Regina Ragan

List of Publications by Year
in descending order

74	1,327	304743 22	395702 33
papers	citations	h-index	g-index

74	74	74	1976
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deep Learning Analysis of Vibrational Spectra of Bacterial Lysate for Rapid Antimicrobial Susceptibility Testing. ACS Nano, 2020, 14, 15336-15348.	14.6	75
2	Measurement of the direct energy gap of coherently strained SnxGe1â^'x/Ge(001) heterostructures. Applied Physics Letters, 2000, 77, 3418-3420.	3.3	73
3	Enhanced Magnetic and Electric Fields via Fano Resonances in Metasurfaces of Circular Clusters of Plasmonic Nanoparticles. ACS Photonics, 2014, 1, 254-260.	6.6	73
4	Nonâ€lithographic SERS Substrates: Tailoring Surface Chemistry for Au Nanoparticle Cluster Assembly. Small, 2012, 8, 2239-2249.	10.0	68
5	Longitudinal Monitoring of Biofilm Formation via Robust Surface-Enhanced Raman Scattering Quantification of Pseudomonas aeruginosa-Produced Metabolites. ACS Applied Materials & Interfaces, 2018, 10, 12364-12373.	8.0	51
6	Ordered arrays of rare-earth silicide nanowires on Si(001). Journal of Crystal Growth, 2003, 251, 657-661.	1.5	50
7	Quantification of Analyte Concentration in the Single Molecule Regime Using Convolutional Neural Networks. Analytical Chemistry, 2019, 91, 13337-13342.	6.5	49
8	Direct energy gap group IV semiconductor alloys and quantum dot arrays in SnxGe1â^'x/Ge and SnxSi1â^'x/Si alloy systems. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 204-213.	3.5	46
9	Large Continuous Mechanical Gradient Formation via Metalâ€“Ligand Interactions. Angewandte Chemie - International Edition, 2017, 56, 15575-15579.	13.8	43
10	Generic Process for Highly Stable Metallic Nanoparticle-Semiconductor Heterostructures via Click Chemistry for Electro/Photocatalytic Applications. ACS Applied Materials & Interfaces, 2013, 5, 9554-9562.	8.0	42
11	Surface-Enhanced Raman Scattering-Based Odor Compass: Locating Multiple Chemical Sources and Pathogens. ACS Sensors, 2019, 4, 2311-2319.	7.8	32
12	Electrically Fueled Active Supramolecular Materials. Journal of the American Chemical Society, 2022, 144, 7844-7851.	13.7	30
13	Dynamics of nucleic acid/cationic polymer complexation and disassembly under biologically simulated conditions using in situ atomic force microscopy. Microscopy Research and Technique, 2010, 73, 845-856.	2.2	29
14	Mixing-sequence-dependent nucleic acid complexation and gene transfer efficiency by polyethylenimine. Biomaterials Science, 2015, 3, 1124-1133.	5.4	29
15	Void-mediated formation of Sn quantum dots in a Si matrix. Applied Physics Letters, 2003, 82, 4262-4264.	3.3	27
16	Self-Assembled Monolayers on Pt(111):Â Molecular Packing Structure and Strain Effects Observed by Scanning Tunneling Microscopy. Journal of the American Chemical Society, 2006, 128, 5745-5750.	13.7	26
17	Comparison of electric field enhancements: Linear and triangular oligomers versus hexagonal arrays of plasmonic nanospheres. Optics Express, 2013, 21, 7957.	3.4	25
18	Driving Chemical Reactions in Plasmonic Nanogaps with Electrohydrodynamic Flow. ACS Nano, 2017, 11, 11317-11329.	14.6	25

