Wolfgang J Parak

List of Publications by Citations

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

430 papers

41,815 citations

100 h-index 196 g-index

529 ext. papers

45,707 ext. citations

10.1 avg, IF

7.4 L-index

| # | Paper | IF | Citations |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|
| 430 | Antibacterial properties of nanoparticles. <i>Trends in Biotechnology</i> , 2012 , 30, 499-511 | 15.1 | 1665 |
| 429 | Biological applications of gold nanoparticles. <i>Chemical Society Reviews</i> , 2008 , 37, 1896-908 | 58.5 | 1430 |
| 428 | Cytotoxicity of colloidal CdSe and CdSe/ZnS nanoparticles. <i>Nano Letters</i> , 2005 , 5, 331-8 | 11.5 | 1419 |
| 427 | Surface modification, functionalization and bioconjugation of colloidal inorganic nanoparticles. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 1333-83 | 3 | 1146 |
| 426 | Synthesis and Properties of Biocompatible Water-Soluble Silica-Coated CdSe/ZnS Semiconductor Quantum Dots Journal of Physical Chemistry B, 2001 , 105, 8861-8871 | 3.4 | 1128 |
| 425 | Biological applications of magnetic nanoparticles. Chemical Society Reviews, 2012, 41, 4306-34 | 58.5 | 939 |
| 424 | Hydrophobic Nanocrystals Coated with an Amphiphilic Polymer Shell:□A General Route to Water Soluble Nanocrystals. <i>Nano Letters</i> , 2004 , 4, 703-707 | 11.5 | 930 |
| 423 | Prospects of nanoscience with nanocrystals. ACS Nano, 2015, 9, 1012-57 | 16.7 | 849 |
| 422 | Diverse Applications of Nanomedicine. <i>ACS Nano</i> , 2017 , 11, 2313-2381 | 16.7 | 714 |
| 421 | Gold nanoparticles quench fluorescence by phase induced radiative rate suppression. <i>Nano Letters</i> , 2005 , 5, 585-9 | 11.5 | 658 |
| 420 | Synthesis, characterization, and bioconjugation of fluorescent gold nanoclusters toward biological labeling applications. <i>ACS Nano</i> , 2009 , 3, 395-401 | 16.7 | 642 |
| 419 | Biological applications of colloidal nanocrystals. <i>Nanotechnology</i> , 2003 , 14, R15-R27 | 3.4 | 626 |
| 418 | A quantitative fluorescence study of protein monolayer formation on colloidal nanoparticles. <i>Nature Nanotechnology</i> , 2009 , 4, 577-80 | 28.7 | 610 |
| 417 | Surface Functionalization of Nanoparticles with Polyethylene Glycol: Effects on Protein Adsorption and Cellular Uptake. <i>ACS Nano</i> , 2015 , 9, 6996-7008 | 16.7 | 587 |
| 416 | Cellular toxicity of inorganic nanoparticles: Common aspects and guidelines for improved nanotoxicity evaluation. <i>Nano Today</i> , 2011 , 6, 446-465 | 17.9 | 506 |
| 415 | The role of metal nanoparticles in remote release of encapsulated materials. <i>Nano Letters</i> , 2005 , 5, 137 | 1₁7 .5 | 480 |
| 414 | Laser-induced release of encapsulated materials inside living cells. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 4612-7 | 16.4 | 442 |

(2010-2001)

