

Andre G Skirtach

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4534979/publications.pdf>

Version: 2024-02-01

217
papers

13,368
citations

17405

63
h-index

26548

107
g-index

226
all docs

226
docs citations

226
times ranked

13035
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | The influence of Ca/Mg ratio on autogelation of hydrogel biomaterials with bioceramic compounds. <i>Materials Science and Engineering C</i> , 2022, 133, 112632. | 3.8 | 4 |
| 2 | Modification of Surfaces with Vaterite CaCO ₃ Particles. <i>Micromachines</i> , 2022, 13, 473. | 1.4 | 14 |
| 3 | Hard, Soft, and Hard-and-Soft Drug Delivery Carriers Based on CaCO ₃ and Alginate Biomaterials: Synthesis, Properties, Pharmaceutical Applications. <i>Pharmaceutics</i> , 2022, 14, 909. | 2.0 | 29 |
| 4 | Antiproliferative activity of Dioclea violacea lectin in CaCO ₃ particles on cancer cells after controlled release. <i>Journal of Materials Science</i> , 2022, 57, 8854-8868. | 1.7 | 5 |
| 5 | Passive antifouling and active self-disinfecting antiviral surfaces. <i>Chemical Engineering Journal</i> , 2022, 446, 137048. | 6.6 | 46 |
| 6 | Hybrid lanthanide-doped rattle-type thermometers for theranostics. <i>Journal of Materials Chemistry C</i> , 2022, 10, 10574-10585. | 2.7 | 2 |
| 7 | Surface enhanced Raman scattering (SERS)-active bacterial detection by Layer-by-Layer (LbL) assembly all-nanoparticle microcapsules. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 650, 129547. | 2.3 | 8 |
| 8 | Surface functionalization of chitosan as a coating material for orthopaedic applications: A comprehensive review. <i>Carbohydrate Polymers</i> , 2021, 255, 117487. | 5.1 | 58 |
| 9 | Hydrothermal synthesis of barium titanate nano/microrods and particle agglomerates using a sodium titanate precursor. <i>Ceramics International</i> , 2021, 47, 8904-8914. | 2.3 | 17 |
| 10 | Calcium carbonate particles: synthesis, temperature and time influence on the size, shape, phase, and their impact on cell hydroxyapatite formation. <i>Journal of Materials Chemistry B</i> , 2021, 9, 8308-8320. | 2.9 | 20 |
| 11 | A lanthanide-functionalized covalent triazine framework as a physiological molecular thermometer. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6436-6444. | 2.7 | 12 |
| 12 | Carbon Nanotubes Transform Soft Gellan Gum Hydrogels into Hybrid Organic-Inorganic Coatings with Excellent Cell Growth Capability. <i>Journal of Carbon Research</i> , 2021, 7, 18. | 1.4 | 3 |
| 13 | Ultra-sensitive slot-waveguide-enhanced Raman spectroscopy for aqueous solutions of non-polar compounds using a functionalized silicon nitride photonic integrated circuit. <i>Optics Letters</i> , 2021, 46, 1153. | 1.7 | 7 |
| 14 | Piezoelectric hybrid scaffolds mineralized with calcium carbonate for tissue engineering: Analysis of local enzyme and small-molecule drug delivery, cell response and antibacterial performance. <i>Materials Science and Engineering C</i> , 2021, 122, 111909. | 3.8 | 22 |
| 15 | Fabrication and Impact of Fouling-Reducing Temperature-Responsive POEGMA Coatings with Embedded CaCO ₃ Nanoparticles on Different Cell Lines. <i>Materials</i> , 2021, 14, 1417. | 1.3 | 24 |
| 16 | Luminescent PMMA Films and PMMA@SiO ₂ Nanoparticles with Embedded Ln ³⁺ Complexes for Highly Sensitive Optical Thermometers in the Physiological Temperature Range**. <i>Chemistry - A European Journal</i> , 2021, 27, 6479-6488. | 1.7 | 11 |
| 17 | Efficient long-range conduction in cable bacteria through nickel protein wires. <i>Nature Communications</i> , 2021, 12, 3996. | 5.8 | 32 |
| 18 | Nanofibrillar Hydrogels by Temperature Driven Self-Assembly: New Structures for Cell Growth and Their Biological and Medical Implications. <i>Advanced Materials Interfaces</i> , 2021, 8, 2002202. | 1.9 | 12 |

