Zhi-Lin Yang

List of Publications by Year
in descending order

101 papers	6,034 citations	71102 41 h-index	71685 76 g-index
103 all docs	103 docs citations	103 times ranked	6808 citing authors

#	Article	IF	Citations
1	In situ Raman spectroscopic evidence for oxygen reduction reaction intermediates at platinum single-crystal surfaces. Nature Energy, 2019, 4, 60-67.	39.5	478
2	In situ Raman spectroscopyÂreveals the structure and dissociation of interfacial water. Nature, 2021, 600, 81-85.	27.8	381
3	Promoted Fixation of Molecular Nitrogen with Surface Oxygen Vacancies on Plasmonâ€Enhanced TiO₂ Photoelectrodes. Angewandte Chemie - International Edition, 2018, 57, 5278-5282.	13.8	365
4	In situ probing electrified interfacial water structures at atomically flat surfaces. Nature Materials, 2019, 18, 697-701.	27.5	352
5	Three-Dimensional and Time-Ordered Surface-Enhanced Raman Scattering Hotspot Matrix. Journal of the American Chemical Society, 2014, 136, 5332-5341.	13.7	293
6	Probing the electronic and catalytic properties of a bimetallic surface with 3â€…nm resolution. Nature Nanotechnology, 2017, 12, 132-136.	31.5	290
7	Electrochemical Tip-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2015, 137, 11928-11931.	13.7	232
8	Electromagnetic field enhancement in TERS configurations. Journal of Raman Spectroscopy, 2009, 40, 1343-1348.	2.5	187
9	In situ dynamic tracking of heterogeneous nanocatalytic processes by shell-isolated nanoparticle-enhanced Raman spectroscopy. Nature Communications, 2017, 8, 15447.	12.8	185
10	â€œSmartâ€•Ag Nanostructures for Plasmon-Enhanced Spectroscopies. Journal of the American Chemical Society, 2015, 137, 13784-13787.	13.7	157
11	Optimization of SERS activities of gold nanoparticles and goldâ€coreâ€"palladiumâ€shell nanoparticles by controlling size and shell thickness. Journal of Raman Spectroscopy, 2008, 39, 1679-1687.	2.5	148
12	Probing the Location of Hot Spots by Surface-Enhanced Raman Spectroscopy: Toward Uniform Substrates. ACS Nano, 2014, 8, 528-536.	14.6	136
13	A Plasmonic Sensor Array with Ultrahigh Figures of Merit and Resonance Linewidths down to 3 nm. Advanced Materials, 2018, 30, e1706031.	21.0	132
14	Revealing the Role of Interfacial Properties on Catalytic Behaviors by <i>in Situ</i> Surface-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2017, 139, 10339-10346.	13.7	127
15	Can <i>p</i>,<i>p</i>â€²-Dimercaptoazobisbenzene Be Produced from <i>p</i>-Aminothiophenol by Surface Photochemistry Reaction in the Junctions of a Ag Nanoparticleâˆ'Moleculeâˆ'Ag (or Au) Film?. Journal of Physical Chemistry C, 2010, 114, 18263-18269.	3.1	114
16	CdS core-Au plasmonic satellites nanostructure enhanced photocatalytic hydrogen evolution reaction. Nano Energy, 2018, 49, 363-371.	16.0	107
17	Plasmon-Induced Magnetic Resonance Enhanced Raman Spectroscopy. Nano Letters, 2018, 18, 2209-2216.	9.1	96
18	Plasmon-Enhanced Second-Harmonic Generation Nanorulers with Ultrahigh Sensitivities. Nano Letters, 2015, 15, 6716-6721.	9.1	88

