

stephan Barcikowski

List of Publications by Year in Descending Order

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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.

289
papers

9,879
citations

53
h-index

84
g-index

336
ext. papers

11,452
ext. citations

5
avg. IF

6.78
L-index

#	Paper	IF	Citations
289	Identification of the main mixing process in the synthesis of alloy nanoparticles by laser ablation of compacted micropowder mixtures. <i>Journal of Materials Science</i> , 2022 , 57, 3041-3056	4.3	2
288	Electrophoretic Deposition of Platinum Nanoparticles using Ethanol-Water Mixtures Significantly Reduces Neural Electrode Impedance. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 022504	3.9	2
287	Ultrafast cold-brewing of coffee by picosecond-pulsed laser extraction.. <i>Npj Science of Food</i> , 2022 , 6, 19	6.3	1
286	Comparison of ultrashort pulse ablation of gold in air and water by time-resolved experiments.. <i>Light: Science and Applications</i> , 2022 , 11, 68	16.7	4
285	Influence of Gold/Silver Ratio in Ablative Nanoparticles on Their Interaction with Aptamers and Functionality of the Obtained Conjugates. <i>Bioconjugate Chemistry</i> , 2021 , 32, 2439-2446	6.3	1
284	Laser Synthesis of Colloids: Applications 2021 , 1455-1479		2
283	Microstructure formation and mechanical properties of ODS steels built by laser additive manufacturing of nanoparticle coated iron-chromium powders. <i>Acta Materialia</i> , 2021 , 206, 116566	8.4	25
282	Influence of sub-monolayer quantities of carbon nanoparticles on the melting and crystallization behavior of polyamide 12 powders for additive manufacturing. <i>Materials and Design</i> , 2021 , 201, 109487	8.1	6
281	Laser Powder Bed Fusion of Polymers: Quantitative Research Direction Indices. <i>Materials</i> , 2021 , 14,	3.5	6
280	Formation of CoAu CoreShell Nanoparticles with Thin Gold Shells and Soft Magnetic Cobalt Cores Ruled by Thermodynamics and Kinetics. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 9534-9549	3.8	5
279	Single-Particle Hyperspectral Imaging Reveals Kinetics of Silver Ion Leaching from Alloy Nanoparticles. <i>ACS Nano</i> , 2021 , 15, 8363-8375	16.7	4
278	Triple Modification of Alginate Hydrogels by Fibrin Blending, Iron Nanoparticle Embedding, and Serum Protein-Coating Synergistically Promotes Strong Endothelialization. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2002015	4.6	2
277	Photoluminescence of Fully Inorganic Colloidal Gold Nanocluster and Their Manipulation Using Surface Charge Effects. <i>Advanced Materials</i> , 2021 , 33, e2101549	24	4
276	Impact of Ligands on Structural and Optical Properties of Ag Nanoclusters. <i>Journal of the American Chemical Society</i> , 2021 , 143, 9405-9414	16.4	13
275	Impact of Single-Pulse, Low-Intensity Laser Post-Processing on Structure and Activity of Mesoporous Cobalt Oxide for the Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	7
274	Pore penetration of porous catalyst supports by in-situ-adsorbed, agglomeration-quenched nanoparticles from pulsed laser ablation in supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 2021 , 169, 105100	4.2	
273	Comparing the Activity of Complex Solid Solution Electrocatalysts Using Inflection Points of Voltammetric Activity Curves as Activity Descriptors. <i>ACS Catalysis</i> , 2021 , 11, 1014-1023	13.1	20