| # | ARTICLE | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Nanofibrillar Hydrogels by Temperature Driven Self-Assembly: New Structures for Cell Growth and Their Biological and Medical Implications (Adv. Mater. Interfaces 15/2021). Advanced Materials Interfaces, 2021, 8, 2170085. | 1.9 | 0 |
| 20 | Deep learning with digital holographic microscopy discriminates apoptosis and necroptosis. Cell Death Discovery, 2021, 7, 229. | 2.0 | 28 |
| 21 | Encapsulation of cells in gold nanoparticle functionalized hybrid Layer-by-Layer (LbL) hybrid shells – Remote effect of laser light. Applied Surface Science Advances, 2021, 5, 100111. | 2.9 | 12 |
| 22 | The type-1 ribosome-inactivating protein OsRIP1 triggers caspase-independent apoptotic-like death in HeLa cells. Food and Chemical Toxicology, 2021, 157, 112590. | 1.8 | 4 |
| 23 | Potential of poly(alkylene terephthalate)s to control endothelial cell adhesion and viability. Materials Science and Engineering C, 2021, 129, 112378. | 3.8 | 10 |
| 24 | Enhanced piezoresponse and surface electric potential of hybrid biodegradable polyhydroxybutyrate scaffolds functionalized with reduced graphene oxide for tissue engineering. Nano Energy, 2021, 89, 106473. | 8.2 | 28 |
| 25 | Osteogenic Capability of Vaterite-Coated Nonwoven Polycaprolactone Scaffolds for In Vivo Bone Tissue Regeneration. Macromolecular Bioscience, 2021, 21, e2100266. | 2.1 | 21 |
| 26 | Mesoporous One-Component Gold Microshells as 3D SERS Substrates. Biosensors, 2021, 11, 380. | 2.3 | 5 |
| 27 | Hybrid NaYF ₄ :Er,Yb@NaYF ₄ @nano-MOF@AuNPs@LB composites for Yb ³⁺ -Er ³⁺ physiological thermometry. Physica B: Condensed Matter, 2021, 626, 413453. | 1.3 | 9 |
| 28 | Bioactivity of catalase loaded into vaterite CaCO ₃ crystals via adsorption and co-synthesis. Materials and Design, 2020, 185, 108223. | 3.3 | 36 |
| 29 | Discriminating Bacterial Phenotypes at the Population and Single-Cell Level: A Comparison of Flow Cytometry and Raman Spectroscopy Fingerprinting. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 713-726. | 1.1 | 16 |
| 30 | Water-Stable Plasma-Polymerized N-Dimethylacrylamide Coatings to Control Cellular Adhesion. ACS Applied Materials & Interfaces, 2020, 12, 2116-2128. | 4.0 | 19 |
| 31 | Effects of fibrillin mutations on the behavior of heart muscle cells in Marfan syndrome. Scientific Reports, 2020, 10, 16756. | 1.6 | 7 |
| 32 | Diazonium chemistry surface treatment of piezoelectric polyhydroxybutyrate scaffolds for enhanced osteoblastic cell growth. Applied Materials Today, 2020, 20, 100758. | 2.3 | 23 |
| 33 | AFM Analysis Enables Differentiation between Apoptosis, Necroptosis, and Ferroptosis in Murine Cancer Cells. IScience, 2020, 23, 101816. | 1.9 | 41 |
| 34 | Nanoparticles in Polyelectrolyte Multilayer Layer-by-Layer (LbL) Films and Capsules – Key Enabling Components of Hybrid Coatings. Coatings, 2020, 10, 1131. | 1.2 | 43 |
| 35 | Vaccination with early ferroptotic cancer cells induces efficient antitumor immunity. , 2020, 8, e001369. | | 220 |
| 36 | Hybrid functional materials for tissue engineering: synthesis, in vivo drug release and SERS effect. Journal of Physics: Conference Series, 2020, 1461, 012150. | 0.3 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Modulating the crystallization of phytosterols with monoglycerides in the binary mixture systems: mixing behavior and eutectic formation. <i>Chemistry and Physics of Lipids</i> , 2020, 230, 104912. | 1.5 | 7 |
| 38 | Colloids-at-surfaces: Physicochemical approaches for facilitating cell adhesion on hybrid hydrogels. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 603, 125185. | 2.3 | 14 |
| 39 | Temperature Window for Encapsulation of an Enzyme into Thermally Shrunk, CaCO ₃ Templated Polyelectrolyte Multilayer Capsules. <i>Macromolecular Bioscience</i> , 2020, 20, 2000081. | 2.1 | 19 |
| 40 | Identification and Analysis of Key Parameters for the Ossification on Particle Functionalized Composites Hydrogel Materials. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38862-38872. | 4.0 | 17 |
| 41 | Visible and NIR Upconverting Er ³⁺ â€“Yb ³⁺ Luminescent Nanorattles and Other Hybrid PMOâ€™morganic Structures for In Vivo Nanothermometry. <i>Advanced Functional Materials</i> , 2020, 30, 2003101. | 7.8 | 83 |
| 42 | Polymer- and Hybrid-Based Biomaterials for Interstitial, Connective, Vascular, Nerve, Visceral and Musculoskeletal Tissue Engineering. <i>Polymers</i> , 2020, 12, 620. | 2.0 | 62 |
| 43 | Enhancement of Biomimetic Enzymatic Mineralization of Gellan Gum Polysaccharide Hydrogels by Plant-Derived Gallotannins. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2315. | 1.8 | 12 |
| 44 | Lanthanide-Grafted Bipyridine Periodic Mesoporous Organosilicas (BPy-PMOs) for Physiological Range and Wide Temperature Range Luminescence Thermometry. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13540-13550. | 4.0 | 44 |
| 45 | Classification of analytics, sensorics, and bioanalytics with polyelectrolyte multilayer capsules. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 5015-5029. | 1.9 | 15 |
| 46 | Inter-protein interactions govern protein loading into porous vaterite CaCO ₃ crystals. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 9713-9722. | 1.3 | 19 |
| 47 | Alkaline Phosphatase Delivery System Based on Calcium Carbonate Carriers for Acceleration of Ossification. <i>ACS Applied Bio Materials</i> , 2020, 3, 2986-2996. | 2.3 | 36 |
| 48 | Cells-Grab-on Particles: A Novel Approach to Control Cell Focal Adhesion on Hybrid Thermally Annealed Hydrogels. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3933-3944. | 2.6 | 31 |
| 49 | Meshesâ€™Fibrils Transition of Gellan Gum Hydrogel Architecture by Thermal Annealing. <i>Macromolecular Materials and Engineering</i> , 2020, 305, 2000308. | 1.7 | 3 |
| 50 | Waveguide-based surface-enhanced Raman spectroscopy detection of protease activity using non-natural aromatic amino acids. <i>Biomedical Optics Express</i> , 2020, 11, 4800. | 1.5 | 8 |
| 51 | Multiplex volatile organic compound Raman sensing with nanophotonic slot waveguides functionalized with a mesoporous enrichment layer. <i>Optics Letters</i> , 2020, 45, 447. | 1.7 | 17 |
| 52 | Towards SERS-based multiplexed monitoring of protease activity using non-natural aromatic amino acids. <i>EPJ Web of Conferences</i> , 2020, 238, 04001. | 0.1 | 0 |
| 53 | Waveguide-based Detection of Protease Activity using Surface-Enhanced Raman Spectroscopy. , 2020, , . | | 0 |