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19	Correlating the Shape, Surface Plasmon Resonance, and Surface-Enhanced Raman Scattering of Gold Nanorods. Journal of Physical Chemistry C, 2009, 113, 10459-10464.	3.1	83
20	Effect of Electric Field Gradient on Sub-nanometer Spatial Resolution of Tip-enhanced Raman Spectroscopy. Scientific Reports, 2015, 5, 9240.	3.3	83
21	SHINERS and plasmonic properties of Au Core SiO₂ shell nanoparticles with optimal core size and shell thickness. Journal of Raman Spectroscopy, 2013, 44, 994-998.	2.5	79
22	How To Light Special Hot Spots in Multiparticleâ€“Film Configurations. ACS Nano, 2016, 10, 581-587.	14.6	79
23	Multifunctional Fe₃O₄@SiO₂â€“Au Satellite Structured SERS Probe for Charge Selective Detection of Food Dyes. ACS Applied Materials & Interfaces, 2016, 8, 3056-3062.	8.0	77
24	Tunable SERS from aluminium nanohole arrays in the ultraviolet region. Chemical Communications, 2011, 47, 3909.	4.1	72
25	Boosting Photocatalytic Hydrogen Evolution Reaction Using Dual Plasmonic Antennas. ACS Catalysis, 2021, 11, 5047-5053.	11.2	62
26	FDTD for plasmonics: Applications in enhanced Raman spectroscopy. Science Bulletin, 2010, 55, 2635-2642.	1.7	61
27	Probing Interfacial Electronic and Catalytic Properties on Wellâ€Defined Surfaces by Using Inâ€…Situ Raman Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 11257-11261.	13.8	60
28	Rapid and low-cost quantitative detection of creatinine in human urine with a portable Raman spectrometer. Biosensors and Bioelectronics, 2020, 154, 112067.	10.1	60
29	Periodic trends in the bonding and vibrational coupling: Pyridine interacting with transition metals and noble metals studied by surface-enhanced Raman spectroscopy and density-functional theory. Journal of Chemical Physics, 2003, 119, 1701-1709.	3.0	59
30	Surface enhanced Raman scattering of pyridine adsorbed on Au@Pd core/shell nanoparticles. Journal of Chemical Physics, 2009, 130, 234705.	3.0	51
31	Largeâ€Area Hybrid Plasmonic Optical Cavity (HPOC) Substrates for Surfaceâ€Enhanced Raman Spectroscopy. Advanced Functional Materials, 2018, 28, 1802263.	14.9	51
32	A facile method for the synthesis of large-size Ag nanoparticles as efficient SERS substrates. Journal of Raman Spectroscopy, 2016, 47, 662-667.	2.5	49
33	In Situ Raman Study of CO Electrooxidation on Pt(<i>hkl</i>) Singleâ€Crystal Surfaces in Acidic Solution. Angewandte Chemie - International Edition, 2020, 59, 23554-23558.	13.8	47
34	Giant Raman enhancement on nanoporous gold film by conjugating with nanoparticles for single-molecule detection. Journal of Materials Chemistry, 2010, 20, 6891.	6.7	46
35	Promoted Fixation of Molecular Nitrogen with Surface Oxygen Vacancies on Plasmonâ€Enhanced TiO₂ Photoelectrodes. Angewandte Chemie, 2018, 130, 5376-5380.	2.0	45
36	Electromagnetic Enhancement in Shell-Isolated Nanoparticle-Enhanced Raman Scattering from Gold Flat Surfaces. Journal of Physical Chemistry C, 2015, 119, 5246-5251.	3.1	44

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37	Shellâ€isolated Tipâ€Enhanced Raman and Fluorescence Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 7523-7527.	13.8	44
38	Probing the Location of 3D Hot Spots in Gold Nanoparticle Films Using Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2019, 91, 5316-5322.	6.5	44
39	Tipâ€enhanced Raman spectroscopy for investigating adsorbed nonresonant molecules on singleâ€crystal surfaces: tip regeneration, probe molecule, and enhancement effect. Journal of Raman Spectroscopy, 2009, 40, 1400-1406.	2.5	43
40	Acoustic Graphene Plasmon Nanoresonators for Field-Enhanced Infrared Molecular Spectroscopy. ACS Photonics, 2017, 4, 3089-3097.	6.6	43
41	High-Throughput Single-Particle Analysis of Metal-Enhanced Fluorescence in Free Solution Using Ag@SiO₂ Coreâ€“Shell Nanoparticles. ACS Sensors, 2017, 2, 1369-1376.	7.8	43
42	Surface-enhanced Raman spectroscopy with ultraviolet excitation. Journal of Raman Spectroscopy, 2005, 36, 606-612.	2.5	42
43	Deep ultraviolet tip-enhanced Raman scattering. Chemical Communications, 2011, 47, 9131.	4.1	40
44	LSPR properties of metal nanoparticles adsorbed at a liquidâ€“liquid interface. Physical Chemistry Chemical Physics, 2013, 15, 5374.	2.8	40
45	Tailoring Topological Transitions of Anisotropic Polaritons by Interface Engineering in Biaxial Crystals. Nano Letters, 2022, 22, 4260-4268.	9.1	40
46	An ultranarrow SPR linewidth in the UV region for plasmonic sensing. Nanoscale, 2019, 11, 4061-4066.	5.6	38
47	Tip-enhanced ablation and ionization mass spectrometry for nanoscale chemical analysis. Science Advances, 2017, 3, eaaq1059.	10.3	34
48	A Nanoplasmonic Strategy for Precision in-situ Measurements of Tip-enhanced Raman and Fluorescence Spectroscopy. Scientific Reports, 2016, 6, 19558.	3.3	32
49	Plasmonic resonance-linewidth shrinkage to boost biosensing. Photonics Research, 2020, 8, 1226.	7.0	31
50	Large scale synthesis of pinholeâ€free shellâ€isolated nanoparticles (SHINs) using improved atomic layer deposition (ALD) method for practical applications. Journal of Raman Spectroscopy, 2015, 46, 1200-1204.	2.5	26
51	Bacteria Inspired Internal Standard SERS Substrate for Quantitative Detection. ACS Applied Bio Materials, 2021, 4, 2009-2019.	4.6	24
52	In-situ nanospectroscopic imaging of plasmon-induced two-dimensional [4+4]-cycloaddition polymerization on Au(111). Nature Communications, 2021, 12, 4557.	12.8	24
53	In Situ Raman Probing of Hotâ€Electron Transfer at Goldâ€“Graphene Interfaces with Atomic Layer Accuracy. Angewandte Chemie - International Edition, 2022, 61, .	13.8	24
54	3D Hotspots Platform for Plasmon Enhanced Raman and Second Harmonic Generation Spectroscopies and Quantitative Analysis. Advanced Optical Materials, 2019, 7, 1901010.	7.3	23

