Liangbao Yang

List of Publications by Year
in descending order

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Version: 2024-02-01

112 papers	4,776 citations	71102 41 h-index	106344 65 g-index
114 all docs	114 docs citations	114 times ranked	5097 citing authors

#	Article	IF	Citations
1	Multifunctional Auâ€Coated TiO₂ Nanotube Arrays as Recyclable SERS Substrates for Multifold Organic Pollutants Detection. Advanced Functional Materials, 2010, 20, 2815-2824.	14.9	492
2	Three-Dimensional and Time-Ordered Surface-Enhanced Raman Scattering Hotspot Matrix. Journal of the American Chemical Society, 2014, 136, 5332-5341.	13.7	293
3	A dynamic surface enhanced Raman spectroscopy method for ultra-sensitive detection: from the wet state to the dry state. Chemical Society Reviews, 2015, 44, 2837-2848.	38.1	162
4	Detection and Direct Readout of Drugs in Human Urine Using Dynamic Surface-Enhanced Raman Spectroscopy and Support Vector Machines. Analytical Chemistry, 2015, 87, 2937-2944.	6.5	154
5	Ultrasensitive SERS Detection of TNT by Imprinting Molecular Recognition Using a New Type of Stable Substrate. Chemistry - A European Journal, 2010, 16, 12683-12693.	3.3	151
6	A novel paper rag as â€˜D-SERSâ€™ substrate for detection of pesticide residues at various peels. Talanta, 2014, 128, 117-124.	5.5	130
7	Portable Kit for Identification and Detection of Drugs in Human Urine Using Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2015, 87, 9500-9506.	6.5	106
8	Sea-urchin-like Fe3O4@C@Ag particles: an efficient SERS substrate for detection of organic pollutants. Nanoscale, 2013, 5, 5887.	5.6	89
9	Three-Dimensional Surface-Enhanced Raman Scattering Hotspots in Spherical Colloidal Superstructure for Identification and Detection of Drugs in Human Urine. Analytical Chemistry, 2015, 87, 4821-4828.	6.5	86
10	General Surface-Enhanced Raman Spectroscopy Method for Actively Capturing Target Molecules in Small Gaps. Journal of the American Chemical Society, 2021, 143, 7769-7776.	13.7	86
11	Surface-Enhanced Raman Spectroscopy on Liquid Interfacial Nanoparticle Arrays for Multiplex Detecting Drugs in Urine. Analytical Chemistry, 2016, 88, 8145-8151.	6.5	85
12	Development of surface-enhanced Raman spectroscopy application for determination of illicit drugs: Towards a practical sensor. Talanta, 2019, 191, 1-10.	5.5	81
13	Optimal Hotspots of Dynamic Surfaced-Enhanced Raman Spectroscopy for Drugs Quantitative Detection. Analytical Chemistry, 2017, 89, 4875-4881.	6.5	77
14	Assembly of polymerâ€“gold nanostructures with high reproducibility into a monolayer film SERS substrate with 5 nm gaps for pesticide trace detection. Analyst, The, 2013, 138, 5832.	3.5	72
15	Monitoring plasmon-driven surface catalyzed reactions in situ using time-dependent surface-enhanced Raman spectroscopy on single particles of hierarchical peony-like silver microflowers. Nanoscale, 2014, 6, 8612-8616.	5.6	72
16	Three-dimensional SERS hot spots for chemical sensing: Towards developing a practical analyzer. TrAC - Trends in Analytical Chemistry, 2016, 80, 364-372.	11.4	69
17	Sensitive and selective SERS probe for trivalent chromium detection using citrate attached gold nanoparticles. Nanoscale, 2012, 4, 6442.	5.6	67
18	Multifunctional TiO2-Coated Ag Nanowire Arrays as Recyclable SERS Substrates for the Detection of Organic Pollutants. European Journal of Inorganic Chemistry, 2012, 2012, 3176-3182.	2.0	66

