Mauri A Kostiainen

List of Publications by Year
in descending order

138 papers	7,889 citations	43973 48 h-index	56606 83 g-index
148 all docs	148 docs citations	148 times ranked	7842 citing authors

#	Article	IF	Citations
1	A Synthetic Protocellâ€Based Heparin Scavenger. Small, 2023, 19, e2201790.	5.2	4
2	Neonatal Fc receptor-targeted lignin-encapsulated porous silicon nanoparticles for enhanced cellular interactions and insulin permeation across the intestinal epithelium. Bioactive Materials, 2022, 9, 299-315.	8.6	23
3	Simultaneous Organic and Inorganic Hostâ€Guest Chemistry within Pillarareneâ€Protein Cage Frameworks. Chemistry - A European Journal, 2022, 28, .	1.7	12
4	Environmentâ€Dependent Stability and Mechanical Properties of DNA Origami Sixâ€Helix Bundles with Different Crossover Spacings. Small, 2022, 18, e2107393.	5.2	29
5	Solâ€Gel Synthesis of Mesoporous Silica Using a Protein Crystal Template. ChemNanoMat, 2022, 8, .	1.5	4
6	From Precision Colloidal Hybrid Materials to Advanced Functional Assemblies. Accounts of Chemical Research, 2022, 55, 1785-1795.	7.6	19
7	Peptide-guided resiquimod-loaded lignin nanoparticles convert tumor-associated macrophages from M2 to M1 phenotype for enhanced chemotherapy. Acta Biomaterialia, 2021, 133, 231-243.	4.1	72
8	Chemical Modification of Reducing Endâ€Groups in Cellulose Nanocrystals. Angewandte Chemie - International Edition, 2021, 60, 66-87.	7.2	83
9	Chemische Modifizierung der reduzierenden Enden von Cellulosenanokristallen. Angewandte Chemie, 2021, 133, 66-88.	1.6	2
10	DNAâ€Origamiâ€Templated Growth of Multilamellar Lipid Assemblies. Angewandte Chemie - International Edition, 2021, 60, 827-833.	7.2	29
11	Biomoleculeâ€Directed Carbon Nanotube Selfâ€Assembly. Advanced Healthcare Materials, 2021, 10, e2001162.	3.9	24
12	Near-Infrared Chiral Plasmonic Microwires through Precision Assembly of Gold Nanorods on Soft Biotemplates. Journal of Physical Chemistry C, 2021, 125, 3256-3267.	1.5	20
13	Unraveling the interaction between doxorubicin and DNA origami nanostructures for customizable chemotherapeutic drug release. Nucleic Acids Research, 2021, 49, 3048-3062.	6.5	95
14	A Theranostic Cellulose Nanocrystalâ€Based Drug Delivery System with Enhanced Retention in Pulmonary Metastasis of Melanoma. Small, 2021, 17, e2007705.	5.2	24
15	Host-Guest Complex for Heparin Binding and Sensing. ECS Meeting Abstracts, 2021, MA2021-01, 1665-1665.	0.0	0
16	Scaling Up DNA Origami Lattice Assembly. Chemistry - A European Journal, 2021, 27, 8564-8571.	1.7	25
17	Hybrid Nanoassemblies from Viruses and DNA Nanostructures. Nanomaterials, 2021, 11, 1413.	1.9	3
18	A Janus-Type Phthalocyanine for the Assembly of Photoactive DNA Origami Coatings. Bioconjugate Chemistry, 2021, 32, 1123-1129.	1.8	5

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19	Challenges in Synthesis and Analysis of Asymmetrically Grafted Cellulose Nanocrystals via Atom Transfer Radical Polymerization. Biomacromolecules, 2021, 22, 2702-2717.	2.6	14
20	Frontispiece: Scaling Up DNA Origami Lattice Assembly. Chemistry - A European Journal, 2021, 27, .	1.7	0
21	Polyelectrolyte Encapsulation and Confinement within Protein Cage-Inspired Nanocompartments. Pharmaceutics, 2021, 13, 1551.	2.0	6
22	Cationic cellulose nanocrystals for fast, efficient and selective heparin recovery. Chemical Engineering Journal, 2021, 420, 129811.	6.6	12
