# Elena Bartolome

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 86 papers | 1,113 citations | 394421 19 h-index | 477307 29 g-index |
| 88 all docs | 88 docs citations | 88 times ranked | 1337 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Structural and magnetic properties of some lanthanide (Ln = Eu(<scp>iii</scp>), Gd(<scp>iii</scp>) and) Tj ETQq1 1 0.784314 rgBT / substitutions. Dalton Transactions, 2014, 43, 12342-12356. | 3.3 | 84 |
| 2 | Chemical tunnel-splitting-engineering in a dysprosium-based molecular nanomagnet. Nature Communications, 2018, 9, 1292. | 12.8 | 81 |
| 3 | Emerging Diluted Ferromagnetism in Highâ€T<sub>c</sub> Superconductors Driven by Point Defect Clusters. Advanced Science, 2016, 3, 1500295. | 11.2 | 41 |
| 4 | {Dy(Î±-fur)3}n: from double relaxation single-ion magnet behavior to 3D ordering. Dalton Transactions, 2013, 42, 10153. | 3.3 | 40 |
| 5 | Critical state in finite type-II superconducting rings. Physical Review B, 2005, 71, . | 3.2 | 38 |
| 6 | Preparation and properties of a calcium(<scp>ii</scp>)-based molecular chain decorated with manganese(<scp>ii</scp>) butterfly-like complexes. Dalton Transactions, 2014, 43, 13349-13357. | 3.3 | 36 |
| 7 | ABS 3D printed solutions for cryogenic applications. Cryogenics, 2017, 82, 30-37. | 1.7 | 35 |
| 8 | Critical state in superconducting single-crystallineYBa2Cu3O7foams: Local versus long-range currents. Physical Review B, 2004, 70, . | 3.2 | 31 |
| 9 | Isotropic and anisotropic pinning in TFA-grown YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7 â^'x</sub>films with BaZrO<sub>3</sub>nanoparticles. Superconductor Science and Technology, 2011, 24, 125010. | 3.5 | 31 |
| 10 | Magnetic Anisotropy Switch: Easy Axis to Easy Plane Conversion and Vice Versa. Advanced Functional Materials, 2018, 28, 1801846. | 14.9 | 31 |
| 11 | A Multifunctional Dysprosiumâ€Carboxylato 2D Metallâ€“Organic Framework. Angewandte Chemie - International Edition, 2021, 60, 12001-12006. | 13.8 | 27 |
| 12 | High critical current YBa2Cu3O7artificial joints using Ag foils as welding agent. Superconductor Science and Technology, 2004, 17, 182-185. | 3.5 | 26 |
| 13 | In-field hall probe mapping system for characterization of YBCO welds. IEEE Transactions on Applied Superconductivity, 2003, 13, 3136-3139. | 1.7 | 23 |
| 14 | Characterization of superconducting rings using an in-field hall probe magnetic mapping system. IEEE Transactions on Applied Superconductivity, 2003, 13, 3667-3670. | 1.7 | 23 |
| 15 | ac susceptibility and critical-current densities in sintered YBa2Cu3O7â^'Î´ superconductors. Applied Physics Letters, 2006, 89, 072501. | 3.3 | 23 |
| 16 | Low-power superconducting motors. Superconductor Science and Technology, 2008, 21, 034010. | 3.5 | 22 |
| 17 | Magnetic properties of the seven-coordinated nanoporous framework material Co(bpy)<sub>1.5</sub>(NO<sub>3</sub>)<sub>2</sub> (bpy = 4,4â€²-bipyridine). Dalton Transactions, 2012, 41, 10382-10389. | 3.3 | 21 |
| 18 | Critical State of YBCO Superconductors With Artificially Patterned Holes. IEEE Transactions on Applied Superconductivity, 2005, 15, 2775-2778. | 1.7 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Vortex dynamics at high ac amplitudes of trifluoracetate route grown<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>YBa</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:ms Physical Review B, 2010, 81, . | 3.2 | 19 |
| 20 | Heteronuclear {Tb<sub>x</sub>Eu<sub>1â^'x</sub>} furoate 1D polymers presenting luminescent properties and SMM behavior. Journal of Materials Chemistry C, 2018, 6, 5286-5299. | 5.5 | 19 |
