

# Robert N. Grass

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/941798/robert-n-grass-publications-by-citations.pdf>

**Version:** 2024-04-23

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

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

136  
papers

8,145  
citations

44  
h-index

88  
g-index

144  
ext. papers

8,925  
ext. citations

8.2  
avg, IF

5.99  
L-index

#	Paper	IF	Citations
136	In vitro cytotoxicity of oxide nanoparticles: comparison to asbestos, silica, and the effect of particle solubility. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 4374-81	10.3	1065
135	Exposure of engineered nanoparticles to human lung epithelial cells: influence of chemical composition and catalytic activity on oxidative stress. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 4158-63	10.3	713
134	Oxide nanoparticle uptake in human lung fibroblasts: effects of particle size, agglomeration, and diffusion at low concentrations. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 9370-6	10.3	673
133	Covalently functionalized cobalt nanoparticles as a platform for magnetic separations in organic synthesis. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 4909-12	16.4	280
132	Robust chemical preservation of digital information on DNA in silica with error-correcting codes. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 2552-5	16.4	275
131	Remineralization of human dentin using ultrafine bioactive glass particles. <i>Acta Biomaterialia</i> , <b>2007</b> , 3, 936-43	10.8	244
130	Large-scale production of carbon-coated copper nanoparticles for sensor applications. <i>Nanotechnology</i> , <b>2006</b> , 17, 1668-73	3.4	244
129	A recyclable nanoparticle-supported palladium catalyst for the hydroxycarbonylation of aryl halides in water. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 1867-70	16.4	199
128	TEMPO supported on magnetic C/Co-nanoparticles: a highly active and recyclable organocatalyst. <i>Chemistry - A European Journal</i> , <b>2008</b> , 14, 8262-6	4.8	154
127	Gas phase synthesis of fcc-cobalt nanoparticles. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 1825		139
126	Magnetic EDTA: coupling heavy metal chelators to metal nanomagnets for rapid removal of cadmium, lead and copper from contaminated water. <i>Chemical Communications</i> , <b>2009</b> , 4862-4	5.8	136
125	Glass and bioglass nanopowders by flame synthesis. <i>Chemical Communications</i> , <b>2006</b> , 1384-6	5.8	135
124	Synthesis and Covalent Surface Functionalization of Nonoxidic Iron Core/Shell Nanomagnets. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 3275-3281	9.6	124
123	Immobilization on a Nanomagnetic Co/C Surface Using ROM Polymerization: Generation of a Hybrid Material as Support for a Recyclable Palladium Catalyst. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 4323-4328	15.6	108
122	Blood purification using functionalized core/shell nanomagnets. <i>Small</i> , <b>2010</b> , 6, 1388-92	11	105
121	Highly sensitive optical detection of humidity on polymer/metal nanoparticle hybrid films. <i>Langmuir</i> , <b>2007</b> , 23, 3473-7	4	104
120	Cotton wool-like nanocomposite biomaterials prepared by electrospinning: in vitro bioactivity and osteogenic differentiation of human mesenchymal stem cells. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2008</b> , 84, 350-62	3.5	103