| 413 | Electrophoretic Isolation of Discrete Au Nanocrystal/DNA Conjugates. <i>Nano Letters</i> , 2001 , 1, 32-35 | 11.5 | 419 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----|
| 412 | Biodistribution of PEG-modified gold nanoparticles following intratracheal instillation and intravenous injection. <i>Biomaterials</i> , 2010 , 31, 6574-81 | 15.6 | 411 |
| 411 | Protein corona formation around nanoparticles (From the past to the future. <i>Materials Horizons</i> , 2014 , 1, 301-313 | 14.4 | 401 |
| 410 | Polymer-coated nanoparticles interacting with proteins and cells: focusing on the sign of the net charge. <i>ACS Nano</i> , 2013 , 7, 3253-63 | 16.7 | 390 |
| 409 | Labelling of cells with quantum dots. <i>Nanotechnology</i> , 2005 , 16, R9-R25 | 3.4 | 389 |
| 408 | Design of an amphiphilic polymer for nanoparticle coating and functionalization. <i>Small</i> , 2008 , 4, 334-41 | 11 | 387 |
| 407 | The Role of Ligands in the Chemical Synthesis and Applications of Inorganic Nanoparticles. <i>Chemical Reviews</i> , 2019 , 119, 4819-4880 | 68.1 | 375 |
| 406 | Size and surface effects on the MRI relaxivity of manganese ferrite nanoparticle contrast agents. <i>Nano Letters</i> , 2007 , 7, 2422-7 | 11.5 | 369 |
| 405 | (Intra)cellular stability of inorganic nanoparticles: effects on cytotoxicity, particle functionality, and biomedical applications. <i>Chemical Reviews</i> , 2015 , 115, 2109-35 | 68.1 | 348 |
| 404 | CuTe nanocrystals: shape and size control, plasmonic properties, and use as SERS probes and photothermal agents. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7098-101 | 16.4 | 342 |
| 403 | Cell Motility and Metastatic Potential Studies Based on Quantum Dot Imaging of Phagokinetic Tracks. <i>Advanced Materials</i> , 2002 , 14, 882 | 24 | 332 |
| 402 | A Decade of the Protein Corona. ACS Nano, 2017 , 11, 11773-11776 | 16.7 | 329 |
| 401 | On the development of colloidal nanoparticles towards multifunctional structures and their possible use for biological applications. <i>Small</i> , 2005 , 1, 48-63 | 11 | 322 |
| 400 | The challenge to relate the physicochemical properties of colloidal nanoparticles to their cytotoxicity. <i>Accounts of Chemical Research</i> , 2013 , 46, 743-9 | 24.3 | 297 |
| 399 | Minimum information reporting in bio-nano experimental literature. <i>Nature Nanotechnology</i> , 2018 , 13, 777-785 | 28.7 | 297 |
| 398 | Conformation of Oligonucleotides Attached to Gold Nanocrystals Probed by Gel Electrophoresis. <i>Nano Letters</i> , 2003 , 3, 33-36 | 11.5 | 292 |
| 397 | In vivo degeneration and the fate of inorganic nanoparticles. Chemical Society Reviews, 2016, 45, 2440-5 | 7 8.5 | 289 |
| 396 | Quantitative evaluation of cellular uptake and trafficking of plain and polyethylene glycol-coated gold nanoparticles. <i>Small</i> , 2010 , 6, 1669-78 | 11 | 277 |