272	Design and perspective of amorphous metal nanoparticles from laser synthesis and processing. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 11121-11154	3.6	14
271	Limited Elemental Mixing in Nanoparticles Generated by Ultrashort Pulse Laser Ablation of AgCu Bilayer Thin Films in a Liquid Environment: Atomistic Modeling and Experiments. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 2132-2155	3.8	13
270	Plasma and nanoparticle shielding during pulsed laser ablation in liquids cause ablation efficiency decrease. <i>Opto-Electronic Advances</i> , 2021 , 4, 200072-200072	6.5	14
269	Synthesis of gold, platinum, and gold-platinum alloy nanoparticle colloids with high-power megahertz-repetition-rate lasers: the importance of the beam guidance method. <i>Applied Nanoscience (Switzerland)</i> , 2021 , 11, 1303-1312	3.3	9
268	Surface Engineering of Gold Nanoclusters Protected with 11-Mercaptoundecanoic Acid for Photoluminescence Sensing. <i>ACS Applied Nano Materials</i> , 2021 , 4, 3197-3203	5.6	5
267	Alumina-Protected, Durable and Photostable Zinc Sulfide Particles from Scalable Atomic Layer Deposition. <i>Advanced Functional Materials</i> , 2021 , 31, 2009323	15.6	3
266	How the Physicochemical Properties of the Bulk Material Affect the Ablation Crater Profile, Mass Balance, and Bubble Dynamics During Single-Pulse, Nanosecond Laser Ablation in Water. <i>Chemistry - A European Journal</i> , 2021 , 27, 5978-5991	4.8	4
265	Nanoparticle Additivation Effects on Laser Powder Bed Fusion of Metals and Polymers-A Theoretical Concept for an Inter-Laboratory Study Design All Along the Process Chain, Including Research Data Management. <i>Materials</i> , 2021 , 14,	3.5	1
264	Formation of Fe-Ni Nanoparticle Strands in Macroscopic Polymer Composites: Experiment and Simulation. <i>Nanomaterials</i> , 2021 , 11,	5.4	1
263	Comparing Direct and Pulsed-Direct Current Electrophoretic Deposition on Neural Electrodes: Deposition Mechanism and Functional Influence. <i>Langmuir</i> , 2021 ,	4	3
262	Zinc sulfide for photocatalysis: White angel or black sheep?. <i>Progress in Materials Science</i> , 2021 , 124, 100865	11.5	2
261	A laser-based synthesis route for magnetic metallic glass nanoparticles. <i>Scripta Materialia</i> , 2021 , 203, 114094	5.6	8
260	Enhancement of Proton Therapy Efficiency by Noble Metal Nanoparticles Is Driven by the Number and Chemical Activity of Surface Atoms.. <i>Small</i> , 2021 , e2106383	11	2
259	Continuous-Flow Flat Jet Setup for Uniform Pulsed Laser Postprocessing of Colloids. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 11125-11132	2.8	6
258	Use of (nano-)additives in Laser Powder Bed Fusion of Al powder feedstocks: research directions within the last decade. <i>Procedia CIRP</i> , 2020 , 94, 11-16	1.8	3
257	Scaling up colloidal surface additivation of polymer powders for laser powder bed fusion. <i>Procedia CIRP</i> , 2020 , 94, 110-115	1.8	1
256	In situ speciation and spatial mapping of Zn products during pulsed laser ablation in liquids (PLAL) by combined synchrotron methods. <i>Nanoscale</i> , 2020 , 12, 14011-14020	7.7	15
255	Iron Nanoparticle Composite Hydrogels for Studying Effects of Iron Ion Release on Red Blood Cell Production.. <i>ACS Applied Bio Materials</i> , 2020 , 3, 4766-4778	4.1	2