23	Engineered protein cages for selective heparin encapsulation. Journal of Materials Chemistry B, 2021, 9, 1272-1276.	2.9	17
24	Biotemplated Lithography of Inorganic Nanostructures (BLIN) for Versatile Patterning of Functional Materials. ACS Applied Nano Materials, 2021, 4, 529-538.	2.4	18
25	Prospective Cancer Therapies Using Stimuliâ€Responsive DNA Nanostructures. Macromolecular Bioscience, 2021, 21, e2100272.	2.1	15
26	Electrostatic Self-Assembly of Protein Cage Arrays. Methods in Molecular Biology, 2021, 2208, 123-133.	0.4	2
27	DNAâ€Origamiâ€Templated Growth of Multilamellar Lipid Assemblies. Angewandte Chemie, 2021, 133, 840-846.	1.6	1
28	Lignin nanoparticles modified with tall oil fatty acid for cellulose functionalization. Cellulose, 2020, 27, 273-284.	2.4	24
29	Highly ordered protein cage assemblies: A toolkit for new materials. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2020, 12, e1578.	3.3	40
30	Self-assembly of colloidal lignin particles in a continuous flow tubular reactor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 587, 124228.	2.3	14
31	Multimodality labeling strategies for the investigation of nanocrystalline cellulose biodistribution in a mouse model of breast cancer. Nuclear Medicine and Biology, 2020, 80-81, 1-12.	0.3	12
32	Systematic in vitro biocompatibility studies of multimodal cellulose nanocrystal and lignin nanoparticles. Journal of Biomedical Materials Research - Part A, 2020, 108, 770-783.	2.1	32
33	Advanced DNA Nanopore Technologies. ACS Applied Bio Materials, 2020, 3, 5606-5619.	2.3	27
34	Phthalocyanineâ€“DNA origami complexes with enhanced stability and optical properties. Chemical Communications, 2020, 56, 7341-7344.	2.2	22
35	Aptamer-embedded DNA origami cage for detecting (glycated) hemoglobin with a surface plasmon resonance sensor. Materials Letters, 2020, 275, 128141.	1.3	8
36	De novo nanomaterial crystals from DNA frameworks. Nature Materials, 2020, 19, 706-707.	13.3	10

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37	Robotic DNA Nanostructures. ACS Synthetic Biology, 2020, 9, 1923-1940.	1.9	102
38	Agglomeration of Viruses by Cationic Lignin Particles for Facilitated Water Purification. ACS Sustainable Chemistry and Engineering, 2020, 8, 4167-4177.	3.2	51
39	Increasing Complexity in Wireframe DNA Nanostructures. Molecules, 2020, 25, 1823.	1.7	23
40	Antimicrobial Colloidal Silverâ€“Lignin Particles via Ion and Solvent Exchange. ACS Sustainable Chemistry and Engineering, 2019, 7, 15297-15303.	3.2	24
41	Phthalocyanineâ€“Virus Nanofibers as Heterogeneous Catalysts for Continuousâ€Flow Photoâ€Oxidation Processes. Advanced Materials, 2019, 31, e1902582.	11.1	25
42	Thermally Induced Reversible Selfâ€Assembly of Apoferritinâ€“Block Copolymer Complexes. Macromolecular Rapid Communications, 2019, 40, 1900308.	2.0	4
43	DNA Origami-Mediated Substrate Nanopatterning of Inorganic Structures for Sensing Applications. Journal of Visualized Experiments, 2019, , .	0.2	2
44	Lyotropic liquid crystals and linear supramolecular polymers of end-functionalized oligosaccharides. Chemical Communications, 2019, 55, 11739-11742.	2.2	4
45	Three-Dimensional Protein Cage Array Capable of Active Enzyme Capture and Artificial Chaperone Activity. Nano Letters, 2019, 19, 3918-3924.	4.5	69
