

Nicolas Vogel

List of Publications by Year in descending order

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117
papers

5,894
citations

101543
36
h-index

76900
74
g-index

120
all docs

120
docs citations

120
times ranked

6542
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in Colloidal Assembly: The Design of Structure and Hierarchy in Two and Three Dimensions. Chemical Reviews, 2015, 115, 6265-6311.	47.7	630
2	Preventing mussel adhesion using lubricant-infused materials. Science, 2017, 357, 668-673.	12.6	375
3	Transparency and damage tolerance of patternable omniphobic lubricated surfaces based on inverse colloidal monolayers. Nature Communications, 2013, 4, 2167.	12.8	339
4	A colloidoscope of colloid-based porous materials and their uses. Chemical Society Reviews, 2016, 45, 281-322.	38.1	256
5	Color from hierarchy: Diverse optical properties of micron-sized spherical colloidal assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10845-10850.	7.1	242
6	Bioinspired Photonic Pigments from Colloidal Self-Assembly. Advanced Materials, 2018, 30, e1706654.	21.0	228
7	A Convenient Method to Produce Close- and Non-close-Packed Monolayers using Direct Assembly at the Air-Water Interface and Subsequent Plasma-Induced Size Reduction. Macromolecular Chemistry and Physics, 2011, 212, 1719-1734.	2.2	226
8	Lubricant-Infused Nanoparticulate Coatings Assembled by Layer-by-Layer Deposition. Advanced Functional Materials, 2014, 24, 6658-6667.	14.9	206
9	From soft to hard: the generation of functional and complex colloidal monolayers for nanolithography. Soft Matter, 2012, 8, 4044-4061.	2.7	177
10	Supraparticles: Functionality from Uniform Structural Motifs. ACS Nano, 2018, 12, 5093-5120.	14.6	169
11	Wafer-Scale Fabrication of Ordered Binary Colloidal Monolayers with Adjustable Stoichiometries. Advanced Functional Materials, 2011, 21, 3064-3073.	14.9	154
12	Magic number colloidal clusters as minimum free energy structures. Nature Communications, 2018, 9, 5259.	12.8	119
13	Transparent antifouling material for improved operative field visibility in endoscopy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11676-11681.	7.1	106
14	Role of Flagella in Adhesion of <i>Escherichia coli</i> to Abiotic Surfaces. Langmuir, 2015, 31, 6137-6144.	3.5	96
15	As flat as it gets: ultrasmooth surfaces from template-stripping procedures. Nanoscale, 2012, 4, 3820.	5.6	94
16	Poly-N-isopropylacrylamide Nanogels and Microgels at Fluid Interfaces. Accounts of Chemical Research, 2020, 53, 414-424.	15.6	87
17	Ordered Arrays of Gold Nanostructures from Interfacially Assembled Au@PNIPAM Hybrid Nanoparticles. Langmuir, 2012, 28, 8985-8993.	3.5	81
18	Plasmon Hybridization in Stacked Double Crescents Arrays Fabricated by Colloidal Lithography. Nano Letters, 2011, 11, 446-454.	9.1	79