#	Article	IF	Citations
19	Fabrication of patterned graphitized carbon wires using low voltage near-field electrospinning, pyrolysis, electrodeposition, and chemical vapor deposition. Microsystems and Nanoengineering, 2020, 6, 7.	7.0	24
20	Nonlithographic epitaxial SnxGe1â^'x dense nanowire arrays grown on Ge(001). Applied Physics Letters, 2003, 82, 3439-3441.	3.3	23
21	Shrink-induced sorting using integrated nanoscale magnetic traps. Applied Physics Letters, 2013, 102, 063504.	3.3	23
22	Directing Cluster Formation of Au Nanoparticles from Colloidal Solution. Langmuir, 2013, 29, 4242-4251.	3.5	22
23	Revealing the molecular structure of soot precursors. Carbon, 2018, 129, 537-542.	10.3	21
24	Electric field enhancement with plasmonic colloidal nanoantennas excited by a silicon nitride waveguide. Optics Express, 2016, 24, 28337.	3.4	20
25	Evaluating the Stability of Single-Atom Catalysts with High Chemical Activity. Journal of Physical Chemistry C, 2018, 122, 21919-21926.	3.1	20
26	Atomic Surface Structure of UHV-Prepared Template-Stripped Platinum and Single-Crystal Platinum(111). Journal of Physical Chemistry B, 2004, 108, 20187-20192.	2.6	19
27	Regular Arrays of Monodisperse Platinum/Erbium Disilicide Coreâ^'Shell Nanowires and Nanoparticles on Si(001) via a Self-Assembled Template. Nano Letters, 2006, 6, 1858-1862.	9.1	18
28	Structure and electronic properties of self-assembled Pt silicide nanowires on Si(100). Nanotechnology, 2007, 18, 095706.	2.6	18
29	Fano resonances in metasurfaces made of linear trimers of plasmonic nanoparticles. Optics Letters, 2013, 38, 5216.	3.3	18
30	Scanning Tunneling Microscopy of Template-Stripped Au Surfaces and Highly Ordered Self-Assembled Monolayers. Langmuir, 2008, 24, 5984-5987.	3.5	17
31	A Facile Approach for Assembling Lipid Bilayer Membranes on Template-Stripped Gold. Langmuir, 2010, 26, 18239-18245.	3.5	17
32	Tunable optical response of bowtie nanoantenna arrays on thermoplastic substrates. Nanotechnology, 2016, 27, 105302.	2.6	17
33	Scalable synthesis of gyroid-inspired freestanding three-dimensional graphene architectures. Nanoscale Advances, 2019, 1, 3870-3882.	4.6	17
34	Unidirectional hexagonal rare-earth disilicide nanowires on vicinal Si(100)-2Ã—1. Applied Physics A: Materials Science and Processing, 2005, 80, 1311-1313.	2.3	16
35	Diamond cubic Sn-rich nanocrystals: synthesis, microstructure and optical properties. Applied Physics A: Materials Science and Processing, 2005, 80, 1335-1338.	2.3	15
36	Platinum passivation of self-assembled erbium disilicide nanowire arrays on Si(001). Applied Physics A: Materials Science and Processing, 2005, 80, 1339-1342.	2.3	11

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37	Evaluation of Youngâ€™s Modulus of Tethered 1-Palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine Membranes Using Atomic Force Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 29301-29309.	3.1	11
38	Large Continuous Mechanical Gradient Formation via Metalâ€“Ligand Interactions. Angewandte Chemie, 2017, 129, 15781-15785.	2.0	11
39	Stress-activated pyrolytic carbon nanofibers for electrochemical platforms. Electrochimica Acta, 2018, 290, 639-648.	5.2	11
40	Absorption enhancement in ultra-thin textured AlGaAs films. Solar Energy Materials and Solar Cells, 1999, 57, 1-7.	6.2	10
41	Characterizing defects and transport in Si nanowire devices using Kelvin probe force microscopy. Nanotechnology, 2012, 23, 405706.	2.6	10
42	Mapping Molecular Adsorption Configurations with <5 nm Spatial Resolution through Ambient Tip-Enhanced Raman Imaging. Journal of Physical Chemistry Letters, 2021, 12, 3586-3590.	4.6	10
43	Kinetics governing phase separation of nanostructuredSnxGe1â^'xalloys. Physical Review B, 2006, 73, .	3.2	9
44	Structural Transformations in self-assembled Semiconductor Quantum Dots as inferred by Transmission Electron Microscopy. , 2002, 4807, 71.		8
45	An atomistic view of structural and electronic properties of rare earth ensembles on Si(001) substrates. Chemical Physics Letters, 2008, 466, 159-164.	2.6	8
46	Morphological work function dependence of rare-earth disilicide metal nanostructures. Nanotechnology, 2009, 20, 035701.	2.6	8
47	Thermodynamic driving forces governing assembly of disilicide nanowires. Surface Science, 2010, 604, 1481-1486.	1.9	8
48	Nanoscale architecture and cellular adhesion of biomimetic collagen substrates. Journal of Biomaterials Applications, 2014, 28, 1354-1365.	2.4	8
49	Plasmon optical trapping using silicon nitride trench waveguides. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1182.	2.1	8
50	Vacancy concentrations in binary rare-earth disilicides with the aluminum diboride structure. Applied Physics A: Materials Science and Processing, 2004, 78, 287-289.	2.3	6
51	Optimization of in-vacuo template-stripped Pt surfaces via UHV STM. Applied Physics A: Materials Science and Processing, 2005, 80, 1327-1334.	2.3	6
52	Elucidating Driving Forces for Liposome Rupture: External Perturbations and Chemical Affinity. Langmuir, 2012, 28, 7417-7427.	3.5	6
53	Influence of Magnetic Moment on Single Atom Catalytic Activation Energy Barriers. Catalysis Letters, 2022, 152, 1347-1357.	2.6	6
54	Optical Properties of Pseudomorphic Sn_XGe_{1â^'x} Alloys. Materials Research Society Symposia Proceedings, 1999, 588, 199.	0.1	5

