Kristian Mlhave

List of Publications by Year in Descending Order

108 papers	3,033 citations	31 h-index	51 g-index
111 ext. papers	3,399 ext. citations	5 avg, IF	5.03 L-index

#	Paper	IF	Citations
108	Spatial Image Resolution Assessment by Fourier Analysis (SIRAF).. *Microscopy and Microanalysis*, **2022**, 1-9	0.5	0
107	Initiation and Progression of Anisotropic Galvanic Replacement Reactions in a Single Ag Nanowire: Implications for Nanostructure Synthesis. *ACS Applied Nano Materials*, **2021**, 4, 12346-12355	5.6	1
106	Mixing and Flow Control of Liquids in Nanochannel Liquid Phase Electron Microscopy. *Microscopy and Microanalysis*, **2021**, 27, 99-100	0.5	
105	Advanced Materials for Energy-Water Systems: The Central Role of Water/Solid Interfaces in Adsorption, Reactivity, and Transport. *Chemical Reviews*, **2021**, 121, 9450-9501	68.1	9
104	Three-dimensional hollow nitrogen-doped carbon shells enclosed monodisperse CoP nanoparticles for long cycle-life sodium storage. *Electrochimica Acta*, **2021**, 395, 139112	6.7	4
103	Microwave assisted crystalline and morphology evolution of flower-like Fe2O3@ iron doped K-birnessite composite and its application for lithium ion storage. *Applied Surface Science*, **2020**, 525, 146513	6.7	11
102	Complex Aerosol Characterization by Scanning Electron Microscopy Coupled with Energy Dispersive X-ray Spectroscopy. *Scientific Reports*, **2020**, 10, 9150	4.9	9
101	Electron inelastic mean free path in water. *Nanoscale*, **2020**, 12, 20649-20657	7.7	11
100	Analysis of Electron Transparent Beam-Sensitive Samples Using Scanning Electron Microscopy Coupled With Energy-Dispersive X-ray Spectroscopy. *Microscopy and Microanalysis*, **2020**, 26, 373-386	0.5	4
99	Mean Inner Potential of Liquid Water. *Physical Review Letters*, **2020**, 124, 065502	7.4	17
98	Methods for Calibration of Specimen Temperature During Transmission Electron Microscopy Experiments. *Microscopy and Microanalysis*, **2020**, 26, 3-17	0.5	5
97	Electron Holography in Gaseous and Liquid Environment. *Microscopy and Microanalysis*, **2020**, 26, 2488-2489	0.5	0
96	In situ TEM modification of individual silicon nanowires and their charge transport mechanisms. *Nanotechnology*, **2020**, 31, 494002	3.4	0
95	Unhindered Brownian Motion of Individual Nanoparticles in Liquid-Phase Scanning Transmission Electron Microscopy. *Nano Letters*, **2020**, 20, 7108-7115	11.5	21
94	Recent Progress of Two-Dimensional Metal-Organic Frameworks and Their Derivatives for Oxygen Evolution Electrocatalysis. *ChemElectroChem*, **2020**, 7, 4695-4712	4.3	10
93	Improving the foundation for particulate matter risk assessment by individual nanoparticle statistics from electron microscopy analysis. *Scientific Reports*, **2019**, 9, 8093	4.9	9
92	Introduction to the Proceedings of CISCEM 2018 - the 4th Conference on In-Situ and Correlative Electron Microscopy. *Microscopy and Microanalysis*, **2019**, 25, 1-2	0.5	13

