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	Diverse Applications of Nanomedicine. ACS Nano, 2017, 11, 2313-2381.	7.3	976
2	Stimuli-responsive LbL capsules and nanoshells for drug delivery. Advanced Drug Delivery Reviews, 2011, 63, 730-747.	6.6	626
3	The Role of Metal Nanoparticles in Remote Release of Encapsulated Materials. Nano Letters, 2005, 5, 1371-1377.	4.5	533
4	Laser-Induced Release of Encapsulated Materials inside Living Cells. Angewandte Chemie - International Edition, 2006, 45, 4612-4617.	7.2	466
5	Remote Activation of Capsules Containing Ag Nanoparticles and IR Dye by Laser Light. Langmuir, 2004, 20, 6988-6992.	1.6	295
6	Polyelectrolyte microcapsules for biomedical applications. Soft Matter, 2009, 5, 282-291.	1.2	276
7	Nanoengineered Polymer Capsules: Tools for Detection, Controlled Delivery, and Site-Specific Manipulation. Small, 2005, 1, 194-200.	5.2	271
8	Multifunctionalized Polymer Microcapsules: Novel Tools for Biological and Pharmacological Applications. Small, 2007, 3, 944-955.	5.2	223
9	Vaccination with early ferroptotic cancer cells induces efficient antitumor immunity. , 2020, 8, e001369.		220
10	The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth MÃ¶hwald. ACS Nano, 2019, 13, 6151-6169.	7.3	211
11	Encapsulation, release and applications of LbL polyelectrolyte multilayer capsules. Chemical Communications, 2011, 47, 12736.	2.2	202
12	Nearâ€IR Remote Release from Assemblies of Liposomes and Nanoparticles. Angewandte Chemie - International Edition, 2009, 48, 1807-1809.	7.2	189
13	Polymeric microcapsules with light responsive properties for encapsulation and release. Advances in Colloid and Interface Science, 2010, 158, 2-14.	7.0	178
14	Hierarchy of Hybrid Materialsâ€”The Place of Inorganics-in-Organics in it, Their Composition and Applications. Frontiers in Chemistry, 2019, 7, 179.	1.8	172
15	Uptake of Colloidal Polyelectrolyteâ€Coated Particles and Polyelectrolyte Multilayer Capsules by Living Cells. Advanced Materials, 2008, 20, 4281-4287.	11.1	170
16	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
17	Automated single-cell sorting system based on optical trapping. Journal of Biomedical Optics, 2001, 6, 14.	1.4	152
18	Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. Small, 2016, 12, 3292-3301.	5.2	145

#	Article	IF	Citations
19	Laser-Controllable Coatings for Corrosion Protection. ACS Nano, 2009, 3, 1753-1760.	7.3	144
20	Photoactivated Release of Cargo from the Cavity of Polyelectrolyte Capsules to the Cytosol of Cells. Langmuir, 2008, 24, 12517-12520.	1.6	137
21	Nanoplasmonics for Dual-Molecule Release through Nanopores in the Membrane of Red Blood Cells. ACS Nano, 2012, 6, 4169-4180.	7.3	136
22	Reversibly Permeable Nanomembranes of Polymeric Microcapsules. Journal of the American Chemical Society, 2008, 130, 11572-11573.	6.6	131
23	Ultrasound stimulated release and catalysis using polyelectrolyte multilayer capsules. Journal of Materials Chemistry, 2007, 17, 1050-1054.	6.7	129
24	Ultrasound-Triggered Release from Multilayered Capsules. Small, 2007, 3, 804-808.	5.2	129
25	Combined Atomic Force Microscopy and Optical Microscopy Measurements as a Method To Investigate Particle Uptake by Cells. Small, 2006, 2, 394-400.	5.2	127
26	The influence of the size and aspect ratio of anisotropic, porous CaCO3 particles on their uptake by cells. Journal of Nanobiotechnology, 2015, 13, 53.	4.2	127
27	On the mechanical stability of polymeric microcontainers functionalized with nanoparticles. Soft Matter, 2009, 5, 148-155.	1.2	122
28	Magnetic/gold nanoparticle functionalized biocompatible microcapsules with sensitivity to laser irradiation. Physical Chemistry Chemical Physics, 2008, 10, 6899.	1.3	119
29	Remote Control of Bioreactions in Multicompartment Capsules. Advanced Materials, 2007, 19, 3142-3145.	11.1	114
30	Controlled Intracellular Release of Peptides from Microcapsules Enhances Antigen Presentation on MHC Class I Molecules. Small, 2009, 5, 2168-2176.	5.2	111