46	Realâ€Time Observation of Superstructureâ€Dependent DNA Origami Digestion by DNaseâ€…I Using Highâ€Speed Atomic Force Microscopy. ChemBioChem, 2019, 20, 2818-2823.	1.3	66
47	Halogenâ€Bondâ€Mediated Selfâ€Assembly of Polymerâ€“Resorcinarene Complexes. Macromolecular Rapid Communications, 2019, 40, 1900158.	2.0	11
48	Preparation and Characterization of Dentin Phosphophorynâ€Derived Peptideâ€Functionalized Lignin Nanoparticles for Enhanced Cellular Uptake. Small, 2019, 15, e1901427.	5.2	57
49	Reconfigurable DNA Origami Nanocapsule for pH-Controlled Encapsulation and Display of Cargo. ACS Nano, 2019, 13, 5959-5967.	7.3	157
50	DNA origami directed 3D nanoparticle superlattice via electrostatic assembly. Nanoscale, 2019, 11, 4546-4551.	2.8	42
51	Serum Albuminâ€“Peptide Conjugates for Simultaneous Heparin Binding and Detection. ACS Omega, 2019, 4, 21891-21899.	1.6	16
52	Knoevenagel Condensation for Modifying the Reducing End Groups of Cellulose Nanocrystals. ACS Macro Letters, 2019, 8, 1642-1647.	2.3	19
53	Radiolabeled Molecular Imaging Probes for the In Vivo Evaluation of Cellulose Nanocrystals for Biomedical Applications. Biomacromolecules, 2019, 20, 674-683.	2.6	32
54	Superhydrophobic Paper from Nanostructured Fluorinated Cellulose Esters. ACS Applied Materials & Interfaces, 2018, 10, 11280-11288.	4.0	75

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55	Self-Assembly of Electrostatic Cocrystals from Supercharged Fusion Peptides and Protein Cages. ACS Macro Letters, 2018, 7, 318-323.	2.3	47
56	Plasmonic nanostructures through DNA-assisted lithography. Science Advances, 2018, 4, eaap8978.	4.7	117
57	Closed cycle production of concentrated and dry redispersible colloidal lignin particles with a three solvent polarity exchange method. Green Chemistry, 2018, 20, 843-850.	4.6	72
58	Evolution of Structural DNA Nanotechnology. Advanced Materials, 2018, 30, e1703721.	11.1	145
59	Enzymatically and chemically oxidized lignin nanoparticles for biomaterial applications. Enzyme and Microbial Technology, 2018, 111, 48-56.	1.6	57
60	DNA nanostructure-directed assembly of metal nanoparticle superlattices. Journal of Nanoparticle Research, 2018, 20, 119.	0.8	49
61	Properties and chemical modifications of lignin: Towards lignin-based nanomaterials for biomedical applications. Progress in Materials Science, 2018, 93, 233-269.	16.0	526
62	Techno-economic assessment for the large-scale production of colloidal lignin particles. Green Chemistry, 2018, 20, 4911-4919.	4.6	49
63	Colloidal Lignin Particles as Adhesives for Soft Materials. Nanomaterials, 2018, 8, 1001.	1.9	33
64	High-Generation Amphiphilic Janus-Dendrimers as Stabilizing Agents for Drug Suspensions. Biomacromolecules, 2018, 19, 3983-3993.	2.6	11
65	On the Stability of DNA Origami Nanostructures in Lowâ€Magnesium Buffers. Angewandte Chemie, 2018, 130, 9614-9618.	1.6	29
66	On the Stability of DNA Origami Nanostructures in Lowâ€Magnesium Buffers. Angewandte Chemie - International Edition, 2018, 57, 9470-9474.	7.2	168
67	A supramolecular hostâ€“guest complex for heparin binding and sensing. Nanoscale, 2018, 10, 14022-14030.	2.8	25
68	Dynamic DNA Origami Devices: from Strand-Displacement Reactions to External-Stimuli Responsive Systems. International Journal of Molecular Sciences, 2018, 19, 2114.	1.8	73
69	Crystalline Cyclophaneâ€“Protein Cage Frameworks. ACS Nano, 2018, 12, 8029-8036.	7.3	39