| 54 | Ultra-sensitive silicon nitride waveguide-enhanced Raman spectroscopy for aqueous solutions of organic compounds. , 2020, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Lactoferrin translocates to the nucleus of bovine rectal epithelial cells in the presence of Escherichia coli O157:H7. <i>Veterinary Research</i> , 2019, 50, 75. | 1.1 | 7 |
| 56 | Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39424-39435. | 4.0 | 62 |
| 57 | Comparison of Free-Space and Waveguide-Based SERS Platforms. <i>Nanomaterials</i> , 2019, 9, 1401. | 1.9 | 20 |
| 58 | Controlled Deposition of Nanosize and Microsize Particles by Spin-Casting. <i>Langmuir</i> , 2019, 35, 3404-3412. | 1.6 | 13 |
| 59 | The Future of Layer-by-Layer Assembly: A Tribute to <i>ACS Nano</i> Associate Editor Helmuth MÄ¶hwald. <i>ACS Nano</i> , 2019, 13, 6151-6169. | 7.3 | 211 |
| 60 | Piezoelectric 3-D Fibrous Poly(3-hydroxybutyrate)-Based Scaffolds Ultrasound-Mineralized with Calcium Carbonate for Bone Tissue Engineering: Inorganic Phase Formation, Osteoblast Cell Adhesion, and Proliferation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 19522-19533. | 4.0 | 88 |
| 61 | Hybrids of Polymeric Capsules, Lipids, and Nanoparticles: Thermodynamics and Temperature Rise at the Nanoscale and Emerging Applications. <i>Langmuir</i> , 2019, 35, 8574-8583. | 1.6 | 33 |
| 62 | Hierarchy of Hybrid Materialsâ€™ The Place of Inorganics-in-Organics in it, Their Composition and Applications. <i>Frontiers in Chemistry</i> , 2019, 7, 179. | 1.8 | 172 |
| 63 | Coculturing Bacteria Leads to Reduced Phenotypic Heterogeneities. <i>Applied and Environmental Microbiology</i> , 2019, 85, . | 1.4 | 37 |
| 64 | Hybrids of Polymer Multilayers, Lipids, and Nanoparticles: Mimicking the Cellular Microenvironment. <i>Langmuir</i> , 2019, 35, 8565-8573. | 1.6 | 27 |
| 65 | Magnetic and silver nanoparticle functionalized calcium carbonate particlesâ€™ Dual functionality of versatile, movable delivery carriers which can surface-enhance Raman signals. <i>Journal of Applied Physics</i> , 2019, 126, . | 1.1 | 27 |
| 66 | The effect of hybrid coatings based on hydrogel, biopolymer and inorganic components on the corrosion behavior of titanium bone implants. <i>Journal of Materials Chemistry B</i> , 2019, 7, 6778-6788. | 2.9 | 16 |
| 67 | Pectin-bioactive glass self-gelling, injectable composites with high antibacterial activity. <i>Carbohydrate Polymers</i> , 2019, 205, 427-436. | 5.1 | 39 |
| 68 | High index contrast photonic platforms for on-chip Raman spectroscopy. <i>Optics Express</i> , 2019, 27, 23067. | 1.7 | 37 |
| 69 | Polycaprolactone-Based, Porous CaCO ₃ and Ag Nanoparticle Modified Scaffolds as a SERS Platform With Molecule-Specific Adsorption. <i>Frontiers in Chemistry</i> , 2019, 7, 888. | 1.8 | 16 |
| 70 | Waveguide-Enhanced Raman Spectroscopy Using a Mesoporous Silica Sorbent Layer for Volatile Organic Compound (VOC) Sensing. , 2019, . | | 0 |
| 71 | Raman and quantitative-phase microscope with counter-propagating beams demonstrated on HeLa cells. <i>OSA Continuum</i> , 2019, 2, 797. | 1.8 | 2 |
| 72 | Hot-melt Preparation of a Non-biodegradable Peptide Implant: A Proof of Principle. <i>Protein and Peptide Letters</i> , 2019, 26, 691-701. | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Novel injectable gellan gum hydrogel composites incorporating Zn- and Sr-enriched bioactive glass microparticles: High-resolution X-ray microcomputed tomography, antibacterial and in vitro testing. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 1313-1326. | 1.3 | 31 |
| 74 | Synergistic interactions between lecithin and fruit wax in oleogel formation. <i>Food and Function</i> , 2018, 9, 1755-1767. | 2.1 | 91 |
| 75 | Mineralization of gellan gum hydrogels with calcium and magnesium carbonates by alternate soaking in solutions of calcium/magnesium and carbonate ion solutions. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 1825-1834. | 1.3 | 18 |
| 76 | The mechanism of catalase loading into porous vaterite CaCO ₃ crystals by co-synthesis. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 8822-8831. | 1.3 | 53 |
| 77 | Novel self-gelling injectable hydrogel/alpha-tricalcium phosphate composites for bone regeneration: Physicochemical and microcomputer tomographical characterization. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 822-828. | 2.1 | 36 |
| 78 | Hybrid PCL/CaCO ₃ scaffolds with capabilities of carrying biologically active molecules: Synthesis, loading and in vivo applications. <i>Materials Science and Engineering C</i> , 2018, 85, 57-67. | 3.8 | 48 |
| 79 | Phytase-mediated enzymatic mineralization of chitosan-enriched hydrogels. <i>Materials Letters</i> , 2018, 214, 186-189. | 1.3 | 4 |
| 80 | Application of whey protein isolate in bone regeneration: Effects on growth and osteogenic differentiation of bone-forming cells. <i>Journal of Dairy Science</i> , 2018, 101, 28-36. | 1.4 | 40 |
| 81 | 4D Microscopy Immune to Sample-Induced Dephasing. , 2018, , . | | 0 |
| 82 | Whey Protein Complexes with Green Tea Polyphenols: Antimicrobial, Osteoblast-Stimulatory, and Antioxidant Activities. <i>Cells Tissues Organs</i> , 2018, 206, 106-118. | 1.3 | 15 |
| 83 | Effect of low-temperature plasma treatment of electrospun polycaprolactone fibrous scaffolds on calcium carbonate mineralisation. <i>RSC Advances</i> , 2018, 8, 39106-39114. | 1.7 | 35 |
| 84 | Plasmonic Hybrid Biocomposite as an Effective Substrate for Detection of Biomolecules by Surface-Enhanced Raman Spectroscopy. <i>Russian Physics Journal</i> , 2018, 61, 1288-1293. | 0.2 | 1 |
| 85 | Added Value of Microscale Raman Chemical Analysis in Mild Traumatic Brain Injury (TBI): A Comparison with Macroscale MRI. <i>ACS Omega</i> , 2018, 3, 16806-16811. | 1.6 | 8 |
| 86 | ALD assisted nanoplasmonic slot waveguide for on-chip enhanced Raman spectroscopy. <i>APL Photonics</i> , 2018, 3, . | 3.0 | 35 |
| 87 | Laser-induced remote release <i>in vivo</i> in <i>C. elegans</i> from novel silver nanoparticles-alginate hydrogel shells. <i>Nanoscale</i> , 2018, 10, 17249-17256. | 2.8 | 34 |
| 88 | Label-free Raman characterization of bacteria calls for standardized procedures. <i>Journal of Microbiological Methods</i> , 2018, 151, 69-75. | 0.7 | 38 |
| 89 | Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 80. | 1.8 | 23 |
| 90 | ANN prediction of corrosion behaviour of uncoated and biopolymers coated cp-Titanium substrates. <i>Materials and Design</i> , 2018, 157, 35-51. | 3.3 | 26 |