91	Highly Ordered 3D Silicon Micro-Mesh Structures Integrated with Nanowire Arrays: A Multifunctional Platform for Photodegradation, Photocurrent Generation, and Materials Conversion. *ChemNanoMat*, **2019**, 5, 92-100	3.5	9
90	Development of a sample preparation approach to measure the size of nanoparticle aggregates by electron microscopy. *Particuology*, **2019**, 45, 49-57	2.8	3
89	Confined Growth of ZIF-8 Nanocrystals with Tunable Structural Colors. *Advanced Materials Interfaces*, **2018**, 5, 1701270	4.6	9
88	Three-dimensional iron sulfide-carbon interlocked graphene composites for high-performance sodium-ion storage. *Nanoscale*, **2018**, 10, 7851-7859	7.7	39
87	Influence of Cetyltrimethylammonium Bromide on Gold Nanocrystal Formation Studied by In Situ Liquid Cell Scanning Transmission Electron Microscopy. *Journal of Physical Chemistry C*, **2018**, 122, 2350-2357	3.8	12
86	Developing New Measurement Capabilities with Nanochannel Liquid Phase TEM. *Microscopy and Microanalysis*, **2018**, 24, 256-257	0.5	1
85	Graphene Oxide-Directed Tunable Assembly of MoS2 Ultrathin Nanosheets for Electrocatalytic Hydrogen Evolution. *ChemistrySelect*, **2017**, 2, 4696-4704	1.8	5
84	Phosphate tuned copper electrodeposition and promoted formic acid selectivity for carbon dioxide reduction. *Journal of Materials Chemistry A*, **2017**, 5, 11905-11916	13	29
83	Enhanced high-frequency microwave absorption of Fe3O4 architectures based on porous nanoflake. *Ceramics International*, **2017**, 43, 16013-16017	5.1	24
82	Microwave synthesis of metal nanocatalysts for the electrochemical oxidation of small biomolecules. *Current Opinion in Electrochemistry*, **2017**, 4, 124-132	7.2	8
81	Not all that glitters is gold-Electron microscopy study on uptake of gold nanoparticles in Daphnia magna and related artifacts. *Environmental Toxicology and Chemistry*, **2017**, 36, 1503-1509	3.8	10
80	Simultaneous modulation of surface composition, oxygen vacancies and assembly in hierarchical CoO mesoporous nanostructures for lithium storage and electrocatalytic oxygen evolution. *Nanoscale*, **2017**, 9, 14431-14441	7.7	62
79	Engineering the Surface/Interface Structures of Titanium Dioxide Micro and Nano Architectures towards Environmental and Electrochemical Applications. *Nanomaterials*, **2017**, 7,	5.4	19
78	IN-SITU TRANSMISSION ELECTRON MICROSCOPY ON OPERATING ELECTROCHEMICAL CELLS **2016**, 137-138		1
77	Nanoparticle Decorated Ultrathin Porous Nanosheets as Hierarchical Co3O4 Nanostructures for Lithium Ion Battery Anode Materials. *Scientific Reports*, **2016**, 6, 20592	4.9	60
76	Controlling nanowire growth through electric field-induced deformation of the catalyst droplet. *Nature Communications*, **2016**, 7, 12271	17.4	41
75	In Situ TEM Electrical Measurements **2016**, 281-300		5
74	Can We Trust Real Time Measurements of Lung Deposited Surface Area Concentrations in Dust from Powder Nanomaterials?. *Aerosol and Air Quality Research*, **2016**, 16, 1105-1117	4.6	8

73	Studying the Formation Dynamics of VLS Silicon Nanowire Devices using in situ TEM **2016**, 159-160		
72	Graphene Oxide/Silver Nanohybrid as Multi-functional Material for Highly Efficient Bacterial Disinfection and Detection of Organic Dye. *Journal of Electronic Materials*, **2016**, 45, 5321-5333	1.9	14
71	Differential proteome and cellular adhesion analyses of the probiotic bacterium Lactobacillus acidophilus NCFM grown on raffinose - an emerging prebiotic. *Proteomics*, **2016**, 16, 1361-75	4.8	22
70	Effect of Synthesis Parameters on the Structure and Magnetic Properties of Magnetic Manganese Ferrite/Silver Composite Nanoparticles Synthesized by Wet Chemistry Method. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 7919-7928	1.3	3
69	Synthesis, Characterizations of Superparamagnetic Fe3O4-Ag Hybrid Nanoparticles and Their Application for Highly Effective Bacteria Inactivation. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 5902-12	1.3	33
68	In-house validation of a method for determination of silver nanoparticles in chicken meat based on asymmetric flow field-flow fractionation and inductively coupled plasma mass spectrometric detection. *Food Chemistry*, **2015**, 181, 78-84	8.5	54
67	Feasibility of the development of reference materials for the detection of Ag nanoparticles in food: neat dispersions and spiked chicken meat. *Accreditation and Quality Assurance*, **2015**, 20, 3-16	0.7	29
66	A uniform measurement expression for cross method comparison of nanoparticle aggregate size distributions. *Analyst, The*, **2015**, 140, 5257-67	5	13
65	Creating New VLS Silicon Nanowire Contact Geometries by Controlling Catalyst Migration. *Nano Letters*, **2015**, 15, 6535-41	11.5	16
64	Limitations in the Use of Unipolar Charging for Electrical Mobility Sizing Instruments: A Study of the Fast Mobility Particle Sizer. *Aerosol Science and Technology*, **2015**, 49, 556-565	3.4	29
63	Tunable exchange bias effect in magnetic Bi0.9Gd0.1Fe0.9Ti0.1O3 nanoparticles at temperatures up to 250 K. *Journal of Applied Physics*, **2015**, 118, 023901	2.5	24
62	Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	21
61	Time-dependent subcellular distribution and effects of carbon nanotubes in lungs of mice. *PLoS ONE*, **2015**, 10, e0116481	3.7	22
60	MWCNTs of different physicochemical properties cause similar inflammatory responses, but differences in transcriptional and histological markers of fibrosis in mouse lungs. *Toxicology and Applied Pharmacology*, **2015**, 284, 16-32	4.6	134
59	Uncertainties of size measurements in electron microscopy characterization of nanomaterials in foods. *Food Chemistry*, **2015**, 176, 472-9	8.5	44
58	Simple top-down preparation of magnetic Bi□Gd□Fe□kTixO□nanoparticles by ultrasonication of multiferroic bulk material. *Nanoscale*, **2014**, 6, 14336-42	7.7	31
57	Perpendicular magnetic anisotropy and the magnetization process in CoFeB/Pd multilayer films. *Journal Physics D: Applied Physics*, **2014**, 47, 445001	3	19
56	Monolithic chip system with a microfluidic channel for in situ electron microscopy of liquids. *Microscopy and Microanalysis*, **2014**, 20, 445-51	0.5	21

