George C Schatz

List of Publications by Year
in descending order

653	75,267	767 119	603 260
papers	citations	h-index	g-index

664	664	664	54051
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Optical Properties of Metal Nanoparticles:â€‰ The Influence of Size, Shape, and Dielectric Environment. Journal of Physical Chemistry B, 2003, 107, 668-677.	2.6	9,036
2	Photoinduced Conversion of Silver Nanospheres to Nanoprisms. Science, 2001, 294, 1901-1903.	12.6	3,222
3	Present and Future of Surface-Enhanced Raman Scattering. ACS Nano, 2020, 14, 28-117.	14.6	2,153
4	Correlating the Crystal Structure of A Thiol-Protected Au₂₅ Cluster and Optical Properties. Journal of the American Chemical Society, 2008, 130, 5883-5885.	13.7	2,014
5	Electromagnetic fields around silver nanoparticles and dimers. Journal of Chemical Physics, 2004, 120, 357-366.	3.0	1,732
6	Controlling anisotropic nanoparticle growth through plasmon excitation. Nature, 2003, 425, 487-490.	27.8	1,583
7	DNA-programmable nanoparticle crystallization. Nature, 2008, 451, 553-556.	27.8	1,431
8	Localized Surface Plasmon Resonance Spectroscopy of Single Silver Nanocubes. Nano Letters, 2005, 5, 2034-2038.	9.1	1,307
9	What Controls the Melting Properties of DNA-Linked Gold Nanoparticle Assemblies?. Journal of the American Chemical Society, 2003, 125, 1643-1654.	13.7	1,054
10	Nanoparticle Superlattice Engineering with DNA. Science, 2011, 334, 204-208.	12.6	1,013
11	Structural Information from Ion Mobility Measurements:Â Effects of the Long-Range Potential. The Journal of Physical Chemistry, 1996, 100, 16082-16086.	2.9	982
12	Probing the Structure of Single-Molecule Surface-Enhanced Raman Scattering Hot Spots. Journal of the American Chemical Society, 2008, 130, 12616-12617.	13.7	825
13	Plasmonic Properties of Copper Nanoparticles Fabricated by Nanosphere Lithography. Nano Letters, 2007, 7, 1947-1952.	9.1	768
14	Structureâ^'Activity Relationships in Gold Nanoparticle Dimers and Trimers for Surface-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2010, 132, 10903-10910.	13.7	723
15	A Nanoscale Optical Biosensor:Â The Long Range Distance Dependence of the Localized Surface Plasmon Resonance of Noble Metal Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 109-116.	2.6	708
16	Silver nanoparticle array structures that produce remarkably narrow plasmon lineshapes. Journal of Chemical Physics, 2004, 120, 10871-10875.	3.0	700
17	Covalent functionalization and passivation of exfoliated black phosphorus via aryl diazonium chemistry. Nature Chemistry, 2016, 8, 597-602.	13.6	687
18	Highly Accurate First-Principles Benchmark Data Sets for the Parametrization and Validation of Density Functional and Other Approximate Methods. Derivation of a Robust, Generally Applicable, Double-Hybrid Functional for Thermochemistry and Thermochemical Kinetics. Journal of Physical Chemistry A, 2008, 112, 12868-12886.	2.5	680

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19	Nanoparticle Optics:Â The Importance of Radiative Dipole Coupling in Two-Dimensional Nanoparticle Arraysâ€. Journal of Physical Chemistry B, 2003, 107, 7337-7342.	2.6	665
20	An accurate electromagnetic theory study of surface enhancement factors for silver, gold, copper, lithium, sodium, aluminum, gallium, indium, zinc, and cadmium. The Journal of Physical Chemistry, 1987, 91, 634-643.	2.9	661
21	Lasing action in strongly coupled plasmonic nanocavity arrays. Nature Nanotechnology, 2013, 8, 506-511.	31.5	657
22	Nanoscale Optical Biosensor:Â Short Range Distance Dependence of the Localized Surface Plasmon Resonance of Noble Metal Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 6961-6968.	2.6	631
23	Plasmonic Materials for Surface-Enhanced Sensing and Spectroscopy. MRS Bulletin, 2005, 30, 368-375.	3.5	616