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19	Clean and reproducible SERS substrates for high sensitive detection by solid phase synthesis and fabrication of Agâ€coated Fe₃O₄ microspheres. Journal of Raman Spectroscopy, 2012, 43, 848-856.	2.5	65
20	Metastable state nanoparticle-enhanced Raman spectroscopy for highly sensitive detection. Chemical Communications, 2011, 47, 3583.	4.1	64
21	Fabrication of Au nanorodâ€coated Fe₃O₄ microspheres as SERS substrate for pesticide analysis by nearâ€infrared excitation. Journal of Raman Spectroscopy, 2015, 46, 470-475.	2.5	64
22	Hybrid single nanoreactor for in situ SERS monitoring of plasmon-driven and small Au nanoparticles catalyzed reactions. Chemical Communications, 2015, 51, 11394-11397.	4.1	63
23	Capillarity-constructed reversible hot spots for molecular trapping inside silver nanorod arrays light up ultrahigh SERS enhancement. Chemical Science, 2013, 4, 3490.	7.4	62
24	Functionalized shell-isolated nanoparticle-enhanced Raman spectroscopy for selective detection of trinitrotoluene. Analyst, The, 2012, 137, 4644.	3.5	60
25	Progress in multifunctional surface-enhanced Raman scattering substrate for detection. RSC Advances, 2014, 4, 49635-49646.	3.6	58
26	Designing of the functional paper-based surface-enhanced Raman spectroscopy substrates for colorants detection. Materials Research Bulletin, 2015, 63, 199-204.	5.2	58
27	Highly Selective and Repeatable Surface-Enhanced Resonance Raman Scattering Detection for Epinephrine in Serum Based on Interface Self-Assembled 2D Nanoparticles Arrays. ACS Applied Materials & Interfaces, 2017, 9, 7772-7779.	8.0	56
28	Ultrasensitive optical detection of trinitrotoluene by ethylenediamine-capped gold nanoparticles. Analytica Chimica Acta, 2012, 744, 92-98.	5.4	53
29	Highly sensitive in situ monitoring of catalytic reactions by surface enhancement Raman spectroscopy on multifunctional Fe₃O₄/C/Au NPs. Nanoscale, 2014, 6, 7954-7958.	5.6	53
30	Highly sensitive on-site detection of drugs adulterated in botanical dietary supplements using thin layer chromatography combined with dynamic surface enhanced Raman spectroscopy. Talanta, 2016, 146, 351-357.	5.5	53
31	Designing of ordered two-dimensional gold nanoparticles film for cocaine detection in human urine using surface-enhanced Raman spectroscopy. Talanta, 2017, 164, 693-699.	5.5	53
32	Highly uniform and optical visualization of SERS substrate for pesticide analysis based on Au nanoparticles grafted on dendritic Î±-Fe2O3. Nanoscale, 2013, 5, 11193.	5.6	52
33	Non-ultraviolet photocatalytic kinetics of NaYF₄:Yb,Tm@TiO₂/Ag core@comby shell nanostructures. Journal of Materials Chemistry A, 2015, 3, 14642-14650.	10.3	52
34	A newâ€type dynamic SERS method for ultrasensitive detection. Journal of Raman Spectroscopy, 2013, 44, 21-28.	2.5	51
35	Polystyrene/Ag nanoparticles as dynamic surface-enhanced Raman spectroscopy substrates for sensitive detection of organophosphorus pesticides. Talanta, 2014, 127, 269-275.	5.5	51
36	Designing of a novel gold nanodumbbells SERS substrate for detection of prohibited colorants in drinks. Applied Surface Science, 2016, 366, 181-186.	6.1	45