| 395 | Room-temperature single-nucleotide polymorphism and multiallele DNA detection using fluorescent nanocrystals and microarrays. <i>Analytical Chemistry</i> , 2003 , 75, 4766-72 | 7.8 | 274 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|
| 394 | Conjugation of DNA to Silanized Colloidal Semiconductor Nanocrystalline Quantum Dots. <i>Chemistry of Materials</i> , 2002 , 14, 2113-2119 | 9.6 | 274 |
| 393 | Quantum-dot-based photoelectrochemical sensors for chemical and biological detection. <i>ACS Applied Materials & Discourse (Materials & Discourse)</i> , 5, 2800-14 | 9.5 | 273 |
| 392 | In vivo integrity of polymer-coated gold nanoparticles. <i>Nature Nanotechnology</i> , 2015 , 10, 619-23 | 28.7 | 269 |
| 391 | Correlating physico-chemical with toxicological properties of nanoparticles: the present and the future. <i>ACS Nano</i> , 2010 , 4, 5527-31 | 16.7 | 269 |
| 390 | Sorting fluorescent nanocrystals with DNA. <i>Journal of the American Chemical Society</i> , 2002 , 124, 7070-4 | 16.4 | 263 |
| 389 | Dissecting the molecular mechanism of apoptosis during photothermal therapy using gold nanoprisms. <i>ACS Nano</i> , 2015 , 9, 52-61 | 16.7 | 260 |
| 388 | Sequential Growth of Magic-Size CdSe Nanocrystals. <i>Advanced Materials</i> , 2007 , 19, 548-552 | 24 | 259 |
| 387 | Nanoengineered polymer capsules: tools for detection, controlled delivery, and site-specific manipulation. <i>Small</i> , 2005 , 1, 194-200 | 11 | 259 |
| 386 | Polyelectrolyte microcapsules for biomedical applications. <i>Soft Matter</i> , 2009 , 5, 282-291 | 3.6 | 255 |
| 385 | Interaction of colloidal nanoparticles with their local environment: the (ionic) nanoenvironment around nanoparticles is different from bulk and determines the physico-chemical properties of the nanoparticles. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20130931 | 4.1 | 254 |
| 384 | Temperature: the "ignored" factor at the NanoBio interface. ACS Nano, 2013 , 7, 6555-62 | 16.7 | 253 |
| 383 | Polymer-coated nanoparticles: a universal tool for biolabelling experiments. <i>Small</i> , 2011 , 7, 3113-27 | 11 | 246 |
| 382 | Polymer microcapsules as mobile local pH-sensors. <i>Journal of Materials Chemistry</i> , 2007 , 17, 4471 | | 223 |
| 381 | Selective growth of PbSe on one or both tips of colloidal semiconductor nanorods. <i>Nano Letters</i> , 2005 , 5, 445-9 | 11.5 | 216 |
| 380 | Multifunctionalized polymer microcapsules: novel tools for biological and pharmacological applications. <i>Small</i> , 2007 , 3, 944-55 | 11 | 210 |
| 379 | Cytotoxic effects of gold nanoparticles: a multiparametric study. ACS Nano, 2012, 6, 5767-83 | 16.7 | 200 |
| 378 | LbL multilayer capsules: recent progress and future outlook for their use in life sciences. <i>Nanoscale</i> , 2010 , 2, 458-67 | 7.7 | 196 |

(2007-2002)

