# Markus Niederberger

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/506274/markus-niederberger-publications-by-citations.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

254 17,324 71 125 h-index g-index citations papers 18,611 8.7 283 7.14 avg, IF L-index ext. citations ext. papers

| #   | Paper  | IF            | Citations |
|-----|--|---------------|-----------|
| 254 | Oriented attachment and mesocrystals: non-classical crystallization mechanisms based on nanoparticle assembly. <i>Physical Chemistry Chemical Physics</i> , <b>2006</b> , 8, 3271-87   | 3.6           | 943       |
| 253 | Microwave chemistry for inorganic nanomaterials synthesis. <i>Nanoscale</i> , <b>2010</b> , 2, 1358-74   | 7.7           | 875       |
| 252 | Nonaqueous sol-gel routes to metal oxide nanoparticles. <i>Accounts of Chemical Research</i> , <b>2007</b> , 40, 793-  | <b>80Q</b> .3 | 564       |
| 251 | Surfactant-free nonaqueous synthesis of metal oxide nanostructures. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 5292-304  | 16.4          | 406       |
| 250 | Organic reaction pathways in the nonaqueous synthesis of metal oxide nanoparticles. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 7282-302   | 4.8           | 393       |
| 249 | Morphology and Topochemical Reactions of Novel Vanadium Oxide Nanotubes. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 8324-8331  | 16.4          | 388       |
| 248 | Benzyl Alcohol and Titanium TetrachlorideA Versatile Reaction System for the Nonaqueous and Low-Temperature Preparation of Crystalline and Luminescent Titania Nanoparticles. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 4364-4370                              | 9.6           | 371       |
| 247 | Magnetite Nanocrystals: Nonaqueous Synthesis, Characterization, and Solubility□ <i>Chemistry of Materials</i> , <b>2005</b> , 17, 3044-3049  | 9.6           | 317       |
| 246 | Benzyl alcohol and transition metal chlorides as a versatile reaction system for the nonaqueous and low-temperature synthesis of crystalline nano-objects with controlled dimensionality. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 13642-3 | 16.4          | 309       |
| 245 | Template-free synthesis and assembly of single-crystalline tungsten oxide nanowires and their gas-sensing properties. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 45, 261-5   | 16.4          | 304       |
| 244 | Nonaqueous synthesis of nanocrystalline semiconducting metal oxides for gas sensing. <i>Angewandte Chemie - International Edition</i> , <b>2004</b> , 43, 4345-9   | 16.4          | 294       |
| 243 | One-minute synthesis of crystalline binary and ternary metal oxide nanoparticles. <i>Chemical Communications</i> , <b>2008</b> , 886-8   | 5.8           | 277       |
| 242 | Non-aqueous Synthesis of Tin Oxide Nanocrystals and Their Assembly into Ordered Porous Mesostructures. <i>Advanced Materials</i> , <b>2005</b> , 17, 2509-2512   | 24            | 252       |
| 241 | Nonaqueous and halide-free route to crystalline BaTiO3, SrTiO3, and (Ba,Sr)TiO3 nanoparticles via a mechanism involving C-C bond formation. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9120-6  | 16.4          | 250       |
| 240 | A general soft-chemistry route to perovskites and related materials: synthesis of BaTiO(3), BaZrO(3), and LiNbO(3) nanoparticles. <i>Angewandte Chemie - International Edition</i> , <b>2004</b> , 43, 2270-3  | 16.4          | 249       |
| 239 | Ligand-Directed Assembly of Preformed Titania Nanocrystals into Highly Anisotropic Nanostructures. <i>Advanced Materials</i> , <b>2004</b> , 16, 436-439   | 24            | 241       |
| 238 | Organic Cathode for Aqueous Zn-Ion Batteries: Taming a Unique Phase Evolution toward Stable Electrochemical Cycling. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 3874-3881   | 9.6           | 236       |

## (2005-2013)

| 237 | The fascinating world of nanoparticle research. Materials Today, 2013, 16, 262-271   | 21.8 | 226 |
|-----|--|------|-----|
| 236 | Low-Cost Synthesis of Vanadium Oxide Nanotubes via Two Novel Non-Alkoxide Routes. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 1995-2000  | 9.6  | 209 |
| 235 | Tailoring the Surface and Solubility Properties of Nanocrystalline Titania by a Nonaqueous In Situ Functionalization Process. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 1202-1208  | 9.6  | 206 |
| 234 | Growth and assembly of crystalline tungsten oxide nanostructures assisted by bioligation. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 15595-601   | 16.4 | 199 |
| 233 | A general nonaqueous route to binary metal oxide nanocrystals involving a C-C bond cleavage.<br>Journal of the American Chemical Society, <b>2005</b> , 127, 5608-12   | 16.4 | 196 |
| 232 | Kinetic and thermodynamic aspects in the microwave-assisted synthesis of ZnO nanoparticles in benzyl alcohol. <i>ACS Nano</i> , <b>2009</b> , 3, 467-77  | 16.7 | 191 |
| 231 | Metal Oxide Nanoparticles in Organic Solvents. Engineering Materials and Processes, 2009,  |      | 180 |
| 230 | Large-scale synthesis of organophilic zirconia nanoparticles and their application in organic-inorganic nanocomposites for efficient volume holography. <i>Small</i> , <b>2007</b> , 3, 1626-32  | 11   | 159 |
| 229 | Zinc oxide nanoparticles: chemical mechanisms and classical and non-classical crystallization. <i>Dalton Transactions</i> , <b>2013</b> , 42, 12554-68   | 4.3  | 148 |
| 228 | Nonaqueous Synthesis of Uniform Indium Tin Oxide Nanocrystals and Their Electrical Conductivity in Dependence of the Tin Oxide Concentration. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 2848-2854                                  | 9.6  | 147 |
| 227 | Non-Aqueous Synthesis of High-Purity Metal Oxide Nanopowders Using an Ether Elimination Process. <i>Advanced Materials</i> , <b>2004</b> , 16, 2196-2200   | 24   | 140 |
| 226 | Non-aqueous routes to crystalline metal oxide nanoparticles: Formation mechanisms and applications. <i>Progress in Solid State Chemistry</i> , <b>2005</b> , 33, 59-70   | 8    | 131 |
| 225 | Highly Conducting Nanosized Monodispersed Antimony-Doped Tin Oxide Particles Synthesized via Nonaqueous Sol <b>G</b> el Procedure. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 5229-5236   | 9.6  | 127 |
| 224 | Nonaqueous synthesis of metal oxide nanoparticles:Review and indium oxide as case study for the dependence of particle morphology on precursors and solvents. <i>Journal of Sol-Gel Science and Technology</i> , <b>2006</b> , 40, 259-266 | 2.3  | 127 |
| 223 | Nonaqueous and Surfactant-Free Synthesis Routes to Metal Oxide Nanoparticles. <i>Journal of the American Ceramic Society</i> , <b>2006</b> , 89, 1801-1808   | 3.8  | 126 |
| 222 | Ligand functionality as a versatile tool to control the assembly behavior of preformed titania nanocrystals. <i>Chemistry - A European Journal</i> , <b>2005</b> , 11, 3541-51   | 4.8  | 124 |
| 221 | Nonaqueous Sol <b>©</b> el Synthesis of a Nanocrystalline InNbO4 Visible-Light Photocatalyst. <i>Advanced Materials</i> , <b>2007</b> , 19, 2083-2086  | 24   | 119 |
| 220 | Steam reforming of methanol over Cu/ZrO/CeO catalysts: a kinetic study. <i>Journal of Catalysis</i> , <b>2005</b> , 230, 464-475   | 7.3  | 117 |

