

# Artem M Abakumov

## List of Publications by Citations

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341  
papers

9,909  
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47  
h-index

84  
g-index

404  
ext. papers

11,611  
ext. citations

7.4  
avg, IF

6.22  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 341 | Origin of voltage decay in high-capacity layered oxide electrodes. <i>Nature Materials</i> , <b>2015</b> , 14, 230-8   | 27   | 612       |
| 340 | Water electrolysis on La(1-x)Sr(x)CoO(3- $\delta$ ) perovskite electrocatalysts. <i>Nature Communications</i> , <b>2016</b> , 7, 11053   | 17.4 | 550       |
| 339 | Visualization of O-O peroxy-like dimers in high-capacity layered oxides for Li-ion batteries. <i>Science</i> , <b>2015</b> , 350, 1516-21  | 33.3 | 514       |
| 338 | Oxidation state and chemical shift investigation in transition metal oxides by EELS. <i>Ultramicroscopy</i> , <b>2012</b> , 116, 24-33   | 3.1  | 348       |
| 337 | Evidence for anionic redox activity in a tridimensional-ordered Li-rich positive electrode $\text{Li}_x\text{IrO}_3$ . <i>Nature Materials</i> , <b>2017</b> , 16, 580-586   | 27   | 234       |
| 336 | Implementation of micro-ball nanodiamond anvils for high-pressure studies above 6 Mbar. <i>Nature Communications</i> , <b>2012</b> , 3, 1163   | 17.4 | 197       |
| 335 | Insertion compounds and composites made by ball milling for advanced sodium-ion batteries. <i>Nature Communications</i> , <b>2016</b> , 7, 10308   | 17.4 | 156       |
| 334 | Discovery of a superhard iron tetraboride superconductor. <i>Physical Review Letters</i> , <b>2013</b> , 111, 157002   | 7.4  | 155       |
| 333 | Structural Evolution of the BiFeO <sub>3</sub> /LaFeO <sub>3</sub> System. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 285-292   | 9.6  | 148       |
| 332 | Structural requirements in lithium cobalt oxides for the catalytic oxidation of water. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 1616-9   | 16.4 | 139       |
| 331 | Understanding the roles of anionic redox and oxygen release during electrochemical cycling of lithium-rich layered Li <sub>4</sub> FeSbO <sub>6</sub> . <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4804-14 | 16.4 | 128       |
| 330 | Terapascal static pressure generation with ultrahigh yield strength nanodiamond. <i>Science Advances</i> , <b>2016</b> , 2, e1600341   | 14.3 | 118       |
| 329 | Exceptional electrocatalytic oxygen evolution via tunable charge transfer interactions in LaSrNiFeO Ruddlesden-Popper oxides. <i>Nature Communications</i> , <b>2018</b> , 9, 3150   | 17.4 | 108       |
| 328 | Anionic Redox Activity in a Newly Zn-Doped Sodium Layered Oxide P2-Na <sub>2/3</sub> Mn <sub>1/3</sub> Zn <sub>2/3</sub> O <sub>2</sub> (0). <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802379                             | 21.8 | 104       |
| 327 | Strong Oxygen Participation in the Redox Governing the Structural and Electrochemical Properties of Na-Rich Layered Oxide Na <sub>2</sub> IrO <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2016</b> , 28, 8278-8288             | 9.6  | 98        |
| 326 | AVPO <sub>4</sub> F (A = Li, K): A 4 V Cathode Material for High-Power Rechargeable Batteries. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 411-415   | 9.6  | 86        |
| 325 | Perovskite-like Mn <sub>2</sub> O <sub>3</sub> : a path to new manganites. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 1494-8   | 16.4 | 82        |