| 377 | Electrophoretic and Structural Studies of DNA-Directed Au Nanoparticle Groupings. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 11758-11763 | 3.4 | 190 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|
| 376 | The state of nanoparticle-based nanoscience and biotechnology: progress, promises, and challenges. <i>ACS Nano</i> , 2012 , 6, 8468-83 | 16.7 | 188 |
| 375 | Electrophoretic Separation of Nanoparticles with a Discrete Number of Functional Groups. <i>Advanced Functional Materials</i> , 2006 , 16, 943-948 | 15.6 | 188 |
| 374 | Back to Basics: Exploiting the Innate Physico-chemical Characteristics of Nanomaterials for Biomedical Applications. <i>Advanced Functional Materials</i> , 2014 , 24, 5936-5955 | 15.6 | 180 |
| 373 | Investigating the cytoskeleton of chicken cardiocytes with the atomic force microscope. <i>Journal of Structural Biology</i> , 1997 , 119, 84-91 | 3.4 | 178 |
| 372 | Magnetic targeting and cellular uptake of polymer microcapsules simultaneously functionalized with magnetic and luminescent nanocrystals. <i>Langmuir</i> , 2005 , 21, 4262-5 | 4 | 178 |
| 371 | Positioning metal-organic framework nanoparticles within the context of drug delivery - A comparison with mesoporous silica nanoparticles and dendrimers. <i>Biomaterials</i> , 2017 , 123, 172-183 | 15.6 | 176 |
| 370 | Selected Standard Protocols for the Synthesis, Phase Transfer, and Characterization of Inorganic Colloidal Nanoparticles. <i>Chemistry of Materials</i> , 2017 , 29, 399-461 | 9.6 | 176 |
| 369 | One-Dimensional Arrangement of Gold Nanoparticles by Electrospinning. <i>Chemistry of Materials</i> , 2005 , 17, 4949-4957 | 9.6 | 176 |
| 368 | Water dispersible upconverting nanoparticles: effects of surface modification on their luminescence and colloidal stability. <i>Nanoscale</i> , 2015 , 7, 1403-10 | 7.7 | 172 |
| 367 | Intracellular processing of proteins mediated by biodegradable polyelectrolyte capsules. <i>Nano Letters</i> , 2009 , 9, 4398-402 | 11.5 | 170 |
| 366 | Air-blood barrier translocation of tracheally instilled gold nanoparticles inversely depends on particle size. <i>ACS Nano</i> , 2014 , 8, 222-33 | 16.7 | 167 |
| 365 | Synthesis and characterization of polymer-coated quantum dots with integrated acceptor dyes as FRET-based nanoprobes. <i>Nano Letters</i> , 2007 , 7, 2613-7 | 11.5 | 165 |
| 364 | Quantitative analysis of the protein corona on FePt nanoparticles formed by transferrin binding. <i>Journal of the Royal Society Interface</i> , 2010 , 7 Suppl 1, S5-S13 | 4.1 | 164 |
| 363 | Uptake of Colloidal Polyelectrolyte-Coated Particles and Polyelectrolyte Multilayer Capsules by Living Cells. <i>Advanced Materials</i> , 2008 , 20, 4281-4287 | 24 | 162 |
| 362 | Controlled antibody/(bio-) conjugation of inorganic nanoparticles for targeted delivery. <i>Advanced Drug Delivery Reviews</i> , 2013 , 65, 677-88 | 18.5 | 155 |
| 361 | Interfacing engineered nanoparticles with biological systems: anticipating adverse nano-bio interactions. <i>Small</i> , 2013 , 9, 1573-84 | 11 | 154 |
| 360 | Size Determination of (Bio)conjugated Water-Soluble Colloidal Nanoparticles: A Comparison of Different Techniques. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 11552-11559 | 3.8 | 153 |

| 359 | Multiple wurtzite twinning in CdTe nanocrystals induced by methylphosphonic acid. <i>Journal of the American Chemical Society</i> , 2006 , 128, 748-55 | 16.4 | 150 |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----|
| 358 | Multiple internalization pathways of polyelectrolyte multilayer capsules into mammalian cells. <i>ACS Nano</i> , 2013 , 7, 6605-18 | 16.7 | 149 |
| 357 | Fluorescent, magnetic and plasmonic⊞ybrid multifunctional colloidal nano objects. <i>Nano Today</i> , 2012 , 7, 282-296 | 17.9 | 149 |
| 356 | Nanopharmacy: Inorganic nanoscale devices as vectors and active compounds. <i>Pharmacological Research</i> , 2010 , 62, 115-25 | 10.2 | 148 |
| 355 | Substrate dependent differences in morphology and elasticity of living osteoblasts investigated by atomic force microscopy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2000 , 19, 367-379 | 6 | 146 |
| 354 | Polymeric multilayer capsules delivering biotherapeutics. <i>Advanced Drug Delivery Reviews</i> , 2011 , 63, 74 | 8 1 6615 | 143 |
| 353 | Stiffness-dependent in vitro uptake and lysosomal acidification of colloidal particles. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1365-8 | 16.4 | 142 |
| 352 | Multiple particle tracking in 3-D+t microscopy: method and application to the tracking of endocytosed quantum dots. <i>IEEE Transactions on Image Processing</i> , 2006 , 15, 1062-70 | 8.7 | 141 |
| 351 | Photoactivated release of cargo from the cavity of polyelectrolyte capsules to the cytosol of cells. <i>Langmuir</i> , 2008 , 24, 12517-20 | 4 | 131 |
| 350 | Dual Enzymatic Reaction-Assisted Gemcitabine Delivery Systems for Programmed Pancreatic Cancer Therapy. <i>ACS Nano</i> , 2017 , 11, 1281-1291 | 16.7 | 129 |
| 349 | Gold nanostoves for microsecond DNA melting analysis. <i>Nano Letters</i> , 2008 , 8, 619-23 | 11.5 | 129 |
| 348 | Luminescent CdTe nanocrystals as ion probes and pH sensors in aqueous solutions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006 , 281, 40-43 | 5.1 | 129 |
| 347 | Magnetic Resonance Imaging Contrast Agents Based on Iron Oxide Superparamagnetic Ferrofluids. <i>Chemistry of Materials</i> , 2010 , 22, 1739-1748 | 9.6 | 128 |
| 346 | The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth Mflwald. <i>ACS Nano</i> , 2019 , 13, 6151-6169 | 16.7 | 127 |
| 345 | Mapping the mechanical pulse of single cardiomyocytes with the atomic force microscope. <i>European Biophysics Journal</i> , 1999 , 28, 179-86 | 1.9 | 127 |
| 344 | Physicochemical properties of protein-coated gold nanoparticles in biological fluids and cells before and after proteolytic digestion. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 4179-83 | 16.4 | 126 |
| 343 | The Toxicity of Silver Nanoparticles Depends on Their Uptake by Cells and Thus on Their Surface Chemistry. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 1079-1085 | 3.1 | 124 |
| 342 | Surface Enhanced Raman Scattering Encoded Gold Nanostars for Multiplexed Cell Discrimination. <i>Chemistry of Materials</i> , 2016 , 28, 6779-6790 | 9.6 | 121 |

