Dan Luo

List of Publications by Year
in descending order

107 papers	11,322 citations	44066 48 h-index	33889 99 g-index
109 all docs	109 docs citations	109 times ranked	12189 citing authors

#	Article	IF	Citations
1	Putting DNA to Work as Generic Polymeric Materials. Angewandte Chemie - International Edition, 2022, 61, .	13.8	17
2	A multiplexed circulating tumor DNA detection platform engineered from 3D-coded interlocked DNA rings. Bioactive Materials, 2022, 10, 68-78.	15.6	7
3	Interfacing DNA hydrogels with ceramics for biofunctional architectural materials. Materials Today, 2022, 53, 98-105.	14.2	7
4	A dynamic DNA nanosponge for triggered amplification of gene-photodynamic modulation. Chemical Science, 2022, 13, 5155-5163.	7.4	12
5	Proteinâ€Encoding Freeâ€Standing RNA Hydrogel for Subâ€Compartmentalized Translation. Advanced Materials, 2022, 34, e2110424.	21.0	11
6	Proteinâ€Encoding Freeâ€Standing RNA Hydrogel for Subâ€Compartmentalized Translation (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 1	21.0	0
7	Programming a DNA tetrahedral nanomachine as an integrative tool for intracellular microRNA biosensing and stimulus-unlocked target regulation. Materials Today Bio, 2022, 15, 100276.	5.5	8
8	Nesfatin-1 Promotes Proliferation, Migration and Invasion of HTR-8/SVneo Trophoblast Cells and Inhibits Oxidative Stress via Activation of PI3K/AKT/mTOR and AKT/GSK3Î² Pathway. Reproductive Sciences, 2021, 28, 550-561.	2.5	12
9	Construction of Smart Stimuliâ€Responsive DNA Nanostructures for Biomedical Applications. Chemistry - A European Journal, 2021, 27, 3929-3943.	3.3	19
10	Frontispiece: Construction of Smart Stimuliâ€Responsive DNA Nanostructures for Biomedical Applications. Chemistry - A European Journal, 2021, 27, .	3.3	1
11	In silico nanosafety assessment tools and their ecosystem-level integration prospect. Nanoscale, 2021, 13, 8722-8739.	5.6	11
12	Ralstonia mannitolilytica sepsis after elective cesarean delivery: a case report. BMC Pregnancy and Childbirth, 2021, 21, 737.	2.4	4
13	Multiplexed Imaging with Coordination Nanoparticles for Cancer Diagnosis and Therapy. ACS Applied Bio Materials, 2020, 3, 713-720.	4.6	10
14	Double Rolling Circle Amplification Generates Physically Cross-Linked DNA Network for Stem Cell Fishing. Journal of the American Chemical Society, 2020, 142, 3422-3429.	13.7	137
15	A CRISPR Path to Cutting-Edge Materials. New England Journal of Medicine, 2020, 382, 85-88.	27.0	11
16	Micro/Nano Technology for Nextâ€Generation Diagnostics. Small Methods, 2020, 4, 1900506.	8.6	25
17	Superâ€Soft and Superâ€Elastic DNA Robot with Magnetically Driven Navigational Locomotion for Cell Delivery in Confined Space. Angewandte Chemie - International Edition, 2020, 59, 2490-2495.	13.8	104
18	Superâ€Soft and Superâ€Elastic DNA Robot with Magnetically Driven Navigational Locomotion for Cell Delivery in Confined Space. Angewandte Chemie, 2020, 132, 2511-2516.	2.0	15