31	Toward Self-Assembly of Nanoparticles on Polymeric Microshells: Near-IR Release and Permeability. ACS Nano, 2008, 2, 1807-1816.	7.3	110
32	Colloidal micro- and nano-particles as templates for polyelectrolyte multilayer capsules. Advances in Colloid and Interface Science, 2014, 207, 253-264.	7.0	108
33	Nanorods as Wavelengthâ€Selective Absorption Centers in the Visible and Nearâ€Infrared Regions of the Electromagnetic Spectrum. Advanced Materials, 2008, 20, 506-510.	11.1	95
34	Nanoparticles Distribution Control by Polymers:â€‰ Aggregates versus Nonaggregates. Journal of Physical Chemistry C, 2007, 111, 555-564.	1.5	94
35	Stabilization of Silver Nanoparticles by Polyelectrolytes and Poly(ethylene glycol). Macromolecular Rapid Communications, 2007, 28, 848-855.	2.0	91
36	Synergistic interactions between lecithin and fruit wax in oleogel formation. Food and Function, 2018, 9, 1755-1767.	2.1	91

#	Article	IF	Citations
37	Multicompartmental Microâ€•and Nanocapsules: Hierarchy and Applications in Biosciences. Macromolecular Bioscience, 2010, 10, 465-474.	2.1	90
38	Surface-Supported Multilayers Decorated with Bio-active Material Aimed at Light-Triggered Drug Delivery. Langmuir, 2009, 25, 14037-14043.	1.6	89
39	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. ACS Applied Materials & Interfaces, 2019, 11, 19522-19533.	4.0	88
40	Analysis of the behaviour of erythrocytes in an optical trapping system. Optics Express, 2000, 7, 533.	1.7	87
41	Polyelectrolyte multilayer microcapsules templated on spherical, elliptical and square calcium carbonate particles. Journal of Materials Chemistry B, 2013, 1, 1223.	2.9	87
42	Assembly of Fullerene-Carbon Nanotubes: Temperature Indicator for Photothermal Conversion. Journal of the American Chemical Society, 2010, 132, 8566-8568.	6.6	83
43	Visible and NIR Upconverting Er³⁺â€“Yb³⁺ Luminescent Nanorattles and Other Hybrid PMOâ€Inorganic Structures for In Vivo Nanothermometry. Advanced Functional Materials, 2020, 30, 2003101.	7.8	83
44	Control of Cell Adhesion by Mechanical Reinforcement of Soft Polyelectrolyte Films with Nanoparticles. Langmuir, 2012, 28, 7249-7257.	1.6	75
45	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
46	Towards Theranostic Multicompartment Microcapsules: in-situ Diagnostics and Laser-induced Treatment. Theranostics, 2013, 3, 141-151.	4.6	74
47	Loading Capacity versus Enzyme Activity in Anisotropic and Spherical Calcium Carbonate Microparticles. ACS Applied Materials & Interfaces, 2016, 8, 14284-14292.	4.0	74
48	Controlling the Vaterite CaCO₃ Crystal Pores. Design of Tailor-Made Polymer Based Microcapsules by Hard Templating. Langmuir, 2016, 32, 4229-4238.	1.6	74
49	Macromolecule Loading into Spherical, Elliptical, Starâ€Like and Cubic Calcium Carbonate Carriers. ChemPhysChem, 2014, 15, 2817-2822.	1.0	72
50	Stimuli-Responsive Multilayered Hybrid Nanoparticle/Polyelectrolyte Capsules. Macromolecular Rapid Communications, 2007, 28, 88-95.	2.0	71
51	Enzyme Reaction in the Pores of CaCO₃ Particles upon Ultrasound Disruption of Attached Substrateâ€Filled Liposomes. Angewandte Chemie - International Edition, 2010, 49, 8116-8120.	7.2	70
52	Nanoparticles on Polyelectrolytes at Low Concentration: Controlling Concentration and Size. Journal of Physical Chemistry C, 2010, 114, 1996-2002.	1.5	70
53	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
54	Mechanobiology: Correlation Between Mechanical Stability of Microcapsules Studied by AFM and Impact of Cellâ€Induced Stresses. Small, 2010, 6, 2858-2862.	5.2	69

#	Article	IF	Citations
55	Laser-Induced Cell Detachment, Patterning, and Regrowth on Gold Nanoparticle Functionalized Surfaces. ACS Nano, 2012, 6, 9585-9595.	7.3	69
56	Quantification of release from microcapsules upon mechanical deformation with AFM. Soft Matter, 2010, 6, 1879.	1.2	68
57	Controlled enzyme-catalyzed degradation of polymeric capsules templated on CaCO3: Influence of the number of LbL layers, conditions of degradation, and disassembly of multicompartments. Journal of Controlled Release, 2012, 162, 599-605.	4.8	67