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37	Natural Deposition Strategy for Interfacial, Selfâ€Assembled, Largeâ€Scale, Densely Packed, Monolayer Film with Ligandâ€Exchanged Gold Nanorods for In Situ Surfaceâ€Enhanced Raman Scattering Drug Detection. Chemistry - A European Journal, 2018, 24, 4094-4102.	3.3	45
38	Solvent-induced hot spot switch on silver nanorod enhanced Raman spectroscopy. Analyst, The, 2012, 137, 1547.	3.5	44
39	Designing and fabricating of surface-enhanced Raman scattering substrate with high density hot spots by polyaniline template-assisted self-assembly. Nanoscale, 2012, 4, 6449.	5.6	43
40	A shrinking strategy for creating dynamic SERS hot spots on the surface of thermosensitive polymer nanospheres. Chemical Communications, 2013, 49, 5025.	4.1	43
41	Amphiphilic Functionalized Acupuncture Needle as SERS Sensor for In Situ Multiphase Detection. Analytical Chemistry, 2018, 90, 3826-3832.	6.5	43
42	Facile Size-Controlled Synthesis of Silver Nanoparticles in UV-Irradiated Tungstosilicate Acid Solution. Journal of Physical Chemistry C, 2007, 111, 5300-5308.	3.1	41
43	Cetylpyridinium Chloride Activated Trinitrotoluene Explosive Lights Up Robust and Ultrahigh Surfaceâ€Enhanced Resonance Raman Scattering in a Silver Sol. Chemistry - A European Journal, 2013, 19, 8789-8796.	3.3	39
44	Nanosized barium carbonate particles stabilized by cetyltrimethylammonium bromide at the water/hexamethylene interface. Crystal Research and Technology, 2007, 42, 886-889.	1.3	38
45	A displacement principle for mercury detection by optical waveguide and surface enhanced Raman spectroscopy. Journal of Colloid and Interface Science, 2012, 386, 451-455.	9.4	38
46	Study on the synthesis of Ag/AgCl nanoparticles and their photocatalytic properties. Materials Research Bulletin, 2012, 47, 3452-3458.	5.2	38
47	Sensitive and simple determination of zwitterionic morphine in human urine based on liquid-liquid micro-extraction coupled with surface-enhanced Raman spectroscopy. Talanta, 2018, 186, 427-432.	5.5	38
48	Molecular sensitivity of DNAâ€“Agâ€“PATP hybrid on optical activity for ultratrace mercury analysis. Chemical Communications, 2011, 47, 9360.	4.1	36
49	Three-dimensional hotspots in evaporating nanoparticle sols for ultrahigh Raman scattering: solidâ€“liquid interface effects. Nanoscale, 2015, 7, 6619-6626.	5.6	36
50	Elucidation of leak-resistance DNA hybridization chain reaction with universality and extensibility. Nucleic Acids Research, 2020, 48, 2220-2231.	14.5	34
51	Speedy and surfactant-free in situ synthesis of nickel/Ag nanocomposites for reproducible SERS substrates. Journal of Materials Chemistry, 2012, 22, 19932.	6.7	33
52	Functionalized Acupuncture Needle as Surfaceâ€Enhanced Resonance Raman Spectroscopy Sensor for Rapid and Sensitive Detection of Dopamine in Serum and Cerebrospinal Fluid. Chemistry - A European Journal, 2017, 23, 14278-14285.	3.3	33
53	Gold Nanoparticle-Decorated Silver Needle for Surface-Enhanced Raman Spectroscopy Screening of Residual Malachite Green in Aquaculture Products. ACS Applied Nano Materials, 2019, 2, 2752-2757.	5.0	33
54	Probing catecholamine neurotransmitters based on iron-coordination surface-enhanced resonance Raman spectroscopy label. Sensors and Actuators B: Chemical, 2018, 268, 350-358.	7.8	32

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55	In Situ Photoreduced Silver Nanoparticles on Cysteine: An Insight into the Origin of Chirality. Chemistry - A European Journal, 2012, 18, 8037-8041.	3.3	29
56	A capillary force-induced Au nanoparticleâ€“Ag nanowire single hot spot platform for SERS analysis. Journal of Materials Chemistry C, 2017, 5, 3229-3237.	5.5	29
57	The time-resolved D-SERS vibrational spectra of pesticide thiram. Talanta, 2013, 117, 39-44.	5.5	28
58	Based on time and spatial-resolved SERS mapping strategies for detection of pesticides. Talanta, 2015, 141, 1-7.	5.5	27
59	SERS and OWGS detection of dynamic trapping molecular TNT based on a functional self-assembly Au monolayer film. Analyst, The, 2013, 138, 1858.	3.5	26
60	Ag nanoparticles as multifunctional SERS substrate for the adsorption, degradation and detection of dye molecules. Applied Surface Science, 2013, 265, 346-351.	6.1	25
61	Individual SERS substrate with coreâ€“satellite structure decorated in shrinkable hydrogel template for pesticide detection. Journal of Raman Spectroscopy, 2014, 45, 68-74.	2.5	24
62	Metal coordination-functionalized Auâ€“Ag bimetal SERS nanoprobe for sensitive detection of glutathione. Analyst, The, 2019, 144, 421-425.	3.5	24
63	Cys-functionalized AuNP substrates for improved sensing of the marine toxin STX by dynamic surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2020, 412, 4609-4617.	3.7	24
64	Sensitively monitoring photodegradation process of organic dye molecules by surface-enhanced Raman spectroscopy based on Fe₃O₄@SiO₂@TiO₂@Ag particle. Analyst, The, 2014, 139, 5509-5515.	3.5	23
65	Sodium Chloride Crystalâ€Induced SERS Platform for Controlled Highly Sensitive Detection of Illicit Drugs. Chemistry - A European Journal, 2018, 24, 4800-4804.	3.3	23
66	Construction of Optimal SERS Hotspots Based on Capturing the Spike Receptor-Binding Domain (RBD) of SARS-CoV-2 for Highly Sensitive and Specific Detection by a Fish Model. Analytical Chemistry, 2021, 93, 16086-16095.	6.5	22
67	Raman Spectroscopy as a Superior Tool To Understand the Synthetic Pathway of Cu2FeSnS4Nanoparticles. European Journal of Inorganic Chemistry, 2015, 2015, 2690-2694.	2.0	21
68	Highly-reproducible Raman scattering of NaYF₄:Yb,Er@SiO₂@Ag for methylamphetamine detection under near-infrared laser excitation. Analyst, The, 2015, 140, 5268-5275.	3.5	18
69	Morphogenesis and Crystallization of ZnS Microspheres by a Soft Templateâ€Assisted Hydrothermal Route: Synthesis, Growth Mechanism, and Oxygen Sensitivity. Chemistry - an Asian Journal, 2009, 4, 174-180.	3.3	17
70	A long-period and high-stability three-dimensional surface-enhanced Raman scattering hotspot matrix. Chemical Communications, 2019, 55, 8647-8650.	4.1	17
71	Controlling the Shrinkage of 3D Hot Spot Droplets as a Microreactor for Quantitative SERS Detection of Anticancer Drugs in Serum Using a Handheld Raman Spectrometer. Analytical Chemistry, 2022, 94, 4831-4840.	6.5	17
72	A simple approach for the synthesis of Ag-coated Ni@TiO2 nanocomposites as recyclable photocatalysts and SERS substrate to monitor catalytic degradation of dye molecules. Materials Research Bulletin, 2014, 53, 205-210.	5.2	16

