Xiao Xia Han

List of Publications by Year
in descending order

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100 papers	4,640 citations	101496 36 h-index	110317 64 g-index
103 all docs	103 docs citations	103 times ranked	4950 citing authors

#	Article	IF	Citations
1	An investigation of the effect of high-pressure on charge transfer in dye-sensitized solar cells based on surface-enhanced Raman spectroscopy. Nanoscale, 2022, 14, 373-381.	2.8	2
2	One plus one greater than Two: Ultrasensitive Surface-Enhanced Raman scattering by TiO2/ZnO heterojunctions based on Electron-Hole separation. Applied Surface Science, 2022, 584, 152609.	3.1	20
3	Electron transfer between cytochrome c and microsomal monooxygenase generates reactive oxygen species that accelerates apoptosis. Redox Biology, 2022, 53, 102340.	3.9	12
4	In-situ fingerprinting phosphorylated proteins via surface-enhanced Raman spectroscopy: Single-site discrimination of Tau biomarkers in Alzheimer's disease. Biosensors and Bioelectronics, 2021, 171, 112748.	5.3	22
5	Metalâ€“semiconductor heterostructures for surface-enhanced Raman scattering: synergistic contribution of plasmons and charge transfer. Materials Horizons, 2021, 8, 370-382.	6.4	124
6	High-efficiency charge transfer on SERS-active semiconducting K2Ti6O13 nanowires enables direct transition of photoinduced electrons to protein redox centers. Biosensors and Bioelectronics, 2021, 191, 113452.	5.3	11
7	Comprehensive Strategy for Sample Preparation for the Analysis of Food Contaminants and Residues by GCâ€“MS/MS: A Review of Recent Research Trends. Foods, 2021, 10, 2473.	1.9	25
8	Label-Free Analysis of Cell Membrane Proteins via Evanescent Field Excited Surface-Enhanced Raman Scattering. Journal of Physical Chemistry Letters, 2021, 12, 10720-10727.	2.1	2
9	Surface-enhanced Raman spectroscopy. Nature Reviews Methods Primers, 2021, 1, .	11.8	183
10	Crocein Orange G mediated detection and modulation of amyloid fibrillation revealed by surface-enhanced Raman spectroscopy. Biosensors and Bioelectronics, 2020, 148, 111816.	5.3	13
11	Surface-enhanced Raman scattering (SERS) and applications. , 2020, , 349-386.		5
12	Innentitelbild: Direct Dynamic Evidence of Charge Separation in a Dyeâ€Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy (Angew. Chem. 27/2020). Angewandte Chemie, 2020, 132, 10758-10758.	1.6	0
13	Enhanced Raman spectroscopic analysis of protein post-translational modifications. TrAC - Trends in Analytical Chemistry, 2020, 131, 116019.	5.8	11
14	Label-Free and Highly Sensitive Detection of Native Proteins by Ag IANPs via Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2020, 92, 14325-14329.	3.2	24
15	Role of 2â€™13C Isotopic Glyphosate Adsorption on Silver Nanoparticles Based on Ninhydrin Reaction: A Study Based on Surfaceâ€”Enhanced Raman Spectroscopy. Nanomaterials, 2020, 10, 2539.	1.9	6
16	Direct Dynamic Evidence of Charge Separation in a Dyeâ€Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy. Angewandte Chemie, 2020, 132, 10872-10876.	1.6	5
17	Direct Dynamic Evidence of Charge Separation in a Dyeâ€Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 10780-10784.	7.2	16
18	Ferrous cytochrome c-nitric oxide oxidation for quantification of protein S-nitrosylation probed by resonance Raman spectroscopy. Sensors and Actuators B: Chemical, 2020, 308, 127706.	4.0	6

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19	Frequency Shifts in Surface-Enhanced Raman Spectroscopy-Based Immunoassays: Mechanistic Insights and Application in Protein Carbonylation Detection. Analytical Chemistry, 2019, 91, 9376-9381.	3.2	27