119	Palladium Nanoparticles Supported on Magnetic Carbon-Coated Cobalt Nanobeads: Highly Active and Recyclable Catalysts for Alkene Hydrogenation. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2020-2027	15.6	95
118	Thermoresponsive polymer induced sweating surfaces as an efficient way to passively cool buildings. <i>Advanced Materials</i> , <b>2012</b> , 24, 5352-6	24	94
117	Flame synthesis of calcium-, strontium-, barium fluoride nanoparticles and sodium chloride. <i>Chemical Communications</i> , <b>2005</b> , 1767-9	5.8	91
116	Cu(II)Azabis(oxazoline) Complexes Immobilized on Magnetic Co/C Nanoparticles: Kinetic Resolution of 1,2-Diphenylethane-1,2-diol under Batch and Continuous-Flow Conditions. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 305-310	9.6	90
115	Permanent pattern-resolved adjustment of the surface potential of graphene-like carbon through chemical functionalization. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 224-7	16.4	89
114	Magnetically recoverable, thermostable, hydrophobic DNA/silica encapsulates and their application as invisible oil tags. <i>ACS Nano</i> , <b>2014</b> , 8, 2677-85	16.7	87
113	Effect of particle size, crystal phase and crystallinity on the reactivity of tricalcium phosphate cements for bone reconstruction. <i>Journal of Materials Chemistry</i> , <b>2007</b> , 17, 4072		84
112	Chemical Aerosol Engineering as a Novel Tool for Material Science: From Oxides to Salt and Metal Nanoparticles. <i>Aerosol Science and Technology</i> , <b>2010</b> , 44, 161-172	3.4	83
111	Reversible DNA encapsulation in silica to produce ROS-resistant and heat-resistant synthetic DNA fossils. <i>Nature Protocols</i> , <b>2013</b> , 8, 2440-8	18.8	76
110	Interaction between human cathepsins K, L, and S and elastins: mechanism of elastinolysis and inhibition by macromolecular inhibitors. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 7893-902	5.4	76
109	Bottom-up Fabrication of Metal/Metal Nanocomposites from Nanoparticles of Immiscible Metals. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 155-160	9.6	74
108	Protection and deprotection of DNA--high-temperature stability of nucleic acid barcodes for polymer labeling. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 4269-72	16.4	73
107	Immobilized Cyclodextrin on surface-modified carbon-coated cobalt nanomagnets: reversible organic contaminant adsorption and enrichment from water. <i>Langmuir</i> , <b>2011</b> , 27, 1924-9	4	65
106	A Characterization of the DNA Data Storage Channel. <i>Scientific Reports</i> , <b>2019</b> , 9, 9663	4.9	61
105	Use of NIR light and upconversion phosphors in light-curable polymers. <i>Dental Materials</i> , <b>2012</b> , 28, 304-11	15.7	61
104	Direct combination of nanoparticle fabrication and exposure to lung cell cultures in a closed setup as a method to simulate accidental nanoparticle exposure of humans. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 2634-40	10.3	61
103	Template free, large scale synthesis of cobalt nanowires using magnetic fields for alignment. <i>Nanotechnology</i> , <b>2007</b> , 18, 165606	3.4	59
102	Gold adsorption on the carbon surface of C/Co nanoparticles allows magnetic extraction from extremely diluted aqueous solutions. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 8239		55

101	Design of high-temperature, gas-phase synthesis of hard or soft TiO <sub>2</sub> agglomerates. <i>AIChE Journal</i> , <b>2006</b> , 52, 1318-1325	3.6	54
100	Mussel-inspired load bearing metal-polymer glues. <i>Chemical Communications</i> , <b>2012</b> , 48, 6238-40	5.8	51
99	High-strength metal nanomagnets for diagnostics and medicine: carbon shells allow long-term stability and reliable linker chemistry. <i>Nanomedicine</i> , <b>2009</b> , 4, 787-98	5.6	51
98	A DNA-of-things storage architecture to create materials with embedded memory. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 39-43	44.5	50
97	Functionalized graphene-coated cobalt nanoparticles for highly efficient surface-assisted laser desorption/ionization mass spectrometry analysis. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 9268-75	7.8	49
96	Phosphate starvation as an antimicrobial strategy: the controllable toxicity of lanthanum oxide nanoparticles. <i>Chemical Communications</i> , <b>2012</b> , 48, 3869-71	5.8	49
95	Combining phosphate and bacteria removal on chemically active filter membranes allows prolonged storage of drinking water. <i>Advanced Materials</i> , <b>2013</b> , 25, 6057-63	24	47
94	Base-free Knoevenagel condensation catalyzed by copper metal surfaces. <i>Chemical Communications</i> , <b>2015</b> , 51, 10695-8	5.8	46
93	Particles with an identity: Tracking and tracing in commodity products. <i>Powder Technology</i> , <b>2016</b> , 291, 344-350	5.2	44
92	Exposure of aerosols and nanoparticle dispersions to in vitro cell cultures: A review on the dose relevance of size, mass, surface and concentration. <i>Journal of Aerosol Science</i> , <b>2010</b> , 41, 1123-1142	4.3	44
91	Palladium nanoparticles supported on ionic liquid modified, magnetic nanobeads – recyclable, high-capacity catalysts for alkene hydrogenation. <i>RSC Advances</i> , <b>2014</b> , 4, 8541	3.7	43
90	Large-Scale Synthesis of PbS@TiO <sub>2</sub> Heterojunction Nanoparticles in a Single Step for Solar Cell Application. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 16264-16270	3.8	42
89	Suzuki cross-coupling reactions on the surface of carbon-coated cobalt: expanding the applicability of core-shell nano-magnets. <i>Chemical Communications</i> , <b>2008</b> , 4297-9	5.8	42
88	Flame spray synthesis under a non-oxidizing atmosphere: Preparation of metallic bismuth nanoparticles and nanocrystalline bulk bismuth metal. <i>Journal of Nanoparticle Research</i> , <b>2006</b> , 8, 729-736	2.3	42
87	Device for continuous extracorporeal blood purification using target-specific metal nanomagnets. <i>Nephrology Dialysis Transplantation</i> , <b>2011</b> , 26, 2948-54	4.3	41
86	Effects of flame made zinc oxide particles in human lung cells - a comparison of aerosol and suspension exposures. <i>Particle and Fibre Toxicology</i> , <b>2012</b> , 9, 33	8.4	40
85	Stable dispersions of ferromagnetic carbon-coated metal nanoparticles: preparation via surface initiated atom transfer radical polymerization. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 12064		38
84	Surfactant-Free, Melt-Processable Metal-Polymer Hybrid Materials: Use of Graphene as a Dispersing Agent. <i>Advanced Materials</i> , <b>2008</b> , 20, 3044-3049	24	35