254	How colloidal surface additivation of polyamide 12 powders with well-dispersed silver nanoparticles influences the crystallization already at low 0.01 vol%. <i>Additive Manufacturing</i> , 2020 , 36, 101419	6.1	6
253	Dynamics of laser-induced cavitation bubbles at a solid-liquid interface in high viscosity and high capillary number regimes. <i>Journal of Applied Physics</i> , 2020 , 127, 044306	2.5	19
252	Recent progress in laser materials processing and synthesis. <i>Applied Surface Science</i> , 2020 , 513, 145762	6.7	4
251	The effect of downstream laser fragmentation on the specific surface area and photoelectrochemical performance of barium tantalum oxynitride. <i>Applied Surface Science</i> , 2020 , 510, 145429	6.7	3
250	Manipulation of the Size and Phase Composition of Yttrium Iron Garnet Nanoparticles by Pulsed Laser Post-Processing in Liquid. <i>Molecules</i> , 2020 , 25,	4.8	6
249	Room-Temperature Laser Synthesis in Liquid of Oxide, Metal-Oxide Core-Shells, and Doped Oxide Nanoparticles. <i>Chemistry - A European Journal</i> , 2020 , 26, 9206-9242	4.8	94
248	Picosecond laser-induced surface structures on alloys in liquids and their influence on nanoparticle productivity during laser ablation. <i>Optics Express</i> , 2020 , 28, 2909-2924	3.3	5
247	Laser Synthesis of Colloids: Applications 2020 , 1-25		2
246	Toxicity of Colloidal Alloy Nanoparticles 2020 , 433-449		
245	Matrix-specific mechanism of Fe ion release from laser-generated 3D-printable nanoparticle-polymer composites and their protein adsorption properties. <i>Nanotechnology</i> , 2020 , 31, 405703	3.4	6
244	Effective size separation of laser-generated, surfactant-free nanoparticles by continuous centrifugation. <i>Nanotechnology</i> , 2020 , 31, 095603	3.4	18
243	Synthesis of Fluorescent Silver Nanoclusters: Introducing Bottom-Up and Top-Down Approaches to Nanochemistry in a Single Laboratory Class. <i>Journal of Chemical Education</i> , 2020 , 97, 239-243	2.4	12
242	Laser Fragmentation-Induced Defect-Rich Cobalt Oxide Nanoparticles for Electrochemical Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2020 , 13, 520-528	8.3	36
241	Effect of nanoparticle additivation on the microstructure and microhardness of oxide dispersion strengthened steels produced by laser powder bed fusion and directed energy deposition. <i>Procedia CIRP</i> , 2020 , 94, 41-45	1.8	5
240	Evaluation of essential powder properties through complementary particle size analysis methods for laser powder bed fusion of polymers. <i>Procedia CIRP</i> , 2020 , 94, 116-121	1.8	7
239	Research trends in laser powder bed fusion of Al alloys within the last decade. <i>Additive Manufacturing</i> , 2020 , 36, 101489	6.1	15
238	Selective Aerobic Oxidation of 5-(Hydroxymethyl)furfural over Heterogeneous Silver-Gold Nanoparticle Catalysts. <i>Advanced Synthesis and Catalysis</i> , 2020 , 362, 5681-5696	5.6	8
237	3D printing of magnetic parts by laser powder bed fusion of iron oxide nanoparticle functionalized polyamide powders. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 12204-12217	7.1	12

236	Frontispiece: Room-Temperature Laser Synthesis in Liquid of Oxide, Metal-Oxide Core-Shells, and Doped Oxide Nanoparticles. <i>Chemistry - A European Journal</i> , 2020 , 26,	4.8	2
235	Increasing the Size-Selectivity in Laser-Based g/h Liquid Flow Synthesis of Pt and PtPd Nanoparticles for CO and NO Oxidation in Industrial Automotive Exhaust Gas Treatment Benchmarking. <i>Nanomaterials</i> , 2020 , 10,	5.4	12
234	Aptamers on laser-generated gold nanoparticles [A novel approach towards green point-of-care] diagnostic tools for biotechnology. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 1220-1221	0.8	
233	Analysis of the Nanoparticle Dispersion and Its Effect on the Crystalline Microstructure in Carbon-Additivated PA12 Feedstock Material for Laser Powder Bed Fusion. <i>Materials</i> , 2020 , 13,	3.5	6
232	Origin of Laser-Induced Colloidal Gold Surface Oxidation and Charge Density, and Its Role in Oxidation Catalysis. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20981-20990	3.8	10
231	Composition and structure of magnetic high-temperature-phase, stable FeAu core-shell nanoparticles with zero-valent bcc Fe core. <i>Nanoscale Advances</i> , 2020 , 2, 3912-3920	5.1	8
230	Plasmonic Seasoning: Giving Color to Desktop Laser 3D Printed Polymers by Highly Dispersed Nanoparticles (Advanced Optical Materials 15/2020). <i>Advanced Optical Materials</i> , 2020 , 8, 2070060	8.1	
229	Plasmonic Seasoning: Giving Color to Desktop Laser 3D Printed Polymers by Highly Dispersed Nanoparticles. <i>Advanced Optical Materials</i> , 2020 , 8, 2000473	8.1	18
228	Impact of Preparation Method and Hydrothermal Aging on Particle Size Distribution of Pt/Al ₂ O ₃ and Its Performance in CO and NO Oxidation. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 5433-5446	3.8	32
227	Comparison of the productivity and ablation efficiency of different laser classes for laser ablation of gold in water and air. <i>Applied Physics A: Materials Science and Processing</i> , 2019 , 125, 1	2.6	21
226	Status and demand of research to bring laser generation of nanoparticles in liquids to maturity. <i>Applied Surface Science</i> , 2019 , 488, 445-454	6.7	46
225	Materials synthesis in a bubble. <i>MRS Bulletin</i> , 2019 , 44, 382-391	3.2	34
224	Synergism between Specific Halide Anions and pH Effects during Nanosecond Laser Fragmentation of Ligand-Free Gold Nanoparticles. <i>Langmuir</i> , 2019 , 35, 6630-6639	4	17
223	Size-Selective Optical Printing of Silicon Nanoparticles through Their Dipolar Magnetic Resonance. <i>ACS Photonics</i> , 2019 , 6, 815-822	6.3	27
222	Early appearance of crystalline nanoparticles in pulsed laser ablation in liquids dynamics. <i>Nanoscale</i> , 2019 , 11, 6962-6969	7.7	32
221	Acoustic emission control avoids fluence shifts caused by target runaway during laser synthesis of colloids. <i>Applied Surface Science</i> , 2019 , 479, 887-895	6.7	4
220	Determining the role of redox-active materials during laser-induced water decomposition. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 18636-18651	3.6	28
219	Excellent Oxygen Reduction Reaction Performance in Self-Assembled Amyloid- β Platinum Nanoparticle Hybrids with Effective Platinum-Nitrogen Bond Formation. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6536-6541	6.1	6