| 219 | What do you do, titanium? Insight into the role of titanium oxide as a water oxidation promoter in hematite-based photoanodes. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 3242-3254  | 35.4                    | 115 |
|-----|--|-------------------------|-----|
| 218 | Organic chemistry in inorganic nanomaterials synthesis. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 1171-1   | 1182                    | 115 |
| 217 | Synthesis and Characterization of Stable and Crystalline Ce1-xZrxO2 Nanoparticle Sols. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 2599-2604   | 9.6                     | 111 |
| 216 | Co-Doped ZnO nanoparticles: minireview. <i>Nanoscale</i> , <b>2010</b> , 2, 1096-104   | 7.7                     | 106 |
| 215 | A general method of fabricating flexible spinel-type oxide/reduced graphene oxide nanocomposite aerogels as advanced anodes for lithium-ion batteries. <i>ACS Nano</i> , <b>2015</b> , 9, 4227-35  | 16.7                    | 105 |
| 214 | Diluted magnetic semiconductors: Mn/Co-doped ZnO nanorods as case study. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 5208  |                         | 105 |
| 213 | Nonaqueous Synthesis of Manganese Oxide Nanoparticles, Structural Characterization, and Magnetic Properties. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 3614-3623   | 3.8                     | 105 |
| 212 | Synthesis of yttria-based crystalline and lamellar nanostructures and their formation mechanism. <i>Small</i> , <b>2005</b> , 1, 112-21  | 11                      | 105 |
| 211 | Microwave-Assisted Nonaqueous Sol <b>©</b> el Chemistry for Highly Concentrated ZnO-Based Magnetic Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 1484-1495   | 3.8                     | 104 |
| 210 | Thermal Transformation of Metal Oxide Nanoparticles into Nanocrystalline Metal Nitrides Using Cyanamide and Urea as Nitrogen Source. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 3499-3505   | 9.6                     | 104 |
| 209 | Dispersion behavior of zirconia nanocrystals and their surface functionalization with vinyl group-containing ligands. <i>Langmuir</i> , <b>2007</b> , 23, 9178-87  | 4                       | 103 |
| 208 | Nonaqueous TiO2 nanoparticle synthesis: a versatile basis for the fabrication of self-supporting, transparent, and UV-absorbing composite films. <i>ACS Applied Materials &amp; District Applied Mat</i> | <b>0</b> 4 <sup>5</sup> | 101 |
| 207 | 25th anniversary article: metal oxide particles in materials science: addressing all length scales. <i>Advanced Materials</i> , <b>2014</b> , 26, 235-57   | 24                      | 99  |
| 206 | Large-area alignment of tungsten oxide nanowires over flat and patterned substrates for room-temperature gas sensing. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 340-4   | 16.4                    | 98  |
| 205 | Nano-Sized Structurally Disordered Metal Oxide Composite Aerogels as High-Power Anodes in Hybrid Supercapacitors. <i>ACS Nano</i> , <b>2018</b> , 12, 2753-2763  | 16.7                    | 97  |
| 204 | Synthesis and characterization of novel nanoscopic molybdenum oxide fibers. <i>Journal of Materials Chemistry</i> , <b>2001</b> , 11, 1941-1945  |                         | 93  |
| 203 | In situ investigations of structurelictivity relationships of a Cu/ZrO2 catalyst for the steam reforming of methanol. <i>Journal of Catalysis</i> , <b>2005</b> , 233, 297-307   | 7.3                     | 92  |
| 202 | Controlled assembly of preformed ceria nanocrystals into highly ordered 3D nanostructures. <i>Small</i> , <b>2005</b> , 1, 313-6   | 11                      | 91  |

### (2010-2008)

| 201 | Nonaqueous synthesis of metal oxide nanoparticles: Short review and doped titanium dioxide as case study for the preparation of transition metal-doped oxide nanoparticles. <i>Journal of Solid State Chemistry</i> , <b>2008</b> , 181, 1571-1581 | 3.3  | 89 |  |
|-----|--|------|----|--|
| 200 | Atomic-Scale Structure of Nanocrystalline BaxSr1-xTiO3 (x = 1, 0.5, 0) by X-ray Diffraction and the Atomic Pair Distribution Function Technique. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 814-821   | 9.6  | 89 |  |
| 199 | Probing Local Dipoles and Ligand Structure in BaTiO3 Nanoparticles. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 4386-4391  | 9.6  | 88 |  |
| 198 | A Highly Sensitive and Fast-Responding Ethanol Sensor Based on CdIn2O4 Nanocrystals Synthesized by a Nonaqueous Sol <b>G</b> el Route. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 5781-5786   | 9.6  | 87 |  |
| 197 | Synthesis of aerogels: from molecular routes to 3-dimensional nanoparticle assembly. <i>Nanoscale Horizons</i> , <b>2017</b> , 2, 6-30   | 10.8 | 83 |  |
| 196 | Neodymium Dioxide Carbonate as a Sensing Layer for Chemoresistive CO2 Sensing. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 5375-5381   | 9.6  | 79 |  |
| 195 | Interplay between size and crystal structure of molybdenum dioxide nanoparticlessynthesis, growth mechanism, and electrochemical performance. <i>Small</i> , <b>2011</b> , 7, 377-87   | 11   | 77 |  |
| 194 | A novel nonaqueous route to V2O3 and Nb2O5 nanocrystals. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2004</b> , 250, 211-213  | 5.1  | 77 |  |
| 193 | An Iron Polyolate Complex as a Precursor for the Controlled Synthesis of Monodispersed Iron Oxide Colloids. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 78-82  | 9.6  | 77 |  |
| 192 | In2O3 and Pt-In2O3 nanopowders for low temperature oxygen sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2007</b> , 127, 455-462   | 8.5  | 76 |  |
| 191 | Effect of the chemical composition on the sensing properties of In2O3BnO2 nanoparticles synthesized by a non-aqueous method. <i>Sensors and Actuators B: Chemical</i> , <b>2008</b> , 130, 222-230   | 8.5  | 76 |  |
| 190 | Microwave-assisted solution synthesis of doped LiFePO4 with high specific charge and outstanding cycling performance. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 5881   |      | 75 |  |
| 189 | Efficient microwave-assisted synthesis of LiFePO4 mesocrystals with high cycling stability. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 5125   |      | 75 |  |
| 188 | Nonaqueous synthesis of crystalline anatase nanoparticles in simple ketones and aldehydes as oxygen-supplying agents. <i>Chemical Communications</i> , <b>2005</b> , 397-9   | 5.8  | 75 |  |
| 187 | Facile synthesis of monodisperse Co3O4 quantum dots with efficient oxygen evolution activity. <i>Chemical Communications</i> , <b>2015</b> , 51, 1338-40   | 5.8  | 73 |  |
| 186 | Template-Free Synthesis and Assembly of Single-Crystalline Tungsten Oxide Nanowires and their Gas-Sensing Properties. <i>Angewandte Chemie</i> , <b>2006</b> , 118, 267-271  | 3.6  | 73 |  |
| 185 | Probing Solvent[ligand Interactions in Colloidal Nanocrystals by the NMR Line Broadening. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 5485-5492  | 9.6  | 72 |  |
| 184 | Anisotropic Crystal Growth Kinetics of Anatase TiO2 Nanoparticles Synthesized in a Nonaqueous Medium. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 6044-6055  | 9.6  | 69 |  |