83	Physico-Chemical Differences Between Particle- and Molecule-Derived Toxicity: Can We Make Inherently Safe Nanoparticles?. <i>Chimia</i> , <b>2009</b> , 63, 38-43	1.3	34
82	Combining Data Longevity with High Storage Capacity Layer-by-Layer DNA Encapsulated in Magnetic Nanoparticles. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901672	15.6	33
81	3D printed lost-wax casted soft silicone monoblocks enable heart-inspired pumping by internal combustion. <i>RSC Advances</i> , <b>2014</b> , 4, 16039-16042	3.7	32
80	Reading and writing digital data in DNA. <i>Nature Protocols</i> , <b>2020</b> , 15, 86-101	18.8	32
79	Soluble nanoparticles as removable pore templates for the preparation of polymer ultrafiltration membranes. <i>Journal of Membrane Science</i> , <b>2012</b> , 387-388, 76-82	9.6	31
78	Efficient magnetic recycling of covalently attached enzymes on carbon-coated metallic nanomagnets. <i>Bioconjugate Chemistry</i> , <b>2014</b> , 25, 677-84	6.3	30
77	Cerium oxide nanoparticle uptake kinetics from the gas-phase into lung cells in vitro is transport limited. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2011</b> , 77, 368-75	5.7	29
76	Energy-Efficient Noble Metal Recovery by the Use of Acid-Stable Nanomagnets. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 9355-9362	3.9	29
75	Incorporating microorganisms into polymer layers provides bioinspired functional living materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 90-4	11.5	28
74	Preparation of nano-gypsum from anhydrite nanoparticles: Strongly increased Vickers hardness and formation of calcium sulfate nano-needles. <i>Journal of Nanoparticle Research</i> , <b>2007</b> , 9, 275-281	2.3	28
73	Single-particle ICP-MS with online microdroplet calibration: toward matrix independent nanoparticle sizing. <i>Journal of Analytical Atomic Spectrometry</i> , <b>2019</b> , 34, 716-728	3.7	27
72	Silica-Encapsulated DNA-Based Tracers for Aquifer Characterization. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 12142-12152	10.3	27
71	Preparation of Homogeneous, Bulk Nanocrystalline Ni/Mo Alloys with Tripled Vickers Hardness Using Flame-Made Metal Nanoparticles. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 4847-4854	9.6	26
70	Tracking Trace Amounts of Submicrometer Silica Particles in Wastewaters and Activated Sludge Using Silica-Encapsulated DNA Barcodes. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 484-489 <sup>11</sup>		25
69	Incorporation of penicillin-producing fungi into living materials to provide chemically active and antibiotic-releasing surfaces. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 11293-6	16.4	24
68	Monomer-on-monomer (MoM) Mitsunobu reaction: facile purification utilizing surface-initiated sequestration. <i>Organic Letters</i> , <b>2011</b> , 13, 8-10	6.2	23
67	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. <i>Journal of Biotechnology</i> , <b>2009</b> , 141, 118-22	3.7	23
66	Safe One-Pot Synthesis of Fluorescent Carbon Quantum Dots from Lemon Juice for a Hands-On Experience of Nanotechnology. <i>Journal of Chemical Education</i> , <b>2019</b> , 96, 540-545	2.4	22