218	One-step synthesis of Fe@Au core-shell magnetic-plasmonic nanoparticles driven by interface energy minimization. <i>Nanoscale Horizons</i> , 2019 , 4, 1326-1332	10.8	37
217	Templated Dealloying: Designing Ultrastructures by Memory Effect. <i>Crystal Growth and Design</i> , 2019 , 19, 4957-4963	3.5	2
216	Perspective of Surfactant-Free Colloidal Nanoparticles in Heterogeneous Catalysis. <i>ChemCatChem</i> , 2019 , 11, 4489-4518	5.2	80
215	Kinetically-controlled laser-synthesis of colloidal high-entropy alloy nanoparticles.. <i>RSC Advances</i> , 2019 , 9, 18547-18558	3.7	70
214	Review on experimental and theoretical investigations of the early stage, femtoseconds to microseconds processes during laser ablation in liquid-phase for the synthesis of colloidal nanoparticles. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 103001	3.5	71
213	Incubation Effect of Pre-Irradiation on Bubble Formation and Ablation in Laser Ablation in Liquids. <i>ChemPhysChem</i> , 2019 , 20, 1036-1043	3.2	12
212	Tissue Concentrations of Zinc, Iron, Copper, and Magnesium During the Phases of Full Thickness Wound Healing in a Rodent Model. <i>Biological Trace Element Research</i> , 2019 , 191, 167-176	4.5	36
211	Platinum nanoparticles supported on reduced graphene oxide prepared in situ by a continuous one-step laser process. <i>Applied Surface Science</i> , 2019 , 469, 811-820	6.7	16
210	Time and Mechanism of Nanoparticle Functionalization by Macromolecular Ligands during Pulsed Laser Ablation in Liquids. <i>Langmuir</i> , 2019 , 35, 3038-3047	4	27
209	First PEM fuel cell based on ligand-free, laser-generated platinum nanoparticles. <i>Applied Surface Science</i> , 2019 , 467-468, 486-492	6.7	26
208	How the re-irradiation of a single ablation spot affects cavitation bubble dynamics and nanoparticles properties in laser ablation in liquids. <i>Applied Surface Science</i> , 2019 , 473, 828-837	6.7	23
207	Tribological properties of laser-generated hard ceramic particles in a gear drive contact. <i>Applied Surface Science</i> , 2019 , 467-468, 811-818	6.7	6
206	Durability study of platinum nanoparticles supported on gas-phase synthesized graphene in oxygen reduction reaction conditions. <i>Applied Surface Science</i> , 2019 , 467-468, 1181-1186	6.7	21
205	Ablation target cooling by maximizing the nanoparticle productivity in laser synthesis of colloids. <i>Applied Surface Science</i> , 2019 , 466, 647-656	6.7	13
204	Discrimination of effects leading to gas formation during pulsed laser ablation in liquids. <i>Applied Surface Science</i> , 2019 , 465, 1096-1102	6.7	20
203	Depositing laser-generated nanoparticles on powders for additive manufacturing of oxide dispersed strengthened alloy parts via laser metal deposition. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 040310	1.4	32
202	X-ray spectroscopic and stroboscopic analysis of pulsed-laser ablation of Zn and its oxidation. <i>Applied Physics A: Materials Science and Processing</i> , 2018 , 124, 1	2.6	18
201	Crystallographic characterization of laser-generated, polymer-stabilized 4 nm silver-gold alloyed nanoparticles. <i>Materials Chemistry and Physics</i> , 2018 , 207, 442-450	4.4	29