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| 324 | VEGF-targeted magnetic nanoparticles for MRI visualization of brain tumor. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2015</b> , 11, 825-33   | 6    | 80 |
| 323 | Degradation process of lead chromate in paintings by Vincent van Gogh studied by means of spectromicroscopic methods. 3. Synthesis, characterization, and detection of different crystal forms of the chrome yellow pigment. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 851-9 | 7.8  | 80 |
| 322 | Exploring the bottlenecks of anionic redox in Li-rich layered sulfides. <i>Nature Energy</i> , <b>2019</b> , 4, 977-987  | 62.3 | 78 |
| 321 | Chemistry and structure of Hg-based superconducting Cu mixed oxides. <i>Superconductor Science and Technology</i> , <b>2002</b> , 15, R31-R49  | 3.1  | 78 |
| 320 | Tetrahedral Chain Order in the Sr <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> Brownmillerite. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 7188-7194  | 9.6  | 77 |
| 319 | Rationalizing the Influence of the Mn(IV)/Mn(III) Red-Ox Transition on the Electrocatalytic Activity of Manganese Oxides in the Oxygen Reduction Reaction. <i>Electrochimica Acta</i> , <b>2016</b> , 187, 161-172   | 6.7  | 75 |
| 318 | Design of new electrode materials for Li-ion and Na-ion batteries from the bloedite mineral Na <sub>2</sub> Mg(SO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 2671-2680   | 13   | 73 |
| 317 | Incommensurate Modulation and Luminescence in the CaGd <sub>2</sub> (1-x)Eu <sub>2x</sub> (MoO <sub>4</sub> ) <sub>4</sub> (1-y)(WO <sub>4</sub> ) <sub>4y</sub> (0 ≤ x ≤ 1, 0 ≤ y ≤ 1) Red Phosphors. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 4387-4395                 | 9.6  | 73 |
| 316 | Synthesis of Li-Rich NMC: A Comprehensive Study. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 9923-9936   | 9.6  | 68 |
| 315 | Energy transfer in Eu <sup>3+</sup> doped scheelites: use as thermographic phosphor. <i>Optics Express</i> , <b>2014</b> , 22 Suppl 3, A961-72   | 3.3  | 68 |
| 314 | Structure and Magnetic Properties of BiFe <sub>0.75</sub> Mn <sub>0.25</sub> O <sub>3</sub> Perovskite Prepared at Ambient and High Pressure. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 4505-4514  | 9.6  | 66 |
| 313 | Preparation, structure, and electrochemistry of layered polyanionic hydroxysulfates: LiMSO <sub>4</sub> OH (M = Fe, Co, Mn) electrodes for Li-ion batteries. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 3653-61  | 16.4 | 63 |
| 312 | Reaching the Energy Density Limit of Layered O <sub>3</sub> -NaNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> Electrodes via Dual Cu and Ti Substitution. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901785  | 21.8 | 61 |
| 311 | Enhanced Electrocatalytic Activities by Substitutional Tuning of Nickel-Based Ruddlesden-Popper Catalysts for the Oxidation of Urea and Small Alcohols. <i>ACS Catalysis</i> , <b>2019</b> , 9, 2664-2673  | 13.1 | 60 |
| 310 | A polar corundum oxide displaying weak ferromagnetism at room temperature. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 3737-47  | 16.4 | 59 |
| 309 | Nanocrystalline ZnO(Ga): Paramagnetic centers, surface acidity and gas sensor properties. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 182, 555-564  | 8.5  | 58 |
| 308 | Visible light activated room temperature gas sensors based on nanocrystalline ZnO sensitized with CdSe quantum dots. <i>Sensors and Actuators B: Chemical</i> , <b>2014</b> , 205, 305-312   | 8.5  | 54 |
| 307 | Direct Observation of Ferroelectric Domain Walls in LiNbO <sub>3</sub> : Wall-Meanders, Kinks, and Local Electric Charges. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 7599-7604  | 15.6 | 53 |