65	Rapid Production of a Porous Cellulose Acetate Membrane for Water Filtration using Readily Available Chemicals. <i>Journal of Chemical Education</i> , <b>2017</b> , 94, 483-487	2.4	21
64	Labeling milk along its production chain with DNA encapsulated in silica. <i>Journal of Agricultural and Food Chemistry</i> , <b>2014</b> , 62, 10615-20	5.7	21
63	Scaling up magnetic filtration and extraction to the ton per hour scale using carbon coated metal nanoparticles. <i>Separation and Purification Technology</i> , <b>2012</b> , 96, 68-74	8.3	21
62	Magnetic switching of optical reflectivity in nanomagnet/micromirror suspensions: colloid displays as a potential alternative to liquid crystal displays. <i>Nanotechnology</i> , <b>2009</b> , 20, 485302	3.4	21
61	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. <i>Nature Communications</i> , <b>2020</b> , 11, 5345	17.4	21
60	Roll-to-Roll Preparation of Mesoporous Membranes by Nanoparticle Template Removal. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 9214-9220	3.9	20
59	DNA protection against ultraviolet irradiation by encapsulation in a multilayered SiO/TiO assembly. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 8504-8509	7.3	20
58	Pressureless mechanical induction of stem cell differentiation is dose and frequency dependent. <i>PLoS ONE</i> , <b>2013</b> , 8, e81362	3.7	20
57	Magnetic superbasic proton sponges are readily removed and permit direct product isolation. <i>Journal of Organic Chemistry</i> , <b>2014</b> , 79, 10908-15	4.2	19
56	Template-particle stabilized bicontinuous emulsion yielding controlled assembly of hierarchical high-flux filtration membranes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 611-7	9.5	18
55	Silica particles with encapsulated DNA as trophic tracers. <i>Molecular Ecology Resources</i> , <b>2015</b> , 15, 231-41	8.4	18
54	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. <i>Chemical Communications</i> , <b>2020</b> , 56, 3613-3616	5.8	18
53	Advanced piezoresistance of extended metal-insulator core-shell nanoparticle assemblies. <i>Physical Review Letters</i> , <b>2008</b> , 101, 166804	7.4	18
52	Kinetics of Aggregation and Gelation in Colloidal Dispersions. <i>Chemical Engineering Research and Design</i> , <b>2005</b> , 83, 926-932	5.5	17
51	Submicrometer-Sized Thermometer Particles Exploiting Selective Nucleic Acid Stability. <i>Small</i> , <b>2016</b> , 12, 452-6	11	17
50	Gas-phase synthesis of magnetic metal/polymer nanocomposites. <i>Nanotechnology</i> , <b>2014</b> , 25, 505602	3.4	16
49	Reversible magnetic mercury extraction from water. <i>RSC Advances</i> , <b>2015</b> , 5, 46430-46436	3.7	15
48	Limestone nanoparticles as nanopore templates in polymer membranes: narrow pore size distribution and use as self-wetting dialysis membranes. <i>RSC Advances</i> , <b>2014</b> , 4, 61420-61426	3.7	15