24	The Extinction Spectra of Silver Nanoparticle Arrays:Â Influence of Array Structure on Plasmon Resonance Wavelength and Widthâ€. Journal of Physical Chemistry B, 2003, 107, 7343-7350.	2.6	575
25	Electronic structure methods for studying surface-enhanced Raman scattering. Chemical Society Reviews, 2008, 37, 1061.	38.1	568
26	Electrodynamics of Noble Metal Nanoparticles and Nanoparticle Clusters. Journal of Cluster Science, 1999, 10, 295-317.	3.3	528
27	Synthesis and Optical Properties of â€œBranchedâ€•Gold Nanocrystals. Nano Letters, 2004, 4, 327-330.	9.1	524
28	Nanosphere Lithography:â€‰ Effect of the External Dielectric Medium on the Surface Plasmon Resonance Spectrum of a Periodic Array of Silver Nanoparticles. Journal of Physical Chemistry B, 1999, 103, 9846-9853.	2.6	520
29	Single-Molecule Chemistry with Surface- and Tip-Enhanced Raman Spectroscopy. Chemical Reviews, 2017, 117, 7583-7613.	47.7	519
30	Light-Harvesting and Ultrafast Energy Migration in Porphyrin-Based Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2013, 135, 862-869.	13.7	510
31	Confined Plasmons in Nanofabricated Single Silver Particle Pairs:Â Experimental Observations of Strong Interparticle Interactions. Journal of Physical Chemistry B, 2005, 109, 1079-1087.	2.6	488
32	Pyridineâ”Ag20 Cluster:â€‰ A Model System for Studying Surface-Enhanced Raman Scattering. Journal of the American Chemical Society, 2006, 128, 2911-2919.	13.7	478
33	Discrete dipole approximation for calculating extinction and Raman intensities for small particles with arbitrary shapes. Journal of Chemical Physics, 1995, 103, 869-875.	3.0	465
34	Methods for Describing the Electromagnetic Properties of Silver and Gold Nanoparticles. Accounts of Chemical Research, 2008, 41, 1710-1720.	15.6	457
35	Theoretical studies of surface enhanced Raman scattering. Accounts of Chemical Research, 1984, 17, 370-376.	15.6	437
36	Distance Dependence of Plasmon-Enhanced Photocurrent in Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2009, 131, 8407-8409.	13.7	434

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37	NWChem: Past, present, and future. Journal of Chemical Physics, 2020, 152, 184102.	3.0	425
38	Designing, fabricating, and imaging Raman hot spots. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13300-13303.	7.1	424
39	Nanosphere Lithography:Â Effect of Substrate on the Localized Surface Plasmon Resonance Spectrum of Silver Nanoparticles. Journal of Physical Chemistry B, 2001, 105, 2343-2350.	2.6	420
40	Reversing the size-dependence of surface plasmon resonances. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14530-14534.	7.1	408
41	Surface plasmon broadening for arbitrary shape nanoparticles: A geometrical probability approach. Journal of Chemical Physics, 2003, 119, 3926-3934.	3.0	395
42	Single-Molecule Surface-Enhanced Raman Spectroscopy of Crystal Violet Isotopologues: Theory and Experiment. Journal of the American Chemical Society, 2011, 133, 4115-4122.	13.7	390
43	Controlling Conformations of Conjugated Polymers and Small Molecules: The Role of Nonbonding Interactions. Journal of the American Chemical Society, 2013, 135, 10475-10483.	13.7	386
44	Brightening of carbon nanotube photoluminescence through the incorporation of sp3 defects. Nature Chemistry, 2013, 5, 840-845.	13.6	372
45	Localized Surface Plasmon Resonance Spectroscopy of Triangular Aluminum Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 13958-13963.	3.1	360
46	Electromagnetic Mechanism of SERS. , 2006, , 19-45.		356
47	Real-time tunable lasing from plasmonic nanocavity arrays. Nature Communications, 2015, 6, 6939.	12.8	356
48	Energy landscapes and functions of supramolecular systems. Nature Materials, 2016, 15, 469-476.	27.5	348
49	Resonance Raman Scattering of Rhodamine 6G as Calculated Using Time-Dependent Density Functional Theory. Journal of Physical Chemistry A, 2006, 110, 5973-5977.	2.5	344