| # | ARTICLE | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Transfer of cells with uptaken nanocomposite, magnetite-nanoparticle functionalized capsules with electromagnetic tweezers. <i>Biomaterials Science</i> , 2018, 6, 2219-2229. | 2.6 | 34 |
| 92 | Nanostructured Biointerfaces Based on Bioceramic Calcium Carbonate/Hydrogel Coatings on Titanium with an Active Enzyme for Stimulating Osteoblasts Growth. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800452. | 1.9 | 41 |
| 93 | Study of bacterial inner structures with 4i€ Raman microscopy. , 2018, , . | | 0 |
| 94 | Bioinspired, biomimetic, double-enzymatic mineralization of hydrogels for bone regeneration with calcium carbonate. <i>Materials Letters</i> , 2017, 190, 13-16. | 1.3 | 32 |
| 95 | Ca:Mg:Zn:CO ₃ and Ca:Mg:CO ₃ "tri- and bi-elemental carbonate microparticles for novel injectable self-gelling hydrogel" microparticle composites for tissue regeneration. <i>Biomedical Materials (Bristol)</i> , 2017, 12, 025015. | 1.7 | 11 |
| 96 | Enzymatic, urease-mediated mineralization of gellan gum hydrogel with calcium carbonate, magnesium-enriched calcium carbonate and magnesium carbonate for bone regeneration applications. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 3556-3566. | 1.3 | 31 |
| 97 | Silver Alginate Hydrogel Micro- and Nanocontainers for Theranostics: Synthesis, Encapsulation, Remote Release, and Detection. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 21949-21958. | 4.0 | 60 |
| 98 | Titanium surface functionalization with coatings of chitosan and polyphenol-rich plant extracts. <i>Materials Letters</i> , 2017, 196, 213-216. | 1.3 | 19 |
| 99 | Diverse Applications of Nanomedicine. <i>ACS Nano</i> , 2017, 11, 2313-2381. | 7.3 | 976 |
| 100 | Fast spatial-selective delivery into live cells. <i>Journal of Controlled Release</i> , 2017, 266, 198-204. | 4.8 | 40 |
| 101 | Gold nanodome SERS platform for label-free detection of protease activity. <i>Faraday Discussions</i> , 2017, 205, 345-361. | 1.6 | 20 |
| 102 | Release from Polyelectrolyte Multilayer Capsules in Solution and on Polymeric Surfaces. <i>Advanced Materials Interfaces</i> , 2017, 4, 1600273. | 1.9 | 25 |
| 103 | Temperature rise around nanoparticles. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 127, 895-904. | 2.0 | 11 |
| 104 | On-chip surface-enhanced Raman spectroscopy using nanosphere-lithography patterned antennas on silicon nitride waveguides. <i>Optics Express</i> , 2017, 25, 12926. | 1.7 | 45 |
| 105 | Polymeric and Lipid Membranes"From Spheres to Flat Membranes and vice versa. <i>Membranes</i> , 2017, 7, 44. | 1.4 | 7 |
| 106 | Superresolution 4i€ Raman microscopy. <i>Optics Letters</i> , 2017, 42, 4410. | 1.7 | 12 |
| 107 | Nanotriangle Decorated Silicon Nitride Waveguides for Integrated Surface-Enhanced Raman Spectroscopy. , 2017, , . | | 0 |
| 108 | Organic Adhesion Layer for an Increased Waveguide-Excited Surface-Enhanced Raman Signal. , 2017, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | High-resolution synchrotron X-ray analysis of bioglass-enriched hydrogels. Journal of Biomedical Materials Research - Part A, 2016, 104, 1194-1201. | 2.1 | 17 |
| 110 | Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. Small, 2016, 12, 3292-3301. | 5.2 | 145 |
| 111 | Microscope-less lab-on-a-chip Raman spectroscopy of cell-membranes. , 2016, , . | | 1 |
| 112 | Laser-assisted photoporation: fundamentals, technological advances and applications. Advances in Physics: X, 2016, 1, 596-620. | 1.5 | 47 |
| 113 | Loading Capacity versus Enzyme Activity in Anisotropic and Spherical Calcium Carbonate Microparticles. ACS Applied Materials & Interfaces, 2016, 8, 14284-14292. | 4.0 | 74 |
| 114 | Controlling the Vaterite CaCO ₃ Crystal Pores. Design of Tailor-Made Polymer Based Microcapsules by Hard Templating. Langmuir, 2016, 32, 4229-4238. | 1.6 | 74 |
| 115 | Cytosolic Delivery of Nanolabels Prevents Their Asymmetric Inheritance and Enables Extended Quantitative in Vivo Cell Imaging. Nano Letters, 2016, 16, 5975-5986. | 4.5 | 49 |
| 116 | Protein-Containing Multilayer Capsules by Templating on Mesoporous CaCO ₃ Particles: POST- and PRE-Loading Approaches. Macromolecular Bioscience, 2016, 16, 95-105. | 2.1 | 53 |
| 117 | Novel injectable, self-gelling hydrogel-microparticle composites for bone regeneration consisting of gellan gum and calcium and magnesium carbonate microparticles. Biomedical Materials (Bristol), 2016, 11, 065011. | 1.7 | 27 |
| 118 | Lab-on-a-chip Raman sensors outperforming Raman microscopes. , 2016, , . | | 2 |
| 119 | The influence of the size and aspect ratio of anisotropic, porous CaCO ₃ particles on their uptake by cells. Journal of Nanobiotechnology, 2015, 13, 53. | 4.2 | 127 |
| 120 | Nanophotonic lab-on-a-chip Raman sensors: A sensitivity comparison with confocal Raman microscope. , 2015, , . | | 3 |
