics, 2010, 110, 584-593.  | 0.2 | 4         |
| 46 | Non-linear current-voltage characteristics of (La <sub>0.5</sub> Eu <sub>0.5</sub> ) <sub>0.7</sub> Pb <sub>0.3</sub> MnO <sub>3</sub> single crystals: Possible manifestation of the internal heating of chargecarriers. Physica B: Condensed Matter, 2010, 405, 4961-4965.  | 1.3 | 4         |
| 47 | Features of the low-temperature specific heat in underdoped YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6-x</sub> single crystals. JETP Letters, 2010, 92, 332-337.   | 0.4 | 4         |
| 48 | A Capacitive Dilatometer for Measuring the Magnetostriction, Piezoelectric Effect, and Linear Thermal-Expansion Coefficient. Technical Physics Letters, 2018, 44, 123-125.  | 0.2 | 4         |
| 49 | General Regularities and Differences in the Behavior of the Dynamic Magnetization Switching of Ferrimagnetic (CoFe <sub>2</sub> O <sub>4</sub> ) and Antiferromagnetic (NiO) Nanoparticles. Physics of the Solid State, 2020, 62, 1518-1524.  | 0.2 | 4         |
| 50 | Features of the Pulsed Magnetization Switching in a High-Coercivity Material Based on $\hat{\mu}$ -Fe <sub>2</sub> O <sub>3</sub> Nanoparticles. Physics of the Solid State, 2020, 62, 445-453.   | 0.2 | 4         |
| 51 | Highly textured bismuth-containing high-temperature superconductor ceramics obtained by uniaxial pressing in liquid medium: Fabrication and properties. Technical Physics Letters, 2007, 33, 740-743.   | 0.2 | 3         |
| 52 | Current-conducting properties of paper consisting of multiwall carbon nanotubes. Journal of Experimental and Theoretical Physics, 2013, 116, 860-865.   | 0.2 | 3         |
| 53 | Positive magnetoresistance of single-crystal bilayer manganites (La <sub>1-z</sub> Nd <sub>z</sub> ) <sub>1.4</sub> Sr <sub>1.6</sub> Mn <sub>2</sub> O <sub>7</sub> (z=0, 0.1). Journal of Applied Physics, 2015, 117, 163918.   | 1.1 | 3         |
| 54 | Magnetoresistance of substituted lanthanum manganites La <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> upon nonequilibrium overheating of carriers. Journal of Applied Physics, 2011, 109, 083711.  | 1.1 | 2         |

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|----|--|-----|-----------|
| 55 | Title is missing!. Journal of Low Temperature Physics, 2003, 130, 347-381.   | 0.6 | 1         |
| 56 | Controlled magnetoresistance in Y <sub>3</sub> /4Lu <sub>1</sub> /4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> -CuO composites at 77 K. Technical Physics Letters, 2003, 29, 578-581.   | 0.2 | 1         |
| 57 | Transport and magnetic properties of Y <sub>3</sub> /4Lu <sub>1</sub> /4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> + Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> composites representing a Josephson-type superconductor-ferrimagnet-superconductor weak-link network. Physics of the Solid State, 2003, 45, 1866-1873.         | 0.2 | 1         |
| 58 | Magnetic properties of a low-density Bi-based HTSC. Physics of Metals and Metallography, 2006, 101, S29-S32.   | 0.3 | 1         |
| 59 | Hysteretic behavior of the magnetoresistance and the critical current of bulk Y <sub>3</sub> /4Lu <sub>1</sub> /4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> +CuO composites in a magnetic field. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1307-1308.  | 0.6 | 1         |
| 60 | Peculiarities of the time evolution of magnetoresistance of granular HTSC in a constant applied magnetic field. Solid State Communications, 2008, 147, 284-287.  | 0.9 | 1         |
| 61 | Current-voltage characteristics of polycrystalline (La <sub>0.5</sub> Eu <sub>0.5</sub> ) <sub>0.7</sub> Pb <sub>0.3</sub> MnO <sub>3</sub> at low temperatures. Physics of the Solid State, 2011, 53, 2455-2458.  | 0.2 | 1         |
| 62 | Relaxation of low-temperature magnetoresistance and magnetization of polycrystalline (La <sub>0.5</sub> Eu <sub>0.5</sub> ) <sub>0.7</sub> Pb <sub>0.3</sub> MnO <sub>3</sub> . Journal Physics D: Applied Physics, 2011, 44, 255001.  | 1.3 | 1         |
| 63 | Relaxation of magnetoresistance of single-crystalline (La <sub>0.5</sub> Eu <sub>0.5</sub> ) <sub>0.7</sub> Pb <sub>0.3</sub> MnO <sub>3</sub> in a pulsed magnetic field. Technical Physics Letters, 2012, 38, 1080-1082.   | 0.2 | 1         |
| 64 | Physical Properties of a Frustrated Quasi-One-Dimensional NaCuFe <sub>2</sub> (VO <sub>4</sub> ) <sub>3</sub> Magnet and Effect of Chemical Pressure Induced by the Substitution of Sodium for Lithium. Physics of the Solid State, 2020, 62, 297-307.   | 0.2 | 1         |
| 65 | Anomalous transport properties of a paramagnetic NiTiO <sub>3</sub> + HTSC two-phase system representing a random Josephson junction network. JETP Letters, 2002, 75, 138-141.   | 0.4 | 0         |
| 66 | The effect of ferrimagnetic ordering in insulating component of composites HTSC+Yttrium Iron Garnet on its transport properties. Solid State Communications, 2003, 125, 281-285.   | 0.9 | 0         |
| 67 | Current-controlled magneto-resistive effect in bulk Y-Ba-Cu-O + CuO composites and their application as magnetic-field sensors at 77 K. Physics of Metals and Metallography, 2006, 101, S24-S26.   | 0.3 | 0         |
| 68 | Investigation of the Josephson coupling through a magnetoactive barrier (ferrimagnet, paramagnet) in Y <sub>3</sub> /4Lu <sub>1</sub> /4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> + Y <sub>3</sub> (Al <sup>1-x</sup> Fe <sup>x</sup> ) <sub>5</sub> O <sub>12</sub> composites. Physics of the Solid State, 2006, 48, 2046-2055. | 0.2 | 0         |
| 69 | Crossover from S <sub>w</sub> to F <sub>w</sub> junctions in composites Y <sub>3</sub> /4Lu <sub>1</sub> /4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> +Y <sub>3</sub> (Al <sup>1-x</sup> Fe <sup>x</sup> ) <sub>5</sub> O <sub>12</sub> . Physica C: Superconductivity and Its Applications, 2007, 460-462, 1311-1312.             | 0.6 | 0         |
| 70 | The effect of magnetisation relaxation of superconducting grains on time relaxation of the resistance of granular HTSC in constant applied magnetic field. Journal of Physics: Conference Series, 2009, 150, 052012.   | 0.3 | 0         |
| 71 | Asymmetry of magnetization curves of textured BSCCO. Physica C: Superconductivity and Its Applications, 2010, 470, S870-S872.  | 0.6 | 0         |
| 72 | Forming High-Temperature Superconducting Layers at the Interfaces between Non-superconducting Phases. Technical Physics Letters, 2020, 46, 1004-1007.  | 0.2 | 0         |