50	Fluorination Effects on Indacenodithienothiophene Acceptor Packing and Electronic Structure, End-Group Redistribution, and Solar Cell Photovoltaic Response. Journal of the American Chemical Society, 2019, 141, 3274-3287.	13.7	336
51	Silver nanoparticle array structures that produce giant enhancements in electromagnetic fields. Chemical Physics Letters, 2005, 403, 62-67.	2.6	326
52	Nanosphere Lithography:Â Surface Plasmon Resonance Spectrum of a Periodic Array of Silver Nanoparticles by Ultravioletâ^'Visible Extinction Spectroscopy and Electrodynamic Modeling. Journal of Physical Chemistry B, 1999, 103, 2394-2401.	2.6	318
53	Expanding applications of SERS through versatile nanomaterials engineering. Chemical Society Reviews, 2017, 46, 3886-3903.	38.1	316
54	Unraveling the Effects of Size, Composition, and Substrate on the Localized Surface Plasmon Resonance Frequencies of Gold and Silver Nanocubes: A Systematic Single-Particle Approach. Journal of Physical Chemistry C, 2010, 114, 12511-12516.	3.1	314

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55	Narrow plasmonic/photonic extinction and scattering line shapes for one and two dimensional silver nanoparticle arrays. Journal of Chemical Physics, 2004, 121, 12606.	3.0	312
56	DNA-Linked Metal Nanosphere Materials:Â Structural Basis for the Optical Properties. Journal of Physical Chemistry B, 2000, 104, 460-467.	2.6	304
57	Computational Studies of the Structure, Behavior upon Heating, and Mechanical Properties of Graphite Oxide. Journal of Physical Chemistry C, 2007, 111, 18099-18111.	3.1	303
58	Structure Enhancement Factor Relationships in Single Gold Nanoantennas by Surface-Enhanced Raman Excitation Spectroscopy. Journal of the American Chemical Society, 2013, 135, 301-308.	13.7	299
59	Theory of Raman scattering by molecules adsorbed on electrode surfaces. Journal of Chemical Physics, 1978, 69, 4472-4481.	3.0	296
60	Surface-Enhanced Raman Excitation Spectroscopy of a Single Rhodamine 6G Molecule. Journal of the American Chemical Society, 2009, 131, 849-854.	13.7	294
61	Coupled quantum mechanical/molecular mechanical modeling of the fracture of defective carbon nanotubes and graphene sheets. Physical Review B, 2007, 75, .	3.2	293
62	Interaction of Plasmon and Molecular Resonances for Rhodamine 6G Adsorbed on Silver Nanoparticles. Journal of the American Chemical Society, 2007, 129, 7647-7656.	13.7	282
63	Enabling singlet fission by controlling intramolecular charge transfer in Ï€-stacked covalent terrylenediimide dimers. Nature Chemistry, 2016, 8, 1120-1125.	13.6	273
64	High-performance SERS substrates: Advances and challenges. MRS Bulletin, 2013, 38, 615-624.	3.5	267
65	Optical Properties of One-, Two-, and Three-Dimensional Arrays of Plasmonic Nanostructures. Journal of Physical Chemistry C, 2016, 120, 816-830.	3.1	257
66	Multipolar excitation in triangular nanoprisms. Journal of Chemical Physics, 2005, 123, 114713.	3.0	255
67	From Discrete Electronic States to Plasmons: TDDFT Optical Absorption Properties of Ag_n(n= 10, 20, 35, 56, 84, 120) Tetrahedral Clusters. Journal of Physical Chemistry C, 2008, 112, 11272-11279.	3.1	252
68	Localized Surface Plasmon Resonance Spectroscopy near Molecular Resonances. Journal of the American Chemical Society, 2006, 128, 10905-10914.	13.7	247
69	Mechanics of defects in carbon nanotubes: Atomistic and multiscale simulations. Physical Review B, 2005, 71, .	3.2	238
70	Silver Nanoparticles with Broad Multiband Linear Optical Absorption. Angewandte Chemie - International Edition, 2009, 48, 5921-5926.	13.8	235
71	Toward Plasmonic Solar Cells: Protection of Silver Nanoparticles via Atomic Layer Deposition of TiO₂. Langmuir, 2009, 25, 2596-2600.	3.5	230