20	Molecular form-specific immunoassays for neutrophil gelatinase-associated lipocalin by surface-enhanced Raman spectroscopy. Sensors and Actuators B: Chemical, 2019, 297, 126742.	4.0	6
21	Redoxâ€Stateâ€Mediated Regulation of Cytochromeâ€...c Release in Apoptosis Revealed by Surfaceâ€Enhanced Raman Scattering on Nickel Substrates. Angewandte Chemie, 2019, 131, 16651-16655.	1.6	0
22	Redoxâ€Stateâ€Mediated Regulation of Cytochromeâ€...c Release in Apoptosis Revealed by Surfaceâ€Enhanced Raman Scattering on Nickel Substrates. Angewandte Chemie - International Edition, 2019, 58, 16499-16503.	7.2	31
23	Surface-enhanced Raman scattering (SERS) as a probe for detection of charge-transfer between TiO₂ and CdS nanoparticles. New Journal of Chemistry, 2019, 43, 230-237.	1.4	32
24	Direct Approach toward Label-Free DNA Detection by Surface-Enhanced Raman Spectroscopy: Discrimination of a Single-Base Mutation in 50 Base-Paired Double Helixes. Analytical Chemistry, 2019, 91, 7980-7984.	3.2	36
25	Surface-Enhanced Raman Scattering for Direct Protein Function Investigation: Controlled Immobilization and Orientation. Analytical Chemistry, 2019, 91, 8767-8771.	3.2	37
26	Metal-free SERS substrate based on rGOâ€“TiO₂â€“Fe₃O₄ nanohybrid: contribution from interfacial charge transfer and magnetic controllability. Physical Chemistry Chemical Physics, 2019, 21, 12850-12858.	1.3	16
27	Revealing interfacial charge transfer in TiO2/reduced graphene oxide nanocomposite by surface-enhanced Raman scattering (SERS): Simultaneous a superior SERS-active substrate. Applied Surface Science, 2019, 487, 938-944.	3.1	36
28	Base-Pair Contents and Sequences of DNA Double Helices Differentiated by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 3013-3018.	2.1	19
29	Investigation of the binding sites and orientation of Norfloxacin on bovine serum albumin by surface enhanced Raman scattering and molecular docking. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 207, 307-312.	2.0	14
30	Nickel Nanowires Combined with Surface-Enhanced Raman Spectroscopy: Application in Label-Free Detection of Cytochrome c-Mediated Apoptosis. Analytical Chemistry, 2019, 91, 1213-1216.	3.2	24
31	In situ semi-quantitative assessment of single-cell viability by resonance Raman spectroscopy. Chemical Communications, 2018, 54, 7135-7138.	2.2	10
32	Investigation of charge transfer at the TiO₂â€“MBAâ€“Au interface based on surface-enhanced Raman scattering: SPR contribution. Physical Chemistry Chemical Physics, 2018, 20, 5666-5673.	1.3	25
33	Indirect glyphosate detection based on ninhydrin reaction and surface-enhanced Raman scattering spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 197, 78-82.	2.0	30
34	Label-Free Detection of Tetramolecular i-Motifs by Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2018, 90, 2996-3000.	3.2	39
35	Surface-enhanced Raman scattering on organicâ€“inorganic hybrid perovskites. Chemical Communications, 2018, 54, 2134-2137.	2.2	30
36	A Ag synchronously deposited and doped TiO₂ hybrid as an ultrasensitive SERS substrate: a multifunctional platform for SERS detection and photocatalytic degradation. Physical Chemistry Chemical Physics, 2018, 20, 15149-15157.	1.3	52

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37	SERS strategy based on the modified Au nanoparticles for highly sensitive detection of bisphenol A residues in milk. Talanta, 2018, 179, 37-42.	2.9	53
38	Antibody-Free Discrimination of Protein Biomarkers in Human Serum Based on Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2018, 90, 12342-12346.	3.2	22
