Mathew M Maye

List of Publications by Year
in descending order

91	5,974	94433 37	69250 77
papers	citations	h-index	g-index

95	95	95	7100
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ligand-mediated synthesis of chemically tailored two-dimensional all-inorganic perovskite nanoplatelets under ambient conditions. Journal of Materials Chemistry C, 2021, 9, 14226-14235.	5.5	20
2	Ligand Surface Density Decreases with Quantum Rod Aspect Ratio. Journal of Physical Chemistry C, 2019, 123, 23682-23690.	3.1	3
3	Exciton Energy Shifts and Tunable Dopant Emission in Manganese-Doped Two-Dimensional CdS/ZnS Core/Shell Nanoplatelets. Chemistry of Materials, 2019, 31, 2516-2523.	6.7	48
4	Perovskite Nanomaterials: 0Dâ€“2D and 1Dâ€“2D Semiconductor Hybrids Composed of All Inorganic Perovskite Nanocrystals and Singleâ€Layer Graphene with Improved Light Harvesting (Part. Part. Syst.) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.8	0
5	0Dâ€“2D and 1Dâ€“2D Semiconductor Hybrids Composed of All Inorganic Perovskite Nanocrystals and Singleâ€Layer Graphene with Improved Light Harvesting. Particle and Particle Systems Characterization, 2018, 35, 1700310.	2.3	22
6	The Surface Composition of Au/Ag Core/Alloy Nanoparticles Influences the Methanol Oxidation Reaction. ACS Applied Nano Materials, 2018, 1, 5640-5645.	5.0	21
7	General Strategy for the Growth of CsPbX₃ (X = Cl, Br, I) Perovskite Nanosheets from the Assembly of Nanorods. Chemistry of Materials, 2018, 30, 3854-3860.	6.7	75
8	Understanding the Surface Properties of Halide Exchanged Cesium Lead Halide Nanoparticles. Langmuir, 2018, 34, 11139-11146.	3.5	28
9	Using Perovskite Nanoparticles as Halide Reservoirs in Catalysis and as Spectrochemical Probes of Ions in Solution. ACS Nano, 2016, 10, 5864-5872.	14.6	43
10	Understanding the Oxidation Behavior of Fe/Ni/Cr and Fe/Cr/Ni Core/Alloy Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 22035-22044.	3.1	20
11	Probing Bioluminescence Resonance Energy Transfer in Quantum Rodâ€“Luciferase Nanoconjugates. ACS Nano, 2016, 10, 1969-1977.	14.6	20
12	Functionalization of quantum rods with oligonucleotides for programmable assembly with DNA origami. Nanoscale, 2015, 7, 2883-2888.	5.6	19
13	Stepwise Assembly and Characterization of DNA Linked Two-Color Quantum Dot Clusters. Langmuir, 2015, 31, 7463-7471.	3.5	13
14	The transformation of Î±-Fe nanoparticles into multi-domain FeNiâ€“M₃O₄(M = Fe,) Tj ETQq0 0 0 rgBT /Overlo	5.5	9
15	Heterostructured Au/Pdâ€“M (M = Au, Pd, Pt) nanoparticles with compartmentalized composition, morphology, and electrocatalytic activity. Nanoscale, 2015, 7, 15748-15756.	5.6	19
16	Near infrared bioluminescence resonance energy transfer from firefly luciferaseâ€”quantum dot bionanoconjugates. Nanotechnology, 2014, 25, 495606.	2.6	29
17	Void Coalescence in Core/Alloy Nanoparticles with Stainless Interfaces. Small, 2014, 10, 271-276.	10.0	10
18	Control of Photoinduced Charge Transfer in Semiconducting Quantum Dot-Based Hybrids. Lecture Notes in Nanoscale Science and Technology, 2014, , 91-111.	0.8	0