| 183 | When Nanoparticles Meet Poly(Ionic Liquid)s: Chemoresistive CO2 Sensing at Room Temperature. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 2537-2542   | 15.6           | 68 |
|-----|---|----------------|----|
| 182 | Fully Integrated Design of a Stretchable Solid-State Lithium-Ion Full Battery. <i>Advanced Materials</i> , <b>2019</b> , 31, e1904648   | 24             | 68 |
| 181 | Template-free co-assembly of preformed Au and TiO2 nanoparticles into multicomponent 3D aerogels. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 16893   |                | 67 |
| 180 | Morphology-controlled nonaqueous synthesis of anisotropic lanthanum hydroxide nanoparticles.<br>Journal of Solid State Chemistry, <b>2007</b> , 180, 2154-2165  | 3.3            | 67 |
| 179 | Three-Dimensional Assembly of Yttrium Oxide Nanosheets into Luminescent Aerogel Monoliths with Outstanding Adsorption Properties. <i>ACS Nano</i> , <b>2016</b> , 10, 2467-75   | 16.7           | 66 |
| 178 | Mechanistic Aspects in the Formation, Growth and Surface Functionalization of Metal Oxide Nanoparticles in Organic Solvents. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 8542-8570  | 4.8            | 65 |
| 177 | Multifunctional role of rare earth doping in optical materials: nonaqueous sol-gel synthesis of stabilized cubic HfO2 luminescent nanoparticles. <i>ACS Nano</i> , <b>2013</b> , 7, 7041-52   | 16.7           | 65 |
| 176 | New developments in the nonaqueous and/or non-hydrolytic solgel synthesis of inorganic nanoparticles. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7717-7725  | 6.7            | 64 |
| 175 | Simultaneous formation of ferrite nanocrystals and deposition of thin films via a microwave-assisted nonaqueous solgel process. <i>Journal of Sol-Gel Science and Technology</i> , <b>2011</b> , 57, 313-322                                | 2.3            | 63 |
| 174 | Preparation of ligand-free TiO2 (anatase) nanoparticles through a nonaqueous process and their surface functionalization. <i>Langmuir</i> , <b>2008</b> , 24, 6988-97   | 4              | 62 |
| 173 | A highly sensitive oxygen sensor operating at room temperature based on platinum-doped In2O3 nanocrystals. <i>Chemical Communications</i> , <b>2005</b> , 6032-4  | 5.8            | 60 |
| 172 | Transparent conducting films of antimony-doped tin oxide with uniform mesostructure assembled from preformed nanocrystals. <i>Small</i> , <b>2010</b> , 6, 633-7  | 11             | 59 |
| 171 | Ligand and solvent effects in the nonaqueous synthesis of highly ordered anisotropic tungsten oxide nanostructures. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 3969  |                | 58 |
| 170 | Self-Assembly of Metal and Metal Oxide Nanoparticles and Nanowires into a Macroscopic Ternary Aerogel Monolith with Tailored Photocatalytic Properties. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5576-5584                         | 9.6            | 56 |
| 169 | Nonaqueous Synthesis of Nanocrystalline Indium Oxide and Zinc Oxide in the Oxygen-Free Solvent Acetonitrile. <i>Crystal Growth and Design</i> , <b>2007</b> , 7, 113-116  | 3.5            | 56 |
| 168 | From colloidal dispersions to aerogels: How to master nanoparticle gelation. <i>Nano Today</i> , <b>2020</b> , 30, 100  | <b>8127</b> .9 | 56 |
| 167 | Understanding the Charge Storage Mechanism to Achieve High Capacity and Fast Ion Storage in Sodium-Ion Capacitor Anodes by Using Electrospun Nitrogen-Doped Carbon Fibers. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1902858 | 15.6           | 54 |
| 166 | High-Quality Transparent Electrodes Spin-Cast from Preformed Antimony-Doped Tin Oxide Nanocrystals for Thin Film Optoelectronics. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 4901-4907   | 9.6            | 53 |