72	Nanostructured organic semiconductor films for molecular detection with surface-enhanced Raman spectroscopy. Nature Materials, 2017, 16, 918-924.	27.5	229

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73	Single-Molecule Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 478-483.	3.1	226
74	Tailorable Plasmonic Circular Dichroism Properties of Helical Nanoparticle Superstructures. Nano Letters, 2013, 13, 3256-3261.	9.1	221
75	Correlated Structure and Optical Property Studies of Plasmonic Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 9291-9305.	3.1	217
76	A Look at the Origin and Magnitude of the Chemical Contribution to the Enhancement Mechanism of Surface-Enhanced Raman Spectroscopy (SERS): Theory and Experiment. Journal of Physical Chemistry Letters, 2013, 4, 2599-2604.	4.6	216
77	Crystallography, Morphology, Electronic Structure, and Transport in Non-Fullerene/Non-Indacenodithienothiophene Polymer:Y6 Solar Cells. Journal of the American Chemical Society, 2020, 142, 14532-14547.	13.7	214
78	Surface-Enhanced Raman Scattering of Pyrazine at the Junction between Two Ag20Nanoclusters. Nano Letters, 2006, 6, 1229-1234.	9.1	212
79	Nitrogenase-mimic iron-containing chalcogels for photochemical reduction of dinitrogen to ammonia. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5530-5535.	7.1	211
80	Near-Field Photochemical Imaging of Noble Metal Nanostructures. Nano Letters, 2005, 5, 615-619.	9.1	210
81	A surfaceâ€enhanced hyperâ€Raman and surfaceâ€enhanced Raman scattering study of transâ€1,2â€bis(4â€pyridyl)ethylene adsorbed onto silver film over nanosphere electrodes. Vibrational assignments: Experiment and theory. Journal of Chemical Physics, 1996, 104, 4313-4323.	3.0	203
82	Atomistic Molecular Dynamics Simulations of Peptide Amphiphile Self-Assembly into Cylindrical Nanofibers. Journal of the American Chemical Society, 2011, 133, 3677-3683.	13.7	195
83	Light-Driven Expansion of Spiropyran Hydrogels. Journal of the American Chemical Society, 2020, 142, 8447-8453.	13.7	190
84	Supramolecularâ€“covalent hybrid polymers for light-activated mechanical actuation. Nature Materials, 2020, 19, 900-909.	27.5	186
85	Observation of Multiple Vibrational Modes in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy Combined with Molecular-Resolution Scanning Tunneling Microscopy. Nano Letters, 2012, 12, 5061-5067.	9.1	182
86	Size-Dependence of the Enhanced Raman Scattering of Pyridine Adsorbed on Agn(n= 2â^'8, 20) Clusters. Journal of Physical Chemistry C, 2007, 111, 4756-4764.	3.1	180
87	Modeling the Effect of Small Gaps in Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 1627-1637.	3.1	179
88	Conformational Order in Aggregates of Conjugated Polymers. Journal of the American Chemical Society, 2015, 137, 6254-6262.	13.7	177
89	A surface enhanced hyperâ€Raman scattering study of pyridine adsorbed onto silver: Experiment and theory. Journal of Chemical Physics, 1988, 88, 7942-7951.	3.0	172
90	Correlating the Structure, Optical Spectra, and Electrodynamics of Single Silver Nanocubes. Journal of Physical Chemistry C, 2009, 113, 2731-2735.	3.1	171

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91	Theory and method for calculating resonance Raman scattering from resonance polarizability derivatives. Journal of Chemical Physics, 2005, 123, 174110.	3.0	169
92	Nanoscale form dictates mesoscale function in plasmonic DNAâ€“nanoparticle superlattices. Nature Nanotechnology, 2015, 10, 453-458.	31.5	169
93	Singlet Fission via an Excimer-Like Intermediate in 3,6-Bis(thiophen-2-yl)diketopyrrolopyrrole Derivatives. Journal of the American Chemical Society, 2016, 138, 11749-11761.	13.7	167
94	Band-edge engineering for controlled multi-modal nanolasing in plasmonic superlattices. Nature Nanotechnology, 2017, 12, 889-894.	31.5	167
95	Simultaneous covalent and noncovalent hybrid polymerizations. Science, 2016, 351, 497-502.	12.6	164