58	Synthesis of Silver Nanoparticles for Remote Opening of Polyelectrolyte Microcapsules. Langmuir, 2007, 23, 4612-4617.	1.6	66
59	Carbon Nanotubes on Polymeric Microcapsules: Freeâ€Standing Structures and Pointâ€Wise Laser Openings. Advanced Functional Materials, 2010, 20, 3136-3142.	7.8	66
60	Chemosensors and biosensors based on polyelectrolyte microcapsules containing fluorescent dyes and enzymes. Analytical and Bioanalytical Chemistry, 2013, 405, 1559-1568.	1.9	66
61	Optically Driven Encapsulation Using Novel Polymeric Hollow Shells Containing an Azobenzene Polymer. Macromolecular Rapid Communications, 2007, 28, 1517-1521.	2.0	64
62	Assembling polyelectrolytes and porphyrins into hollow capsules with laser-responsive oxidative properties. Journal of Materials Chemistry, 2009, 19, 2226.	6.7	63
63	Bioapplications of light-sensitive polymer films and capsules assembled using the layer-by-layer technique. Polymer International, 2012, 61, 673-679.	1.6	62
64	Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. ACS Applied Materials & Interfaces, 2019, 11, 39424-39435.	4.0	62
65	Polymer- and Hybrid-Based Biomaterials for Interstitial, Connective, Vascular, Nerve, Visceral and Musculoskeletal Tissue Engineering. Polymers, 2020, 12, 620.	2.0	62
66	Silver Alginate Hydrogel Micro- and Nanocontainers for Theranostics: Synthesis, Encapsulation, Remote Release, and Detection. ACS Applied Materials & Interfaces, 2017, 9, 21949-21958.	4.0	60
67	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
68	Surface functionalization of chitosan as a coating material for orthopaedic applications: A comprehensive review. Carbohydrate Polymers, 2021, 255, 117487.	5.1	58
69	Nanoengineered Colloidal Probes for Ramanâ€based Detection of Biomolecules inside Living Cells. Small, 2013, 9, 351-356.	5.2	53
70	Proteinâ€Containing Multilayer Capsules by Templating on Mesoporous CaCO₃ Particles: POSTâ€and PREâ€Loading Approaches. Macromolecular Bioscience, 2016, 16, 95-105.	2.1	53
71	The mechanism of catalase loading into porous vaterite CaCO₃ crystals by co-synthesis. Physical Chemistry Chemical Physics, 2018, 20, 8822-8831.	1.3	53
72	Direction specific release from giant microgel-templated polyelectrolyte microcontainers. Soft Matter, 2009, 5, 3927.	1.2	52

#	Article	IF	Citations
73	Mechanical strength and intracellular uptake of CaCO3-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
74	Bioâ€interfacesâ€”Interaction of PLL/HA Thick Films with Nanoparticles and Microcapsules. ChemPhysChem, 2010, 11, 822-829.	1.0	50
75	Anisotropic multicompartment micro- and nano-capsules produced via embedding into biocompatible PLL/HA films. Chemical Communications, 2011, 47, 2098-2100.	2.2	49
76	Micropackaging via layer-by-layer assembly: microcapsules and microchamber arrays. International Materials Reviews, 2014, 59, 224-244.	9.4	49
77	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
78	Hybrid PCL/CaCO3 scaffolds with capabilities of carrying biologically active molecules: Synthesis, loading and in vivo applications. Materials Science and Engineering C, 2018, 85, 57-67.	3.8	48
79	Laser-assisted photoporation: fundamentals, technological advances and applications. Advances in Physics: X, 2016, 1, 596-620.	1.5	47
80	Passive antifouling and active self-disinfecting antiviral surfaces. Chemical Engineering Journal, 2022, 446, 137048.	6.6	46
81	On-chip surface-enhanced Raman spectroscopy using nanosphere-lithography patterned antennas on silicon nitride waveguides. Optics Express, 2017, 25, 12926.	1.7	45
82	Lanthanide-Grafted Bipyridine Periodic Mesoporous Organosilicas (BPy-PMOs) for Physiological Range and Wide Temperature Range Luminescence Thermometry. ACS Applied Materials & Interfaces, 2020, 12, 13540-13550.	4.0	44
83	Patchiness of Embedded Particles and Film Stiffness Control Through Concentration of Gold Nanoparticles. Advanced Materials, 2012, 24, 1095-1100.	11.1	43
84	Nanoparticles in Polyelectrolyte Multilayer Layer-by-Layer (LbL) Films and Capsulesâ€”Key Enabling Components of Hybrid Coatings. Coatings, 2020, 10, 1131.	1.2	43