## (2013-2015)

| 165 | Amorphous cobalt silicate nanobelts@carbon composites as a stable anode material for lithium ion batteries. <i>Chemical Science</i> , <b>2015</b> , 6, 6908-6915  | 9.4  | 52 |
|-----|---|------|----|
| 164 | Self-assembly in inorganic and hybrid systems: beyond the molecular scale. <i>Dalton Transactions</i> , <b>2008</b> , 18-24   | 4.3  | 52 |
| 163 | A General Soft-Chemistry Route to Perovskites and Related Materials: Synthesis of BaTiO3, BaZrO3, and LiNbO3 Nanoparticles. <i>Angewandte Chemie</i> , <b>2004</b> , 116, 2320-2323                                   | 3.6  | 52 |
| 162 | Fast Na-Ion Intercalation in Zinc Vanadate for High-Performance Na-Ion Hybrid Capacitor. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802800  | 21.8 | 52 |
| 161 | Controlled fabrication of porous metals from the nanometer to the macroscopic scale. <i>Materials Horizons</i> , <b>2015</b> , 2, 359-377   | 14.4 | 50 |
| 160 | Photocatalytic Gas Phase Reactions. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 597-618   | 9.6  | 50 |
| 159 | Assembly of BaTiO3 nanocrystals into macroscopic aerogel monoliths with high surface area. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 6823-6  | 16.4 | 49 |
| 158 | Mechanistic aspects of molecular formation and crystallization of zinc oxide nanoparticles in benzyl alcohol. <i>Nanoscale</i> , <b>2012</b> , 4, 1982-95   | 7.7  | 49 |
| 157 | Low-temperature synthesis of gamma-alumina nanocrystals from aluminum acetylacetonate in nonaqueous media. <i>Small</i> , <b>2007</b> , 3, 763-7  | 11   | 49 |
| 156 | Improved nonaqueous synthesis of TiO2 for dye-sensitized solar cells. ACS Nano, 2013, 7, 8981-9   | 16.7 | 48 |
| 155 | Liquid-phase deposition of freestanding copper foils and supported copper thin films and their structuring into conducting line patterns. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 4743-6 | 16.4 | 48 |
| 154 | Microwave-Assisted Nonaqueous Solfiel Synthesis: From Al:ZnO Nanoparticles to Transparent Conducting Films. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2013</b> , 1, 152-160                               | 8.3  | 48 |
| 153 | Solvothermal and surfactant-free synthesis of crystalline Nb(2)O(5), Ta(2)O(5), HfO(2), and Co-doped HfO(2) nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 15537-43                    | 3.6  | 48 |
| 152 | Multiscale Nanoparticle Assembly: From Particulate Precise Manufacturing to Colloidal Processing. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703647  | 15.6 | 47 |
| 151 | Influence of carbon enrichment on electrical conductivity and processing of polycarbosilane derived ceramic for MEMS applications. <i>Journal of the European Ceramic Society</i> , <b>2014</b> , 34, 3559-3570       | 6    | 47 |
| 150 | Nonaqueous synthesis, assembly and formation mechanisms of metal oxide nanocrystals. <i>International Journal of Nanotechnology</i> , <b>2007</b> , 4, 263  | 1.5  | 47 |
| 149 | Nonaqueous Synthesis of Amorphous Powder Precursors for Nanocrystalline PbTiO3, Pb(Zr,Ti)O3, and PbZrO3. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 4594-4599  | 9.6  | 47 |
| 148 | Impact of sonication pretreatment on carbon nanotubes: A transmission electron microscopy study. <i>Carbon</i> , <b>2013</b> , 61, 404-411  | 10.4 | 46 |

| 147 | Ultrasmall Cu3N Nanoparticles: Surfactant-Free Solution-Phase Synthesis, Nitridation Mechanism, and Application for Lithium Storage. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8282-8288   | 9.6  | 45 |
|-----|--|------|----|
| 146 | Crystallization of indium tin oxide nanoparticles: from cooperative behavior to individuality. <i>Small</i> , <b>2007</b> , 3, 310-7   | 11   | 45 |
| 145 | Translucent nanoparticle-based aerogel monoliths as 3-dimensional photocatalysts for the selective photoreduction of CO2 to methanol in a continuous flow reactor. <i>Materials Horizons</i> , <b>2017</b> , 4, 1115-1121  | 14.4 | 42 |
| 144 | CoFe2O4 and CoFe2O4-SiO2 Nanoparticle Thin Films with Perpendicular Magnetic Anisotropy for Magnetic and Magneto-Optical Applications. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 1954-1963  | 15.6 | 42 |
| 143 | Nonaqueous Synthesis of Colloidal ZnGa2O4 Nanocrystals and Their Photoluminescence Properties. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 5830-5832   | 9.6  | 41 |
| 142 | Microwave-assisted nonaqueous synthesis of WO3 nanoparticles for crystallographically oriented photoanodes for water splitting. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 20530-20537   | 13   | 40 |
| 141 | Assembly of antimony doped tin oxide nanocrystals into conducting macroscopic aerogel monoliths. <i>Chemical Communications</i> , <b>2014</b> , 50, 13138-41   | 5.8  | 39 |
| 140 | Towards enhanced performances in gas sensing: SnO2 based nanocrystalline oxides application. <i>Sensors and Actuators B: Chemical</i> , <b>2007</b> , 122, 564-571   | 8.5  | 36 |
| 139 | Size-Dependent Luminescence in HfO2 Nanocrystals: Toward White Emission from Intrinsic Surface Defects. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 3245-3253  | 9.6  | 36 |
| 138 | Titania-Cellulose Hybrid Monolith for In-Flow Purification of Water under Solar Illumination. <i>ACS Applied Materials &amp; District Materia</i> | 9.5  | 35 |
| 137 | Generalized nonaqueous sol-gel synthesis of different transition-metal niobate nanocrystals and analysis of the growth mechanism. <i>Chemistry - an Asian Journal</i> , <b>2008</b> , 3, 746-52  | 4.5  | 35 |
| 136 | Nonaqueous Synthesis of Nanocrystalline Semiconducting Metal Oxides for Gas Sensing.  Angewandte Chemie, <b>2004</b> , 116, 4445-4449  | 3.6  | 35 |
| 135 | Nanoparticle-Based Magnetoelectric BaTiO-CoFeO Thin Film Heterostructures for Voltage Control of Magnetism. <i>ACS Nano</i> , <b>2016</b> , 10, 9840-9851  | 16.7 | 35 |
| 134 | Extension of the benzyl alcohol route to metal sulfides: "nonhydrolytic" thio sol-gel synthesis of ZnS and SnS2. <i>Chemical Communications</i> , <b>2011</b> , 47, 5280-2   | 5.8  | 34 |
| 133 | Oxygen self-doping in hollandite-type vanadium oxyhydroxide nanorods. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 11364-75  | 16.4 | 34 |
| 132 | Tensidfreie nichtwßsrige Synthese von Metalloxid-Nanostrukturen. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 5372-5385   | 3.6  | 34 |
| 131 | Tailoring Two Polymorphs of LiFePO4 by Efficient Microwave-Assisted Synthesis: A Combined Experimental and Theoretical Study. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 3399-3407  | 9.6  | 33 |
| 130 | Structural Characterization of a Nanocrystalline Inorganic Drganic Hybrid with Fiberlike Morphology and One-Dimensional Antiferromagnetic Properties. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 3356-5   | 3369 | 33 |