39	Structural Features of DNA G-Quadruplexes Revealed by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 3245-3252.	2.1	41
40	SERS investigation and high sensitive detection of carbenicillin disodium drug on the Ag substrate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 204, 241-247.	2.0	17
41	Reduced Charge-Transfer Threshold in Dye-Sensitized Solar Cells with an Au@Ag/N3/n-TiO₂ Structure As Revealed by Surface-Enhanced Raman Scattering. Journal of Physical Chemistry C, 2018, 122, 12748-12760.	1.5	13
42	Direct detection of fluoride ions in aquatic samples by surface-enhanced Raman scattering. Talanta, 2018, 178, 9-14.	2.9	34
43	Interfacial Charge Transfer in TiO2/PTCA/Ag Revealed by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 15208-15213.	1.5	10
44	Semiconductor-enhanced Raman scattering: active nanomaterials and applications. Nanoscale, 2017, 9, 4847-4861.	2.8	289
45	Charge Transfer at the TiO₂/N3/Ag Interface Monitored by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 5145-5153.	1.5	11
46	High sensitive detection of penicillin G residues in milk by surface-enhanced Raman scattering. Talanta, 2017, 167, 236-241.	2.9	61
47	Double Metal Co-Doping of TiO₂ Nanoparticles for Improvement of their SERS Activity and Ultrasensitive Detection of Enrofloxacin: Regulation Strategy of Energy Levels. ChemistrySelect, 2017, 2, 3099-3105.	0.7	17
48	Surface-Enhanced Raman Scattering (SERS) Active Gold Nanoparticles Decorated on a Porous Polymer Filter. Applied Spectroscopy, 2017, 71, 1543-1550.	1.2	17
49	Electron Transfer of Cytochromeâ€…c on Surfaceâ€Enhanced Raman Scatteringâ€“Active Substrates: Material Dependence and Biocompatibility. Chemistry - A European Journal, 2017, 23, 9034-9038.	1.7	15
50	Recyclable Auâ€“TiO₂ nanocomposite SERS-active substrates contributed by synergistic charge-transfer effect. Physical Chemistry Chemical Physics, 2017, 19, 11212-11219.	1.3	67
51	Detection of Pesticide Residues in Food Using Surface-Enhanced Raman Spectroscopy: A Review. Journal of Agricultural and Food Chemistry, 2017, 65, 6719-6726.	2.4	252
52	An enhanced degree of charge transfer in dye-sensitized solar cells with a ZnO-TiO₂/N3/Ag structure as revealed by surface-enhanced Raman scattering. Nanoscale, 2017, 9, 15303-15313.	2.8	36
53	Highly-dispersed TiO₂ nanoparticles with abundant active sites induced by surfactants as a prominent substrate for SERS: charge transfer contribution. Physical Chemistry Chemical Physics, 2017, 19, 22302-22308.	1.3	27
54	Multiplex Immunochips for High-Accuracy Detection of AFP-L3% Based on Surface-Enhanced Raman Scattering: Implications for Early Liver Cancer Diagnosis. Analytical Chemistry, 2017, 89, 8877-8883.	3.2	88

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55	Charge-Transfer Effect on Surface-Enhanced Raman Spectroscopy in Ag/PTCA: Herzbergâ€“Teller Selection Rules. Journal of Physical Chemistry C, 2017, 121, 25788-25794.	1.5	20
56	Mesoporous semiconducting TiO₂ with rich active sites as a remarkable substrate for surface-enhanced Raman scattering. Physical Chemistry Chemical Physics, 2017, 19, 18731-18738.	1.3	35
57	Quantitative Determination of Total Amino Acids Based on Surface-Enhanced Raman Scattering and Ninhydrin Derivatization. Analytical Sciences, 2017, 33, 53-57.	0.8	8
58	A rapid and ultrasensitive SERRS assay for histidine and tyrosine based on azo coupling. Talanta, 2016, 159, 208-214.	2.9	20
59	Charge-Transfer-Induced Enantiomer Selective Discrimination of Chiral Alcohols by SERS. Journal of Physical Chemistry C, 2016, 120, 29374-29381.	1.5	28