85	Neuron Cells Uptake of Polymeric Microcapsules and Subsequent Intracellular Release. Macromolecular Bioscience, 2011, 11, 848-854.	2.1	42
86	Nanoplasmonic smooth silica versus porous calcium carbonate bead biosensors for detection of biomarkers. Annalen Der Physik, 2012, 524, 723-732.	0.9	41
87	Nanostructured Biointerfaces Based on Bioceramic Calcium Carbonate/Hydrogel Coatings on Titanium with an Active Enzyme for Stimulating Osteoblasts Growth. Advanced Materials Interfaces, 2018, 5, 1800452.	1.9	41
88	AFM Analysis Enables Differentiation between Apoptosis, Necroptosis, and Ferroptosis in Murine Cancer Cells. IScience, 2020, 23, 101816.	1.9	41
89	Fast spatial-selective delivery into live cells. Journal of Controlled Release, 2017, 266, 198-204.	4.8	40
90	Application of whey protein isolate in bone regeneration: Effects on growth and osteogenic differentiation of bone-forming cells. Journal of Dairy Science, 2018, 101, 28-36.	1.4	40

#	Article	IF	Citations
91	Salt-induced fusion of microcapsules of polyelectrolytes. Soft Matter, 2010, 6, 4742.	1.2	39
92	Pectin-bioactive glass self-gelling, injectable composites with high antibacterial activity. Carbohydrate Polymers, 2019, 205, 427-436.	5.1	39
93	Release Properties of Pressurized Microgel Templated Capsules. Advanced Functional Materials, 2011, 21, 1411-1418.	7.8	38
94	Label-free Raman characterization of bacteria calls for standardized procedures. Journal of Microbiological Methods, 2018, 151, 69-75.	0.7	38
95	Coculturing Bacteria Leads to Reduced Phenotypic Heterogeneities. Applied and Environmental Microbiology, 2019, 85, .	1.4	37
96	High index contrast photonic platforms for on-chip Raman spectroscopy. Optics Express, 2019, 27, 23067.	1.7	37
97	Novel selfâ€gelling injectable hydrogel/alphaâ€tricalcium phosphate composites for bone regeneration: Physiochemical and microcomputer tomographical characterization. Journal of Biomedical Materials Research - Part A, 2018, 106, 822-828.	2.1	36
98	Bioactivity of catalase loaded into vaterite CaCO3 crystals via adsorption and co-synthesis. Materials and Design, 2020, 185, 108223.	3.3	36
99	Alkaline Phosphatase Delivery System Based on Calcium Carbonate Carriers for Acceleration of Ossification. ACS Applied Bio Materials, 2020, 3, 2986-2996.	2.3	36
100	Preparation of polyelectrolyte microcapsules with silver and gold nanoparticles in a shell and the remote destruction of microcapsules under laser irradiation. Crystallography Reports, 2006, 51, 863-869.	0.1	35
101	Nanoplasmonically-Induced Defects in Lipid Membrane Monitored by Ion Current: Transient Nanopores versus Membrane Rupture. Nano Letters, 2014, 14, 4273-4279.	4.5	35
102	Effect of low-temperature plasma treatment of electrospun polycaprolactone fibrous scaffolds on calcium carbonate mineralisation. RSC Advances, 2018, 8, 39106-39114.	1.7	35
103	ALD assisted nanoplasmonic slot waveguide for on-chip enhanced Raman spectroscopy. APL Photonics, 2018, 3, .	3.0	35
104	LbL Films as Reservoirs for Bioactive Molecules. Advances in Polymer Science, 2010, , 135-161.	0.4	34
105	Laser-induced remote release in vivo in C. elegans from novel silver nanoparticles-alginate hydrogel shells. Nanoscale, 2018, 10, 17249-17256.	2.8	34
106	Transfer of cells with uptaken nanocomposite, magnetite-nanoparticle functionalized capsules with electromagnetic tweezers. Biomaterials Science, 2018, 6, 2219-2229.	2.6	34
107	Hybrids of Polymeric Capsules, Lipids, and Nanoparticles: Thermodynamics and Temperature Rise at the Nanoscale and Emerging Applications. Langmuir, 2019, 35, 8574-8583.	1.6	33
108	Mucosal irritation potential of polyelectrolyte multilayer capsules. Biomaterials, 2011, 32, 1967-1977.	5.7	32

#	Article	IF	Citations
109	Bioinspired, biomimetic, double-enzymatic mineralization of hydrogels for bone regeneration with calcium carbonate. Materials Letters, 2017, 190, 13-16.	1.3	32
110	Efficient long-range conduction in cable bacteria through nickel protein wires. Nature Communications, 2021, 12, 3996.	5.8	32