### (2015-2000)

| 129 | The Cross-Sectional Structure of Vanadium Oxide Nanotubes Studied by Transmission Electron Microscopy and Electron Spectroscopic Imaging. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , <b>2000</b> , 626, 2208-2216 | 1.3             | 33 |
|-----|--|-----------------|----|
| 128 | Monolithic metal-containing TiO2 aerogels assembled from crystalline pre-formed nanoparticles as efficient photocatalysts for H2 generation. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 267, 118660                 | 21.8            | 32 |
| 127 | Black Titania with Nanoscale Helicity. Advanced Functional Materials, 2019, 29, 1904639  | 15.6            | 32 |
| 126 | AnataseBilica composite aerogels: a nanoparticle-based approach. <i>Journal of Sol-Gel Science and Technology</i> , <b>2014</b> , 70, 300-306  | 2.3             | 32 |
| 125 | Design of vanadium oxide corellhell nanoplatelets for lithium ion storage. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 2861-2868  | 13              | 31 |
| 124 | A Micromolding Method for Transparent and Flexible Thin-Film Supercapacitors and Hybrid Supercapacitors. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004410  | 15.6            | 31 |
| 123 | Hydrogel-derived foams of nitrogen-doped carbon loaded with Sn nanodots for high-mass-loading Na-ion storage. <i>Energy Storage Materials</i> , <b>2019</b> , 16, 519-526  | 19.4            | 31 |
| 122 | Evaporation-Induced Self-Assembly of Ultrathin Tungsten Oxide Nanowires over a Large Scale for Ultraviolet Photodetector. <i>Langmuir</i> , <b>2016</b> , 32, 2474-81  | 4               | 30 |
| 121 | Anisotropically structured magnetic aerogel monoliths. <i>Nanoscale</i> , <b>2014</b> , 6, 13213-21  | 7.7             | 30 |
| 120 | Direct imaging of dopant clustering in metal-oxide nanoparticles. ACS Nano, 2012, 6, 7077-83   | 16.7            | 30 |
| 119 | A comprehensive study of the crystallization mechanism involved in the nonaqueous formation of tungstite. <i>Nanoscale</i> , <b>2013</b> , 5, 8517-25  | 7.7             | 28 |
| 118 | Synthesis of mesoporous ceria zirconia beads. <i>Microporous and Mesoporous Materials</i> , <b>2007</b> , 101, 413-41  | <b>&amp;</b> .3 | 28 |
| 117 | Benzylamines as Versatile Agents for the One-Pot Synthesis and Highly Ordered Stacking of Anatase Nanoplatelets. <i>European Journal of Inorganic Chemistry</i> , <b>2008</b> , 2008, 890-895                                      | 2.3             | 26 |
| 116 | Subpicosecond to Second Time-Scale Charge Carrier Kinetics in Hematite-Titania Nanocomposite Photoanodes. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2859-64  | 6.4             | 25 |
| 115 | Co-operative formation of monolithic tungsten oxide-polybenzylene hybrids via polymerization of benzyl alcohol and study of the catalytic activity of the tungsten oxide nanoparticles. <i>Small</i> , <b>2010</b> , 6, 960-6      | 11              | 25 |
| 114 | From 1D to 3D - macroscopic nanowire aerogel monoliths. <i>Nanoscale</i> , <b>2016</b> , 8, 14074-7  | 7.7             | 25 |
| 113 | Heterostructure formation from hydrothermal annealing of preformed nanocrystals. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 2216-2225  | 13              | 24 |
| 112 | Non-aqueous solgel synthesis of hybrid rare-earth-doped EGa2O3 nanoparticles with multiple organicIhorganic-ionic light-emission features. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 41-45                        | 7.1             | 24 |

| 111 | Study of the chemical mechanism involved in the formation of tungstite in benzyl alcohol by the advanced QEXAFS technique. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 2305-12   | 4.8   | 24 |
|-----|--|-------|----|
| 110 | The first oxide nanotubes with alternating inter-layer distances. <i>Solid State Ionics</i> , <b>2001</b> , 141-142, 185-  | 199.3 | 24 |
| 109 | The Role of Interfaces in Heterostructures. <i>ChemPlusChem</i> , <b>2017</b> , 82, 42-59  | 2.8   | 23 |
| 108 | Layered hybrid organic-inorganic nanobelts exhibiting a field-induced magnetic transition. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 6166-72  | 3.6   | 23 |
| 107 | Synthesis and functional verification of the unsupported active phase of VxOy catalysts for partial oxidation of n-butane. <i>Journal of Catalysis</i> , <b>2005</b> , 236, 221-232  | 7.3   | 23 |
| 106 | Chemical Substitution - Alignment of the Surface Potentials for Efficient Charge Transport in Nanocrystalline TiO2 Photocatalysts. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 4223-4230   | 9.6   | 22 |
| 105 | Wet-chemical preparation of copper foam monoliths with tunable densities and complex macroscopic shapes. <i>Advanced Materials</i> , <b>2013</b> , 25, 5599-604  | 24    | 22 |
| 104 | Rare earth oxycarbonates as a material class for chemoresistive CO2 gas sensors. <i>Procedia Engineering</i> , <b>2010</b> , 5, 139-142  |       | 22 |
| 103 | Matching the organic and inorganic counterparts during nucleation and growth of copper-based nanoparticles In situ spectroscopic studies. <i>CrystEngComm</i> , <b>2015</b> , 17, 6962-6971  | 3.3   | 21 |
| 102 | Towards fast-charging technologies in Li/Na storage: from the perspectives of pseudocapacitive materials and non-aqueous hybrid capacitors. <i>Nanoscale</i> , <b>2019</b> , 11, 19225-19240   | 7.7   | 21 |
| 101 | Self-Assembly Route to TiO2 and TiC with a Liquid Crystalline Order. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2174-2181   | 9.6   | 20 |
| 100 | Synthesis, Spray Deposition, and Hot-Press Transfer of Copper Nanowires for Flexible Transparent Electrodes. <i>ACS Applied Materials &amp; Acs Applied </i> | 9.5   | 20 |
| 99  | Liquid-phase deposition of ferroelectrically switchable nanoparticle-based BaTiO3 films of macroscopically controlled thickness. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 9833-9841  | 7.1   | 19 |
| 98  | Aliovalent Ni in MoO2 LatticelProbing the Structure and Valence of Ni and Its Implication on the Electrochemical Performance. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 4505-4513  | 9.6   | 19 |
| 97  | Transparent conducting Sn:ZnO films deposited from nanoparticles. <i>Journal of Sol-Gel Science and Technology</i> , <b>2013</b> , 65, 28-35   | 2.3   | 19 |
| 96  | Design of multicomponent aerogels and their performance in photocatalytic hydrogen production. <i>Catalysis Today</i> , <b>2015</b> , 246, 101-107   | 5.3   | 19 |
| 95  | Magnetite/maghemite mixture prepared in benzyl alcohol for the preparation of ₱Fe16N2 with ₱Fe. <i>Journal of the European Ceramic Society</i> , <b>2011</b> , 31, 2471-2474   | 6     | 19 |
| 94  | Multifunctional Batteries: Flexible, Transient, and Transparent. ACS Central Science, 2021, 7, 231-244   | 16.8  | 19 |