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| 341 | Combined atomic force microscopy and optical microscopy measurements as a method to investigate particle uptake by cells. <i>Small</i> , 2006 , 2, 394-400 | 11 | 118 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|
| 340 | Molecular Weight, Osmotic Second Virial Coefficient, and Extinction Coefficient of Colloidal CdSe Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 5500-5505 | 3.4 | 117 |
| 339 | On the mechanical stability of polymeric microcontainers functionalized with nanoparticles. <i>Soft Matter</i> , 2009 , 5, 148-155 | 3.6 | 115 |
| 338 | In vitro interaction of colloidal nanoparticles with mammalian cells: What have we learned thus far?. <i>Beilstein Journal of Nanotechnology</i> , 2014 , 5, 1477-90 | 3 | 114 |
| 337 | Composite nanoparticles take aim at cancer. ACS Nano, 2008, 2, 2200-5 | 16.7 | 113 |
| 336 | Cytotoxicity of nanoparticle-loaded polymer capsules. <i>Talanta</i> , 2005 , 67, 486-91 | 6.2 | 109 |
| 335 | Characterization of protein adsorption onto FePt nanoparticles using dual-focus fluorescence correlation spectroscopy. <i>Beilstein Journal of Nanotechnology</i> , 2011 , 2, 374-83 | 3 | 106 |
| 334 | Light-controlled bioelectrochemical sensor based on CdSe/ZnS quantum dots. <i>Analytical Chemistry</i> , 2011 , 83, 7778-85 | 7.8 | 105 |
| 333 | Basic Physicochemical Properties of Polyethylene Glycol Coated Gold Nanoparticles that Determine Their Interaction with Cells. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 5483-7 | 16.4 | 103 |
| 332 | Magnetically triggered release of molecular cargo from iron oxide nanoparticle loaded microcapsules. <i>Nanoscale</i> , 2015 , 7, 570-6 | 7.7 | 100 |
| 331 | The influence of the size and aspect ratio of anisotropic, porous CaCO3 particles on their uptake by cells. <i>Journal of Nanobiotechnology</i> , 2015 , 13, 53 | 9.4 | 100 |
| 330 | Influence of Size and Shape on the Anatomical Distribution of Endotoxin-Free Gold Nanoparticles. <i>ACS Nano</i> , 2017 , 11, 5519-5529 | 16.7 | 99 |
| 329 | Multifunctional nanoparticles for dual imaging. <i>Analytical Chemistry</i> , 2011 , 83, 2877-82 | 7.8 | 99 |
| 328 | Bioanalytics and biolabeling with semiconductor nanoparticles (quantum dots). <i>Journal of Materials Chemistry</i> , 2007 , 17, 1343-1346 | | 99 |
| 327 | Light-addressable capsules as caged compound matrix for controlled triggering of cytosolic reactions. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 695-9 | 16.4 | 98 |
| 326 | In situ detection of the protein corona in complex environments. <i>Nature Communications</i> , 2017 , 8, 1542 | 17.4 | 98 |
| 325 | Quantification of the internalization patterns of superparamagnetic iron oxide nanoparticles with opposite charge. <i>Journal of Nanobiotechnology</i> , 2012 , 10, 28 | 9.4 | 96 |
| 324 | Rare earth based nanostructured materials: synthesis, functionalization, properties and bioimaging and biosensing applications. <i>Nanophotonics</i> , 2017 , 6, 881-921 | 6.3 | 94 |