47	Electrical resistivity of assembled transparent inorganic oxide nanoparticle thin layers: influence of silica, insulating impurities, and surfactant layer thickness. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 2664-71	9.5	15
46	Reversible As(V) adsorption on magnetic nanoparticles and pH dependent desorption concentrates dilute solutions and realizes true moving bed reactor systems. <i>Chemical Engineering Journal</i> , <b>2011</b> , 175, 244-250	14.7	15
45	Large-scale preparation of ceria/bismuth metal-matrix nano-composites with a hardness comparable to steel. <i>Journal of Materials Chemistry</i> , <b>2007</b> , 17, 1485		14
44	Fast and exergy efficient start-up of micro-solid oxide fuel cell systems by using the reformer or the post-combustor for start-up heating. <i>Journal of Power Sources</i> , <b>2008</b> , 182, 558-564	8.9	14
43	Silica Microcapsules for Long-Term, Robust, and Reliable Room Temperature RNA Preservation. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 1332-8	10.1	13
42	Physical defect formation in few layer graphene-like carbon on metals: influence of temperature, acidity, and chemical functionalization. <i>Langmuir</i> , <b>2012</b> , 28, 4565-72	4	13
41	DNA synthesis for true random number generation. <i>Nature Communications</i> , <b>2020</b> , 11, 5869	17.4	13
40	Click and release: fluoride cleavable linker for mild bioorthogonal separation. <i>Chemical Communications</i> , <b>2016</b> , 52, 938-41	5.8	12
39	Fibers Mechanically Similar to Sheep Wool Obtained by Wet Spinning of Gelatin and Optional Plasticizers. <i>Macromolecular Materials and Engineering</i> , <b>2015</b> , 300, 234-241	3.9	12
38	From Embedded to Supported Metal/Oxide Nanomaterials: Thermal Behavior and Structural Evolution at Elevated Temperatures. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 1269-1276	3.8	11
37	Flame Spray Pyrolysis as a Synthesis Platform to Assess Metal Promotion in In <sub>2</sub> O <sub>3</sub> -Catalyzed CO <sub>2</sub> Hydrogenation. <i>Advanced Energy Materials</i> , 2103707	21.8	11
36	Porous, Water-Resistant Multifilament Yarn Spun from Gelatin. <i>Biomacromolecules</i> , <b>2015</b> , 16, 1997-2005	6.9	10
35	Robuste chemische Speicherung von digitalen Informationen auf DNA in Silicat unter Verwendung fehlerkorrigierender Codes. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 2582-2586	3.6	10
34	Spinning Angora Rabbit Wool-Like Porous Fibers from a Non-Equilibrated Gelatin/Water/2-Propanol Mixture. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1831-1839	15.6	10
33	The light triggered dissolution of gold wires using potassium ferrocyanide solutions enables cumulative illumination sensing. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 282, 52-59	8.5	10
32	Immobilizing and de-immobilizing enzymes on mesoporous silica. <i>RSC Advances</i> , <b>2015</b> , 5, 87706-87712	3.7	9
31	Water dispersible surface-functionalized platinum/carbon nanorattles for size-selective catalysis. <i>Chemical Science</i> , <b>2018</b> , 9, 362-367	9.4	9
30	One-step large scale gas phase synthesis of Mn(2+) doped ZnS nanoparticles in reducing flames. <i>Nanotechnology</i> , <b>2010</b> , 21, 215603	3.4	9