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|-----|---|------|----|
| 306 | Effect of the electrode/electrolyte interface structure on the potassium-ion diffusional and charge transfer rates: towards a high voltage potassium-ion battery. <i>Electrochimica Acta</i> , <b>2017</b> , 258, 814-824   | 6.7  | 51 |
| 305 | Enhancing Na <sup>+</sup> Extraction Limit through High Voltage Activation of the NASICON-Type Na <sub>4</sub> MnV(PO <sub>4</sub> ) <sub>3</sub> Cathode. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 5842-5846 | 6.1  | 51 |
| 304 | Structural evolution at the oxidative and reductive limits in the first electrochemical cycle of LiNiMnCoO. <i>Nature Communications</i> , <b>2020</b> , 11, 1252   | 17.4 | 50 |
| 303 | Synthesis, Crystal Structure, and Magnetic Properties of a Novel Layered Manganese Oxide Sr <sub>2</sub> MnGaO <sub>5</sub> + $\delta$ . <i>Journal of Solid State Chemistry</i> , <b>2001</b> , 160, 353-361               | 3.3  | 50 |
| 302 | Solving the Structure of Li Ion Battery Materials with Precession Electron Diffraction: Application to Li <sub>2</sub> CoPO <sub>4</sub> F. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 3540-3545                     | 9.6  | 49 |
| 301 | Crystallographic shear structures as a route to anion-deficient perovskites. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 6697-700  | 16.4 | 49 |
| 300 | Core-shell-corona doxorubicin-loaded superparamagnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles for cancer theranostics. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2015</b> , 136, 1073-80                     | 6    | 48 |
| 299 | Synthesis and Crystal Structure of Novel Layered Manganese Oxide Ca <sub>2</sub> MnGaO <sub>5</sub> + $\delta$ . <i>Journal of Solid State Chemistry</i> , <b>2001</b> , 158, 100-111                                       | 3.3  | 48 |
| 298 | The Crystal Structure of Ba <sub>8</sub> Ta <sub>6</sub> NiO <sub>24</sub> : Cation Ordering in Hexagonal Perovskites. <i>Journal of Solid State Chemistry</i> , <b>1996</b> , 125, 102-107                                 | 3.3  | 48 |
| 297 | Peierls distortion, magnetism, and high hardness of manganese tetraboride. <i>Physical Review B</i> , <b>2014</b> , 89,   | 3.3  | 47 |
| 296 | Solid state chemistry for developing better metal-ion batteries. <i>Nature Communications</i> , <b>2020</b> , 11, 4976  | 17.4 | 47 |
| 295 | Unlocking anionic redox activity in O <sub>3</sub> -type sodium 3d layered oxides via Li substitution. <i>Nature Materials</i> , <b>2021</b> , 20, 353-361  | 27   | 47 |
| 294 | Using electron vortex beams to determine chirality of crystals in transmission electron microscopy. <i>Physical Review B</i> , <b>2015</b> , 91,  | 3.3  | 45 |
| 293 | Direct Observation of Luminescent Silver Clusters Confined in Faujasite Zeolites. <i>ACS Nano</i> , <b>2016</b> , 10, 7604-11   | 16.7 | 45 |
| 292 | Multiple Twinning As a Structure Directing Mechanism in Layered Rock-Salt-Type Oxides: NaMnO <sub>2</sub> Polymorphism, Redox Potentials, and Magnetism. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 3306-3315        | 9.6  | 45 |
| 291 | Understanding and promoting the rapid preparation of the triplite-phase of LiFeSO <sub>4</sub> F for use as a large-potential Fe cathode. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 18380-7      | 16.4 | 45 |
| 290 | UV effect on NO <sub>2</sub> sensing properties of nanocrystalline In <sub>2</sub> O <sub>3</sub> . <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 231, 491-496   | 8.5  | 44 |
| 289 | Charge-ordering transition in iron oxide Fe <sub>4</sub> O <sub>5</sub> involving competing dimer and trimer formation. <i>Nature Chemistry</i> , <b>2016</b> , 8, 501-8  | 17.6 | 44 |