70	Superstructure-Dependent Loading of DNA Origami Nanostructures with a Groove-Binding Drug. ACS Omega, 2018, 3, 9441-9448.	1.6	42
71	DNA Origami Nanophotonics and Plasmonics at Interfaces. Langmuir, 2018, 34, 14911-14920.	1.6	39
72	Packaging DNA Origami into Viral Protein Cages. Methods in Molecular Biology, 2018, 1776, 267-277.	0.4	4

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73	DNA Nanotechnology: Evolution of Structural DNA Nanotechnology (Adv. Mater. 24/2018). Advanced Materials, 2018, 30, 1870175.	11.1	2
74	Photoantimicrobial Biohybrids by Supramolecular Immobilization of Cationic Phthalocyanines onto Cellulose Nanocrystals. Chemistry - A European Journal, 2017, 23, 4320-4326.	1.7	38
75	Toughness and Fracture Properties in Nacreâ€Mimetic Clay/Polymer Nanocomposites. Advanced Functional Materials, 2017, 27, 1605378.	7.8	114
76	InÂvitro evaluation of biodegradable lignin-based nanoparticles for drug delivery and enhanced antiproliferation effect in cancer cells. Biomaterials, 2017, 121, 97-108.	5.7	296
77	DNA origami structures as calibration standards for nanometrology. Measurement Science and Technology, 2017, 28, 034001.	1.4	11
78	Modular synthesis of self-assembling Janus-dendrimers and facile preparation of drug-loaded dendrimersomes. Nanoscale, 2017, 9, 7189-7198.	2.8	23
79	Emergence of highly-ordered hierarchical nanoscale aggregates on electrostatic binding of self-assembled multivalent (SAMul) cationic micelles with polyanionic heparin. Journal of Materials Chemistry B, 2017, 5, 341-347.	2.9	20
80	Functionalization of carboxylated lignin nanoparticles for targeted and pH-responsive delivery of anticancer drugs. Nanomedicine, 2017, 12, 2581-2596.	1.7	96
81	Cooperative colloidal self-assembly of metal-protein superlattice wires. Nature Communications, 2017, 8, 671.	5.8	73
82	Adsorption of Proteins on Colloidal Lignin Particles for Advanced Biomaterials. Biomacromolecules, 2017, 18, 2767-2776.	2.6	71
83	Protein Coating of DNA Nanostructures for Enhanced Stability and Immunocompatibility. Advanced Healthcare Materials, 2017, 6, 1700692.	3.9	166
84	Nanometrology and super-resolution imaging with DNA. MRS Bulletin, 2017, 42, 951-959.	1.7	24
85	DNA origami: The bridge from bottom to top. MRS Bulletin, 2017, 42, 943-950.	1.7	24
86	Scaling Up Production of Colloidal Lignin Particles. Nordic Pulp and Paper Research Journal, 2017, 32, 586-596.	0.3	61
87	Scaling Up Production of Colloidal Lignin Particles - OPEN ACCESS. Nordic Pulp and Paper Research Journal, 2017, 32, 586-596.	0.3	12
88	DNA-Based Enzyme Reactors and Systems. Nanomaterials, 2016, 6, 139.	1.9	63
89	Metallic Nanostructures Based on DNA Nanoshapes. Nanomaterials, 2016, 6, 146.	1.9	16
90	Chiral Plasmonics Using Twisting along Cellulose Nanocrystals as a Template for Gold Nanoparticles. Advanced Materials, 2016, 28, 5262-5267.	11.1	105

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91	Cationic polymers for DNA origami coating â€“ examining their binding efficiency and tuning the enzymatic reaction rates. Nanoscale, 2016, 8, 11674-11680.	2.8	109
92	Hydrogen bonding asymmetric star-shape derivative of bile acid leads to supramolecular fibrillar aggregates that wrap into micrometer spheres. Soft Matter, 2016, 12, 7159-7165.	1.2	19
93	Automated design of DNA origami. Nature Biotechnology, 2016, 34, 826-827.	9.4	45