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19	DNA Functional Materials Assembled from Branched DNA: Design, Synthesis, and Applications. Chemical Reviews, 2020, 120, 9420-9481.	47.7	313
20	The prevalence and associated factors of metabolic syndrome in Chinese aging population. Scientific Reports, 2020, 10, 20034.	3.3	24
21	Self-assembly of stem cell membrane-camouflaged nanocomplex for microRNA-mediated repair of myocardial infarction injury. Biomaterials, 2020, 257, 120256.	11.4	60
22	Construction of Organelleâ€Like Architecture by Dynamic DNA Assembly in Living Cells. Angewandte Chemie - International Edition, 2020, 59, 20651-20658.	13.8	57
23	Construction of Organelleâ€Like Architecture by Dynamic DNA Assembly in Living Cells. Angewandte Chemie, 2020, 132, 20832-20839.	2.0	7
24	DNA-based engineering system for improving human and environmental health: Identification, detection, and treatment. Nano Today, 2020, 35, 100958.	11.9	15
25	Enzyme-based fabrication of physical DNA hydrogels: new materials and applications. Polymer Journal, 2020, 52, 891-898.	2.7	11
26	Transformation of Biomass DNA into Biodegradable Materials from Gels to Plastics for Reducing Petrochemical Consumption. Journal of the American Chemical Society, 2020, 142, 10114-10124.	13.7	66
27	Three-dimensional DNA tweezers serve as modular DNA intelligent machines for detection and regulation of intracellular microRNA. Science Advances, 2020, 6, eabb0695.	10.3	41
28	Serum homocysteine and folate concentrations in early pregnancy and subsequent events of adverse pregnancy outcome: the Sichuan Homocysteine study. BMC Pregnancy and Childbirth, 2020, 20, 176.	2.4	21
29	A PEGDA/DNA Hybrid Hydrogel for Cell-Free Protein Synthesis. Frontiers in Chemistry, 2020, 8, 28.	3.6	26
30	Dysregulation of BDNF/TrkB signaling mediated by NMDAR/Ca2+/calpain might contribute to postoperative cognitive dysfunction in aging mice. Journal of Neuroinflammation, 2020, 17, 23.	7.2	125
31	An ultraportable and versatile point-of-care DNA testing platform. Science Advances, 2020, 6, eaaz7445.	10.3	71
32	Superâ€Soft DNA/Dopamineâ€Graftedâ€Dextran Hydrogel as Dynamic Wire for Electric Circuits Switched by a Microbial Metabolism Process. Advanced Science, 2020, 7, 2000684.	11.2	35
33	Nanobarcoding: Topological Transformation-Based Nanobarcoding for Detection and Enumeration of MicroRNAs and Single Nucleotide Polymorphism (Adv. Biosys. 7/2019). Advanced Biology, 2019, 3, 1970072.	3.0	0
34	Target-Triggered Polymerization of Branched DNA Enables Enzyme-free and Fast Discrimination of Single-Base Changes. IScience, 2019, 21, 228-240.	4.1	5
35	Polymeric DNA hydrogel: Design, synthesis and applications. Progress in Polymer Science, 2019, 98, 101163.	24.7	189
36	Revealing the Presence of a Symbolic Sequence Representing Multiple Nucleotides Based on K-Means Clustering of Oligonucleotides. Molecules, 2019, 24, 348.	3.8	1

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37	Topological Transformationâ€Based Nanobarcoding for Detection and Enumeration of MicroRNAs and Single Nucleotide Polymorphism. Advanced Biology, 2019, 3, e1900013.	3.0	3
38	A fixed cytometer chip for identification of cell populations and real-time monitoring of single-cell apoptosis under gradient UV radiation. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	1
39	Dynamic DNA material with emergent locomotion behavior powered by artificial metabolism. Science Robotics, 2019, 4, .	17.6	52
40	Nucleic Acidâ€“Based Functional Nanomaterials as Advanced Cancer Therapeutics. Small, 2019, 15, e1900172.	10.0	80
41	Lead exposure inhibits expression of SV2C through NRSF. Toxicology, 2018, 398-399, 23-30.	4.2	5
42	A DNA Tracer System for Hydrological Environment Investigations. Environmental Science & Technology, 2018, 52, 1695-1703.	10.0	40
43	A Fluorescent Biofunctional DNA Hydrogel Prepared by Enzymatic Polymerization. Advanced Healthcare Materials, 2018, 7, 1700998.	7.6	65
44	Designing a retrievable and scalable cell encapsulation device for potential treatment of type 1 diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E263-E272.	7.1	137
45	Synthesis of Cationic Amphiphilic Surface-Block Polyester Dendrimers. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 383-398.	3.7	1
46	PolyBrick 3.0: live signatures through DNA hydrogels and digital ceramics. International Journal of Rapid Manufacturing, 2018, 7, 203.	0.5	5
47	Polymeric Nanocomplex Encapsulating Iron Oxide Nanoparticles in Constant Size for Controllable Magnetic Field Reactivity. Langmuir, 2018, 34, 12827-12833.	3.5	11
48	Assembly Dynamics of Plasmonic DNA-Capped Gold Nanoparticle Monolayers. Langmuir, 2018, 34, 14711-14720.	3.5	2
49	Microfluidic-Assisted Fabrication of Clay Microgels for Cell-Free Protein Synthesis. ACS Applied Materials & Interfaces, 2018, 10, 29308-29313.	8.0	41
50	Maternal exposure to perfluorooctanoic acid inhibits luteal function via oxidative stress and apoptosis in pregnant mice. Reproductive Toxicology, 2017, 69, 159-166.	2.9	50
51	Bioresponsive DNA Hydrogels: Beyond the Conventional Stimuli Responsiveness. Accounts of Chemical Research, 2017, 50, 733-739.	15.6	186
52	Pollen magnetofection for genetic modification with magnetic nanoparticles as gene carriers. Nature Plants, 2017, 3, 956-964.	9.3	262
53	Non-invasive detection of gastric cancer relevant<scp>d</scp>-amino acids with luminescent DNA/silver nanoclusters. Nanoscale, 2017, 9, 19367-19373.	5.6	60
54	Reduced expression of follicle stimulating hormone receptor mRNA and protein in pregnancies complicated by pre-eclampsia. Molecular Medicine Reports, 2017, 16, 367-372.	2.4	2