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55	Fano Interference Between Higher Localized and Propagating Surface Plasmon Modes in Nanovoid Arrays. Plasmonics, 2015, 10, 71-76.	3.4	21
56	Temperatureâ€Related Morphological Evolution of MoS₂ Domains on Graphene and Electron Transfer within Heterostructures. Small, 2017, 13, 1603549.	10.0	20
57	Directional surface plasmon-coupled emission of tilted-tip enhanced spectroscopy. Nanophotonics, 2018, 7, 1325-1332.	6.0	20
58	Largeâ€Area Plasmonic Metamaterial with Thicknessâ€Dependent Absorption. Advanced Optical Materials, 2021, 9, .	7.3	20
59	Probing Interfacial Electronic and Catalytic Properties on Wellâ€Defined Surfaces by Using Inâ€…Situ Raman Spectroscopy. Angewandte Chemie, 2018, 130, 11427-11431.	2.0	19
60	Unveiling the size effect of Pt-on-Au nanostructures on CO and methanol electrooxidation by <i>in situ</i> electrochemical SERS. Nanoscale, 2020, 12, 5341-5346.	5.6	18
61	Dimeric Coreâ€“Shell Ag₂@TiO₂ Nanoparticles for Off-Resonance Raman Study of the TiO₂â€“N719 Interface. Journal of Physical Chemistry C, 2015, 119, 18396-18403.	3.1	17
62	Gold nanorings synthesized via a stress-driven collapse and etching mechanism. NPG Asia Materials, 2016, 8, e323-e323.	7.9	17
63	Plasmoelectric Potential Mapping of a Single Nanoparticle. ACS Photonics, 2018, 5, 3519-3525.	6.6	16
64	Adsorption of Dye Molecules on Single Crystalline Semiconductor Surfaces: An Electrochemical Shell-Isolated Nanoparticle Enhanced Raman Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 22500-22507.	3.1	15
65	Surface-Enhanced Raman Scattering on Uniform Pd and Pt Films: From Ill-Defined to Structured Surfaces. Journal of Physical Chemistry C, 2013, 117, 24843-24850.	3.1	14
66	Plasma Cleaning and Self-Limited Welding of Silver Nanowire Films for Flexible Transparent Conductors. ACS Applied Nano Materials, 2021, 4, 1664-1671.	5.0	14
67	Plasmon-Enhanced Fluorescence of Phosphors Using Shell-Isolated Nanoparticles for Display Technologies. ACS Applied Nano Materials, 2020, 3, 5846-5854.	5.0	14
68	<i>In situ</i> Raman study of the photoinduced behavior of dye molecules on TiO₂(<i>hkl</i>) single crystal surfaces. Chemical Science, 2020, 11, 6431-6435.	7.4	13
69	Shellâ€Isolated Tipâ€Enhanced Raman and Fluorescence Spectroscopy. Angewandte Chemie, 2018, 130, 7645-7649.	2.0	12
70	Tunable surface plasmon polaritons and ultrafast dynamics in 2D nanohole arrays. Nanoscale, 2019, 11, 16428-16436.	5.6	12
71	Enhanced sum frequency generation for ultrasensitive characterization of plasmonic modes. Nanophotonics, 2020, 9, 815-822.	6.0	12
72	Understanding the strain effect of Au@Pd nanocatalysts by <i>in situ</i> surface-enhanced Raman spectroscopy. Chemical Communications, 2019, 55, 8824-8827.	4.1	11