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19	Core size dependent hole transfer from a photoexcited CdSe/ZnS quantum dot to a conductive polymer. Chemical Communications, 2014, 50, 5958-5960.	4.1	28
20	Investigating the role of polytypism in the growth of multi-shell CdSe/CdZnS quantum dots. Journal of Materials Chemistry C, 2014, 2, 4659-4666.	5.5	5
21	Keplerate cluster (Mo-132) mediated electrostatic assembly of nanoparticles. Journal of Colloid and Interface Science, 2014, 432, 144-150.	9.4	5
22	Discrete Dipole Approximation Analysis of Plasmonic Core/Alloy Nanoparticles. ChemPhysChem, 2014, 15, 2582-2587.	2.1	2
23	Multifunctional DNA-Gold Nanoparticles for Targeted Doxorubicin Delivery. Bioconjugate Chemistry, 2014, 25, 1261-1271.	3.6	61
24	Super-compressible DNA nanoparticle lattices. Soft Matter, 2013, 9, 10452.	2.7	29
25	Using Temperature-Sensitive Smart Polymers to Regulate DNA-Mediated Nanoassembly and Encoded Nanocarrier Drug Release. ACS Nano, 2013, 7, 7011-7020.	14.6	93
26	En route to patchy superlattices. Nature Nanotechnology, 2013, 8, 5-6.	31.5	5
27	Growth Characteristics and Optical Properties of Core/Alloy Nanoparticles Fabricated via the Layer-by-Layer Hydrothermal Route. Chemistry of Materials, 2013, 25, 3105-3113.	6.7	13
28	Novel multistep BRET-FRET energy transfer using nanoconjugates of firefly proteins, quantum dots, and red fluorescent proteins. Nanoscale, 2013, 5, 5303.	5.6	60
29	Thermal Aggregation Properties of Nanoparticles Modified with Temperature Sensitive Copolymers. Langmuir, 2013, 29, 15217-15223.	3.5	37
30	Designing Quantum Rod Morphology and Surface Chemistry for Optimum Bioluminescence Resonance Energy Transfer. , 2013, , .		0
31	Tailoring Quantum Dot Interfaces for Improved Biofunctionality and Energy Transfer. ACS Symposium Series, 2012, , 59-79.	0.5	1
32	Shell Thickness Dependent Photoinduced Hole Transfer in Hybrid Conjugated Polymer/Quantum Dot Nanocomposites: From Ensemble to Single Hybrid Level. ACS Nano, 2012, 6, 4984-4992.	14.6	64
33	Investigation of the Drug Binding Properties and Cytotoxicity of DNA-Capped Nanoparticles Designed as Delivery Vehicles for the Anticancer Agents Doxorubicin and Actinomycin D. Bioconjugate Chemistry, 2012, 23, 2061-2070.	3.6	40
34	Probing Resonance Energy Transfer and Inner Filter Effects in Quantum Dotâ€“Large Metal Nanoparticle Clusters using a DNA-Mediated Quench and Release Mechanism. Journal of Physical Chemistry C, 2012, 116, 22996-23003.	3.1	28
35	Probing the quenching of CdSe/ZnS qdots by Au, Au/Ag, and Au/Pd nanoparticles. Nanotechnology, 2012, 23, 435401.	2.6	10
36	Exploiting coreâ€“shell and coreâ€“alloy interfaces for asymmetric growth of nanoparticles. Chemical Communications, 2012, 48, 10449.	4.1	9