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55	Nox-2-Mediated Phenotype Loss of Hippocampal Parvalbumin Interneurons Might Contribute to Postoperative Cognitive Decline in Aging Mice. Frontiers in Aging Neuroscience, 2016, 8, 234.	3.4	49
56	DNA Microgels as a Platform for Cell-Free Protein Expression and Display. Biomacromolecules, 2016, 17, 2019-2026.	5.4	52
57	Mass production of shaped particles through vortex ring freezing. Nature Communications, 2016, 7, 12401.	12.8	55
58	Developing robust, hydrogel-based, nanofiber-enabled encapsulation devices (NEEDs) for cell therapies. Biomaterials, 2015, 37, 40-48.	11.4	81
59	Tâ€“B-cell entanglement and ICOSL-driven feed-forward regulation of germinal centre reaction. Nature, 2015, 517, 214-218.	27.8	333
60	DNA-bonded 'atoms'. Nature Materials, 2014, 13, 121-122.	27.5	7
61	DNA Materials: Bridging Nanotechnology and Biotechnology. Accounts of Chemical Research, 2014, 47, 1902-1911.	15.6	228
62	Crystallization of DNAâ€Capped Gold Nanoparticles in Highâ€Concentration, Divalent Salt Environments. Angewandte Chemie - International Edition, 2014, 53, 1316-1319.	13.8	46
63	A Universal DNA-Based Protein Detection System. Journal of the American Chemical Society, 2013, 135, 14008-14011.	13.7	35
64	Enhanced transcription and translation in clay hydrogel and implications for early life evolution. Scientific Reports, 2013, 3, 3165.	3.3	86
65	Thermostable Branched DNA Nanostructures as Modular Primers for Polymerase Chain Reaction. Angewandte Chemie - International Edition, 2013, 52, 8699-8702.	13.8	75
66	Gravity and Surface Tension Effects on the Shape Change of Soft Materials. Langmuir, 2013, 29, 8665-8674.	3.5	44
67	Cell-Free Protein Expression from DNA-Based Hydrogel (P-Gel) Droplets for Scale-Up Production. Industrial Biotechnology, 2012, 8, 372-377.	0.8	12
68	A mechanical metamaterial made from a DNA hydrogel. Nature Nanotechnology, 2012, 7, 816-820.	31.5	484
69	From cells to DNA materials. Materials Today, 2012, 15, 190-194.	14.2	36
70	Probing Y-shaped DNA structure with time-resolved FRET. Nanoscale, 2012, 4, 1568.	5.6	32
71	Femtomolar sensitivity DNA photonic crystal nanowire array ultrasonic mass sensor. , 2012, , .		3
72	Adaptive DNA-based materials for switching, sensing, and logic devices. Journal of Materials Chemistry, 2011, 21, 6113.	6.7	26