94	Effect of PEGâ€“PDMAEMA Block Copolymer Architecture on Polyelectrolyte Complex Formation with Heparin. Biomacromolecules, 2016, 17, 2891-2900.	2.6	37
95	Cellular delivery of enzyme-loaded DNA origami. Chemical Communications, 2016, 52, 14161-14164.	2.2	65
96	Structural diversity in metalâ€“organic nanoparticles based on iron isopropoxide treated lignin. RSC Advances, 2016, 6, 31790-31796.	1.7	39
97	Hierarchical Organization of Organic Dyes and Protein Cages into Photoactive Crystals. ACS Nano, 2016, 10, 1565-1571.	7.3	72
98	A simple process for lignin nanoparticle preparation. Green Chemistry, 2016, 18, 1416-1422.	4.6	455
99	One-step large-scale deposition of salt-free DNA origami nanostructures. Scientific Reports, 2015, 5, 15634.	1.6	54
100	Rapid Cationization of Gold Nanoparticles by Twoâ€Step Phase Transfer. Angewandte Chemie, 2015, 127, 8101-8104.	1.6	7
101	Rapid Cationization of Gold Nanoparticles by Twoâ€Step Phase Transfer. Angewandte Chemie - International Edition, 2015, 54, 7990-7993.	7.2	39
102	Selfâ€Assembly of Amphiphilic Janus Dendrimers into Mechanically Robust Supramolecular Hydrogels for Sustained Drug Release. Chemistry - A European Journal, 2015, 21, 14433-14439.	1.7	43
103	Supramolecular Assembly and Coalescence of Ferritin Cages Driven by Designed Proteinâ€“Protein Interactions. Biomacromolecules, 2015, 16, 2006-2011.	2.6	20
104	Custom-shaped metal nanostructures based on DNA origami silhouettes. Nanoscale, 2015, 7, 11267-11272.	2.8	57
105	A modular DNA origami-based enzyme cascade nanoreactor. Chemical Communications, 2015, 51, 5351-5354.	2.2	183
106	Disulfide-Functionalized Unimolecular Micelles as Selective Redox-Responsive Nanocarriers. Biomacromolecules, 2015, 16, 2872-2883.	2.6	26
107	Hierarchically Ordered Supramolecular Protein-Polymer Composites with Thermoresponsive Properties. International Journal of Molecular Sciences, 2015, 16, 10201-10213.	1.8	14
108	DNA Nanostructures as Smart Drug-Delivery Vehicles and Molecular Devices. Trends in Biotechnology, 2015, 33, 586-594.	4.9	216

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109	Electrostatic Self-Assembly of Soft Matter Nanoparticle Cocrystals with Tunable Lattice Parameters. ACS Nano, 2015, 9, 11278-11285.	7.3	79
110	Engineering of the Function of Diamond-like Carbon Binding Peptides through Structural Design. Biomacromolecules, 2015, 16, 476-482.	2.6	4
111	Contents: (Small 6/2014). Small, 2014, 10, 1031-1037.	5.2	4
112	Light-Fuelled Transport of Large Dendrimers and Proteins. Journal of the American Chemical Society, 2014, 136, 6850-6853.	6.6	37
113	Self-assembly and modular functionalization of three-dimensional crystals from oppositely charged proteins. Nature Communications, 2014, 5, 4445.	5.8	124
114	Cationic polymer brush-modified cellulose nanocrystals for high-affinity virus binding. Nanoscale, 2014, 6, 11871-11881.	2.8	92
115	Stable neutral double hydrophilic block copolymer capillary coating for capillary electrophoretic separations. Electrophoresis, 2014, 35, 1106-1113.	1.3	20
116	Partial-filling affinity capillary electrophoresis and quartz crystal microbalance with adsorption energy distribution calculations in the study of biomolecular interactions with apolipoprotein E as interaction partner. Analytical and Bioanalytical Chemistry, 2014, 406, 4137-4146.	1.9	10