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37	Designing Quantum Rods for Optimized Energy Transfer with Firefly Luciferase Enzymes. Nano Letters, 2012, 12, 3251-3256.	9.1	63
38	Asymmetric quantum dot growth via temperature cycling. Inorganica Chimica Acta, 2012, 380, 114-117.	2.4	0
39	Human Airway Epithelial Cell Responses to Single Walled Carbon Nanotube Exposure: Nanorope-Residual Body Formation. Nanoscience and Nanotechnology Letters, 2012, 4, 1110-1121.	0.4	2
40	DNA-capped nanoparticles designed for doxorubicin drug delivery. Chemical Communications, 2011, 47, 3418.	4.1	68
41	Direct Attachment of Oligonucleotides to Quantum Dot Interfaces. Chemistry of Materials, 2011, 23, 4975-4981.	6.7	41
42	Layer-by-Layer Processing and Optical Properties of Core/Alloy Nanostructures. Journal of the American Chemical Society, 2011, 133, 5224-5227.	13.7	24
43	A Modular Phase Transfer and Ligand Exchange Protocol for Quantum Dots. Langmuir, 2011, 27, 4371-4379.	3.5	62
44	Attenuating surface plasmon resonance via core/alloy architectures. Chemical Communications, 2011, 47, 10079.	4.1	12
45	Processing Core/Alloy/Shell Nanoparticles: Tunable Optical Properties and Evidence for Self-Limiting Alloy Growth. Journal of Physical Chemistry C, 2011, 115, 9933-9942.	3.1	28
46	Site-Selective Binding of Nanoparticles to Double-Stranded DNA via Peptide Nucleic Acid â€œInvasionâ€• ACS Nano, 2011, 5, 2467-2474.	14.6	22
47	Sensing Nucleic Acids with Dimer Nanoclusters. Advanced Functional Materials, 2011, 21, 1051-1057.	14.9	11
48	Photoluminescence enhancement in CdSe/ZnSâ€“DNA linkedâ€“Au nanoparticle heterodimers probed by single molecule spectroscopy. Chemical Communications, 2010, 46, 6111.	4.1	76
49	Switching binary states of nanoparticle superlattices and dimer clusters by DNA strands. Nature Nanotechnology, 2010, 5, 116-120.	31.5	268
50	Size Control and Photophysical Properties of Quantum Dots Prepared via a Novel Tunable Hydrothermal Route. Journal of Physical Chemistry C, 2010, 114, 19270-19277.	3.1	35
51	Nanoparticle Interactions with Living Systems: In Vivo and In Vitro Biocompatibility. , 2009, , 1-45.		7
52	Greener Synthesis of Nanoparticles Using Fine Tuned Hydrothermal Routes. Materials Research Society Symposia Proceedings, 2009, 1220, 3021.	0.1	0
53	Stepwise surface encoding for high-throughput assembly of nanoclusters. Nature Materials, 2009, 8, 388-391.	27.5	253
54	Controllable g5p-Protein-Directed Aggregation of ssDNAâ”Gold Nanoparticles. Langmuir, 2009, 25, 657-660.	3.5	23

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55	Single walled carbon nanotube reactivity and cytotoxicity following extended aqueous exposure. Environmental Pollution, 2009, 157, 1140-1151.	7.5	52
56	Adenovirus Knob Trimers as Tailorable Scaffolds for Nanoscale Assembly. Small, 2008, 4, 1941-1944.	10.0	3
57	DNA-guided crystallization of colloidal nanoparticles. Nature, 2008, 451, 549-552.	27.8	1,420
58	Human epithelial cell processing of carbon and gold nanoparticles. International Journal of Nanotechnology, 2008, 5, 55.	0.2	26
59	Fluorescence intermittency and spectral shifts of single bio-conjugated nanocrystals studied by single molecule confocal fluorescence microscopy and spectroscopy. , 2007, , .		1
60	DNA-Based Approach for Interparticle Interaction Control. Langmuir, 2007, 23, 6305-6314.	3.5	61
61	Fe-Doped Trititanate Nanotubes:â€‰ Formation, Optical and Magnetic Properties, and Catalytic Applications. Journal of Physical Chemistry C, 2007, 111, 14339-14342.	3.1	34
62	Gold-Based Nanoparticle Catalysts for Fuel Cell Reactions. , 2007, , 289-307.		9
63	DNAâ€Regulated Microâ€•and Nanoparticle Assembly. Small, 2007, 3, 1678-1682.	10.0	83
64	A Simple Method for Kinetic Control of DNA-Induced Nanoparticle Assembly. Journal of the American Chemical Society, 2006, 128, 14020-14021.	13.7	106
65	Iron oxideâ€“gold coreâ€“shell nanoparticles and thin film assembly. Journal of Materials Chemistry, 2005, 15, 1821.	6.7	211
66	Mediatorâ^'Template Assembly of Nanoparticles. Journal of the American Chemical Society, 2005, 127, 1519-1529.	13.7	165
67	Electrocatalytic reduction of oxygen: Gold and gold-platinum nanoparticle catalysts prepared by two-phase protocol. Gold Bulletin, 2004, 37, 217-223.	2.7	73
68	Synthesis, processing, assembly and activation of core-shell structured gold nanoparticle catalysts. Gold Bulletin, 2003, 36, 75-82.	2.7	70
69	Novel Interparticle Spatial Properties of Hydrogen-Bonding Mediated Nanoparticle Assembly. Chemistry of Materials, 2003, 15, 29-37.	6.7	107
70	X-ray Photoelectron Spectroscopic Study of the Activation of Molecularly-Linked Gold Nanoparticle Catalysts. Langmuir, 2003, 19, 125-131.	3.5	93
71	Size-Controlled Assembly of Gold Nanoparticles Induced by a Tridentate Thioether Ligand. Journal of the American Chemical Society, 2003, 125, 9906-9907.	13.7	85
72	A Thermogravimetric Study of Alakanethiolate Monolayer-Capped Gold Nanoparticle Catalysts. Materials Research Society Symposia Proceedings, 2003, 789, 45.	0.1	0