96	Finite lifetime effects on the polarizability within time-dependent density-functional theory. Journal of Chemical Physics, 2005, 122, 224115.	3.0	161
97	Ultralow-threshold, continuous-wave upconverting lasing from subwavelength plasmons. Nature Materials, 2019, 18, 1172-1176.	27.5	160
98	Using DNA to Design Plasmonic Metamaterials with Tunable Optical Properties. Advanced Materials, 2014, 26, 653-659.	21.0	157
99	Plasmon resonance broadening in small metal particles. Journal of Chemical Physics, 1983, 79, 6130-6139.	3.0	153
100	Self-assembly of ink molecules in dip-pen nanolithography: A diffusion model. Journal of Chemical Physics, 2001, 115, 2721-2729.	3.0	153
101	Direct Observation of a Charge-Transfer State Preceding High-Yield Singlet Fission in Terrylenediimide Thin Films. Journal of the American Chemical Society, 2017, 139, 663-671.	13.7	149
102	Effect of Structural Dynamics on Charge Transfer in DNA Hairpins. Journal of the American Chemical Society, 2008, 130, 5157-5166.	13.7	148
103	Ultrafast and nonlinear surface-enhanced Raman spectroscopy. Chemical Society Reviews, 2016, 45, 2263-2290.	38.1	143
104	CO₂ Hydrogenation to Formic Acid on Ni(111). Journal of Physical Chemistry C, 2012, 116, 3001-3006.	3.1	141
105	Modeling the Self-Assembly of Peptide Amphiphiles into Fibers Using Coarse-Grained Molecular Dynamics. Nano Letters, 2012, 12, 4907-4913.	9.1	140
106	Immobilized Nanorod Assemblies: Fabrication and Understanding of Large Area Surface-Enhanced Raman Spectroscopy Substrates. Analytical Chemistry, 2013, 85, 2297-2303.	6.5	138
107	High-Resolution Distance Dependence Study of Surface-Enhanced Raman Scattering Enabled by Atomic Layer Deposition. Nano Letters, 2016, 16, 4251-4259.	9.1	136
108	Plasmon-Coupled Resonance Energy Transfer. Journal of Physical Chemistry Letters, 2017, 8, 2357-2367.	4.6	136

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109	Mobilities of carbon cluster ions: Critical importance of the molecular attractive potential. Journal of Chemical Physics, 1998, 108, 2416-2423.	3.0	135
110	Cell death versus cell survival instructed by supramolecular cohesion of nanostructures. Nature Communications, 2014, 5, 3321.	12.8	135
111	On the Origin of Photoluminescence in Silicon Nanocrystals: Pressure-Dependent Structural and Optical Studies. Nano Letters, 2012, 12, 4200-4205.	9.1	133
112	Introduction to Plasmonics. Chemical Reviews, 2011, 111, 3667-3668.	47.7	130
113	Structural Engineering in Plasmon Nanolasers. Chemical Reviews, 2018, 118, 2865-2881.	47.7	130
114	Programmable and reversible plasmon mode engineering. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14201-14206.	7.1	129
115	Hyper-Rayleigh scattering from silver nanoparticles. Journal of Chemical Physics, 2002, 117, 5963-5966.	3.0	128
116	Strong Coupling between Plasmonic Gap Modes and Photonic Lattice Modes in DNA-Assembled Gold Nanocube Arrays. Nano Letters, 2015, 15, 4699-4703.	9.1	128
117	Ultrahigh-Vacuum Tip-Enhanced Raman Spectroscopy. Chemical Reviews, 2017, 117, 4961-4982.	47.7	128
118	Timeâ€dependent dynamics of methyl iodide photodissociation in the first continuum. Journal of Chemical Physics, 1990, 93, 393-402.	3.0	127
119	A Quantum State-Resolved Insertion Reaction: O(1D) + H2(J = 0) rightarrow OH(2∏, v, N) + H(2S). Science, 2000, 289, 1536-1538.	12.6	127
120	Molecularly Tunable Fluorescent Quantum Defects. Journal of the American Chemical Society, 2016, 138, 6878-6885.	13.7	126
121	Closely packed, low reorganization energy Ï€-extended postfullerene acceptors for efficient polymer solar cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8341-E8348.	7.1	126
122	Systematic Merging of Nonfullerene Acceptor Ï€-Extension and Tetrafluorination Strategies Affords Polymer Solar Cells with >16% Efficiency. Journal of the American Chemical Society, 2021, 143, 6123-6139.	13.7	125