111	Optical Heating and Temperature Determination of Coreâ€“Shell Gold Nanoparticles and Singleâ€Walled Carbon Nanotube Microparticles. Small, 2015, 11, 1320-1327.	5.2	31
112	Enzymatic, urease-mediated mineralization of gellan gum hydrogel with calcium carbonate, magnesium-enriched calcium carbonate and magnesium carbonate for bone regeneration applications. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3556-3566.	1.3	31
113	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. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1313-1326.	1.3	31
114	Cells-Grab-on Particles: A Novel Approach to Control Cell Focal Adhesion on Hybrid Thermally Annealed Hydrogels. ACS Biomaterials Science and Engineering, 2020, 6, 3933-3944.	2.6	31
115	Coreâ€“Shell Poly(allyamine hydrochloride)-Pyrene Nanorods Decorated with Gold Nanoparticles. Chemistry of Materials, 2011, 23, 4741-4747.	3.2	29
116	Hard, Soft, and Hard-and-Soft Drug Delivery Carriers Based on CaCO3 and Alginate Biomaterials: Synthesis, Properties, Pharmaceutical Applications. Pharmaceutics, 2022, 14, 909.	2.0	29
117	Mimicking Bubble Use in Nature: Propulsion of Janus Particles due to Hydrophobicâ€Hydrophilic Interactions. Small, 2014, 10, 2670-2677.	5.2	28
118	Deep learning with digital holographic microscopy discriminates apoptosis and necroptosis. Cell Death Discovery, 2021, 7, 229.	2.0	28
119	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
120	Novel injectable, self-gelling hydrogelâ€“microparticle composites for bone regeneration consisting of gellan gum and calcium and magnesium carbonate microparticles. Biomedical Materials (Bristol), 2016, 11, 065011.	1.7	27
121	Hybrids of Polymer Multilayers, Lipids, and Nanoparticles: Mimicking the Cellular Microenvironment. Langmuir, 2019, 35, 8565-8573.	1.6	27
122	Magnetic and silver nanoparticle functionalized calcium carbonate particlesâ€”Dual functionality of versatile, movable delivery carriers which can surface-enhance Raman signals. Journal of Applied Physics, 2019, 126, .	1.1	27
123	Laser-embossing nanoparticles into a polymeric film. Applied Physics Letters, 2009, 94, 093106.	1.5	26
124	ANN prediction of corrosion behaviour of uncoated and biopolymers coated cp-Titanium substrates. Materials and Design, 2018, 157, 35-51.	3.3	26
125	Release from Polyelectrolyte Multilayer Capsules in Solution and on Polymeric Surfaces. Advanced Materials Interfaces, 2017, 4, 1600273.	1.9	25
126	Fabrication and Impact of Fouling-Reducing Temperature-Responsive POEGMA Coatings with Embedded CaCO3 Nanoparticles on Different Cell Lines. Materials, 2021, 14, 1417.	1.3	24

#	Article	IF	Citations
127	Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. Frontiers in Cellular Neuroscience, 2018, 12, 80.	1.8	23
128	Diazonium chemistry surface treatment of piezoelectric polyhydroxybutyrate scaffolds for enhanced osteoblastic cell growth. Applied Materials Today, 2020, 20, 100758.	2.3	23
129	IR-light triggered drug delivery from micron-sized polymer biocoatings. Journal of Controlled Release, 2010, 148, e70-e71.	4.8	22
130	From Beetles in Nature to the Laboratory: Actuating Underwater Locomotion on Hydrophobic Surfaces. Langmuir, 2015, 31, 13734-13742.	1.6	22
131	Piezoelectric hybrid scaffolds mineralized with calcium carbonate for tissue engineering: Analysis of local enzyme and small-molecule drug delivery, cell response and antibacterial performance. Materials Science and Engineering C, 2021, 122, 111909.	3.8	22
132	Pharmacological aspects of release from microcapsules â€" from polymeric multilayers to lipid membranes. Current Opinion in Pharmacology, 2014, 18, 129-140.	1.7	21
133	Osteogenic Capability of Vateriteâ€Coated Nonwoven Polycaprolactone Scaffolds for In Vivo Bone Tissue Regeneration. Macromolecular Bioscience, 2021, 21, e2100266.	2.1	21
134	Gold nanodome SERS platform for label-free detection of protease activity. Faraday Discussions, 2017, 205, 345-361.	1.6	20