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73	Construction of Spherical Assembly of Gold Nanoparticles Using Tetra[(methylthio)methyl] silane as Ligand. Materials Research Society Symposia Proceedings, 2002, 739, 261.	0.1	0
74	Interfacial Ion Fluxes at Nanostructured Thin Films. Materials Research Society Symposia Proceedings, 2002, 752, 1.	0.1	0
75	Characterizations of Core-Shell Nanoparticle Catalysts for Methanol Electrooxidation. Materials Research Society Symposia Proceedings, 2002, 756, 1.	0.1	2
76	Preparation and Characterization of Gold Nanoparticles Dispersed in Poly(2-hydroxyethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (	3.5	44
77	Novel Spherical Assembly of Gold Nanoparticles Mediated by a Tetradentate Thioether. Journal of the American Chemical Society, 2002, 124, 4958-4959.	13.7	129
78	Chemical Analysis Using Scanning Force Microscopy. An Undergraduate Laboratory Experiment. Journal of Chemical Education, 2002, 79, 207.	2.3	21
79	Coreâ˜Shell Nanostructured Nanoparticle Films as Chemically Sensitive Interfaces. Analytical Chemistry, 2001, 73, 4441-4449.	6.5	163
80	Goldâ€“platinum alloy nanoparticle assembly as catalyst for methanol electrooxidation. Chemical Communications, 2001, , 473-474.	4.1	167
81	Quartz-crystal microbalance and spectrophotometric assessments of inter-core and inter-shell reactivities in nanoparticle thin film formation and growth. Journal of Materials Chemistry, 2001, 11, 1258-1264.	6.7	38
82	Probing pH-Tuned Morphological Changes in Coreâ˜Shell Nanoparticle Assembly Using Atomic Force Microscopy. Nano Letters, 2001, 1, 575-579.	9.1	34
83	Nanoparticle Assembly via Hydrogen-Bonding: IRS, TEM and AFM Characterizations. Materials Research Society Symposia Proceedings, 2001, 635, C4.5.1.	0.1	1
84	Coreâ˜Shell Gold Nanoparticle Assembly as Novel Electrocatalyst of CO Oxidation. Langmuir, 2000, 16, 7520-7523.	3.5	170
85	Manipulating coreâ€“shell reactivities for processing nanoparticle sizes and shapes. Journal of Materials Chemistry, 2000, 10, 1895-1901.	6.7	95
86	Heating-Induced Evolution of Thiolate-Encapsulated Gold Nanoparticles:Â A Strategy for Size and Shape Manipulations. Langmuir, 2000, 16, 490-497.	3.5	320
87	An infrared reflectance spectroscopic study of a pH-tunable network of nanoparticles linked by hydrogen bonding. Analyst, The, 2000, 125, 17-20.	3.5	27
88	An Infrared Reflection Spectroscopic Assessment of Interfacial Derivatization and Reactivity at Inter-Shell Linked Nanoparticle Films. Langmuir, 2000, 16, 9639-9644.	3.5	10
89	Imparting Biomimetic Ion-Gating Recognition Properties to Electrodes with a Hydrogen-Bonding Structured Coreâ˜Shell Nanoparticle Network. Analytical Chemistry, 2000, 72, 2190-2199.	6.5	114
90	Structures and Properties of Nanoparticle Thin Films Formed via a One-Step Exchangeâ˜Cross-Linkingâ˜Precipitation Route. Analytical Chemistry, 1999, 71, 5076-5083.	6.5	155

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91	Electrical and Electrochemical Properties of Nanocomposite Thin Films Formed by Exchange-Precipitation Route from Nanocrystals and Organic Cross-Linkers. Materials Research Society Symposia Proceedings, 1999, 598, 309.	0.1	0