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19	Interfacial arrangement and phase transitions of PNIPAm microgels with different crosslinking densities. <i>Soft Matter</i> , 2017, 13, 8717-8727.	2.7	72
20	Tunable Anisotropy in Inverse Opals and Emerging Optical Properties. <i>Chemistry of Materials</i> , 2014, 26, 1622-1628.	6.7	71
21	Combining Bottom-Up Self-Assembly with Top-Down Microfabrication to Create Hierarchical Inverse Opals with High Structural Order. <i>Small</i> , 2015, 11, 4334-4340.	10.0	69
22	Chiral Surface Lattice Resonances. <i>Advanced Materials</i> , 2020, 32, e2001330.	21.0	68
23	Stimuli-Responsive Behavior of PNIPAm Microgels under Interfacial Confinement. <i>Langmuir</i> , 2019, 35, 10512-10521.	3.5	63
24	Tailoring re-entrant geometry in inverse colloidal monolayers to control surface wettability. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6853-6859.	10.3	62
25	Structural Color of Colloidal Clusters as a Tool to Investigate Structure and Dynamics. <i>Advanced Functional Materials</i> , 2020, 30, 1907730.	14.9	59
26	Anisotropic Self-Assembly from Isotropic Colloidal Building Blocks. <i>Journal of the American Chemical Society</i> , 2017, 139, 17464-17473.	13.7	56
27	Reusable Localized Surface Plasmon Sensors Based on Ultrastable Nanostructures. <i>Small</i> , 2010, 6, 104-109.	10.0	54
28	Direct visualization of the interfacial position of colloidal particles and their assemblies. <i>Nanoscale</i> , 2014, 6, 6879-6885.	5.6	54
29	Large-Scale Synthesis of Highly Uniform Silicon Nanowire Arrays Using Metal-Assisted Chemical Etching. <i>Chemistry of Materials</i> , 2020, 32, 9425-9434.	6.7	51
30	The Beginner's Guide to Chiral Plasmonics: Mostly Harmless Theory and the Design of Large-Area Substrates. <i>Advanced Optical Materials</i> , 2021, 9, 2100378.	7.3	51
31	The Optical Janus Effect: Asymmetric Structural Color Reflection Materials. <i>Advanced Materials</i> , 2017, 29, 1606876.	21.0	45
32	Effect of Stabilizing Particle Size on the Structure and Properties of Liquid Marbles. <i>Langmuir</i> , 2020, 36, 13274-13284.	3.5	43
33	Plasmon hybridization and strong near-field enhancements in opposing nanocrescent dimers with tunable resonances. <i>Nanoscale</i> , 2011, 3, 4788.	5.6	42
34	Surface Patterning with SiO ₂ @PNIPAm Core-Shell Particles. <i>ACS Omega</i> , 2018, 3, 12089-12098.	3.5	42
35	Free Energy Landscape of Colloidal Clusters in Spherical Confinement. <i>ACS Nano</i> , 2019, 13, 9005-9015.	14.6	42
36	Morphology-Graded Silicon Nanowire Arrays via Chemical Etching: Engineering Optical Properties at the Nanoscale and Macroscale. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13140-13147.	8.0	41

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37	A self-assembled metamaterial for Lamb waves. Applied Physics Letters, 2015, 107, .	3.3	40
38	Hierarchical Design of Metal Micro/Nanohole Array Films Optimizes Transparency and Haze Factor. Advanced Functional Materials, 2018, 28, 1706965.	14.9	38
39	Nanoimprint Lithography Facilitated Plasmonic-Photonic Coupling for Enhanced Photoconductivity and Photocatalysis. Advanced Functional Materials, 2021, 31, 2105054.	14.9	38
40	Smart Optical Composite Materials: Dispersions of Metal-Organic Framework@Superparamagnetic Microrods for Switchable Isotropic-Anisotropic Optical Properties. ACS Nano, 2017, 11, 779-787.	14.6	37
41	A Dirty Story: Improving Colloidal Monolayer Formation by Understanding the Effect of Impurities at the Air/Water Interface. Langmuir, 2019, 35, 95-103.	3.5	35
42	Controlled Synthesis of Reactive Polymeric Architectures Using 5-Norbornene-2-carboxylic Acid Pentafluorophenyl Ester. Macromolecular Symposia, 2007, 249-250, 383-391.	0.7	33
43	Particle Monolayer-Stabilized Light-Sensitive Liquid Marbles from Polypyrrole-Coated Microparticles. Langmuir, 2020, 36, 2695-2706.	3.5	32
44	Magnetic Polymer/Nickel Hybrid Nanoparticles Via Miniemulsion Polymerization. Macromolecular Chemistry and Physics, 2013, 214, 2213-2222.	2.2	31
45	Directional Wetting in Anisotropic Inverse Opals. Langmuir, 2014, 30, 7615-7620.	3.5	31
46	Multiband Hypersound Filtering in Two-Dimensional Colloidal Crystals: Adhesion, Resonances, and Periodicity. Nano Letters, 2020, 20, 1883-1889.	9.1	31
47	Probing guided modes in a monolayer colloidal crystal on a flat metal film. Physical Review B, 2012, 86, .	3.2	30
48	Tailored Double Emulsions Made Simple. Advanced Materials, 2022, 34, e2107338.	21.0	30
49	Hierarchical structural control of visual properties in self-assembled photonic-plasmonic pigments. Optics Express, 2014, 22, 27750.	3.4	29
50	Engineered disorder and light propagation in a planar photonic glass. Scientific Reports, 2016, 6, 27264.	3.3	29
51	Amphiphile-Induced Anisotropic Colloidal Self-Assembly. Langmuir, 2018, 34, 9990-10000.	3.5	27
52	Arrays of size and distance controlled platinum nanoparticles fabricated by a colloidal method. Nanoscale, 2011, 3, 2523.	5.6	26
53	Ionic-Liquid-Infused Nanostructures as Repellent Surfaces. Langmuir, 2018, 34, 6894-6902.	3.5	26
54	Dewetted Au Nanoparticles on TiO ₂ Surfaces: Evidence of a Size-Independent Plasmonic Photoelectrochemical Response. Journal of Physical Chemistry C, 2019, 123, 16934-16942.	3.1	26