117	Virus-Encapsulated DNA Origami Nanostructures for Cellular Delivery. Nano Letters, 2014, 14, 2196-2200.	4.5	254
118	Selfâ€Assembled Silver Nanoparticles in a Bowâ€Tie Antenna Configuration. Small, 2014, 10, 1057-1062.	5.2	18
119	Diblockâ€Copolymerâ€Mediated Selfâ€Assembly of Proteinâ€Stabilized Iron Oxide Nanoparticle Clusters for Magnetic Resonance Imaging. Chemistry - A European Journal, 2014, 20, 2718-2722.	1.7	13
120	Janus-Dendrimer-Mediated Formation of Crystalline Virus Assemblies. ACS Macro Letters, 2013, 2, 720-724.	2.3	39
121	Synthesis of Large Dendrimers with the Dimensions of Small Viruses. Journal of the American Chemical Society, 2013, 135, 4660-4663.	6.6	72
122	Electrostatic assembly of binary nanoparticle superlattices using protein cages. Nature Nanotechnology, 2013, 8, 52-56.	15.6	332
123	Biomimetic zinc chlorinâ€“poly(4-vinylpyridine) assemblies: doping level dependent emissionâ€“absorption regimes. Journal of Materials Chemistry C, 2013, 1, 2166.	2.7	24
124	Controlling the Formation of DNA Origami Structures with External Signals. Small, 2012, 8, 2016-2020.	5.2	12
125	Proteinâ€“dendron conjugates for DNA binding: understanding the effect of the protein core on multivalency. RSC Advances, 2011, 1, 1677.	1.7	6
126	Electrostatic self-assembly of virusâ€“polymer complexes. Journal of Materials Chemistry, 2011, 21, 2112-2117.	6.7	57

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127	Generation-Dependent Molecular Recognition Controls Self-Assembly in Supramolecular Dendronâ^'Virus Complexes. Nano Letters, 2011, 11, 723-728.	4.5	36
128	Hierarchical Self-Assembly and Optical Disassembly for Controlled Switching of Magnetoferritin Nanoparticle Magnetism. ACS Nano, 2011, 5, 6394-6402.	7.3	75
129	Temperatureâ€Switchable Assembly of Supramolecular Virusâ€"Polymer Complexes. Advanced Functional Materials, 2011, 21, 2012-2019.	7.8	49
130	Optically Degradable Dendrons for Temporary Adhesion of Proteins to DNA. Chemistry - A European Journal, 2010, 16, 6912-6918.	1.7	26
131	Self-assembly and optically triggered disassembly of hierarchical dendronâ€"virus complexes. Nature Chemistry, 2010, 2, 394-399.	6.6	178
132	Computational Approach for Understanding the Interactions of UV-Degradable Dendrons with DNA and siRNA. Journal of Physical Chemistry B, 2010, 114, 5686-5693.	1.2	38
133	Lowâ€Molecularâ€Weight Dendrons for DNA Binding and Release by Reductionâ€Triggered Degradation of Multivalent Interactions. Chemistry - A European Journal, 2009, 15, 5656-5660.	1.7	32
134	Precisely Defined Proteinâ€"Polymer Conjugates: Construction of Synthetic DNA Binding Domains on Proteins by Using Multivalent Dendrons. ACS Nano, 2007, 1, 103-113.	7.3	77
135	Optically Triggered Release of DNA from Multivalent Dendrons by Degrading and Chargeâ€Switching Multivalency. Angewandte Chemie - International Edition, 2007, 46, 7600-7604.	7.2	103
136	Multivalent Dendrons for High-Affinity Adhesion of Proteins to DNA. Angewandte Chemie - International Edition, 2006, 45, 3538-3542.	7.2	65
137	Dendrons with Spermine Surface Groups as Potential Building Blocks for Nonviral Vectors in Gene Therapy. Bioconjugate Chemistry, 2006, 17, 172-178.	1.8	73
138	High-Affinity Multivalent DNA Binding by Using Low-Molecular-Weight Dendrons. Angewandte Chemie - International Edition, 2005, 44, 2556-2559.	7.2	119