| 323 | pH-sensitive capsules as intracellular optical reporters for monitoring lysosomal pH changes upon stimulation. <i>Small</i> , 2012 , 8, 943-8 | 11 | 94 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----|
| 322 | Tumour homing and therapeutic effect of colloidal nanoparticles depend on the number of attached antibodies. <i>Nature Communications</i> , 2016 , 7, 13818 | 17.4 | 93 |
| 321 | NIR-light triggered delivery of macromolecules into the cytosol. <i>Journal of Controlled Release</i> , 2012 , 159, 120-7 | 11.7 | 90 |
| 320 | Ion and pH sensing with colloidal nanoparticles: influence of surface charge on sensing and colloidal properties. <i>ChemPhysChem</i> , 2010 , 11, 730-5 | 3.2 | 90 |
| 319 | Gel electrophoresis of gold-DNA nanoconjugates. <i>Journal of Biomedicine and Biotechnology</i> , 2007 , 2007, 26796 | | 90 |
| 318 | Techniques for the experimental investigation of the protein corona. <i>Current Opinion in Biotechnology</i> , 2017 , 46, 106-113 | 11.4 | 89 |
| 317 | Cell-imprinted substrates direct the fate of stem cells. ACS Nano, 2013, 7, 8379-84 | 16.7 | 89 |
| 316 | Catalytic azide reduction in biological environments. <i>ChemBioChem</i> , 2012 , 13, 1116-20 | 3.8 | 88 |
| 315 | Phase Transfer and Polymer Coating Methods toward Improving the Stability of Metallic Nanoparticles for Biological Applications. <i>Chemistry of Materials</i> , 2015 , 27, 990-997 | 9.6 | 87 |
| 314 | Multiplexed sensing of ions with barcoded polyelectrolyte capsules. ACS Nano, 2011, 5, 9668-74 | 16.7 | 87 |
| 313 | Nanoparticle-modified polyelectrolyte capsules. <i>Nano Today</i> , 2008 , 3, 12-21 | 17.9 | 87 |
| 312 | Fluorescent-magnetic hybrid nanoparticles induce a dose-dependent increase in proinflammatory response in lung cells in vitro correlated with intracellular localization. <i>Small</i> , 2010 , 6, 753-62 | 11 | 86 |
| 311 | Adenosine Triphosphate-Triggered Release of Macromolecular and Nanoparticle Loads from Aptamer/DNA-Cross-Linked Microcapsules. <i>ACS Nano</i> , 2015 , 9, 9078-86 | 16.7 | 82 |
| 310 | How Entanglement of Different Physicochemical Properties Complicates the Prediction of in Vitro and in Vivo Interactions of Gold Nanoparticles. <i>ACS Nano</i> , 2018 , 12, 10104-10113 | 16.7 | 81 |
| 309 | Protein-mediated synthesis, pH-induced reversible agglomeration, toxicity and cellular interaction of silver nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 102, 511-8 | 6 | 80 |
| 308 | SERS Quantification and Characterization of Proteins and Other Biomolecules. <i>Langmuir</i> , 2017 , 33, 971 | 1 _≠ 9730 | 80 |
| 307 | Exploration of MOF nanoparticle sizes using various physical characterization methods ls what you measure what you get?. <i>CrystEngComm</i> , 2016 , 18, 4359-4368 | 3.3 | 79 |
| 306 | Quantum dots on gold: electrodes for photoswitchable cytochrome C electrochemistry. <i>Small</i> , 2006 , 2, 741-3 | 11 | 78 |