60	The mechanism of an enzymatic reaction-induced SERS transformation for the study of enzymeâ€“molecule interfacial interactions. Physical Chemistry Chemical Physics, 2016, 18, 31787-31795.	1.3	11
61	SERS investigation and detection of levofloxacin drug molecules on semiconductor TiO2: Charge transfer contribution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 508, 142-149.	2.3	23
62	Nickel electrodes as a cheap and versatile platform for studying structure and function of immobilized redox proteins. Analytica Chimica Acta, 2016, 941, 35-40.	2.6	17
63	Investigation of Charge Transfer in Ag/N719/TiO2 Interface by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 13078-13086.	1.5	43
64	Mercury species induced frequency-shift of molecular orientational transformation based on SERS. Analyst, The, 2016, 141, 4782-4788.	1.7	24
65	Ultrasensitive detection of thyrotropin-releasing hormone based on azo coupling and surface-enhanced resonance Raman spectroscopy. Analyst, The, 2016, 141, 5181-5188.	1.7	13
66	A Turn-On Resonance Raman Scattering (BCS/Cu+) Sensor for Quantitative Determination of Proteins. Applied Spectroscopy, 2016, 70, 355-362.	1.2	4
67	Multiple weak interactionâ€assisted SERS detection platform for triadimefon. Journal of Raman Spectroscopy, 2015, 46, 54-58.	1.2	8
68	Anatase TiO₂ nanoparticles with controllable crystallinity as a substrate for SERS: improved charge-transfer contribution. RSC Advances, 2015, 5, 80269-80275.	1.7	23
69	Semiconductor-driven â€œturn-offâ€•surface-enhanced Raman scattering spectroscopy: application in selective determination of chromium(<scp>vi</scp>) in water. Chemical Science, 2015, 6, 342-348.	3.7	92
70	Magnetic Titanium Dioxide Nanocomposites for Surfaceâ€Enhanced Resonance Raman Spectroscopic Determination and Degradation of Toxic Anilines and Phenols. Angewandte Chemie - International Edition, 2014, 53, 2481-2484.	7.2	57
71	Potentialâ€Dependent Surfaceâ€Enhanced Resonance Raman Spectroscopy at Nanostructured TiO₂: A Case Study on Cytochrome b₅. Small, 2013, 9, 4175-4181.	5.2	63
72	Magnetic Silver Hybrid Nanoparticles for Surface-Enhanced Resonance Raman Spectroscopic Detection and Decontamination of Small Toxic Molecules. ACS Nano, 2013, 7, 3212-3220.	7.3	71

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73	Biological Applications of SERS Using Functional Nanoparticles. ACS Symposium Series, 2012, , 181-234.	0.5	7
74	pH-Dependent SERS by Semiconductor-Controlled Charge-Transfer Contribution. Journal of Physical Chemistry C, 2012, 116, 24829-24836.	1.5	32
75	An ionic surfactant-mediated Langmuirâ€“Blodgett method to construct gold nanoparticle films for surface-enhanced Raman scattering. Physical Chemistry Chemical Physics, 2012, 14, 10132.	1.3	36
76	Label-free detection in biological applications of surface-enhanced Raman scattering. TrAC - Trends in Analytical Chemistry, 2012, 38, 67-78.	5.8	100
77	Micrometer-sized gold nanoplates: starch-mediated photochemical reduction synthesis and possibility of application to tip-enhanced Raman scattering (TERS). Physical Chemistry Chemical Physics, 2012, 14, 9636.	1.3	49
78	Biomagnetic glass beads for protein separation and detection based on surface-enhanced Raman scattering. Analytical Methods, 2012, 4, 1643.	1.3	14
79	Labelâ€free detection of binary mixtures of proteins using surfaceâ€enhanced Raman scattering. Journal of Raman Spectroscopy, 2012, 43, 706-711.	1.2	26
80	Laser heating effect on Raman spectra of styreneâ€“butadiene rubber/multiwalled carbon nanotube nanocomposites. Chemical Physics Letters, 2012, 523, 87-91.	1.2	22