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| 288 | Revealing pH-Dependent Activities and Surface Instabilities for Ni-Based Electrocatalysts during the Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 2884-2890   | 20.1 | 44 |
| 287 | Cation insertion to break the activity/stability relationship for highly active oxygen evolution reaction catalyst. <i>Nature Communications</i> , <b>2020</b> , 11, 1378  | 17.4 | 43 |
| 286 | Titanium-based potassium-ion battery positive electrode with extraordinarily high redox potential. <i>Nature Communications</i> , <b>2020</b> , 11, 1484   | 17.4 | 43 |
| 285 | Interface control by chemical and dimensional matching in an oxide heterostructure. <i>Nature Chemistry</i> , <b>2016</b> , 8, 347-53  | 17.6 | 43 |
| 284 | Revealing the Reactivity of the Iridium Trioxide Intermediate for the Oxygen Evolution Reaction in Acidic Media. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 5845-5855   | 9.6  | 43 |
| 283 | Structural and magnetic properties of the colossal magnetoresistance perovskite La <sub>0.85</sub> Ca <sub>0.15</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , <b>2000</b> , 61, 8941-8949  | 3.3  | 43 |
| 282 | Cation ordering and flexibility of the BO <sub>4</sub> tetrahedra in incommensurately modulated CaEu(BO) <sub>3</sub> (B = Mo, W) scheelites. <i>Inorganic Chemistry</i> , <b>2014</b> , 53, 9407-15   | 5.1  | 42 |
| 281 | Visible light activation of room temperature NO <sub>2</sub> gas sensors based on ZnO, SnO <sub>2</sub> and In <sub>2</sub> O <sub>3</sub> sensitized with CdSe quantum dots. <i>Thin Solid Films</i> , <b>2016</b> , 618, 253-262                     | 2.2  | 42 |
| 280 | A New Mixed-Valence Ferrite with a Cubic Structure, YBaFe <sub>4</sub> O <sub>7</sub> : Spin-Glass-Like Behavior. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 1116-1122  | 9.6  | 41 |
| 279 | Compositionally induced phase transition in the Ca <sub>2</sub> MnGa <sub>1-x</sub> Al <sub>x</sub> O <sub>5</sub> solid solutions: Ordering of tetrahedral chains in brownmillerite structure. <i>Solid State Sciences</i> , <b>2005</b> , 7, 801-811 | 3.4  | 41 |
| 278 | Ordering of tetrahedral chains in the Sr <sub>2</sub> MnGaO <sub>5</sub> brownmillerite. <i>Journal of Solid State Chemistry</i> , <b>2003</b> , 174, 319-328  | 3.3  | 40 |
| 277 | A hard oxide semiconductor with a direct and narrow bandgap and switchable p-n electrical conduction. <i>Advanced Materials</i> , <b>2014</b> , 26, 8185-91  | 24   | 38 |
| 276 | Topochemical Nitridation with Anion Vacancy-Assisted N(3-)/O(2-) Exchange. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 3211-7   | 16.4 | 37 |
| 275 | Chemistry and Structure of Anion-Deficient Perovskites with Translational Interfaces. <i>Journal of the American Ceramic Society</i> , <b>2008</b> , 91, 1807-1813   | 3.8  | 37 |
| 274 | In Situ Electron Diffraction Tomography Using a Liquid-Electrochemical Transmission Electron Microscopy Cell for Crystal Structure Determination of Cathode Materials for Li-Ion batteries. <i>Nano Letters</i> , <b>2018</b> , 18, 6286-6291          | 11.5 | 37 |
| 273 | Reversible Li-Intercalation through Oxygen Reactivity in Li-Rich Li-Fe-Te Oxide Materials. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, A1341-A1351  | 3.9  | 36 |
| 272 | Inducing superconductivity and structural transformations by fluorination of reduced YBCO. <i>Physica C: Superconductivity and Its Applications</i> , <b>1997</b> , 280, 272-280   | 1.3  | 36 |
| 271 | Target-aimed synthesis of anion-deficient perovskites. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 8543-52  | 5.1  | 36 |