123	Plasmonic Surface Lattice Resonances: Theory and Computation. Accounts of Chemical Research, 2019, 52, 2548-2558.	15.6	119
124	Allosteric transcriptional regulation via changes in the overall topology of the core promoter. Science, 2015, 349, 877-881.	12.6	118
125	Screening of Type I and II Drug Binding to Human Cytochrome P450-3A4 in Nanodiscs by Localized Surface Plasmon Resonance Spectroscopy. Analytical Chemistry, 2009, 81, 3754-3759.	6.5	116
126	Theoretical studies of the reactions hydrogen atom + methylidyne .fwdarw. carbon + hydrogen and carbon + hydrogen .fwdarw. methylene using an ab initio global ground-state potential surface for methylene. The Journal of Physical Chemistry, 1993, 97, 5472-5481.	2.9	112

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127	Calculating nonlocal optical properties of structures with arbitrary shape. Physical Review B, 2010, 82, .	3.2	112
128	A crossed molecular beams study of the O(3P)+H2 reaction: Comparison of excitation function with accurate quantum reactive scattering calculations. Journal of Chemical Physics, 2003, 118, 1585-1588.	3.0	111
129	The origin of cross section thresholds in H+H2: Why quantum dynamics appears to be more vibrationally adiabatic than classical dynamics. Journal of Chemical Physics, 1983, 79, 5386-5391.	3.0	110
130	Quantum and quasiclassical calculations on the OH+COâ†'CO2+H reaction. Journal of Chemical Physics, 1993, 99, 4578-4589.	3.0	108
131	Plasmonic photonic crystals realized through DNA-programmable assembly. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 977-981.	7.1	107
132	Using theory and computation to model nanoscale properties. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6885-6892.	7.1	106
133	Dissociation dynamics of vibrationally excited van der Waals clusters: I2XYâ€‰â†'â€‰I2+X+Yâ€‰(X,â€‰Y=He,â€‰Ne). Journal of Chemical Physics, 1983, 79, 1808-1822.	3.0	105
134	Gap Structure Effects on Surface-Enhanced Raman Scattering Intensities for Gold Gapped Rods. Nano Letters, 2010, 10, 1722-1727.	9.1	103
135	Bisboronic Acids for Selective, Physiologically Relevant Direct Glucose Sensing with Surface-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2016, 138, 13952-13959.	13.7	103
136	Stretchable Nanolasing from Hybrid Quadrupole Plasmons. Nano Letters, 2018, 18, 4549-4555.	9.1	102
137	Operando Characterization of Iron Phthalocyanine Deactivation during Oxygen Reduction Reaction Using Electrochemical Tip-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2019, 141, 15684-15692.	13.7	102
138	A quasiclassical trajectory study of H+CO2: Angular and translational distributions, and OH angular momentum alignment. Journal of Chemical Physics, 1997, 106, 8464-8472.	3.0	98
139	A quasiclassical trajectory study of reagent vibrational excitation effects in the OH+H2â†'H2O+H reaction. Journal of Chemical Physics, 1981, 74, 1133-1139.	3.0	96
140	Quantum dynamics of a planar model for the complex forming OH+COâ†'H+CO2 reaction. Journal of Chemical Physics, 1995, 102, 8807-8817.	3.0	96
141	Importance of Intersystem Crossing in the S(3P,1D) + H2â†' SH + H Reactionâ€. Journal of Physical Chemistry A, 2004, 108, 8772-8781.	2.5	96
142	Liquid meniscus condensation in dip-pen nanolithography. Journal of Chemical Physics, 2002, 116, 3875-3886.	3.0	94
143	Scattering Theory and Dynamics:Â Time-Dependent and Time-Independent Methods. The Journal of Physical Chemistry, 1996, 100, 12839-12847.	2.9	92
144	Surprisingly Longâ€Range Surfaceâ€Enhanced Raman Scattering (SERS) on Auâ€“Ni Multisegmented Nanowires. Angewandte Chemie - International Edition, 2009, 48, 4210-4212.	13.8	90