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| 305 | Model Driven Optimization of Magnetic Anisotropy of Exchange-coupled Core-Shell Ferrite Nanoparticles for Maximal Hysteretic Loss. <i>Chemistry of Materials</i> , 2015 , 27, 7380-7387 | 9.6 | 76 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|
| 304 | Blue light emitting diodes based on fluorescent CdSeInS nanocrystals. <i>Applied Physics Letters</i> , 2007 , 90, 051106 | 3.4 | 76 |
| 303 | Nanomedicine delivery: does protein corona route to the target or off road?. <i>Nanomedicine</i> , 2015 , 10, 3231-47 | 5.6 | 75 |
| 302 | Laser-Induced Release of Encapsulated Materials inside Living Cells. <i>Angewandte Chemie</i> , 2006 , 118, 4728-4733 | 3.6 | 74 |
| 301 | Nanoparticles for radiooncology: Mission, vision, challenges. <i>Biomaterials</i> , 2017 , 120, 155-184 | 15.6 | 73 |
| 3 00 | Effects of surface functionalization on the adsorption of human serum albumin onto nanoparticles - a fluorescence correlation spectroscopy study. <i>Beilstein Journal of Nanotechnology</i> , 2014 , 5, 2036-47 | 3 | 73 |
| 299 | Bridge over troubled waters: understanding the synthetic and biological identities of engineered nanomaterials. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2013 , 5, 111-29 | 9.2 | 73 |
| 298 | A novel flow-cytometry-based assay for cellular uptake studies of polyelectrolyte microcapsules. <i>Small</i> , 2008 , 4, 1763-8 | 11 | 73 |
| 297 | Magnetic Capsules for NMR Imaging: Effect of Magnetic Nanoparticles Spatial Distribution and Aggregation. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6257-6264 | 3.8 | 72 |
| 296 | Quantitative surface-enhanced Raman scattering ultradetection of atomic inorganic ions: the case of chloride. <i>ACS Nano</i> , 2011 , 5, 7539-46 | 16.7 | 69 |
| 295 | The Application of Stimuli-Responsive VEGF- and ATP-Aptamer-Based Microcapsules for the Controlled Release of an Anticancer Drug, and the Selective Targeted Cytotoxicity toward Cancer Cells. <i>Advanced Functional Materials</i> , 2016 , 26, 4262-4273 | 15.6 | 69 |
| 294 | Quantum dot-based cell motility assay. <i>Differentiation</i> , 2003 , 71, 542-8 | 3.5 | 68 |
| 293 | Discontinuous Growth of IIIVI Semiconductor Nanocrystals from Different Materials. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 6205-6215 | 3.8 | 66 |
| 292 | Quantum-dot-modified electrode in combination with NADH-dependent dehydrogenase reactions for substrate analysis. <i>Langmuir</i> , 2010 , 26, 1395-400 | 4 | 66 |
| 291 | Rhenium complexes with visible-light-induced anticancer activity. <i>ChemMedChem</i> , 2013 , 8, 924-7 | 3.7 | 65 |
| 2 90 | Homogeneous Biosensing Based on Magnetic Particle Labels. Sensors, 2016, 16, | 3.8 | 65 |
| 289 | Plasmonic nanoprobes for real-time optical monitoring of nitric oxide inside living cells. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 13694-8 | 16.4 | 64 |
| 288 | Ligand exchange of CdSe nanocrystals probed by optical spectroscopy in the visible and mid-IR. <i>Journal of Materials Chemistry</i> , 2008 , 18, 2728 | | 64 |