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73	A novel SERS selective detection sensor for trace trinitrotoluene based on meisenheimer complex of monoethanolamine molecule. Talanta, 2020, 218, 121157.	5.5	16
74	Surfaceâ€enhanced Raman evidence for Rhodamine 6â€‰G and its derivative with different adsorption geometry to colloidal silver nanoparticle. Journal of Raman Spectroscopy, 2013, 44, 999-1003.	2.5	15
75	Developing cysteamine-modified SERS substrate for detection of acidic pigment with weak surface affinity. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 212, 293-299.	3.9	15
76	Oriented Attachment Growth of Three-Dimensionally Packed Trigonal Selenium Microspheres into Large-Area Wire Networks. European Journal of Inorganic Chemistry, 2007, 2007, 4438-4444.	2.0	14
77	Raman scattering and plasmonic photocatalysis of single particles of NaYF₄:Yb,Er@Ag under near-infrared laser excitation. Analyst, The, 2014, 139, 5983-5988.	3.5	14
78	Metal coordination induced SERS nanoprobe for sensitive and selective detection of histamine in serum. Talanta, 2022, 237, 122913.	5.5	14
79	Controlling Plasmon-Aided Reduction of p-Nitrothiophenol by Tuning the Illumination Wavelength. ACS Catalysis, 2021, 11, 14898-14905.	11.2	14
80	Synthesis of Controllable-Size Coreâ€“Shell Se@Ag and Se@Au Nanoparticles in UV-Irradiated TSA Solution. European Journal of Inorganic Chemistry, 2007, 2007, 1128-1134.	2.0	13
81	Highly sensitive detection of an antidiabetic drug as illegal additives in health products using solvent microextraction combined with surface-enhanced Raman spectroscopy. Analyst, The, 2019, 144, 7406-7411.	3.5	13
82	Size- and Shape-Controlled Synthesis and Assembly of a Silver Nanocomplex in UV-Irradiated TSA Solution. European Journal of Inorganic Chemistry, 2006, 2006, 4658-4664.	2.0	12
83	Time-dependent SERS spectra monitoring the dynamic adsorption behavior of bipyridine isomerides combined with bianalyte method. Analyst, The, 2016, 141, 5189-5194.	3.5	12
84	Real-time monitoring of plasmon-induced proton transfer of hypoxanthine in serum. Nanoscale, 2017, 9, 12307-12310.	5.6	12
85	Functionalized acupuncture needle as a SERS-active platform for rapid and sensitive determination of adenosine triphosphate. Analytical and Bioanalytical Chemistry, 2019, 411, 5669-5679.	3.7	12
86	Morphogenesis of CuI Nanocrystals by a TSAâ€Assisted Photochemical Route: Synthesis, Optical Properties, and Growth Mechanism. European Journal of Inorganic Chemistry, 2009, 2009, 1376-1384.	2.0	11
87	Assembling PVP-Au NPs as portable chip for sensitive detection of cyanide with surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2020, 412, 2863-2871.	3.7	11
88	Hydrothermal growth of ZnS microspheres and their temperatureâ€dependent luminescence properties. Crystal Research and Technology, 2008, 43, 1022-1025.	1.3	10
89	Monitoring the inorganic chemical reaction by surface-enhanced Raman spectroscopy: A case of Fe3+ to Fe2+ conversion. Talanta, 2016, 146, 452-456.	5.5	10
90	Rapid and sensitive surfaceâ€enhanced resonance Raman spectroscopy detection for norepinephrine in biofluids. Journal of Raman Spectroscopy, 2019, 50, 314-321.	2.5	10