| 121 | From Beetles in Nature to the Laboratory: Actuating Underwater Locomotion on Hydrophobic Surfaces. Langmuir, 2015, 31, 13734-13742. | 1.6 | 22 |
| 122 | Efficient delivery of quantum dots in live cells by gold nanoparticle mediated photoporation. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 123 | Laser-induced vapor nanobubbles for efficient delivery of macromolecules in live cells. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 124 | Gold nanodome-patterned microchips for intracellular surface-enhanced Raman spectroscopy. Analyst, The, 2015, 140, 8080-8087. | 1.7 | 19 |
| 125 | Nanodome coins for intracellular surface-enhanced Raman spectroscopy. , 2015, , . | | 0 |
| 126 | Optical Heating and Temperature Determination of Core-Shell Gold Nanoparticles and Single-Walled Carbon Nanotube Microparticles. Small, 2015, 11, 1320-1327. | 5.2 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Resonant enhancement mechanisms in lab-on-chip Raman spectroscopy on a silicon nitride waveguide platform. , 2014, , . | | 0 |
| 128 | Pharmacological aspects of release from microcapsules " from polymeric multilayers to lipid membranes. Current Opinion in Pharmacology, 2014, 18, 129-140. | 1.7 | 21 |
| 129 | Polymer Brush Gradients by Adjusting the Functional Density Through Temperature Gradient. Advanced Materials Interfaces, 2014, 1, 1300056. | 1.9 | 11 |
| 130 | Colloidal micro- and nano-particles as templates for polyelectrolyte multilayer capsules. Advances in Colloid and Interface Science, 2014, 207, 253-264. | 7.0 | 108 |
| 131 | Micropackaging via layer-by-layer assembly: microcapsules and microchamber arrays. International Materials Reviews, 2014, 59, 224-244. | 9.4 | 49 |
| 132 | Nanoplasmonically-Induced Defects in Lipid Membrane Monitored by Ion Current: Transient Nanopores versus Membrane Rupture. Nano Letters, 2014, 14, 4273-4279. | 4.5 | 35 |
| 133 | Macromolecule Loading into Spherical, Elliptical, Star-Like and Cubic Calcium Carbonate Carriers. ChemPhysChem, 2014, 15, 2817-2822. | 1.0 | 72 |
| 134 | Mimicking Bubble Use in Nature: Propulsion of Janus Particles due to Hydrophobic-Hydrophilic Interactions. Small, 2014, 10, 2670-2677. | 5.2 | 28 |
| 135 | Comparison of Gold Nanoparticle Mediated Photoporation: Vapor Nanobubbles Outperform Direct Heating for Delivering Macromolecules in Live Cells. ACS Nano, 2014, 8, 6288-6296. | 7.3 | 157 |
| 136 | Gold Nanoparticle Coated Silicon Nitride Chips For Intracellular Surface-Enhanced Raman Spectroscopy. , 2014, , . | | 1 |
| 137 | Preserving Catalytic Activity and Enhancing Biochemical Stability of the Therapeutic Enzyme Asparaginase by Biocompatible Multilayered Polyelectrolyte Microcapsules. Biomacromolecules, 2013, 14, 4398-4406. | 2.6 | 74 |
| 138 | Mechanical strength and intracellular uptake of CaCO ₃ -templated LbL capsules composed of biodegradable polyelectrolytes: the influence of the number of layers. Journal of Materials Chemistry B, 2013, 1, 1175. | 2.9 | 51 |
| 139 | Polyelectrolyte multilayer microcapsules templated on spherical, elliptical and square calcium carbonate particles. Journal of Materials Chemistry B, 2013, 1, 1223. | 2.9 | 87 |
| 140 | Chemosensors and biosensors based on polyelectrolyte microcapsules containing fluorescent dyes and enzymes. Analytical and Bioanalytical Chemistry, 2013, 405, 1559-1568. | 1.9 | 66 |
| 141 | Red blood cells and polyelectrolyte multilayer capsules: natural carriers versus polymer-based drug delivery vehicles. Expert Opinion on Drug Delivery, 2013, 10, 47-58. | 2.4 | 59 |
| 142 | Nanoengineered Colloidal Probes for Raman-based Detection of Biomolecules inside Living Cells. Small, 2013, 9, 351-356. | 5.2 | 53 |
| 143 | Nanoplasmonic Modification of the Local Morphology, Shape, and Wetting Properties of Nanoflake Microparticles. Langmuir, 2013, 29, 7464-7471. | 1.6 | 11 |
| 144 | Towards Theranostic Multicompartment Microcapsules: in-situ Diagnostics and Laser-induced Treatment. Theranostics, 2013, 3, 141-151. | 4.6 | 74 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 145 | Controlled enzyme-catalyzed degradation of polymeric capsules templated on CaCO ₃ : Influence of the number of LbL layers, conditions of degradation, and disassembly of multicompartments. <i>Journal of Controlled Release</i> , 2012, 162, 599-605. | 4.8 | 67 |
| 146 | Control of Cell Adhesion by Mechanical Reinforcement of Soft Polyelectrolyte Films with Nanoparticles. <i>Langmuir</i> , 2012, 28, 7249-7257. | 1.6 | 75 |
| 147 | Nanoplasmonic smooth silica versus porous calcium carbonate bead biosensors for detection of biomarkers. <i>Annalen Der Physik</i> , 2012, 524, 723-732. | 0.9 | 41 |
| 148 | Laser-Induced Cell Detachment, Patterning, and Regrowth on Gold Nanoparticle Functionalized Surfaces. <i>ACS Nano</i> , 2012, 6, 9585-9595. | 7.3 | 69 |
| 149 | Bioapplications of light-sensitive polymer films and capsules assembled using the layer-by-layer technique. <i>Polymer International</i> , 2012, 61, 673-679. | 1.6 | 62 |