- 270 Oxidation potential in the Earth's lower mantle as recorded by ferropericlase inclusions in diamond. *Earth and Planetary Science Letters*, **2015**, 417, 49-56 5.3 35
- 269 Switching between solid solution and two-phase regimes in the  $\text{Li}_{1-x}\text{Fe}_{1-y}\text{Mn}_y\text{PO}_4$  cathode materials during lithium (de)insertion: combined PITT, in situ XRPD and electron diffraction tomography study. *Electrochimica Acta*, **2016**, 191, 149-157 6.7 35
- 268 Oxygen exchange on nanocrystalline tin dioxide modified by palladium. *Journal of Solid State Chemistry*, **2012**, 186, 1-8 3.3 35
- 267 Fluorinated heterometallic  $\beta$ -diketonates as volatile single-source precursors for the synthesis of low-valent mixed-metal fluorides. *Journal of the American Chemical Society*, **2011**, 133, 692-4 16.4 35
- 266 Synthesis and crystal structure of the  $\text{Sr}_2\text{Al}_{1.07}\text{Mn}_{0.93}\text{O}_5$  brownmillerite. *Journal of Materials Chemistry*, **2007**, 17, 692-698 35
- 265 Coupled Cation and Charge Ordering in the  $\text{CaMn}_3\text{O}_6$  Tunnel Structure. *Chemistry of Materials*, **2006**, 18, 5530-5536 9.6 35
- 264 Novel Complex Stacking of Fully-Ordered Transition Metal Layers in  $\text{Li}_4\text{FeSbO}_6$  Materials. *Chemistry of Materials*, **2015**, 27, 1699-1708 9.6 34
- 263 New class of single-source precursors for the synthesis of main group-transition metal oxides: heterobimetallic Pb-Mn beta-diketonates. *Inorganic Chemistry*, **2009**, 48, 8480-8 5.1 34
- 262 The Role of Divalent ( $\text{Zn}^{2+}/\text{Mg}^{2+}/\text{Cu}^{2+}$ ) Substituents in Achieving Full Capacity of Sodium Layered Oxides for Na-Ion Battery Applications. *Chemistry of Materials*, **2020**, 32, 1657-1666 9.6 31
- 261 Local Oxygen-Vacancy Ordering and Twinned Octahedral Tilting Pattern in the  $\text{Bi}_{0.81}\text{Pb}_{0.19}\text{FeO}_{2.905}$  Cubic Perovskite. *Chemistry of Materials*, **2012**, 24, 1378-1385 9.6 31
- 260 Preparation, Structure, and Magnetic Studies of a New  $\text{Sr}_{11}\text{Re}_4\text{O}_{24}$  Double Oxide. *Journal of Solid State Chemistry*, **2000**, 149, 49-55 3.3 31
- 259 Structural Studies on New Ternary Oxides  $\text{Ba}_8\text{Ta}_4\text{Ti}_3\text{O}_{24}$  and  $\text{Ba}_{10}\text{Ta}_7.04\text{Ti}_{1.2}\text{O}_{30}$ . *Journal of Solid State Chemistry*, **1995**, 114, 560-574 3.3 31
- 258 Crystal Structure and Li-Ion Transport in  $\text{Li}_2\text{CoPO}_4\text{F}$  High-Voltage Cathode Material for Li-Ion Batteries. *Journal of Physical Chemistry C*, **2017**, 121, 3194-3202 3.8 30
- 257 Pressure-Collapsed Amorphous  $\text{Mg}(\text{BH}_4)_2$ : An Ultradense Complex Hydride Showing a Reversible Transition to the Porous Framework. *Journal of Physical Chemistry C*, **2014**, 118, 23402-23408 3.8 30
- 256 Antiferroelectric  $(\text{Pb},\text{Bi})_{1-x}\text{Fe}_{1+x}\text{O}_3$  Perovskites Modulated by Crystallographic Shear Planes. *Chemistry of Materials*, **2011**, 23, 255-265 9.6 30
- 255 Effect of Fluorination on the Structure and Superconducting Properties of the Hg-1201 Phase. *Physical Review Letters*, **1998**, 80, 385-388 7.4 30
- 254 Role of the Carbon Support on the Oxygen Reduction and Evolution Activities in  $\text{LaNiO}_3$  Composite Electrodes in Alkaline Solution. *ACS Applied Energy Materials*, **2018**, 1, 1549-1558 6.1 29
- 253 Synthesis and crystal structure of the palladium oxides  $\text{NaPd}_3\text{O}_4$ ,  $\text{Na}_2\text{PdO}_3$  and  $\text{K}_3\text{Pd}_2\text{O}_4$ . *Journal of Solid State Chemistry*, **2007**, 180, 1566-1574 3.3 29