81	Highly Sensitive and Selective Determination of Iodide and Thiocyanate Concentrations Using Surface-Enhanced Raman Scattering of Starch-Reduced Gold Nanoparticles. Analytical Chemistry, 2011, 83, 3655-3662.	3.2	92
82	Coupling Reaction-Based Ultrasensitive Detection of Phenolic Estrogens Using Surface-Enhanced Resonance Raman Scattering. Analytical Chemistry, 2011, 83, 8582-8588.	3.2	56
83	Labelâ€Free Indirect Immunoassay Using an Avidinâ€Induced Surfaceâ€Enhanced Raman Scattering Substrate. Small, 2011, 7, 316-320.	5.2	35
84	Selective SERS detection of each polycyclic aromatic hydrocarbon (PAH) in a mixture of five kinds of PAHs. Journal of Raman Spectroscopy, 2011, 42, 945-950.	1.2	63
85	Detection of proteins on Silicaâ€“Silver Coreâ€“Shell substrates by surface-enhanced Raman spectroscopy. Journal of Colloid and Interface Science, 2011, 360, 482-487.	5.0	45
86	Siteâ€specific deposition of Ag nanoparticles on ZnO nanorod arrays via galvanic reduction and their SERS applications. Journal of Raman Spectroscopy, 2010, 41, 907-913.	1.2	54
87	Coomassie Brilliant Dyes as Surface-Enhanced Raman Scattering Probes for Proteinâ^'Ligand Recognitions. Analytical Chemistry, 2010, 82, 4102-4106.	3.2	50
88	Sensing of polycyclic aromatic hydrocarbons with cyclodextrin inclusion complexes on silver nanoparticles by surface-enhanced Raman scattering. Analyst, The, 2010, 135, 1389.	1.7	118
89	Highly Sensitive Protein Concentration Assay over a Wide Range via Surface-Enhanced Raman Scattering of Coomassie Brilliant Blue. Analytical Chemistry, 2010, 82, 4325-4328.	3.2	58
90	Surface-enhanced Raman scattering for protein detection. Analytical and Bioanalytical Chemistry, 2009, 394, 1719-1727.	1.9	317

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91	Surface-enhanced Raman scattering: realization of localized surface plasmon resonance using unique substrates and methods. Analytical and Bioanalytical Chemistry, 2009, 394, 1747-1760.	1.9	107
92	Label-Free Highly Sensitive Detection of Proteins in Aqueous Solutions Using Surface-Enhanced Raman Scattering. Analytical Chemistry, 2009, 81, 3329-3333.	3.2	203
93	Protein-Mediated Sandwich Strategy for Surface-Enhanced Raman Scattering: Application to Versatile Protein Detection. Analytical Chemistry, 2009, 81, 3350-3355.	3.2	112
94	Preparation and SERS study of triangular silver nanoparticle selfâ€assembled films. Journal of Raman Spectroscopy, 2008, 39, 1673-1678.	1.2	39
95	Simplified Protocol for Detection of Proteinâ^'Ligand Interactions via Surface-Enhanced Resonance Raman Scattering and Surface-Enhanced Fluorescence. Analytical Chemistry, 2008, 80, 6567-6572.	3.2	79
96	Fluorescein Isothiocyanate Linked Immunoabsorbent Assay Based on Surface-Enhanced Resonance Raman Scattering. Analytical Chemistry, 2008, 80, 3020-3024.	3.2	92
97	Analytical Technique for Label-Free Multi-Protein Detection Based on Western Blot and Surface-Enhanced Raman Scattering. Analytical Chemistry, 2008, 80, 2799-2804.	3.2	150
98	Density functional theory calculation of vibrational spectroscopy of trans-1,2-bis(4-pyridyl)-ethylene. Vibrational Spectroscopy, 2007, 43, 306-312.	1.2	30
99	Surface-enhanced Raman spectroscopy and density functional theory study on 4,4â€²-bipyridine molecule. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2007, 67, 509-516.	2.0	41
100	Optical properties of Ag/CdTe nanocomposite self-organized by electrostatic interaction. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 64, 101-105.	2.0	27