200	Two mechanisms of nanoparticle generation in picosecond laser ablation in liquids: the origin of the bimodal size distribution. <i>Nanoscale</i> , 2018 , 10, 6900-6910	7.7	130
199	Temperature-Dependent Ultrastructure Transformation of Au@Fe Nanoparticles Investigated by in Situ Scanning Transmission Electron Microscopy. <i>Crystal Growth and Design</i> , 2018 , 18, 5434-5440	3.5	20
198	Development of A Low-Cost FPGA-Based Measurement System for Real-Time Processing of Acoustic Emission Data: Proof of Concept Using Control of Pulsed Laser Ablation in Liquids. <i>Sensors</i> , 2018 , 18,	3.8	8
197	How the crystal structure and phase segregation of Au-Fe alloy nanoparticles are ruled by the molar fraction and size. <i>Nanoscale</i> , 2018 , 10, 16434-16437	7.7	35
196	Spontaneous Shape Alteration and Size Separation of Surfactant-Free Silver Particles Synthesized by Laser Ablation in Acetone during Long-Period Storage. <i>Nanomaterials</i> , 2018 , 8,	5.4	22
195	Primary particle diameter differentiation and bimodality identification by five analytical methods using gold nanoparticle size distributions synthesized by pulsed laser ablation in liquids. <i>Applied Surface Science</i> , 2018 , 435, 743-751	6.7	29
194	Laser additive manufacturing of oxide dispersion strengthened steels using laser-generated nanoparticle-metal composite powders. <i>Procedia CIRP</i> , 2018 , 74, 196-200	1.8	20
193	A new approach to coat PA12 powders with laser-generated nanoparticles for selective laser sintering. <i>Procedia CIRP</i> , 2018 , 74, 244-248	1.8	24
192	Role of Citrate and NaBr at the Surface of Colloidal Gold Nanoparticles during Functionalization. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 27383-27391	3.8	10
191	Mechanism of Laser-Induced Bulk and Surface Defect Generation in ZnO and TiO ₂ Nanoparticles: Effect on Photoelectrochemical Performance. <i>ACS Applied Energy Materials</i> , 2018 ,	6.1	7
190	Neue Nanokomposite für die additive Fertigung. <i>Chemie-Ingenieur-Technik</i> , 2018 , 90, 1193-1193	0.8	
189	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. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 22125-22136	3.8	56
188	Oxide dispersion-strengthened alloys generated by laser metal deposition of laser-generated nanoparticle-metal powder composites. <i>Materials and Design</i> , 2018 , 154, 360-369	8.1	58
187	High productive and continuous nanoparticle fabrication by laser ablation of a wire-target in a liquid jet. <i>Applied Surface Science</i> , 2017 , 403, 487-499	6.7	42
186	Laser-induced growth of YVO ₄ :Eu ³⁺ nanoparticles from sequential flowing aqueous suspension. <i>RSC Advances</i> , 2017 , 7, 9002-9008	3.7	6
185	How Size Determines the Value of Gold: Economic Aspects of Wet Chemical and Laser-Based Metal Colloid Synthesis. <i>ChemPhysChem</i> , 2017 , 18, 1012-1019	3.2	56
184	Germanium Sub-Microspheres Synthesized by Picosecond Pulsed Laser Melting in Liquids: Educt Size Effects. <i>Scientific Reports</i> , 2017 , 7, 40355	4.9	32
183	Optimizing in Vitro Impedance and Physico-Chemical Properties of Neural Electrodes by Electrophoretic Deposition of Pt Nanoparticles. <i>ChemPhysChem</i> , 2017 , 18, 1108-1117	3.2	9