55	FIB-SEM imaging of carbon nanotubes in mouse lung tissue. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 3863-73	4.4	20
54	Detection and characterization of silver nanoparticles in chicken meat by asymmetric flow field flow fractionation with detection by conventional or single particle ICP-MS. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 8185-95	4.4	158
53	In-situ SEM microchip setup for electrochemical experiments with water based solutions. *Ultramicroscopy*, **2013**, 129, 63-9	3.1	18
52	Black silicon maskless templates for carbon nanotube forests. *Microelectronic Engineering*, **2013**, 104, 110-113	2.5	4
51	Fibroblasts cultured on nanowires exhibit low motility, impaired cell division, and DNA damage. *Small*, **2013**, 9, 4006-16, 3905	11	83
50	Mapping the complex morphology of cell interactions with nanowire substrates using FIB-SEM. *PLoS ONE*, **2013**, 8, e53307	3.7	56
49	Transcriptomic analysis reveals novel mechanistic insight into murine biological responses to multi-walled carbon nanotubes in lungs and cultured lung epithelial cells. *PLoS ONE*, **2013**, 8, e80452	3.7	71
48	Assessment of automated analyses of cell migration on flat and nanostructured surfaces. *Computational and Structural Biotechnology Journal*, **2012**, 1, e201207004	6.8	3
47	In situ TEM creation and electrical characterization of nanowire devices. *Nano Letters*, **2012**, 12, 2965-70	11.5	32
46	Cell motility, morphology, viability and proliferation in response to nanotopography on silicon black. *Nanoscale*, **2012**, 4, 3739-45	7.7	36
45	3D mechanical measurements with an atomic force microscope on 1D structures. *Review of Scientific Instruments*, **2012**, 83, 023704	1.7	10
44	Carbon nanotube based separation columns for high electrical field strengths in microchip electrochromatography. *Lab on A Chip*, **2011**, 11, 2116-8	7.2	63
43	TimeLapseAnalyzer: multi-target analysis for live-cell imaging and time-lapse microscopy. *Computer Methods and Programs in Biomedicine*, **2011**, 104, 227-34	6.9	29
42	Characterization of nanomaterials in food by electron microscopy. *TrAC - Trends in Analytical Chemistry*, **2011**, 30, 28-43	14.6	108
41	Micro-cantilevers for non-destructive characterization of nanograss uniformity **2011**,		1
40	Integration, gap formation, and sharpening of III-V heterostructure nanowires by selective etching. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 21-26	1.3	12
39	Customizable in situ TEM devices fabricated in freestanding membranes by focused ion beam milling. *Nanotechnology*, **2010**, 21, 405304	3.4	11
38	Measurement of local Si-nanowire growth kinetics using in situ transmission electron microscopy of heated cantilevers. *Small*, **2010**, 6, 2058-64	11	22