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55	Laterally Patterned Ultraflat Surfaces. <i>Small</i> , 2009, 5, 821-825.	10.0	24
56	Pattern formation in two-dimensional hard-core/soft-shell systems with variable soft shell profiles. <i>Soft Matter</i> , 2020, 16, 3564-3573.	2.7	23
57	Online Monitoring of Styrene Polymerization in Miniemulsion by Hyperpolarized ¹²⁹ Xenon NMR Spectroscopy. <i>Macromolecules</i> , 2012, 45, 1839-1846.	4.8	22
58	Large-Area 3D Plasmonic Crescents with Tunable Chirality. <i>Advanced Optical Materials</i> , 2019, 7, 1801770.	7.3	22
59	Bottom-Up Design of Composite Supraparticles for Powder-Based Additive Manufacturing. <i>Small</i> , 2020, 16, e2002076.	10.0	22
60	Soft Particles at Liquid Interfaces: From Molecular Particle Architecture to Collective Phase Behavior. <i>Langmuir</i> , 2021, 37, 5364-5375.	3.5	22
61	Accurate Elemental Analysis of Metal-Containing Polymer Latexes Using ICP-Optical Emission Spectrometry. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1355-1368.	2.2	21
62	Nanoscale Patterning of Solid-Supported Membranes by Integrated Diffusion Barriers. <i>Langmuir</i> , 2011, 27, 7008-7015.	3.5	21
63	Formation of Highly Ordered Alloy Nanoparticles Based on Precursor-Filled Latex Spheres. <i>Chemistry of Materials</i> , 2012, 24, 1048-1054.	6.7	20
64	Mechanics of colloidal supraparticles under compression. <i>Science Advances</i> , 2021, 7, eabj0954.	10.3	20
65	Anisotropic silicon nanowire arrays fabricated by colloidal lithography. <i>Nanoscale Advances</i> , 2021, 3, 3634-3642.	4.6	19
66	Defined core-shell particles as the key to complex interfacial self-assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	19
67	Three-Dimensional Electrochemical Axial Lithography on Si Micro- and Nanowire Arrays. <i>Nano Letters</i> , 2018, 18, 7343-7349.	9.1	18
68	Coloration in Supraparticles Assembled from Polyhedral Metal-Organic Framework Particles. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	18
69	Versatile strategy for homogeneous drying patterns of dispersed particles. <i>Nature Communications</i> , 2022, 13, .	12.8	16
70	Ordered nanopore arrays with large interpore distances <i>via</i> one-step anodization. <i>Nanoscale</i> , 2018, 10, 8385-8390.	5.6	15
71	Addressing the plasmonic hotspot region by site-specific functionalization of nanostructures. <i>Nanoscale Advances</i> , 2020, 2, 394-400.	4.6	15
72	Bottom-Up Assembly of Silica and Bioactive Glass Supraparticles with Tunable Hierarchical Porosity. <i>Langmuir</i> , 2018, 34, 2063-2072.	3.5	14