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73	Crystalline Gibbs Monolayers of DNA-Capped Nanoparticles at the Airâ€“Liquid Interface. ACS Nano, 2011, 5, 7978-7985.	14.6	53
74	Engineering DNA-based functional materials. Chemical Society Reviews, 2011, 40, 5730.	38.1	263
75	Building plasmonic nanostructures with DNA. Nature Nanotechnology, 2011, 6, 268-276.	31.5	736
76	DNAsomes: Multifunctional DNAâ€Based Nanocarriers. Small, 2011, 7, 74-78.	10.0	71
77	Biodegradable CpG DNA hydrogels for sustained delivery of doxorubicin and immunostimulatory signals in tumor-bearing mice. Biomaterials, 2011, 32, 488-494.	11.4	186
78	From biology to materials: engineering DNA and RNA for drug delivery and nanomedicine. Advanced Drug Delivery Reviews, 2010, 62, 591.	13.7	6
79	DNA nanomedicine: Engineering DNA as a polymer for therapeutic and diagnostic applications. Advanced Drug Delivery Reviews, 2010, 62, 606-616.	13.7	88
80	Probing in Real Time the Soft Crystallization of DNAâ€Capped Nanoparticles. Angewandte Chemie - International Edition, 2010, 49, 380-384.	13.8	71
81	Photocrosslinked DNA Nanospheres for Drug Delivery. Macromolecular Rapid Communications, 2010, 31, 1207-1211.	3.9	30
82	Novel DNA materials and their applications. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 648-669.	6.1	79
83	DNA-based nanostructures for molecular sensing. Nanoscale, 2010, 2, 188-197.	5.6	56
84	A cell-free protein-producing gel. Nature Materials, 2009, 8, 432-437.	27.5	287
85	Free-standing nanoparticle superlattice sheets controlled by DNA. Nature Materials, 2009, 8, 519-525.	27.5	372
86	Multifunctional nanoarchitectures from DNA-based ABC monomers. Nature Nanotechnology, 2009, 4, 430-436.	31.5	164
87	High-yield cell-free protein production from P-gel. Nature Protocols, 2009, 4, 1759-1770.	12.0	58
88	The assembly of a short linear natural cytosine-phosphate-guanine DNA into dendritic structures and its effect on immunostimulatory activity. Biomaterials, 2009, 30, 5701-5706.	11.4	104
89	Rapid determination of Î”9-Tetrahydrocannabinol in saliva by polymer monolith microextraction combined with gas chromatographyâ€“mass spectrometry. Talanta, 2009, 77, 1701-1706.	5.5	37
90	Humic acid-bonded silica as a novel sorbent for solid-phase extraction of benzo[a]pyrene in edible oils. Analytica Chimica Acta, 2007, 588, 261-267.	5.4	53

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91	A Dendrimer-Like DNA-Based Vector for DNA Delivery: A Viral and Nonviral Hybrid Approach. , 2006, 127, 115-126.		5
92	Enzyme-catalysed assembly of DNA hydrogel. Nature Materials, 2006, 5, 797-801.	27.5	713
93	Dendrimer-like DNA-based fluorescence nanobarcodes. Nature Protocols, 2006, 1, 995-1000.	12.0	80
94	DNA Hydrogels. Materials Research Society Symposia Proceedings, 2006, 950, 1.	0.1	0
95	Chargeâ€reversible lipids for DNA delivery. FASEB Journal, 2006, 20, A73.	0.5	0
96	Non-viral Charge Reversal Vectors for pDNA Delivery. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
97	Multiplexed detection of pathogen DNA with DNA-based fluorescence nanobarcodes. Nature Biotechnology, 2005, 23, 885-889.	17.5	467
98	Diffusion of Single Star-Branched Dendrimer-like DNA. Journal of Physical Chemistry B, 2005, 109, 9839-9842.	2.6	32
99	Controlled assembly of dendrimer-like DNA. Nature Materials, 2004, 3, 38-42.	27.5	428
100	A new solution for improving gene delivery. Trends in Biotechnology, 2004, 22, 101-103.	9.3	58
101	The road from biology to materials. Materials Today, 2003, 6, 38-43.	14.2	78
102	Poly(ethylene glycol)-Conjugated PAMAM Dendrimer for Biocompatible, High-Efficiency DNA Delivery. Macromolecules, 2002, 35, 3456-3462.	4.8	388
103	Synthetic DNA delivery systems. Nature Biotechnology, 2000, 18, 33-37.	17.5	1,494
104	Enhancement of transfection by physical concentration of DNA at the cell surface. Nature Biotechnology, 2000, 18, 893-895.	17.5	532
105	Controlled DNA delivery systems. Pharmaceutical Research, 1999, 16, 1300-1308.	3.5	144
106	Nucleic Acid Engineering. , 0, , 549-575.		0
107	Putting DNA to Work as Generic Polymeric Materials. Angewandte Chemie, 0, , .	2.0	6