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| 252 | Study of Hydrogen Peroxide Reactions on Manganese Oxides as a Tool To Decode the Oxygen Reduction Reaction Mechanism. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1667-1677   | 4.3  | 28 |
| 251 | Effect of Concentrated Diglyme-Based Electrolytes on the Electrochemical Performance of Potassium-Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 6051-6059   | 6.1  | 28 |
| 250 | Crystal structure and phase transitions in Sr <sub>3</sub> WO <sub>6</sub> . <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 6058-65   | 5.1  | 28 |
| 249 | Topotactic reduction as a route to new close-packed anion deficient perovskites: structure and magnetism of 4H-BaMnO(2+x). <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 10598-604   | 16.4 | 28 |
| 248 | Local structure of perovskite-based Pb <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> . <i>Solid State Sciences</i> , <b>2008</b> , 10, 382-389  | 3.4  | 28 |
| 247 | Complex manganese oxides with the brownmillerite structure: synthesis, crystal chemistry and properties. <i>Russian Chemical Reviews</i> , <b>2004</b> , 73, 847-860  | 6.8  | 28 |
| 246 | Structure and Microstructure of Epitaxial Sr <sub>4</sub> Fe <sub>6</sub> O <sub>13-δ</sub> Films on SrTiO <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2004</b> , 16, 2578-2584   | 9.6  | 28 |
| 245 | Solid-electrolyte interphase nucleation and growth on carbonaceous negative electrodes for Li-ion batteries visualized with in situ atomic force microscopy. <i>Scientific Reports</i> , <b>2020</b> , 10, 8550   | 4.9  | 28 |
| 244 | Spin-induced multiferroicity in the binary perovskite manganite MnO. <i>Nature Communications</i> , <b>2018</b> , 9, 2996   | 17.4 | 27 |
| 243 | Frustrated Octahedral Tilting Distortion in the Incommensurately Modulated Li <sub>3x</sub> Nd <sub>2/3</sub> TiO <sub>3</sub> Perovskites. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 2670-2683   | 9.6  | 27 |
| 242 | Frustrated square lattice with spatial anisotropy: Crystal structure and magnetic properties of PbZnVO(PO <sub>4</sub> ) <sub>2</sub> . <i>Physical Review B</i> , <b>2010</b> , 81,  | 3.3  | 27 |
| 241 | Crystal structure, phase transition, and magnetic ordering in perovskitelike Pb <sub>2</sub> BaxFe <sub>2</sub> O <sub>5</sub> solid solutions. <i>Physical Review B</i> , <b>2008</b> , 78,  | 3.3  | 27 |
| 240 | Optical and photoelectrical properties of nanocrystalline indium oxide with small grains. <i>Thin Solid Films</i> , <b>2015</b> , 595, 25-31  | 2.2  | 26 |
| 239 | The high-temperature polymorphs of K <sub>3</sub> AlF <sub>6</sub> . <i>Inorganic Chemistry</i> , <b>2011</b> , 50, 7792-801  | 5.1  | 26 |
| 238 | The crystal structure of alpha-K <sub>3</sub> AlF <sub>6</sub> : elpasolites and double perovskites with broken corner-sharing connectivity of the octahedral framework. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 9336-44                             | 5.1  | 26 |
| 237 | Synthesis, Structure, and Magnetic Properties of SrLaMnSbO <sub>6</sub> : A New B-Site Ordered Double Perovskite. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 4653-4660   | 9.6  | 26 |
| 236 | Reversible facile Rb <sup>+</sup> and K <sup>+</sup> ions de/insertion in a KTiOPO <sub>4</sub> -type RbVPO <sub>4</sub> F cathode material. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14420-14430   | 13   | 26 |
| 235 | Li <sub>2</sub> Cu <sub>2</sub> O(SO <sub>4</sub> ) <sub>2</sub> : a Possible Electrode for Sustainable Li-Based Batteries Showing a 4.7 V Redox Activity vs Li <sup>+</sup> /Li <sup>0</sup> . <i>Chemistry of Materials</i> , <b>2015</b> , 27, 3077-3087 | 9.6  | 25 |

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|-----|--|------|----|
| 234 | Structural, electrochemical and magnetic properties of a novel KFeSO <sub>4</sub> F polymorph. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19754-19764  | 13   | 25 |
| 233 | Proton Ion Exchange Reaction in Li <sub>3</sub> IrO <sub>4</sub> : A Way to New H <sub>3+x</sub> IrO <sub>4</sub> Phases Electrochemically Active in Both Aqueous and Nonaqueous Electrolytes. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702855 | 21.8 | 24 |
| 232 | Extension of the clathrate family: the type X clathrate Ge <sub>79</sub> P <sub>29</sub> S <sub>18</sub> Te <sub>6</sub> . <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 2371-4   | 16.4 | 24 |
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| 8  | New anion-conducting fluorite-like solid solution $\text{Bi}_{1-x}\text{Te}_x(\text{O,F})_2$ + $\sqrt{0.28}$ Russian Journal of Inorganic Chemistry, <b>2013</b> , 58, 749-755  | 1.5 |   |
| 7  | Materials Science Applications of Aberration Corrected TEM and/or STEM. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1131-1132   | 0.5 |   |
| 6  | Trapping of Oxygen Vacancies at Crystallographic Shear Planes in Acceptor-Doped Pb-Based Ferroelectrics. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 15000-15003  | 3.6 |   |
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| 4  | Synthesis and Structure of 3-Methyl-2,2,4-trinitro-3-thiolene 1,1-dioxide. <i>Russian Journal of General Chemistry</i> , <b>2003</b> , 73, 434-439  | 0.7 |   |
| 3  | Crystal structure solution of $\text{K}_{6.4}(\text{Nb,Ta})_{36.3}\text{O}_{94}$ compound, by using advanced TEM <b>2016</b> , 989-990  |     |   |
| 2  | Electrode materials viewed with transmission electron microscopy <b>2021</b> ,  |     |   |
| 1  | Chemical Design of $\text{IrS}_2$ Polymorphs to Understand the Charge/Discharge Asymmetry in Anionic Redox Systems. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 325-336   | 9.6 |   |