### (2016-2019)

| 93 | Structurally disordered Ta2O5 aerogel for high-rate and highly stable Li-ion and Na-ion storage through surface redox pseudocapacitance. <i>Electrochimica Acta</i> , <b>2019</b> , 321, 134645                       | 6.7           | 18 |
|----|---|---------------|----|
| 92 | A study on the microstructure and gas sensing properties of ITO nanocrystals. <i>Thin Solid Films</i> , <b>2007</b> , 515, 8637-8640  | 2.2           | 18 |
| 91 | Homoconjugation in poly(phenylene methylene)s: A case study of non-Econjugated polymers with unexpected fluorescent properties. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2017</b> , 55, 707-77 | 2 <b>6</b> .6 | 17 |
| 90 | Commercially Available WO Nanopowders for Photoelectrochemical Water Splitting: Photocurrent versus Oxygen Evolution. <i>ChemPlusChem</i> , <b>2016</b> , 81, 935-940   | 2.8           | 17 |
| 89 | Formation mechanism of LiFePOIsticks grown by a microwave-assisted liquid-phase process. <i>Small</i> , <b>2012</b> , 8, 2231-8   | 11            | 17 |
| 88 | Electroless plating of platinum nanoparticles onto mesoporous cellulose films for catalytically active free-standing materials. <i>Cellulose</i> , <b>2019</b> , 26, 5513-5527  | 5.5           | 16 |
| 87 | Demonstration of cellular imaging by using luminescent and anti-cytotoxic europium-doped hafnia nanocrystals. <i>Nanoscale</i> , <b>2018</b> , 10, 7933-7940  | 7.7           | 16 |
| 86 | Rationale for the crystallization of titania polymorphs in solution. <i>Nanoscale</i> , <b>2014</b> , 6, 14716-23   | 7.7           | 16 |
| 85 | Chlorine borrowing: an efficient method for an easier use of alcohols as alkylation agents. <i>Green Chemistry</i> , <b>2009</b> , 11, 34-37  | 10            | 16 |
| 84 | Multiscale anode materials in lithium ion batteries by combining micro- with nanoparticles: design of mesoporous TiO2 microfibers@nitrogen doped carbon composites. <i>Nanoscale</i> , <b>2015</b> , 7, 13898-906     | 7.7           | 15 |
| 83 | A novel non-aqueous sol-gel route for the in situ synthesis of high loaded silica-rubber nanocomposites. <i>Soft Matter</i> , <b>2014</b> , 10, 2234-44   | 3.6           | 15 |
| 82 | Atomic-scale structure of nanocrystalline CeO2@rO2oxides by total x-ray diffraction and pair distribution function analysis. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 156205                    | 1.8           | 15 |
| 81 | Degradation Behavior, Biocompatibility, Electrochemical Performance, and Circularity Potential of Transient Batteries. <i>Advanced Science</i> , <b>2021</b> , 8, 2004814   | 13.6          | 15 |
| 80 | Layered metal vanadates with different interlayer cations for high-rate Na-ion storage. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 16109-16116  | 13            | 14 |
| 79 | Nonaqueous Sol-Gel Synthesis of Anatase Nanoparticles and Their Electrophoretic Deposition in Porous Alumina. <i>Langmuir</i> , <b>2017</b> , 33, 12404-12418   | 4             | 14 |
| 78 | Double role of polyethylene glycol in the microwaves-assisted non-hydrolytic synthesis of nanometric TiO2: oxygen source and stabilizing agent. <i>Journal of Nanoparticle Research</i> , <b>2014</b> , 16, 1         | 2.3           | 14 |
| 77 | Tungsten Oxide Nanowires-Based Ammonia Gas Sensors. Sensor Letters, <b>2008</b> , 6, 590-595  | 0.9           | 14 |
| 76 | Assembly of ultrasmall Cu3N nanoparticles into three-dimensional porous monolithic aerogels. <i>Dalton Transactions</i> , <b>2016</b> , 45, 11616-9   | 4.3           | 14 |

| 75 | Doping of TiO2 as a tool to optimize the water splitting efficiencies of titaniallematite photoanodes. <i>Sustainable Energy and Fuels</i> , <b>2017</b> , 1, 199-206  | 5.8  | 13 |
|----|--|------|----|
| 74 | Carbon-metal interfaces analyzed by aberration-corrected TEM: how copper and nickel nanoparticles interact with MWCNTs. <i>Micron</i> , <b>2015</b> , 72, 52-8   | 2.3  | 13 |
| 73 | Multifunctional microparticles with uniform magnetic coatings and tunable surface chemistry. <i>RSC Advances</i> , <b>2014</b> , 4, 62483-62491  | 3.7  | 13 |
| 72 | Multicomposite Nanostructured Hematite-Titania Photoanodes with Improved Oxygen Evolution: The Role of the Oxygen Evolution Catalyst. <i>ACS Omega</i> , <b>2017</b> , 2, 4531-4539                              | 3.9  | 13 |
| 71 | Superparamagnetic core-shell nanoparticles as solid supports for peptide synthesis. <i>Chemical Communications</i> , <b>2012</b> , 48, 7176-8  | 5.8  | 13 |
| 70 | Microwave-assisted nonaqueous sol-gel deposition of different spinel ferrites and barium titanate perovskite thin films. <i>Chimia</i> , <b>2010</b> , 64, 170-2   | 1.3  | 13 |
| 69 | Interplay between the local structural disorder and the length of structural coherence in stabilizing the cubic phase in nanocrystalline ZrO2. <i>Solid State Communications</i> , <b>2006</b> , 138, 279-284    | 1.6  | 13 |
| 68 | Synthesis of a rare-earth doped hafnia hydrosol: Towards injectable luminescent nanocolloids. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2017</b> , 154, 21-26   | 6    | 12 |
| 67 | Colloidal Nanocrystal-Based BaTiO Xerogels as Green Bodies: Effect of Drying and Sintering at Low Temperatures on Pore Structure and Microstructures. <i>Langmuir</i> , <b>2017</b> , 33, 280-287                | 4    | 12 |
| 66 | Nonaqueous liquid-phase synthesis of nanocrystalline metal carbodiimides. A proof of concept for copper and manganese carbodiimides. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 5122              |      | 12 |
| 65 | A Sodium-Ion Battery Separator with Reversible Voltage Response Based on Water-Soluble Cellulose Derivatives. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2020</b> , 12, 29264-29274                 | 9.5  | 10 |
| 64 | Strategies to improve the electrical conductivity of nanoparticle-based antimony-doped tin oxide aerogels. <i>Journal of Sol-Gel Science and Technology</i> , <b>2016</b> , 80, 660-666                          | 2.3  | 10 |
| 63 | Nonaqueous Sol <b>©</b> el Routes to Nanocrystalline Metal Oxides119-137   |      | 10 |
| 62 | Layered hydrotalcite derived holey porous cobalt oxide nanosheets coated with nitrogen-doped carbon for high-mass-loading Li-ion storage. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 26150-26157 | 13   | 10 |
| 61 | Transient Rechargeable Battery with a High Lithium Transport Number Cellulosic Separator. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101827   | 15.6 | 10 |
| 60 | Synthesis and fractionation of poly(phenylene methylene). <i>Journal of Polymer Science Part A</i> , <b>2018</b> , 56, 309-318   | 2.5  | 10 |
| 59 | CO2 sensing with chemoresistive Nd2O2CO3 sensors - Operando insights. <i>Procedia Chemistry</i> , <b>2009</b> , 1, 650-653   |      | 9  |
| 58 | SnS/N-Doped carbon composites with enhanced Li+ storage and lifetime by controlled hierarchical submicron- and nano-structuring. <i>CrystEngComm</i> , <b>2020</b> , 22, 1547-1554                               | 3.3  | 9  |