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73	Roughly Spherical: Tailored PMMA-SiO ₂ Composite Supraparticles with Optimized Powder Flowability for Additive Manufacturing. ACS Applied Materials & Interfaces, 2021, 13, 25334-25345.	8.0	14
74	Characterization of gold films by surface plasmon spectroscopy: Large errors and small consequences. Surface Science, 2009, 603, 491-497.	1.9	13
75	Interfacial Activity of Metal ^{II} -Diketonato Complexes: In Situ Generation of Amphiphiles by Water Coordination. Langmuir, 2011, 27, 8044-8053.	3.5	13
76	Laser-Activated Self-Assembled Thermoplasmonic Nanocavity Substrates for Intracellular Delivery. ACS Applied Bio Materials, 2018, 1, 1793-1799.	4.6	13
77	Particulate Coatings with Optimized Haze Properties. Advanced Functional Materials, 2019, 29, 1806025.	14.9	13
78	Platinum nanoparticles from size adjusted functional colloidal particles generated by a seeded emulsion polymerization process. Beilstein Journal of Nanotechnology, 2011, 2, 459-472.	2.8	12
79	Silica-titania hybrids for structurally robust inverse opals with controllable refractive index. Journal of Materials Chemistry C, 2020, 8, 109-116.	5.5	12
80	Longitudinal eigenvibration of multilayer colloidal crystals and the effect of nanoscale contact bridges. Nanoscale, 2019, 11, 5655-5665.	5.6	11
81	Diffusion of Gold Nanoparticles in Inverse Opals Probed by Heterodyne Dynamic Light Scattering. Transport in Porous Media, 2020, 131, 723-737.	2.6	11
82	Solid state interdigitated Sb ₂ S ₃ based TiO ₂ nanotube solar cells. RSC Advances, 2020, 10, 28225-28231.	3.6	11
83	Wetting-Controlled Localized Placement of Surface Functionalities within Nanopores. Small, 2020, 16, 1906463.	10.0	11
84	Evidence of Spatially Inhomogeneous Electron Temperature in a Resonantly Excited Array of Bow-Tie Nanoantennas. Journal of Physical Chemistry C, 2019, 123, 12429-12436.	3.1	10
85	Effect of Asymmetry on Plasmon Hybridization and Sensing Capacities of Hole-Disk Arrays. Journal of Physical Chemistry C, 2020, 124, 2609-2618.	3.1	10
86	Probing particle heteroaggregation using analytical centrifugation. Soft Matter, 2020, 16, 3407-3415.	2.7	10
87	Enduring liquid repellency through slippery ionic liquid-infused organogels. Journal of Materials Chemistry A, 2021, 9, 2357-2366.	10.3	10
88	Template-free structuring of colloidal hetero-monolayers by inkjet printing and particle floating. Soft Matter, 2010, 6, 2403.	2.7	9
89	On the Size-Determining Role of the Comonomer in the Nucleation and Growth of Cationic Polystyrene Latex via Emulsion Polymerization. Macromolecular Chemistry and Physics, 2018, 219, 1700457.	2.2	9
90	Synthesis of Millimeter-sized Polymer Particles by Seeded Polymerization and Their Use as Shape-designable Liquid Marble Stabilizer. Chemistry Letters, 2020, 49, 1282-1285.	1.3	9