135	Comparison of Free-Space and Waveguide-Based SERS Platforms. Nanomaterials, 2019, 9, 1401.	1.9	20
136	Calcium carbonate particles: synthesis, temperature and time influence on the size, shape, phase, and their impact on cell hydroxyapatite formation. Journal of Materials Chemistry B, 2021, 9, 8308-8320.	2.9	20
137	Ultrasonic Approach for Formation of Erbium Oxide Nanoparticles with Variable Geometries. Langmuir, 2011, 27, 14472-14480.	1.6	19
138	Raman imaging and photodegradation study of phthalocyanine containing microcapsules and coated particles. Journal of Raman Spectroscopy, 2011, 42, 1901-1907.	1.2	19
139	Gold nanodome-patterned microchips for intracellular surface-enhanced Raman spectroscopy. Analyst, The, 2015, 140, 8080-8087.	1.7	19
140	Titanium surface functionalization with coatings of chitosan and polyphenol-rich plant extracts. Materials Letters, 2017, 196, 213-216.	1.3	19
141	Water-Stable Plasma-Polymerized N,N-Dimethylacrylamide Coatings to Control Cellular Adhesion. ACS Applied Materials & Interfaces, 2020, 12, 2116-2128.	4.0	19
142	Temperature Window for Encapsulation of an Enzyme into Thermally Shrunk, CaCO 3 Templated Polyelectrolyte Multilayer Capsules. Macromolecular Bioscience, 2020, 20, 2000081.	2.1	19
143	Inter-protein interactions govern protein loading into porous vaterite CaCO₃ crystals. Physical Chemistry Chemical Physics, 2020, 22, 9713-9722.	1.3	19
144	Immunogenic Cell Death and Role of Nanomaterials Serving as Therapeutic Vaccine for Personalized Cancer Immunotherapy. Frontiers in Immunology, 0, 13, .	2.2	19

#	Article	IF	Citations
145	Mineralization of gellan gum hydrogels with calcium and magnesium carbonates by alternate soaking in solutions of calcium/magnesium and carbonate ion solutions. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1825-1834.	1.3	18
146	Highâ€resolution synchrotron <scp>X</scp>â€ray analysis of bioglassâ€enriched hydrogels. Journal of Biomedical Materials Research - Part A, 2016, 104, 1194-1201.	2.1	17
147	Identification and Analysis of Key Parameters for the Ossification on Particle Functionalized Composites Hydrogel Materials. ACS Applied Materials & Interfaces, 2020, 12, 38862-38872.	4.0	17
148	Hydrothermal synthesis of barium titanate nano/microrods and particle agglomerates using a sodium titanate precursor. Ceramics International, 2021, 47, 8904-8914.	2.3	17
149	Multiplex volatile organic compound Raman sensing with nanophotonic slot waveguides functionalized with a mesoporous enrichment layer. Optics Letters, 2020, 45, 447.	1.7	17
150	The effect of hybrid coatings based on hydrogel, biopolymer and inorganic components on the corrosion behavior of titanium bone implants. Journal of Materials Chemistry B, 2019, 7, 6778-6788.	2.9	16
151	Discriminating Bacterial Phenotypes at the Population and Singleâ€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
152	Polycaprolactone-Based, Porous CaCO3 and Ag Nanoparticle Modified Scaffolds as a SERS Platform With Molecule-Specific Adsorption. Frontiers in Chemistry, 2019, 7, 888.	1.8	16
153	Whey Protein Complexes with Green Tea Polyphenols: Antimicrobial, Osteoblast-Stimulatory, and Antioxidant Activities. Cells Tissues Organs, 2018, 206, 106-118.	1.3	15
154	Classification of analytics, sensorics, and bioanalytics with polyelectrolyte multilayer capsules. Analytical and Bioanalytical Chemistry, 2020, 412, 5015-5029.	1.9	15
155	Colloids-at-surfaces: Physicochemical approaches for facilitating cell adhesion on hybrid hydrogels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 603, 125185.	2.3	14
156	Modification of Surfaces with Vaterite CaCO3 Particles. Micromachines, 2022, 13, 473.	1.4	14
157	Controlled Deposition of Nanosize and Microsize Particles by Spin-Casting. Langmuir, 2019, 35, 3404-3412.	1.6	13
158	Superresolution 4ï€ Raman microscopy. Optics Letters, 2017, 42, 4410.	1.7	12
159	Enhancement of Biomimetic Enzymatic Mineralization of Gellan Gum Polysaccharide Hydrogels by Plant-Derived Gallotannins. International Journal of Molecular Sciences, 2020, 21, 2315.	1.8	12