| 57 | Surface energy-driven ex situ hierarchical assembly of low-dimensional nanomaterials on graphene aerogels: a versatile strategy. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 18551-18560  | 13                | 9 |  |
|----|--|-------------------|---|--|
| 56 | Microwave-Assisted Nonaqueous Synthesis of Doped Ceria Nanoparticles Assembled into Flakes.<br>Zeitschrift Fur Anorganische Und Allgemeine Chemie, <b>2014</b> , 640, 733-737  | 1.3               | 8 |  |
| 55 | Single-step functionalization of vertically aligned MWCNTs with Cu and Ni by chemical reduction of copper and nickel acetyl acetonate in benzyl alcohol. <i>Carbon</i> , <b>2014</b> , 73, 146-154   | 10.4              | 8 |  |
| 54 | Synthesis and Formation Mechanism of Multicomponent Sb\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\   | 9.6               | 8 |  |
| 53 | Electrophoretic deposition of nano-sized BaTiO3. <i>Journal of Materials Science</i> , <b>2006</b> , 41, 8196-8201   | 4.3               | 8 |  |
| 52 | A poly-(styrene-acrylonitrile) copolymer-derived hierarchical architecture in electrode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 11481-11490  | 13                | 7 |  |
| 51 | GroflEhige Anordnung von WolframoxidnanodrEten auf ebenen und strukturierten Substraten fEl Gassensorik bei Raumtemperatur. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 347-351  | 3.6               | 7 |  |
| 50 | PbZr1⊠TixO3 by soft synthesis: Structural aspects. <i>Physical Review B</i> , <b>2007</b> , 76,  | 3.3               | 7 |  |
| 49 | Stable Na Electrodeposition Enabled by Agarose-Based Water-Soluble Sodium Ion Battery Separators. <i>ACS Applied Materials &amp; Acs Applied &amp; Acs</i> | 9.5               | 7 |  |
| 48 | Design and Fabrication of Transparent and Stretchable Zinc Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 6166-6179   | 6.1               | 7 |  |
| 47 | Processing of Cr doped SrTiO3 nanoparticles into high surface area aerogels and thin films. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 1662-1667  | 7.8               | 6 |  |
| 46 | Mechanistic Studies as a Tool for the Design of Copper-Based Heterostructures. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500094   | 4.6               | 6 |  |
| 45 | Faster Response Times of Rare-Earth Oxycarbonate Based Co2 Sensors and Another Readout Strategy for Real-World Applications. <i>Procedia Engineering</i> , <b>2011</b> , 25, 1429-1432   |                   | 6 |  |
| 44 | Antimony doped tin oxide nanoparticles and their assembly in mesostructured film. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 1759-1763   |                   | 6 |  |
| 43 | Gas-Phase Nitrogen Doping of Monolithic TiO Nanoparticle-Based Aerogels for Efficient Visible Light-Driven Photocatalytic H Production. <i>ACS Applied Materials &amp; District Amplied Materials &amp; </i>   | o1 <sup>9.5</sup> | 6 |  |
| 42 | 3D Printed Scaffolds for Monolithic Aerogel Photocatalysts with Complex Geometries. <i>Small</i> , <b>2021</b> , 17, e2104089  | 11                | 6 |  |
| 41 | Porous Silica Microspheres with Immobilized Titania Nanoparticles for In-Flow Solar-Driven Purification of Wastewater. <i>Global Challenges</i> , <b>2021</b> , 5, 2000116   | 4.3               | 6 |  |
| 40 | Poly(phenylene methylene)-Based Coatings for Corrosion Protection: Replacement of Additives by Use of Copolymers. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 3551  | 2.6               | 5 |  |