| 150 | Nanoplasmonics for Dual-Molecule Release through Nanopores in the Membrane of Red Blood Cells. <i>ACS Nano</i> , 2012, 6, 4169-4180. | 7.3 | 136 |
| 151 | Patchiness of Embedded Particles and Film Stiffness Control Through Concentration of Gold Nanoparticles. <i>Advanced Materials</i> , 2012, 24, 1095-1100. | 11.1 | 43 |
| 152 | Anisotropic multicompartment micro- and nano-capsules produced via embedding into biocompatible PLL/HA films. <i>Chemical Communications</i> , 2011, 47, 2098-2100. | 2.2 | 49 |
| 153 | Core-Shell Poly(allyamine hydrochloride)-Pyrene Nanorods Decorated with Gold Nanoparticles. <i>Chemistry of Materials</i> , 2011, 23, 4741-4747. | 3.2 | 29 |
| 154 | Ultrasonic Approach for Formation of Erbium Oxide Nanoparticles with Variable Geometries. <i>Langmuir</i> , 2011, 27, 14472-14480. | 1.6 | 19 |
| 155 | Encapsulation, release and applications of LbL polyelectrolyte multilayer capsules. <i>Chemical Communications</i> , 2011, 47, 12736. | 2.2 | 202 |
| 156 | Stimuli-responsive LbL capsules and nanoshells for drug delivery. <i>Advanced Drug Delivery Reviews</i> , 2011, 63, 730-747. | 6.6 | 626 |
| 157 | Mucosal irritation potential of polyelectrolyte multilayer capsules. <i>Biomaterials</i> , 2011, 32, 1967-1977. | 5.7 | 32 |
| 158 | Neuron Cells Uptake of Polymeric Microcapsules and Subsequent Intracellular Release. <i>Macromolecular Bioscience</i> , 2011, 11, 848-854. | 2.1 | 42 |
| 159 | Raman imaging and photodegradation study of phthalocyanine containing microcapsules and coated particles. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 1901-1907. | 1.2 | 19 |
| 160 | Release Properties of Pressurized Microgel Templated Capsules. <i>Advanced Functional Materials</i> , 2011, 21, 1411-1418. | 7.8 | 38 |
| 161 | LbL Films as Reservoirs for Bioactive Molecules. <i>Advances in Polymer Science</i> , 2010, , 135-161. | 0.4 | 34 |
| 162 | IR-light triggered drug delivery from micron-sized polymer biocoatings. <i>Journal of Controlled Release</i> , 2010, 148, e70-e71. | 4.8 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 163 | Bioâ€”interfacesâ€” Interaction of PLL/HA Thick Films with Nanoparticles and Microcapsules. ChemPhysChem, 2010, 11, 822-829. | 1.0 | 50 |
| 164 | Carbon Nanotubes on Polymeric Microcapsules: Freeâ€”Standing Structures and Pointâ€”Wise Laser Openings. Advanced Functional Materials, 2010, 20, 3136-3142. | 7.8 | 66 |
| 165 | Enzyme Reaction in the Pores of CaCO ₃ Particles upon Ultrasound Disruption of Attached Substrateâ€”Filled Liposomes. Angewandte Chemie - International Edition, 2010, 49, 8116-8120. | 7.2 | 70 |
| 166 | Multicompartmental Microâ€”and Nanocapsules: Hierarchy and Applications in Biosciences. Macromolecular Bioscience, 2010, 10, 465-474. | 2.1 | 90 |
| 167 | Polymeric microcapsules with light responsive properties for encapsulation and release. Advances in Colloid and Interface Science, 2010, 158, 2-14. | 7.0 | 178 |
| 168 | Mechanobiology: Correlation Between Mechanical Stability of Microcapsules Studied by AFM and Impact of Cellâ€”Induced Stresses. Small, 2010, 6, 2858-2862. | 5.2 | 69 |
| 169 | Polyelectrolytes: Influence on Evaporative Self-Assembly of Particles and Assembly of Multilayers with Polymers, Nanoparticles and Carbon Nanotubes. Polymers, 2010, 2, 690-708. | 2.0 | 11 |
| 170 | Nanoparticles on Polyelectrolytes at Low Concentration: Controlling Concentration and Size. Journal of Physical Chemistry C, 2010, 114, 1996-2002. | 1.5 | 70 |
| 171 | Assembly of Fullerene-Carbon Nanotubes: Temperature Indicator for Photothermal Conversion. Journal of the American Chemical Society, 2010, 132, 8566-8568. | 6.6 | 83 |
| 172 | Quantification of release from microcapsules upon mechanical deformation with AFM. Soft Matter, 2010, 6, 1879. | 1.2 | 68 |
| 173 | Salt-induced fusion of microcapsules of polyelectrolytes. Soft Matter, 2010, 6, 4742. | 1.2 | 39 |
| 174 | Laser-embossing nanoparticles into a polymeric film. Applied Physics Letters, 2009, 94, 093106. | 1.5 | 26 |
| 175 | Nearâ€”IR Remote Release from Assemblies of Liposomes and Nanoparticles. Angewandte Chemie - International Edition, 2009, 48, 1807-1809. | 7.2 | 189 |
| 176 | Controlled Intracellular Release of Peptides from Microcapsules Enhances Antigen Presentation on MHC Class I Molecules. Small, 2009, 5, 2168-2176. | 5.2 | 111 |
| 177 | Laser-Controllable Coatings for Corrosion Protection. ACS Nano, 2009, 3, 1753-1760. | 7.3 | 144 |
| 178 | Stimuli-Sensitive Nanotechnology for Drug Delivery. , 2009, , 545-578. | | 9 |
| 179 | Assembling polyelectrolytes and porphyrins into hollow capsules with laser-responsive oxidative properties. Journal of Materials Chemistry, 2009, 19, 2226. | 6.7 | 63 |
| 180 | Polyelectrolyte microcapsules for biomedical applications. Soft Matter, 2009, 5, 282-291. | 1.2 | 276 |