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55	Interpreting Kelvin probe force microscopy under an applied electric field: local electronic behavior of vaporâ€"liquidâ€"solid Si nanowires. Nanotechnology, 2013, 24, 205704.	2.6	5
56	Surface Reconstruction of Pt/Si(001). Applied Physics A: Materials Science and Processing, 2005, 80, 1301-1304.	2.3	4
57	Determination of preferential rare earth adatom adsorption geometries on Si(001). Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 3459-3463.	2.1	4
58	Structural and Chemical Properties of Gold Rare Earth Disilicide Coreâ^'Shell Nanowires. ACS Nano, 2011, 5, 477-485.	14.6	4
59	Phase stabilities of ternary rare earth metal disilicides. Applied Physics A: Materials Science and Processing, 2004, 78, 1-3.	2.3	3
60	Platinum and gold nanostructures on silicon via a self-assembled template. , 2004, 5593, 167.		3
61	Thermal expansion coefficients of rare earth metal disilicides and their influence on the growth of disilicide nanowires. Applied Physics A: Materials Science and Processing, 2006, 82, 39-42.	2.3	3
62	First principles studies of adsorption of Pd, Ag, Pt, and Au on yttrium disilicide nanowires. Chemical Physics Letters, 2008, 454, 327-331.	2.6	3
63	Structural Understanding of Selfâ€Assembled Rare Earth Disilicide Nanostructures Via Scanning Probe Microscopy and First Principles Studies. Israel Journal of Chemistry, 2008, 48, 73-79.	2.3	3
64	Highly nonlinear sub-micron silicon nitride trench waveguide coated with gold nanoparticles. , 2015, , .		3
65	Surface enhanced Raman scattering for detection ofPseudomonas aeruginosaquorum sensing compounds. , 2015, , .		3
66	Two-Scale Structure for Giant Field Enhancement: Combination of Rayleigh Anomaly and Colloidal Plasmonic Resonance. Physical Review Applied, 2019, 11, .	3.8	3
67	Tunable nano bead arrays on film for controlling propogation of light. Proceedings of SPIE, 2013, , .	0.8	2
68	Robust SERS spectral analysis for quantitative detection of pyocyanin in biological fluids. , 2017, , .		2
69	Improved regressions with convolutional neural networks for surface enhanced Raman scattering sensing of metabolite biomarkers. , 2019, , .		2
70	Formation of Direct Energy Gap Group IV Semiconductor Alloys and Quantum Dot Arrays in SnxSi1â^'x /Si and SnxGe1â^'x/Ge Alloy Systems. Materials Research Society Symposia Proceedings, 1999, 583, 349.	0.1	1
71	Templated electrokinetic directed chemical assembly for the fabrication of close-packed plasmonic metamolecules. , 2017, , .		1
72	Noble metal nanoparticle arrays: control of size, shape, and placement via chemical self-assembly. , 2006, 6370, 154.		0

#	Article	IF	Citations
73	Surface Electronic Structure. , 2016, , 3896-3907.		0
74	Electric Field Enhancement by Two-scale Structure. , 2018, , .		0