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73	Competitive Effects of Surface Plasmon Resonances and Interband Transitions on Plasmon-Enhanced Second-Harmonic Generation at Near-Ultraviolet Frequencies. Physical Review Applied, 2020, 13, .	3.8	11
74	Adjustment and control of SERS activity of metal substrates by pressure. Journal of Raman Spectroscopy, 2010, 41, 398-405.	2.5	10
75	Self-assembly of subwavelength nanostructures with symmetry breaking in solution. Nanoscale, 2016, 8, 2951-2959.	5.6	10
76	Broadband unidirectional scattering in visible ranges and controllable hot-spot spatial transfer via a single nanoparticle. Applied Surface Science, 2020, 528, 146489.	6.1	10
77	Strong coupling between magnetic resonance and propagating surface plasmons at visible light frequencies. Journal of Chemical Physics, 2020, 152, 014702.	3.0	9
78	Segmented Agâ€"Auâ€"Ag Heterojunction Nanorods: Pressure-Assisted Aqueous-Phase Synthesis and Engineered Femtosecond-to-Nanosecond Dynamics. Journal of Physical Chemistry Letters, 2021, 12, 989-996.	4.6	9
79	Internal-Modified Dithiol DNAâ€"Directed Au Nanoassemblies: Geometrically Controlled Selfâ€"Assembly and Quantitative Surfaceâ€"Enhanced Raman Scattering Properties. Scientific Reports, 2015, 5, 16715.	3.3	8
80	Manipulation of Ultrafast Nonlinear Optical Response Based on Surface Plasmon Resonance. Advanced Optical Materials, 2021, 9, 2100847.	7.3	8
81	Overcurrent Electrodeposition of Fractal Plasmonic Black Gold with Broad-Band Absorption Properties for Excitation-Immune SERS. ACS Omega, 2020, 5, 8293-8298.	3.5	7
82	Light-Trapped Nanocavities for Ultraviolet Surface-Enhanced Raman Scattering. Journal of Physical Chemistry C, 2021, 125, 17241-17247.	3.1	7
83	Near-field coupling and SERS effects of palladium nanoparticle dimers. Science Bulletin, 2010, 55, 2930-2936.	1.7	6
84	Strong Fluorescence Enhancement with Silica-Coated Au Nanoshell Dimers. Plasmonics, 2017, 12, 263-269.	3.4	5
85	Rational Design of 3D Plasmonic Superstructure for Enhanced Photocatalytic Hydrogen Evolution Reaction in Wide Spectral Region. Journal of Physical Chemistry C, 2021, 125, 25455-25461.	3.1	5
86	Enhancement in middle-ultraviolet emission in a surface-plasmon-assisted coaxial nanocavity. Applied Physics Letters, 2008, 93, 091902.	3.3	4
87	Spatially-Controllable Hot Spots for Plasmon-Enhanced Second-Harmonic Generation in AgNP-ZnO Nanocavity Arrays. Nanomaterials, 2018, 8, 1012.	4.1	4
88	Multiband enhanced second-harmonic generation via plasmon hybridization. Journal of Chemical Physics, 2020, 153, 151102.	3.0	4
89	Quasi-Bragg plasmon modes for highly efficient plasmon-enhanced second-harmonic generation at near-ultraviolet frequencies. Optics Express, 2021, 29, 21444.	3.4	3
90	Statistical Strategy for Quantitative Evaluation of Plasmon-Enhanced Spectroscopy. ACS Photonics, 2022, 9, 1733-1740.	6.6	3

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91	Propagation and enhancement of ultraviolet radiation in metalâ€“dielectric nanocables assisted by surface plasmon polaritons. Applied Physics Letters, 2013, 102, 171601.	3.3	2
92	Surface plasmon resonance â€œhot spotsâ€•and near-field enhanced spectroscopy at interfaces. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 147801.	0.5	2
93	Nonlinear light amplification via 3D plasmonic nanocavities. Optics Express, 2022, 30, 2610.	3.4	2
94	Active Tendon Control of Stay Cable by a Giant Magnetostrictive Actuator Considering Time-Delay. Applied Sciences (Switzerland), 2022, 12, 2666.	2.5	2
95	Ultrasensitive and ultrafast nonlinear optical characterization of surface plasmons. APL Materials, 2022, 10, 030701.	5.1	2
96	Direct visualization of the charge transfer in conjugated polymers. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1119-1123.	5.1	1
97	In Situ Raman Study of CO Electrooxidation on Pt(hkl) Singleâ€Crystal Surfaces in Acidic Solution. Angewandte Chemie, 2020, 132, 23760-23764.	2.0	1
98	Nonlinear Light Amplification Governed by Structural Asymmetry. Advanced Optical Materials, 0, , 2102215.	7.3	1
99	Studies On Photorefractivity Of Liquid Crystals. , 1997, , .		0
100	Tunable Surface-Enhanced Raman Scattering from Aluminum Nanohole Arrays. , 2010, , .		0
101	RÃ¼cktitelbild: Promoted Fixation of Molecular Nitrogen with Surface Oxygen Vacancies on Plasmon-Enhanced TiO2 Photoelectrodes (Angew. Chem. 19/2018). Angewandte Chemie, 2018, 130, 5656-5656.	2.0	0