160	A lanthanide-functionalized covalent triazine framework as a physiological molecular thermometer. Journal of Materials Chemistry C, 2021, 9, 6436-6444.	2.7	12
161	Nanofibrillar Hydrogels by Temperature Driven Selfâ€Assembly: New Structures for Cell Growth and Their Biological and Medical Implications. Advanced Materials Interfaces, 2021, 8, 2002202.	1.9	12
162	Encapsulation of cells in gold nanoparticle functionalized hybrid Layer-by-Layer (LbL) hybrid shells â€“ Remote effect of laser light. Applied Surface Science Advances, 2021, 5, 100111.	2.9	12

#	Article	IF	Citations
163	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
164	Nanoplasmonic Modification of the Local Morphology, Shape, and Wetting Properties of Nanoflake Microparticles. Langmuir, 2013, 29, 7464-7471.	1.6	11
165	Polymer Brush Gradients by Adjusting the Functional Density Through Temperature Gradient. Advanced Materials Interfaces, 2014, 1, 1300056.	1.9	11
166	Ca:Mg:Zn:CO 3 and Ca:Mg:CO 3 â€"tri- and bi-elemental carbonate microparticles for novel injectable self-gelling hydrogelâ€"microparticle composites for tissue regeneration. Biomedical Materials (Bristol), 2017, 12, 025015.	1.7	11
167	Temperature rise around nanoparticles. Journal of Thermal Analysis and Calorimetry, 2017, 127, 895-904.	2.0	11
168	Luminescent PMMA Films and PMMA@SiO₂ Nanoparticles with Embedded Ln³⁺ Complexes for Highly Sensitive Optical Thermometers in the Physiological Temperature Range**. Chemistry - A European Journal, 2021, 27, 6479-6488.	1.7	11
169	Potential of poly(alkylene terephthalate)s to control endothelial cell adhesion and viability. Materials Science and Engineering C, 2021, 129, 112378.	3.8	10
170	Nondegenerate two-wave mixing in Cr^3+:Er^3+:YAlO_3. Journal of the Optical Society of America B: Optical Physics, 1996, 13, 546.	0.9	9
171	Stimuli-Sensitive Nanotechnology for Drug Delivery. , 2009, , 545-578.		9
172	Hybrid NaYF4:Er,Yb@NaYF4@nano-MOF@AuNPs@LB composites for Yb3+-Er3+ physiological thermometry. Physica B: Condensed Matter, 2021, 626, 413453.	1.3	9
173	Added Value of Microscale Raman Chemical Analysis in Mild Traumatic Brain Injury (TBI): A Comparison with Macroscale MRI. ACS Omega, 2018, 3, 16806-16811.	1.6	8
174	Waveguide-based surface-enhanced Raman spectroscopy detection of protease activity using non-natural aromatic amino acids. Biomedical Optics Express, 2020, 11, 4800.	1.5	8
175	Surface enhanced Raman scattering (SERS)-active bacterial detection by Layer-by-Layer (LbL) assembly all-nanoparticle microcapsules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 650, 129547.	2.3	8
176	Polymeric and Lipid Membranesâ€"From Spheres to Flat Membranes and vice versa. Membranes, 2017, 7, 44.	1.4	7
177	Lactoferrin translocates to the nucleus of bovine rectal epithelial cells in the presence of Escherichia coli O157:H7. Veterinary Research, 2019, 50, 75.	1.1	7
178	Effects of fibrillin mutations on the behavior of heart muscle cells in Marfan syndrome. Scientific Reports, 2020, 10, 16756.	1.6	7
179	Modulating the crystallization of phytosterols with monoglycerides in the binary mixture systems: mixing behavior and eutectic formation. Chemistry and Physics of Lipids, 2020, 230, 104912.	1.5	7
180	Ultra-sensitive slot-waveguide-enhanced Raman spectroscopy for aqueous solutions of non-polar compounds using a functionalized silicon nitride photonic integrated circuit. Optics Letters, 2021, 46, 1153.	1.7	7

#	Article	IF	Citations
181	Measurement of real-time gain gratings in erbium-doped fiber. IEEE Journal of Quantum Electronics, 1999, 35, 39-46.	1.0	5
182	Mesoporous One-Component Gold Microshells as 3D SERS Substrates. Biosensors, 2021, 11, 380.	2.3	5
183	Antiproliferative activity of Dioclea violacea lectin in CaCO3 particles on cancer cells after controlled release. Journal of Materials Science, 2022, 57, 8854-8868.	1.7	5
184	Theory of nondegenerate two-wave mixing in an absorptive Kerr medium. Journal of the Optical Society of America B: Optical Physics, 1996, 13, 2164.	0.9	4