182	Size Quenching during Laser Synthesis of Colloids Happens Already in the Vapor Phase of the Cavitation Bubble. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 5356-5365	3.8	64
181	Tailored protein encapsulation into a DNA host using geometrically organized supramolecular interactions. <i>Nature Communications</i> , 2017 , 8, 14472	17.4	54
180	Peptide Cross-linkers: Immobilization of Platinum Nanoparticles Highly Dispersed on Graphene Oxide Nanosheets with Enhanced Photocatalytic Activities. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 9996-10002	9.5	20
179	Process Chain for the Fabrication of Nanoparticle Polymer Composites by Laser Ablation Synthesis. <i>Chemical Engineering and Technology</i> , 2017 , 40, 1535-1543	2	16
178	How persistent microbubbles shield nanoparticle productivity in laser synthesis of colloids - quantification of their volume, dwell dynamics, and gas composition. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 7112-7123	3.6	61
177	Laser Synthesis and Processing of Colloids: Fundamentals and Applications. <i>Chemical Reviews</i> , 2017 , 117, 3990-4103	68.1	684
176	Upconversion Nanoparticles Synthesized by Ultrashort Pulsed Laser Ablation in Liquid: Effect of the Stabilizing Environment. <i>ChemPhysChem</i> , 2017 , 18, 1210-1216	3.2	11
175	Gradual modification of ITO particle's crystal structure and optical properties by pulsed UV laser irradiation in a free liquid jet. <i>Dalton Transactions</i> , 2017 , 46, 6039-6048	4.3	6
174	Triplex-hybridizing bioconjugated gold nanoparticles for specific Y-chromosome sequence targeting of bull spermatozoa. <i>Analyst, The</i> , 2017 , 142, 2020-2028	5	11
173	Role of Dissolved and Molecular Oxygen on Cu and PtCu Alloy Particle Structure during Laser Ablation Synthesis in Liquids. <i>ChemPhysChem</i> , 2017 , 18, 1175-1184	3.2	49
172	Pulsed laser ablation of wire-shaped target in a thin water jet: effects of plasma features and bubble dynamics on the PLAL process. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 185204	3	16
171	Direct Integration of Laser-Generated Nanoparticles into Transparent Nail Polish: The Plasmonic "Goldfinger" <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 3291-3296	3.9	13
170	Fluence Threshold Behaviour on Ablation and Bubble Formation in Pulsed Laser Ablation in Liquids. <i>ChemPhysChem</i> , 2017 , 18, 1084-1090	3.2	34
169	Adjusting the catalytic properties of cobalt ferrite nanoparticles by pulsed laser fragmentation in water with defined energy dose. <i>Scientific Reports</i> , 2017 , 7, 13161	4.9	42
168	Water-based, surfactant-free cytocompatible nanoparticle-microgel-composite biomaterials - rational design by laser synthesis, processing into fiber pads and impact on cell proliferation. <i>BioNanoMaterials</i> , 2017 , 18,		4
167	Colloidal Stability of Metal Nanoparticles in Engine Oil under Thermal and Mechanical Load. <i>Chemical Engineering and Technology</i> , 2017 , 40, 1569-1576	2	14
166	Pulsed laser ablation in liquids: Impact of the bubble dynamics on particle formation. <i>Journal of Colloid and Interface Science</i> , 2017 , 489, 106-113	9.3	70
165	Laser synthesis, structure and chemical properties of colloidal nickel-molybdenum nanoparticles for the substitution of noble metals in heterogeneous catalysis. <i>Journal of Colloid and Interface Science</i> , 2017 , 489, 57-67	9.3	39