29	Grain growth resistance and increased hardness of bulk nanocrystalline fcc cobalt prepared by a bottom-up approach. <i>Nanotechnology</i> , <b>2007</b> , 18, 035703	3.4	9
28	Schützen und Entschützen von DNA [Temperaturstabile Nucleinsäuren als Barcode zur Markierung von Polymeren. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 4364-4368	3.6	8
27	Sintering of core-shell Ag/glass nanoparticles: metal percolation at the glass transition temperature yields metal/glass/ceramic composites. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 7769		8
26	Magnetically deliverable calcium phosphate nanoparticles for localized gene expression. <i>RSC Advances</i> , <b>2015</b> , 5, 9997-10004	3.7	7
25	Nanocomposites of high-density polyethylene with amorphous calcium phosphate: in vitro biomineralization and cytocompatibility of human mesenchymal stem cells. <i>Biomedical Materials (Bristol)</i> , <b>2012</b> , 7, 054103	3.5	7
24	Preparation of an ultra fast binding cement from calcium silicate-based mixed oxide nanoparticles. <i>Nanotechnology</i> , <b>2007</b> , 18, 395701	3.4	7
23	Genomic Encryption of Digital Data Stored in Synthetic DNA. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 8476-8480	16.4	6
22	Ferromagnetic inks facilitate large scale paper recycling and reduce bleach chemical consumption. <i>Langmuir</i> , <b>2013</b> , 29, 5093-8	4	6
21	Length-dependent DNA degradation kinetic model: Decay compensation in DNA tracer concentration measurements. <i>AIChE Journal</i> , <b>2019</b> , 65, 40-48	3.6	6
20	Development and Application of a Recyclable High-Load Magnetic Co/C Hybrid ROMP-Derived Benzenesulfonyl Chloride Reagent and Utility of Corresponding Analogues. <i>Organic Letters</i> , <b>2017</b> , 19, 2274-2277	6.2	5
19	Protein Reduction and Dialysis-Free Work-Up through Phosphines Immobilized on a Magnetic Support: TCEP-Functionalized Carbon-Coated Cobalt Nanoparticles. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 8585-8589	4.8	4
18	Small-Size Polymerase Chain Reaction Device with Improved Heat Transfer and Combined Feedforward/Feedback Control Strategy. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 9663-9674	3.9	4
17	Self-defending anti-vandalism surfaces based on mechanically triggered mixing of reactants in polymer foils. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 8425-8430	13	4
16	PCR quantification of SiO <sub>2</sub> particle uptake in cells in the ppb and ppm range via silica encapsulated DNA barcodes. <i>Chemical Communications</i> , <b>2014</b> , 50, 10707-9	5.8	4
15	Micro Mirror Polymer Composite Offers Mechanically Switchable Light Transmittance. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 878-883	3.5	4
14	Induced cyanogenesis from hydroxynitrile lyase and mandelonitrile on wheat with polylactic acid multilayer-coating produces self-defending seeds. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 853-858	13	3
13	D-glucosidase assisted gold dissolution as non-optical and quantifiable detection technique for immunoassays. <i>Small</i> , <b>2013</b> , 9, 4000-5	11	3
12	DNA-Based Sensor Particles Enable Measuring Light Intensity in Single Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 2765-70	24	3



11	Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA.. <i>Small</i> , <b>2022</b> , e2107381	11	3
10	Synthetic DNA applications in information technology.. <i>Nature Communications</i> , <b>2022</b> , 13, 352	17.4	2
9	Genomic Encryption of Digital Data Stored in Synthetic DNA. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 8554-8558	3.6	1
8	RNA Storage: Silica Microcapsules for Long-Term, Robust, and Reliable Room Temperature RNA Preservation (Adv. Healthcare Mater. 9/2015). <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 1262-1262	10.1	1
7	Anhydrous calcium phosphate crystals stabilize DNA for dry storage.. <i>Chemical Communications</i> , <b>2022</b> ,	5.8	1
6	Genomic encryption of digital data stored in synthetic DNA		1
5	Ecotoxicological Assessment of DNA-Tagged Silica Particles for Environmental Tracing. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 6867-6875	10.3	1
4	One-Step Photolithographic Surface Patterning of Nanometer-Thick Gold Surfaces by Using a Commercial DLP Projector and the Fabrication of a Microheater. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 12048-12055	3.9	0
3	Titelbild: Robuste chemische Speicherung von digitalen Informationen auf DNA in Silicat unter Verwendung fehlerkorrigierender Codes (Angew. Chem. 8/2015). <i>Angewandte Chemie</i> , <b>2015</b> , 127, 2323-2323	3.6	1
2	DNA Barcode Quantification As a Robust Tool for Measuring Mixing Ratios in Two-Component Systems.. <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 5062-5068	4.1	
1	The dissipation rate of news in online mass media evaluated by chemical engineering and process control tools. <i>AIChE Journal</i> , <b>2016</b> , 62, 1104-1111	3.6	