| 39 | Microwave Chemistry: Towards Predictable Nanoparticle Synthesis. <i>Chimia</i> , <b>2009</b> , 63, 581-581   | 1.3     | 5               |
|----|--|---------|-----------------|
| 38 | Poly(Phenylene Methylene): A Multifunctional Material for Thermally Stable, Hydrophobic, Fluorescent, Corrosion-Protective Coatings. <i>Coatings</i> , <b>2018</b> , 8, 274  | 2.9     | 5               |
| 37 | Processing of the Multifunctional Polymer Poly(phenylene methylene) into Fibers, Films, Foams, and Microspheres. <i>Macromolecular Materials and Engineering</i> , <b>2019</b> , 304, 1800752  | 3.9     | 4               |
| 36 | Adapting the concepts of nonaqueous solgel chemistry to metals: synthesis and formation mechanism of palladium and palladiumdopper nanoparticles in benzyl alcohol. <i>Journal of Sol-Gel Science and Technology</i> , <b>2020</b> , 95, 573-586 | 2.3     | 4               |
| 35 | Polymers with Exceptional Photoluminescence by Homoconjugation. <i>Chimia</i> , <b>2017</b> , 71, 733-733  | 1.3     | 4               |
| 34 | Synthesis of High Molar Mass Poly(phenylene methylene) Catalyzed by Tungsten(II) Compounds. <i>Polymers</i> , <b>2018</b> , 10,  | 4.5     | 4               |
| 33 | Insights into light and mass transport in nanoparticle-based aerogels: the advantages of monolithic 3D photocatalysts. <i>Journal of Materials Chemistry A</i> ,   | 13      | 4               |
| 32 | Freezing of Gelled Suspensions: a Facile Route toward Mesoporous TiO2 Particles for High-Capacity Lithium-Ion Electrodes. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 6622-6629   | 5.6     | 4               |
| 31 | Radio-luminescence spectral features and fast emission in hafnium dioxide nanocrystals. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 15907-15915   | 3.6     | 4               |
| 30 | The Importance of the Macroscopic Geometry in Gas-Phase Photocatalysis Advanced Science, 2022, e   | 21@5.36 | 33 <sub>4</sub> |
| 29 | Layered cobalt hydrotalcite as an advanced lithium-ion anode material with high capacity and rate capability. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 21264-21269   | 13      | 3               |
| 28 | Nonaqueous sol-gel synthesis of InTaO4 nanoparticles and their assembly into macroscopic aerogels. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 4483-4490   | 3.8     | 3               |
| 27 | Nonhydrolytic Sol <b>©</b> el Methods <b>2015</b> , 29-70  |         | 3               |
| 26 | Benzyl Alcohol and Titanium Tetrachloride IA Versatile Reaction System for the Nonaqueous and Low-Temperature Preparation of Crystalline and Luminescent Titania Nanoparticles <i>ChemInform</i> , <b>2003</b> , 34, no-no                       |         | 3               |
| 25 | Nonaqueous Synthesis of Barium Titanate Nanocrystals in Acetophenone as Oxygen Supplying Agent. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 879, 1  |         | 3               |
| 24 | Vanadium Oxide Nanotubes with Diamine Templates. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 581, 393   |         | 3               |
| 23 | The Bright X-Ray Stimulated Luminescence of HfO2 Nanocrystals Activated by Ti Ions. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 1901348   | 8.1     | 3               |
| 22 | Colloidal Nanocrystals: A Toolbox for Materials Chemistry. <i>Chimia</i> , <b>2021</b> , 75, 387-397   | 1.3     | 3               |

| 21 | Colloidal Routes to Macroscopic Monoliths of Porous Titania and Copper. <i>Chimia</i> , <b>2014</b> , 68, 87  | 1.3    | 2 |
|----|---|--------|---|
| 20 | Anordnung von BaTiO3-Nanokristallen zu makroskopischen Aerogelmonolithen mit großr<br>Oberflühe. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 6941-6944  | 3.6    | 2 |
| 19 | Microwave-Assisted Nonaqueous Routes to Metal Oxide Nanoparticles and Nanostructures <b>2013</b> , 185-2  | 205    | 2 |
| 18 | Electrophoretic Deposition of Nanocrystalline BaTiO3 in Ethanol Medium. <i>Key Engineering Materials</i> , <b>2006</b> , 314, 133-140   | 0.4    | 2 |
| 17 | Nonaqueous synthesis of high-purity indium and tin oxide nanocrystals and their application as gas sens   | sors   | 2 |
| 16 | Nonaqueous and Halide-Free Route to Crystalline BaTiO3, SrTiO3, and (Ba,Sr)TiO3 Nanoparticles via a Mechanism Involving CII Bond Formation <i>ChemInform</i> , <b>2004</b> , 35, no   |        | 2 |
| 15 | Hierarchical Nanocellulose-Based Gel Polymer Electrolytes for Stable Na Electrodeposition in Sodium Ion Batteries <i>Small</i> , <b>2022</b> , e2107183   | 11     | 2 |
| 14 | Composites of Copper Nanowires in Polyethylene: Preparation and Processing to Materials with NIR Dichroism. <i>ACS Omega</i> , <b>2019</b> , 4, 11223-11228   | 3.9    | 1 |
| 13 | FlBsigphasenabscheidung freistehender Kupferfolien und KupferdEnfilme auf ein Substrat und deren Strukturierung zu Leiterbahnmustern. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 4824-4827   | 3.6    | 1 |
| 12 | Synthesis of CuN and CuN-CuO multicomponent mesocrystals: non-classical crystallization and nanoscale Kirkendall effect. <i>Nanoscale</i> , <b>2021</b> , 13, 17521-17529   | 7.7    | 1 |
| 11 | An advanced cathode material for high-power Li-ion storage full cells with a long lifespan. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 22444-22452  | 13     | 1 |
| 10 | Tailoring the phase of LiAlD nanoparticles by nonaqueous solgel chemistry. <i>Journal of Sol-Gel Science and Technology</i> , <b>2017</b> , 82, 739-747   | 2.3    | 0 |
| 9  | 3D-TEM microstructure analyses of anisotropic and isotropic aerogels of TiO2 nanoparticles <b>2016</b> , 1052   | 2-1053 | О |
| 8  | Towards stable and high-capacity anode materials for sodium-ion batteries by embedding of Sb/Sn nanoparticles into electrospun mesoporous carbon fibers. <i>Electrochemical Science Advances</i> ,e2100010  |        | О |
| 7  | Beyond conventional sodium-ion storage mechanisms: a combinational intercalation/conversion reaction mechanism in Ni-ion modified hydrated vanadate for high-rate sodium-ion storage. <i>Energy Storage Materials</i> , <b>2022</b> , 47, 579-590         | 19.4   | О |
| 6  | Reply to Comment on "Commercially Available WO Nanopowders for Photoelectrochemical Water Splitting: Photocurrent versus Oxygen Evolution". <i>ChemPlusChem</i> , <b>2017</b> , 82, 1169  | 2.8    |   |
| 5  | Titelbild: Fl\(\mathbb{E}\)sigphasenabscheidung freistehender Kupferfolien und Kupferd\(\mathbb{E}\)nfilme auf ein Substrat und deren Strukturierung zu Leiterbahnmustern (Angew. Chem. 19/2012). <i>Angewandte Chemie</i> , <b>2012</b> , 124, 4571-4571 | 3.6    |   |
| 4  | Polymerization of Arylmethyl Alcohols using a Tungsten Oxide Catalyst. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , <b>2010</b> , 636, 2104-2104   | 1.3    |   |

- Metal Oxide Nanocrystals: Building Blocks for Mesostructures and Precursors for Metal Nitrides.

  Materials Research Society Symposia Proceedings, 2007, 1007, 1
- A microwave-based one-pot process for homogeneous surface coating: improved electrochemical performance of Li(Ni1/3Mn1/3Co1/3)O2 with a nano-scaled ZnO:Al layer. *Nano Select*, **2021**, 2, 146-157 3.1
- Controlled Impurity Admixture: From Doped Systems to Composites **2021**, 151-183