| # | ARTICLE | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 181 | Remote Near-IR Light Activation of a Hyaluronic Acid/Poly(L-lysine) Multilayered Film and Film-Entrapped Microcapsules. ACS Applied Materials & Interfaces, 2009, 1, 1705-1710. | 4.0 | 69 |
| 182 | Surface-Supported Multilayers Decorated with Bio-active Material Aimed at Light-Triggered Drug Delivery. Langmuir, 2009, 25, 14037-14043. | 1.6 | 89 |
| 183 | On the mechanical stability of polymeric microcontainers functionalized with nanoparticles. Soft Matter, 2009, 5, 148-155. | 1.2 | 122 |
| 184 | Direction specific release from giant microgel-templated polyelectrolyte microcontainers. Soft Matter, 2009, 5, 3927. | 1.2 | 52 |
| 185 | Nanorods as Wavelength-Selective Absorption Centers in the Visible and Near-Infrared Regions of the Electromagnetic Spectrum. Advanced Materials, 2008, 20, 506-510. | 11.1 | 95 |
| 186 | Uptake of Colloidal Polyelectrolyte-Coated Particles and Polyelectrolyte Multilayer Capsules by Living Cells. Advanced Materials, 2008, 20, 4281-4287. | 11.1 | 170 |
| 187 | Magnetic/gold nanoparticle functionalized biocompatible microcapsules with sensitivity to laser irradiation. Physical Chemistry Chemical Physics, 2008, 10, 6899. | 1.3 | 119 |
| 188 | Reversibly Permeable Nanomembranes of Polymeric Microcapsules. Journal of the American Chemical Society, 2008, 130, 11572-11573. | 6.6 | 131 |
| 189 | Toward Self-Assembly of Nanoparticles on Polymeric Microshells: Near-IR Release and Permeability. ACS Nano, 2008, 2, 1807-1816. | 7.3 | 110 |
| 190 | Photoactivated Release of Cargo from the Cavity of Polyelectrolyte Capsules to the Cytosol of Cells. Langmuir, 2008, 24, 12517-12520. | 1.6 | 137 |
| 191 | Multifunctional microcontainers with tuned permeability for delivery and (bio)chemical reactions. , 2008, , 45-60. | | 0 |
| 192 | <title>Permeability adjustment of polyelectrolyte micro- and nanocapsules by laser irradiation</title>. Proceedings of SPIE, 2007, , . | 0.8 | 2 |
| 193 | Synthesis of Silver Nanoparticles for Remote Opening of Polyelectrolyte Microcapsules. Langmuir, 2007, 23, 4612-4617. | 1.6 | 66 |
| 194 | Ultrasound stimulated release and catalysis using polyelectrolyte multilayer capsules. Journal of Materials Chemistry, 2007, 17, 1050-1054. | 6.7 | 129 |
| 195 | Nanoparticles Distribution Control by Polymers: % Aggregates versus Nonaggregates. Journal of Physical Chemistry C, 2007, 111, 555-564. | 1.5 | 94 |
| 196 | Remote Control of Bioreactions in Multicompartment Capsules. Advanced Materials, 2007, 19, 3142-3145. | 11.1 | 114 |
| 197 | Stimuli-Responsive Multilayered Hybrid Nanoparticle/Polyelectrolyte Capsules. Macromolecular Rapid Communications, 2007, 28, 88-95. | 2.0 | 71 |
| 198 | Stabilization of Silver Nanoparticles by Polyelectrolytes and Poly(ethylene glycol). Macromolecular Rapid Communications, 2007, 28, 848-855. | 2.0 | 91 |