| 21 | 1:30 000 cryogenic current comparator with optimum squid readout. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 621-625. | 4.7 | 18 |
| 22 | Antiferromagnetic single-chain magnet slow relaxation in the {Tb(Î±-fur)<sub>3</sub>}<sub>n</sub> polymer with non-Kramers ions. Journal of Materials Chemistry C, 2016, 4, 5038-5050. | 5.5 | 18 |
| 23 | Magnetic and structural characterization of inkjet-printed<sup>TFA</sup>YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7â^'x</sub>/<sup>MOD</sup>CZO/<sup>ABAD</su coated conductors. Superconductor Science and Technology, 2013, 26, 125004. | 3.1 | 17 |
| 24 | Magnetic stability against calcining of microwave-synthesized CoFe<sub>2</sub>O<sub>4</sub> nanoparticles. New Journal of Chemistry, 2016, 40, 6890-6898. | 2.8 | 16 |
| 25 | Anomalous ac magnetic susceptibility of high-temperatureYBa2Cu3O7â^'Î´superconductors. Physical Review B, 2005, 72, . | 3.2 | 15 |
| 26 | Vortex creep in TFAâ€“YBCO nanocomposite films. Superconductor Science and Technology, 2014, 27, 115008. | 3.5 | 15 |
| 27 | Coumarin-lanthanide based compounds with SMM behavior and high quantum yield luminescence. Dalton Transactions, 2020, 49, 13671-13684. | 3.3 | 15 |
| 28 | Magnetic relaxation versus 3D long-range ordering in {Dy<sub>2</sub>Ba(Î±-fur)<sub>8</sub>}<sub>n</sub>furoate polymers. Dalton Transactions, 2014, 43, 10999-11013. | 3.3 | 14 |
| 29 | Magnetic Relaxation of Lanthanide-Based Molecular Magnets. Handbook of Magnetic Materials, 2017, 26, 1-289. | 0.6 | 14 |
| 30 | Intrinsic anisotropy and pinning anisotropy in nanostructured YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7â^'Î´ </sub> from microwave measurements. Superconductor Science and Technology, 2020, 33, 044017. | 3.5 | 14 |
| 31 | Magnetization and critical current of finite superconductingYBa2Cu3O7rings. Physical Review B, 2005, 72, . | 3.2 | 13 |
| 32 | Hybrid YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> Superconductingâ€“Ferromagnetic Nanocomposite Thin Films Prepared from Colloidal Chemical Solutions. Advanced Electronic Materials, 2017, 3, 1700037. | 5.1 | 13 |
| 33 | Universal correlation between critical current density and normal-state resistivity in porous YBa2Cu3O7â^'xthin films. Superconductor Science and Technology, 2007, 20, 895-899. | 3.5 | 12 |
| 34 | Slow magnetic relaxation in a dimeric Mn<sub>2</sub>Ca<sub>2</sub> complex enabled by the large Mn(<scp>iii</scp>) rhombicity. Dalton Transactions, 2017, 46, 720-732. | 3.3 | 12 |
| 35 | A â€˜study and research pathâ€™ enriching the learning of mechanical engineering. European Journal of Engineering Education, 2019, 44, 330-346. | 2.3 | 12 |
| 36 | Critical Current Determination of Artificially Welded HTS Samples by In-Field Hall Mapping Technique. IEEE Transactions on Applied Superconductivity, 2005, 15, 3632-3635. | 1.7 | 11 |

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|---|---|---|---|
| 37 | Grain boundary anisotropy versus effective pinning anisotropy in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>YB</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math> thin f | 3.2 | 11 |
| 38 | Melting of Agâ€“Y Ba2Cu3O7 interfaces: the path to large area high critical current welds. Superconductor Science and Technology, 2005, 18, S168-S172. | 3.5 | 10 |
| 39 | Determination of the inter- and intra-granular critical currents in superconducting YBa2Cu3O7welds. Superconductor Science and Technology, 2005, 18, 1227-1232. | 3.5 | 10 |
| 40 | Nanostrain induced pinning in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7â^'x</sub>nanocomposites even close to the irreversibility line. Superconductor Science and Technology, 2012, 25, 122001. | 3.5 | 10 |