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145	Using nanoscale and mesoscale anisotropy to engineer the optical response of three-dimensional plasmonic metamaterials. Nature Communications, 2014, 5, 4090.	12.8	90
146	Uniform Circular Disks With Synthetically Tailorable Diameters: Two-Dimensional Nanoparticles for Plasmonics. Nano Letters, 2015, 15, 1012-1017.	9.1	90
147	Molecular Dynamics Simulation of DNA-Functionalized Gold Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 2316-2321.	3.1	89
148	Theoretical studies of intersystem crossing effects in the O+H2 reaction. Journal of Chemical Physics, 2000, 113, 9456-9465.	3.0	88
149	Quantum scattering study of electronic Coriolis and nonadiabatic coupling effects in O(1D)+H2â†'OH+H. Journal of Chemical Physics, 1999, 111, 2451-2463.	3.0	87
150	Nanoscale Chemical Imaging of a Dynamic Molecular Phase Boundary with Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy. Nano Letters, 2016, 16, 3898-3904.	9.1	87
151	Aluminum Film-Over-Nanosphere Substrates for Deep-UV Surface-Enhanced Resonance Raman Spectroscopy. Nano Letters, 2016, 16, 7968-7973.	9.1	86
152	Singlet Fission in 9,10-Bis(phenylethynyl)anthracene Thin Films. Journal of the American Chemical Society, 2018, 140, 15140-15144.	13.7	84
153	Molecular engineering of organic semiconductors enables noble metal-comparable SERS enhancement and sensitivity. Nature Communications, 2019, 10, 5502.	12.8	84
154	Theoretical studies of intersystem crossing effects in the O(3P,â€Š1D)+H2 reaction. Journal of Chemical Physics, 2003, 119, 12360-12371.	3.0	82
155	Whispering-gallery mode resonators: Surface enhanced Raman scattering without plasmons. Journal of Chemical Physics, 2008, 129, 054704.	3.0	82
156	Two-photon excited deep-red and near-infrared emissive organic co-crystals. Nature Communications, 2020, 11, 4633.	12.8	82
157	REACTION DYNAMICS:Detecting Resonances. Science, 2000, 288, 1599-1600.	12.6	81
158	Embedding Methods for Quantum Chemistry: Applications from Materials to Life Sciences. Journal of the American Chemical Society, 2020, 142, 3281-3295.	13.7	81
159	Near-Infrared Surface-Enhanced Raman Spectroscopy (NIR-SERS) for the Identification of Eosin Y: Theoretical Calculations and Evaluation of Two Different Nanoplasmonic Substrates. Journal of Physical Chemistry A, 2012, 116, 11863-11869.	2.5	80
160	Superlattice Plasmons in Hierarchical Au Nanoparticle Arrays. ACS Photonics, 2015, 2, 1789-1794.	6.6	80
161	Mesoscale molecular network formation in amorphous organic materials. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10055-10060.	7.1	79
162	What Controls the Hybridization Thermodynamics of Spherical Nucleic Acids?. Journal of the American Chemical Society, 2015, 137, 3486-3489.	13.7	79

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163	Evaluating Single-Molecule Stokes and Anti-Stokes SERS for Nanoscale Thermometry. Journal of Physical Chemistry C, 2015, 119, 21116-21124.	3.1	78
164	Fluorinating Ï€â€Extended Molecular Acceptors Yields Highly Connected Crystal Structures and Low Reorganization Energies for Efficient Solar Cells. Advanced Energy Materials, 2020, 10, 2000635.	19.5	78
165	CO2 hydrogenation to formic acid on Ni(110). Surface Science, 2012, 606, 1050-1055.	1.9	76
166	Steered Molecular Dynamics Studies of the Potential of Mean Force of a Na+or K+Ion in a Cyclic Peptide Nanotube. Journal of Physical Chemistry B, 2006, 110, 26448-26460.	2.6	75
167	Plasmonic Hot-Carrier-Mediated Tunable Photochemical Reactions. ACS Nano, 2018, 12, 8415-8422.	14.6	75
168	Ab initio and semiempirical molecular orbital studies of surface enhanced and bulk hyperâ€Raman scattering from pyridine. Journal of Chemical Physics, 1992, 97, 3831-3845.	3.0	74
169	Tip-Enhanced Raman Voltammetry: Coverage Dependence and Quantitative Modeling. Nano Letters, 2017, 17, 590-596.	9.1	74
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