164	Colloids created by light: Laser-generated nanoparticles for applications in biology and medicine. <i>Materials Today: Proceedings</i> , 2017 , 4, S93-S100	1.4	8
163	Laser Micromachining of Metals with Ultra-Short Pulses: Factors Limiting the Scale-Up Process. <i>Journal of Laser Micro Nanoengineering</i> , 2017 , 12,	1	8
162	Laser-based in situ embedding of metal nanoparticles into bioextruded alginate hydrogel tubes enhances human endothelial cell adhesion. <i>Nano Research</i> , 2016 , 9, 3407-3427	10	34
161	Laser-synthesized ligand-free Au nanoparticles for contrast agent applications in computed tomography and magnetic resonance imaging. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 6413-6427	7.3	11
160	Characterizing the Effect of Multivalent Conjugates Composed of Aβ-specific Ligands and Metal Nanoparticles on Neurotoxic Fibrillar Aggregation. <i>ACS Nano</i> , 2016 , 10, 7582-97	16.7	37
159	Integration of Gold Nanoparticles into NIR-Radiation Curable Powder Resin. <i>ChemistrySelect</i> , 2016 , 1, 5574-5578	1.8	14
158	Solvent-surface interactions control the phase structure in laser-generated iron-gold core-shell nanoparticles. <i>Scientific Reports</i> , 2016 , 6, 23352	4.9	92
157	Optical and electron microscopy study of laser-based intracellular molecule delivery using peptide-conjugated photodispersible gold nanoparticle agglomerates. <i>Journal of Nanobiotechnology</i> , 2016 , 14, 2	9.4	18
156	Electrophoretic deposition of ligand-free platinum nanoparticles on neural electrodes affects their impedance in vitro and in vivo with no negative effect on reactive gliosis. <i>Journal of Nanobiotechnology</i> , 2016 , 14, 3	9.4	27
155	Target geometry and rigidity determines laser-induced cavitation bubble transport and nanoparticle productivity - a high-speed videography study. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 16585-93	3.6	32
154	Debris-free rear-side picosecond laser ablation of thin germanium wafers in water with ethanol. <i>Applied Surface Science</i> , 2016 , 367, 222-230	6.7	49
153	Plasmon assisted 3D microstructuring of gold nanoparticle-doped polymers. <i>Nanotechnology</i> , 2016 , 27, 154001	3.4	44
152	Barrierless growth of precursor-free, ultrafast laser-fragmented noble metal nanoparticles by colloidal atom clusters - A kinetic in situ study. <i>Journal of Colloid and Interface Science</i> , 2016 , 463, 299-307	9.3	44
151	Efficient nucleic acid delivery to murine regulatory T cells by gold nanoparticle conjugates. <i>Scientific Reports</i> , 2016 , 6, 28709	4.9	24
150	Effect of various dispersing agents on the stability of silver microparticle dispersion and the formulation of uniform silver film by laser melting. <i>Journal of Laser Applications</i> , 2016 , 28, 042004	2.1	2
149	Ultrafiltration membrane-based purification of bioconjugated gold nanoparticle dispersions. <i>Separation and Purification Technology</i> , 2016 , 157, 120-130	8.3	20
148	Continuous multigram nanoparticle synthesis by high-power, high-repetition-rate ultrafast laser ablation in liquids. <i>Optics Letters</i> , 2016 , 41, 1486-9	3	177
147	Gold-Manganese Oxide Core-Shell Nanoparticles Produced by Pulsed Laser Ablation in Water. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 22635-22645	3.8	11

146	In Situ Investigations of Laser-Generated Ligand-Free Platinum Nanoparticles by X-ray Absorption Spectroscopy: How Does the Immediate Environment Influence the Particle Surface?. <i>Langmuir</i> , 2016 , 32, 8793-802	4	30
145	Effect of pH on the spontaneous synthesis of palladium nanoparticles on reduced graphene oxide. <i>Applied Surface Science</i> , 2016 , 389, 911-915	6.7	14
144	Influence of ligands in metal nanoparticle electrophoresis for the fabrication of biofunctional coatings. <i>Applied Surface Science</i> , 2015 , 348, 92-99	6.7	40
143	Biocompatible microgel-modified electrospun fibers for zinc ion release. <i>Polymer</i> , 2015 , 61, 163-173	3.9	24
142	Cysteine-containing oligopeptide B sheets as redispersants for agglomerated metal nanoparticles. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17612-17619	13	6
141	How Electrophoretic Deposition with Ligand-Free Platinum Nanoparticles Affects Contact Angle. <i>Key Engineering Materials</i> , 2015 , 654, 218-223	0.4	3
140	Strategies to harvest the unique properties of laser-generated nanomaterials in biomedical and energy applications. <i>Applied Surface Science</i> , 2015 , 348, 1-3	6.7	19
139	Ripening kinetics of laser-generated plasmonic nanoparticles in different solvents. <i>Chemical Physics Letters</i> , 2015 , 626, 96-101	2.5	34
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