37	Semiconducting III-V nanowires with nanogaps for molecular junctions: DFT transport simulations. *Nanotechnology*, **2009**, 20, 465401	3.4	1
36	. *IEEE Nanotechnology Magazine*, **2009**, 8, 76-85	2.6	36
35	Dose and energy dependence of mechanical properties of focused electron-beam-induced pillar deposits from Cu(C5HF6O2)2. *Nanotechnology*, **2009**, 20, 385304	3.4	26
34	Competition between the thermal gradient and the bimorph effect in locally heated MEMS actuators. *Journal of Micromechanics and Microengineering*, **2009**, 19, 015008	2	2
33	Correction to "Multimodal Electrothermal Silicon Microgrippers for Nanotube Manipulation". *IEEE Nanotechnology Magazine*, **2009**, 8, 659-659	2.6	
32	Droplet Based Cavities and Lasers. *Integrated Analytical Systems*, **2009**, 471-486	0.4	2
31	Electrothermal microgrippers for pick-and-place operations. *Microelectronic Engineering*, **2008**, 85, 1128-1130	1.5	27
30	On the suitability of carbon nanotube forests as non-stick surfaces for nanomanipulation. *Soft Matter*, **2008**, 4, 392-399	3.6	12
29	Epitaxial integration of nanowires in microsystems by local micrometer-scale vapor-phase epitaxy. *Small*, **2008**, 4, 1741-6	11	26
28	Selective etching of III-V nanowires for molecular junctions. *Microelectronic Engineering*, **2008**, 85, 1179-1181	1.5	4
27	Topology optimized electrothermal polysilicon microgrippers. *Microelectronic Engineering*, **2008**, 85, 1096-1099	2.5	31
26	Electron irradiation-induced destruction of carbon nanotubes in electron microscopes. *Ultramicroscopy*, **2007**, 108, 52-7	3.1	60
25	A carbon nanofibre scanning probe assembled using an electrothermal microgripper. *Nanotechnology*, **2007**, 18, 345501	3.4	50
24	Versatile method for manipulating and contacting nanowires. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 1995-9	1.3	8
23	Pick-and-place nanomanipulation using microfabricated grippers. *Nanotechnology*, **2006**, 17, 2434-41	3.4	89
22	Transmission electron microscopy study of individual carbon nanotube breakdown caused by Joule heating in air. *Nano Letters*, **2006**, 6, 1663-8	11.5	56
21	MICROFABRICATED TOOLS FOR PICK-AND-PLACE OF NANOSCALE COMPONENTS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 120-126		1
20	Temperature and pressure dependence of resonance in multi-layer microcantilevers. *Journal of Micromechanics and Microengineering*, **2005**, 15, 1454-1458	2	94

19	Effect of gold coating on theQ-factor of a resonant cantilever. *Journal of Micromechanics and Microengineering*, **2005**, 15, 2249-2253	2	82
18	Design and construction of a linear Paul trap for the study of crystalline beams. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2005**, 540, 209-214	1.2	5
17	A simple electron-beam lithography system. *Ultramicroscopy*, **2005**, 102, 215-9	3.1	5
16	Multi-walled carbon nanotubes integrated in microcantilevers for application of tensile strain. *Ultramicroscopy*, **2005**, 105, 209-214	3.1	21
15	Electro-thermally actuated microgrippers with integrated force-feedback. *Journal of Micromechanics and Microengineering*, **2005**, 15, 1265-1270	2	84
14	Direct Measurement of Resistance of Multiwalled Carbon Nanotubes Using Micro Four-Point Probes. *Sensor Letters*, **2005**, 3, 300-303	0.9	38
13	Towards pick-and-place assembly of nanostructures. *Journal of Nanoscience and Nanotechnology*, **2004**, 4, 279-82	1.3	44
12	Constructing, connecting and soldering nanostructures by environmental electron beam deposition. *Nanotechnology*, **2004**, 15, 1047-1053	3.4	70
11	Dynamically excited single-component ion Coulomb crystals in linear Paul traps. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2004**, 532, 237-240	1.2	1
10	Non-stationary Coulomb crystals in linear Paul traps. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2003**, 36, 525-532	1.3	11
9	Soldering of Carbon Nanotube Bridges using Electron Beam Deposited Gold. *Materials Research Society Symposia Proceedings*, **2003**, 772, 481		1
8	Solid Gold Nanostructures Fabricated by Electron Beam Deposition. *Nano Letters*, **2003**, 3, 1499-1503	11.5	78
7	Soldering of Nanotubes onto Microelectrodes. *Nano Letters*, **2003**, 3, 47-49	11.5	95
6	Ion Coulomb crystals and some applications. *AIP Conference Proceedings*, **2002**,	0	8
5	Stability of Coulomb crystals in a linear Paul trap with storage-ring-like confinement. *Physical Review E*, **2002**, 66, 015401	2.4	21
4	Demonstration of the continuous quantum Zeno effect in optical pumping. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2000**, 268, 45-49	2.3	18
3	Formation of translationally cold MgH+ and MgD+ molecules in an ion trap. *Physical Review A*, **2000**, 62,	2.6	180
2	Encapsulated Liquid Cells for Transmission Electron Microscopy35-55		8

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