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91	High-affinity Fe₃O₄/Au probe with synergetic effect of surface plasmon resonance and charge transfer enabling improved SERS sensing of dopamine in biofluids. Analyst, The, 2019, 144, 4526-4533.	3.5	9
92	Field determination of hazardous chemicals in public security by using a hand-held Raman spectrometer and a deep architecture-search network. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 258, 119871.	3.9	9
93	Unravelling the Relationship between Raman Enhancement and Photocatalytic Activity on Single Anisotropic Au Microplates. Chemistry - A European Journal, 2014, 20, 10414-10424.	3.3	8
94	Facile fabrication of leafy spikes-like silver dendrite crystals for SERS substrate. Materials Research Bulletin, 2013, 48, 4125-4133.	5.2	7
95	Natural <3Ânm Interbedded Gaps to Trap Target Molecules and Provide an Enhanced Raman Spectroscopy Method. Advanced Optical Materials, 2022, 10, .	7.3	7
96	Synthesis and SERS Performance of a Recyclable SERS Substrate Based on Ag NPs Coated TiO₂ NT Arrays. Integrated Ferroelectrics, 2013, 147, 17-23.	0.7	6
97	Design and fabrication of surface-enhanced Raman scattering substrate from DNAâ€“gold nanoparticles assembly with 2â€“3 nm interparticle gap. RSC Advances, 2014, 4, 45207-45213.	3.6	6
98	Transformation of thiolated chitosan-templated gold nanoparticles to huge microcubes. Materials Research Bulletin, 2014, 53, 89-95.	5.2	6
99	Cationic surfactant regulated synthesis of Au nanorods for sensitive detection of negatively charged colorants by surfaceâ€enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 2019, 50, 809-817.	2.5	6
100	Plasma- and anneal-assisted hybridization of SWCNT-Au network for rapid and high-sensitive electrical detection of antibody-antigen interactions. Journal of Materials Chemistry, 2012, 22, 6139.	6.7	4
101	Ethanol-extraction SERS strategy for highly sensitive detection of poisons in oily matrix. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 259, 119883.	3.9	4
102	Insight into the Heterogeneity of Longitudinal Plasmonic Field in a Nanocavity Using an Intercalated Two-Dimensional Atomic Crystal Probe with a â¼7 Ã… Resolution. Journal of the American Chemical Society, 2022, 144, 13174-13183.	13.7	4
103	A facile method to synthesize spherical PbS and their shape evolution process. Crystal Research and Technology, 2008, 43, 1026-1029.	1.3	3
104	Synthesis of flakeâ€like crystals by a hydrothermal process. Crystal Research and Technology, 2009, 44, 409-413.	1.3	3
105	Synthesis of gold nanorods with varied length-diameter ratios-applications using SERS for the detection of drugs. Journal of Dispersion Science and Technology, 2021, 42, 485-492.	2.4	3
106	In-situ SERS readout strategy to improve the reliability of beta-galactosidase activity assay based on X-gal staining in shortening incubation times. Talanta, 2021, 234, 122689.	5.5	3
107	Exploring the utility of Au@PVP-polyamide-Triton X-114 for SERS tracking of extracellular senescence associated-beta-galactosidase activity. Analytical Methods, 2021, 13, 2087-2091.	2.7	3
108	Intelligent and robust DNA robots capable of swarming into leakless nonlinear amplification in response to a trigger. Nanoscale Horizons, 2022, 7, 634-643.	8.0	3

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109	Construction of Ag nanowire@Au nanoparticle nano nests with densely stacked small gaps for actively trapping molecules to realize diversity SERS detection. Analyst, The, 2022, , .	3.5	2
110	Growth of starâ€shaped PbWO₄ crystal assemblies in TSA solution and their optical properties. Crystal Research and Technology, 2009, 44, 736-740.	1.3	1
111	The rapid SERS detection of succinylcholine chloride in human plasma is based on the high affinity between quaternary ammonium salt structures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 263, 120172.	3.9	1
112	Insight into ultrasensitive and high-stability flocculation-enhanced Raman spectroscopy for the in situ noninvasive probing of cupping effect substances. Analyst, The, 0, , .	3.5	1