| 41 | Effective silver-assisted welding of YBCO blocks: mechanical versus electrical properties. Superconductor Science and Technology, 2010, 23, 045013. | 3.5 | 9 |
| 42 | High relaxation barrier in neodymium furoate-based field-induced SMMs. Dalton Transactions, 2019, 48, 15386-15396. | 3.3 | 9 |
| 43 | Double-barrier junction based dc SQUID. Physica C: Superconductivity and Its Applications, 2000, 340, 93-100. | 1.2 | 8 |
| 44 | Artificial magnetic granularity effects on patterned epitaxial<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Y</mml:mi><mml:msub><mml:mi mathvariant="normal">Ba</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>7</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></ | 3.2 | 8 |
| 45 | Simplified calculus for the design of a cryogenic current comparator. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 612-616. | 4.7 | 7 |
| 46 | Transport versus magnetization technique for determination of critical current densities in superconducting tapes with macroscopic defects. Superconductor Science and Technology, 2005, 18, 388-394. | 3.5 | 7 |
| 47 | Iron-YBCO heterostructures and their application for trapped field superconducting motor. Journal of Physics: Conference Series, 2006, 43, 788-791. | 0.4 | 7 |
| 48 | Vortex pinning regimes in YBa2Cu3O7â^'xbulk boundaries investigated by quantitative magnetic Hall microscopy. Superconductor Science and Technology, 2008, 21, 125002. | 3.5 | 7 |
| 49 | Vortex pinning properties at dc and microwave frequencies of YBa2Cu3O7-x films with nanorods and nanoparticles. Superconductor Science and Technology, 2020, 33, 074006. | 3.5 | 7 |
| 50 | Failure mode and effect analysis (FMEA) to improve collaborative project-based learning: Case study of a Study and Research Path in mechanical engineering. International Journal of Mechanical Engineering Education, 2022, 50, 291-325. | 1.0 | 7 |
| 51 | Vortex oscillations in TFA-grown YBCO thin-films with BZO nanoparticles. Physica C: Superconductivity and Its Applications, 2010, 470, 2033-2039. | 1.2 | 6 |
| 52 | Inkjet Printing Multideposited YBCO on CGO/LMO/MgO/Y2O3/Al2 O3/Hastelloy Tape for 2G-Coated Conductors. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5. | 1.7 | 6 |
| 53 | Luminescent and Magnetic Tb-MOF Flakes Deposited on Silicon. Molecules, 2021, 26, 5503. | 3.8 | 6 |
| 54 | 1:30000 cryogenic current comparator with optimum squid readout. , 0, , . | | 5 |

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|---|---|---|---|
| 55 | Critical current density analysis ofex situMgB2wire by in-field and temperature Hall probe imaging. Superconductor Science and Technology, 2005, 18, 1135-1140. | 3.5 | 5 |
| 56 | Embedded Magnetism in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> Associated with Cuâ€“O Vacancies within Nanoscale Intergrowths: Implications for Superconducting Current Performance. ACS Applied Nano Materials, 2020, 3, 3050-3059. | 5.0 | 5 |
| 57 | Accurate measurement of small currents using a CCC with DC SQUID readout. Sensors and Actuators A: Physical, 2000, 85, 54-59. | 4.1 | 4 |
| 58 | Magnetic properties of a melt-textured YBa2Cu3Ox ring with a perpendicular crack. Applied Physics Letters, 2007, 90, 072501. | 3.3 | 4 |
| 59 | Slow relaxation in a {Tb2Ba(Î±-fur)8}n polymer with Ln = Tb(iii) non-Kramers ions. Dalton Transactions, 2019, 48, 5022-5034. | 3.3 | 4 |
| 60 | Enhanced Magnetism through Oxygenation of FePc/Ag(110) Monolayer Phases. Journal of Physical Chemistry C, 2020, 124, 13993-14006. | 3.1 | 4 |
| 61 | In-field magnetic Hall probe microscopy studies of YBa2Cu3O7 based superconductors. Journal of Physics and Chemistry of Solids, 2006, 67, 403-406. | 4.0 | 3 |