185	<title>Erbium in photosensitive hybrid organoaluminosilicate sol-gel glasses</title>. , 1997, 2997, 90.		4
186	Phytase-mediated enzymatic mineralization of chitosan-enriched hydrogels. Materials Letters, 2018, 214, 186-189.	1.3	4
187	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
188	The influence of Ca/Mg ratio on autogelation of hydrogel biomaterials with bioceramic compounds. Materials Science and Engineering C, 2022, 133, 112632.	3.8	4
189	Nanophotonic lab-on-a-chip Raman sensors: A sensitivity comparison with confocal Raman microscope. , 2015, , .		3
190	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
191	Carbon Nanotubes Transform Soft Gellan Gum Hydrogels into Hybrid Organicâ€“Inorganic Coatings with Excellent Cell Growth Capability. Journal of Carbon Research, 2021, 7, 18.	1.4	3
192	Meshesâ€toâ€Fibrils Transition of Gellan Gum Hydrogel Architecture by Thermal Annealing. Macromolecular Materials and Engineering, 2020, 305, 2000308.	1.7	3
193	<title>Permeability adjustment of polyelectrolyte micro- and nanocapsules by laser irradiation</title>. Proceedings of SPIE, 2007, , .	0.8	2
194	Efficient delivery of quantum dots in live cells by gold nanoparticle mediated photoporation. Proceedings of SPIE, 2015, , .	0.8	2
195	Laser-induced vapor nanobubbles for efficient delivery of macromolecules in live cells. Proceedings of SPIE, 2015, , .	0.8	2
196	Lab-on-a-chip Raman sensors outperforming Raman microscopes. , 2016, , .		2
197	Raman and quantitative-phase microscope with counter-propagating beams demonstrated on HeLa cells. OSA Continuum, 2019, 2, 797.	1.8	2
198	Hybrid lanthanide-doped rattle-type thermometers for theranostics. Journal of Materials Chemistry C, 2022, 10, 10574-10585.	2.7	2

#	Article	IF	Citations
199	Amplification of a phase-conjugate signal in a nonlinear absorptive Kerr medium. Optics Letters, 1997, 22, 673.	1.7	1
200	Measurement of the nonlinear response in a strongly pumped erbium doped amplifiers for all-optical switching. , 0, , .		1
201	Microscope-less lab-on-a-chip Raman spectroscopy of cell-membranes. , 2016, , .		1
202	Plasmonic Hybrid Biocomposite as an Effective Substrate for Detection of Biomolecules by Surface-Enhanced Raman Spectroscopy. Russian Physics Journal, 2018, 61, 1288-1293.	0.2	1
203	Gold Nanoparticle Coated Silicon Nitride Chips For Intracellular Surface-Enhanced Raman Spectroscopy. , 2014, , .		1
204	Multifunctional microcontainers with tuned permeability for delivery and (bio)chemical reactions. , 2008, , 45-60.		0
205	Resonant enhancement mechanisms in lab-on-chip Raman spectroscopy on a silicon nitride waveguide platform. , 2014, , .		0
206	Nanodome coins for intracellular surface-enhanced Raman spectroscopy. , 2015, , .		0
207	4Ï€ Microscopy Immune to Sample-Induced Dephasing. , 2018, , .		0
208	Nanofibrillar Hydrogels by Temperature Driven Selfâ€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
209	LASER INDUCED ACTIVATION OF MICROCAPSULES CONTAINING NANOPARTICLES AND IR-DYE. , 2005, , .		0
210	Nanotriangle Decorated Silicon Nitride Waveguides for Integrated Surface-Enhanced Raman Spectroscopy. , 2017, , .		0
211	Organic Adhesion Layer for an Increased Waveguide-Excited Surface-Enhanced Raman Signal. , 2017, , .		0
212	Study of bacterial inner structures with 4Ï€ Raman microscopy. , 2018, , .		0
213	Waveguide-Enhanced Raman Spectroscopy Using a Mesoporous Silica Sorbent Layer for Volatile Organic Compound (VOC) Sensing. , 2019, , .		0
214	Hot-melt Preparation of a Non-biodegradable Peptide Implant: A Proof of Principle. Protein and Peptide Letters, 2019, 26, 691-701.	0.4	0
215	Towards SERS-based multiplexed monitoring of protease activity using non-natural aromatic amino acids. EPJ Web of Conferences, 2020, 238, 04001.	0.1	0
216	Waveguide-based Detection of Protease Activity using Surface-Enhanced Raman Spectroscopy. , 2020, , .		0

#	Article	IF	Citations
217	Ultra-sensitive silicon nitride waveguide-enhanced Raman spectroscopy for aqueous solutions of organic compounds. , 2020, , .		0