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91	Collapse-induced phase transitions in binary interfacial microgel monolayers. <i>Soft Matter</i> , 2021, 17, 4504-4516.	2.7	9
92	Dispersion-based, scalable fabrication of repellent superhydrophobic and liquid-infused coatings under ambient conditions. <i>Green Chemistry</i> , 2022, 24, 3009-3016.	9.0	9
93	Spatioselective Deposition of Passivating and Electrocatalytic Layers on Silicon Nanowire Arrays. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52581-52587.	8.0	8
94	Substrate-Independent Design of Liquid-Infused Slippery Surfaces via Mussel-Inspired Chemistry. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100156.	3.7	8
95	Metallic nanoparticle-on-mirror: Multiple-band light harvesting and efficient photocurrent generation under visible light irradiation. <i>Nano Energy</i> , 2021, 90, 106609.	16.0	8
96	Interface-induced hysteretic volume phase transition of microgels: simulation and experiment. <i>Soft Matter</i> , 2021, 17, 5581-5589.	2.7	7
97	Influence of Surfactant-Mediated Interparticle Contacts on the Mechanical Stability of Supraparticles. <i>Journal of Physical Chemistry C</i> , 2021, 125, 23445-23456.	3.1	7
98	Interfacial self-assembly of SiO ₂ -PNIPAM core-shell particles with varied crosslinking density. <i>Soft Matter</i> , 2022, 18, 5585-5597.	2.7	7
99	Cell Interactions with Size-Controlled Colloidal Monolayers: Toward Improved Coatings in Bone Tissue Engineering. <i>Langmuir</i> , 2020, 36, 1793-1803.	3.5	6
100	Probing sedimentation non-ideality of particulate systems using analytical centrifugation. <i>Soft Matter</i> , 2021, 17, 2803-2814.	2.7	6
101	Switching light with light – advanced functional colloidal monolayers. <i>Nanoscale</i> , 2014, 6, 492-502.	5.6	5
102	Surface-Plasmon- and Green-Light-Induced Polymerization in Mesoporous Thin Silica Films. <i>Langmuir</i> , 2020, 36, 1671-1679.	3.5	5
103	A Self-Ordered Nanostructured Transparent Electrode of High Structural Quality and Corresponding Functional Performance. <i>Small</i> , 2021, 17, e2100487.	10.0	5
104	Materials with Hierarchical Porosity Enhance the Stability of Infused Ionic Liquid Films. <i>ACS Omega</i> , 2021, 6, 20956-20965.	3.5	5
105	Biodegradable Polylactide Supraparticle Powders with Functional Additives for Biomedical Additive Manufacturing. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	5
106	Scale-Bridging 3D-Analysis of Colloidal Clusters Using 360° Electron Tomography and X-Ray Nano-CT. <i>Microscopy and Microanalysis</i> , 2019, 25, 392-393.	0.4	4
107	Simultaneous Nanolocal Polymer and <i>In Situ</i> Readout Unit Placement in Mesoporous Separation Layers. <i>Analytical Chemistry</i> , 2021, 93, 5394-5402.	6.5	4
108	Box fabricated from plate-stabilized liquid marble. <i>Materials Advances</i> , 2021, 2, 4604-4609.	5.4	4

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109	From Sticky to Slippery: Self-Functionalizing Lubricants for <i>In Situ</i> Fabrication of Liquid-Infused Surfaces. ACS Applied Materials & Interfaces, 2022, 14, 16735-16745.	8.0	4
110	Cyanate Ester Resins as Thermally Stable Adhesives for PEEK. , 0, , 145-164.		3
111	Coloration in Supraparticles Assembled from Polyhedral Metal-Organic Framework Particles. Angewandte Chemie, 2022, 134, .	2.0	2
112	Interplay of Mie and Bragg resonances in partly ordered monolayers of colloidal spheres. , 2012, , .		1
113	Chiral Materials: Chiral Surface Lattice Resonances (Adv. Mater. 22/2020). Advanced Materials, 2020, 32, 2070173.	21.0	1
114	<i>N</i> -Methyl-2-pyrrolidone as a Reaction Medium for Gold(III)-Ion Reduction and Star-like Gold Nanostructure Formation. ACS Omega, 2022, 7, 9484-9495.	3.5	1
115	Balancing ballistic and hopping light transport by purposive arraying of colloidal particles. , 2014, , .		0
116	Experimental Section. Springer Theses, 2012, , 207-226.	0.1	0
117	Self-Assembled Laser-Activated Plasmonic Substrates for High-Throughput, High-Efficiency Intracellular Delivery. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 463-463.	0.3	0