| 287 | Ligand density on nanoparticles: A parameter with critical impact on nanomedicine. <i>Advanced Drug Delivery Reviews</i> , 2019 , 143, 22-36 | 18.5 | 63 |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|
| 286 | Ratiometric optical sensing of chloride ions with organic fluorophore-gold nanoparticle hybrids: a systematic study of design parameters and surface charge effects. <i>Small</i> , 2010 , 6, 2590-7 | 11 | 63 |
| 285 | Multiplexed sensing and imaging with colloidal nano- and microparticles. <i>Annual Review of Analytical Chemistry</i> , 2013 , 6, 53-81 | 12.5 | 62 |
| 284 | Gene silencing mediated by magnetic lipospheres tagged with small interfering RNA. <i>Nano Letters</i> , 2010 , 10, 3914-21 | 11.5 | 62 |
| 283 | High-Content Imaging and Gene Expression Approaches To Unravel the Effect of Surface Functionality on Cellular Interactions of Silver Nanoparticles. <i>ACS Nano</i> , 2015 , 9, 10431-44 | 16.7 | 61 |
| 282 | Biodegradable capsules as non-viral vectors for in vitro delivery of PEI/siRNA polyplexes for efficient gene silencing. <i>Journal of Controlled Release</i> , 2014 , 196, 132-8 | 11.7 | 61 |
| 281 | Synthesis and characterization of ratiometric ion-sensitive polyelectrolyte capsules. <i>Small</i> , 2011 , 7, 351 | -63: | 61 |
| 280 | Extracellular measurements of averaged ionic currents with the light-addressable potentiometric sensor (LAPS). <i>Sensors and Actuators B: Chemical</i> , 2004 , 98, 299-304 | 8.5 | 61 |
| 279 | Colloidal Gold Nanoparticles Induce Changes in Cellular and Subcellular Morphology. <i>ACS Nano</i> , 2017 , 11, 7807-7820 | 16.7 | 60 |
| 278 | Quantification of gold nanoparticle cell uptake under controlled biological conditions and adequate resolution. <i>Nanomedicine</i> , 2014 , 9, 607-21 | 5.6 | 59 |
| 277 | Aqueous Stable Gold Nanostar/ZIF-8 Nanocomposites for Light-Triggered Release of Active Cargo Inside Living Cells. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 7078-7082 | 16.4 | 58 |
| 276 | Interaction of stable colloidal nanoparticles with cellular membranes. <i>Biotechnology Advances</i> , 2014 , 32, 679-92 | 17.8 | 58 |
| 275 | Lateral resolution of light-addressable potentiometric sensors: an experimental and theoretical investigation. <i>Sensors and Actuators A: Physical</i> , 1997 , 63, 47-57 | 3.9 | 58 |
| 274 | Fluorescent nanocrystals as colloidal probes in complex fluids measured by fluorescence correlation spectroscopy. <i>Small</i> , 2005 , 1, 997-1003 | 11 | 58 |
| 273 | Corrosion Protection and Long-Term Chemical Functionalization of Gallium Arsenide in an Aqueous Environment. <i>Advanced Functional Materials</i> , 2002 , 12, 266 | 15.6 | 57 |
| 272 | Quantitative Particle-Cell Interaction: Some Basic Physicochemical Pitfalls. <i>Langmuir</i> , 2017 , 33, 6639-66 | 4.6 | 56 |
| 271 | Immobilization of quantum dots via conjugated self-assembled monolayers and their application as a light-controlled sensor for the detection of hydrogen peroxide. <i>ACS Nano</i> , 2011 , 5, 9870-6 | 16.7 | 56 |
| 270 | Laser Fragmentation of Colloidal Gold Nanoparticles with High-Intensity Nanosecond Pulses is Driven by a Single-Step Fragmentation Mechanism with a Defined Educt Particle-Size Threshold. | 3.8 | 56 |

| 269 | Light-Triggered Ruthenium-Catalyzed Allylcarbamate Cleavage in Biological Environments. <i>Organometallics</i> , 2012 , 31, 5968-5970 | 3.8 | 55 | |
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