| 62 | Ac susceptibility of bicrystal-like type-II superconducting films. Physica C: Superconductivity and Its Applications, 2007, 460-462, 787-788. | 1.2 | 3 |
| 63 | Novel Hall sensors developed for magnetic field imaging systems. Journal of Magnetism and Magnetic Materials, 2007, 316, 232-235. | 2.3 | 3 |
| 64 | On the magnetic susceptibility of niobium diselenide. Low Temperature Physics, 2008, 34, 642-644. | 0.6 | 3 |
| 65 | â€˜Study and Research Pathâ€™ multi-approach learning of Theory of Machines and Mechanisms. European Journal of Engineering Education, 2020, 45, 985-1001. | 2.3 | 3 |
| 66 | Dimeric SMM Rungs. Molecules, 2021, 26, 5626. | 3.8 | 3 |
| 67 | Study and Research Path for Learning General Chemistry: Analyzing the Quality of Drinking Water. Journal of Chemical Education, 2022, 99, 1255-1265. | 2.3 | 3 |
| 68 | Towards large area surface functionalization with luminescent and magnetic lanthanoid complexes. Inorganic Chemistry Frontiers, 2022, 9, 4160-4170. | 6.0 | 3 |
| 69 | Resistance bridge based on the cryogenic current comparator in a transport dewar. IEEE Transactions on Applied Superconductivity, 2001, 11, 867-870. | 1.7 | 2 |
| 70 | LTS slotted SQUIDs for reduction of 1/f noise. Physica C: Superconductivity and Its Applications, 2002, 372-376, 233-236. | 1.2 | 2 |
| 71 | On the sensitivity of cryogenic current comparators: theory and experiments. Metrologia, 2003, 40, 51-56. | 1.2 | 2 |
| 72 | Obtention and characterization of YBCO/Ag/YBCO welds at different misorientation angles. Journal of Physics: Conference Series, 2006, 43, 401-404. | 0.4 | 2 |

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|---|---|---|---|
| 73 | Imaging Current Percolation and Ac Losses in Artificially Granular YBCO Thin Films. IEEE Transactions on Applied Superconductivity, 2007, 17, 3223-3226. | 1.7 | 2 |
| 74 | Magnetic Anisotropy in 2H-NbSe‹sub›2‹/sub› Electron Irradiated Single Crystals. Solid State Phenomena, 2009, 152-153, 470-473. | 0.3 | 2 |
| 75 | AC response of 2Hâ€“NbSe‹sub›2‹/sub›single crystals with electron-irradiation-induced defects. Journal of Physics Condensed Matter, 2010, 22, 295702. | 1.8 | 2 |
| 76 | Vortex Dynamics in Nanostructured TFA-Grown YBCO Films Studied by Ac Susceptibility. IEEE Transactions on Applied Superconductivity, 2011, 21, 3189-3191. | 1.7 | 2 |
| 77 | An Atomic-Scale Perspective of the Challenging Microstructure of YBa2Cu3O7âˆ’x Thin Films. , 2020, , 189-212. | | 2 |
| 78 | Study and Research Paths to Improve Web-Based Inquiry Learning: Study Case of an ICT Course in Engineering. Education Sciences, 2021, 11, 772. | 2.6 | 2 |
| 79 | AC susceptibility of halfâ€“half jointed melt-textured YBCO rings. Physica C: Superconductivity and Its Applications, 2007, 460-462, 770-771. | 1.2 | 1 |
| 80 | Simulation of dc magnetic effects due to geometrically defined grain boundaries in type-II superconductors. Physica C: Superconductivity and Its Applications, 2008, 468, 492-497. | 1.2 | 1 |
| 81 | Nano-mechanical properties of silver-welded YBCO bulks. Journal of Physics: Conference Series, 2010, 234, 012034. | 0.4 | 1 |
| 82 | Simplified calculus for the design of a cryogenic current comparator. , 0, , . | | 0 |
| 83 | Deployment of Study and Research Paths in Mechanical Engineering. Trends in Mathematics, 2021, , 169-175. | 0.1 | 0 |
| 84 | A Multifunctional Dysprosiumâ€Carboxylato 2D Metallâ€“Organic Framework. Angewandte Chemie, 2021, 133, 12108-12113. | 2.0 | 0 |
| 85 | Nearly Quantum-Limited Squids for a Gravitational Wave Antenna. , 1998, , 61-66. | | 0 |
| 86 | Towards practical quantum-limited SQUIDs for a gravitational wave antenna. European Physical Journal Special Topics, 1998, 08, Pr3-229-Pr3-232. | 0.2 | 0 |