| # | ARTICLE | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 199 | Optically Driven Encapsulation Using Novel Polymeric Hollow Shells Containing an Azobenzene Polymer. <i>Macromolecular Rapid Communications</i> , 2007, 28, 1517-1521. | 2.0 | 64 |
| 200 | Ultrasound-Triggered Release from Multilayered Capsules. <i>Small</i> , 2007, 3, 804-808. | 5.2 | 129 |
| 201 | Multifunctionalized Polymer Microcapsules: Novel Tools for Biological and Pharmacological Applications. <i>Small</i> , 2007, 3, 944-955. | 5.2 | 223 |
| 202 | Combined Atomic Force Microscopy and Optical Microscopy Measurements as a Method To Investigate Particle Uptake by Cells. <i>Small</i> , 2006, 2, 394-400. | 5.2 | 127 |
| 203 | Preparation of polyelectrolyte microcapsules with silver and gold nanoparticles in a shell and the remote destruction of microcapsules under laser irradiation. <i>Crystallography Reports</i> , 2006, 51, 863-869. | 0.1 | 35 |
| 204 | Laser-Induced Release of Encapsulated Materials inside Living Cells. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4612-4617. | 7.2 | 466 |
| 205 | Nanoengineered Polymer Capsules: Tools for Detection, Controlled Delivery, and Site-Specific Manipulation. <i>Small</i> , 2005, 1, 194-200. | 5.2 | 271 |
| 206 | The Role of Metal Nanoparticles in Remote Release of Encapsulated Materials. <i>Nano Letters</i> , 2005, 5, 1371-1377. | 4.5 | 533 |
| 207 | LASER INDUCED ACTIVATION OF MICROCAPSULES CONTAINING NANOPARTICLES AND IR-DYE. , 2005, , . | | 0 |
| 208 | Remote Activation of Capsules Containing Ag Nanoparticles and IR Dye by Laser Light. <i>Langmuir</i> , 2004, 20, 6988-6992. | 1.6 | 295 |
| 209 | Automated single-cell sorting system based on optical trapping. <i>Journal of Biomedical Optics</i> , 2001, 6, 14. | 1.4 | 152 |
| 210 | Analysis of the behaviour of erythrocytes in an optical trapping system. <i>Optics Express</i> , 2000, 7, 533. | 1.7 | 87 |
| 211 | Measurement of real-time gain gratings in erbium-doped fiber. <i>IEEE Journal of Quantum Electronics</i> , 1999, 35, 39-46. | 1.0 | 5 |
| 212 | <title>Erbium in photosensitive hybrid organoaluminosilicate sol-gel glasses</title>. , 1997, 2997, 90. | | 4 |
| 213 | Amplification of a phase-conjugate signal in a nonlinear absorptive Kerr medium. <i>Optics Letters</i> , 1997, 22, 673. | 1.7 | 1 |
| 214 | Nondegenerate two-wave mixing in Cr ³⁺ :Er ³⁺ :YAlO ₃ . <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996, 13, 546. | 0.9 | 9 |
| 215 | Theory of nondegenerate two-wave mixing in an absorptive Kerr medium. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996, 13, 2164. | 0.9 | 4 |
| 216 | Measurement of the nonlinear response in a strongly pumped erbium doped amplifiers for all-optical switching. , 0, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 217 | Immunogenic Cell Death and Role of Nanomaterials Serving as Therapeutic Vaccine for Personalized Cancer Immunotherapy. <i>Frontiers in Immunology</i> , 0, 13, . | 2.2 | 19 |