

# Bing Zhao

## List of Publications by Year in descending order

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197  
papers

11,665  
citations

26567

56  
h-index

32761

100  
g-index

200  
all docs

200  
docs citations

200  
times ranked

10097  
citing authors

#	ARTICLE	IF	CITATIONS
1	Present and Future of Surface-Enhanced Raman Scattering. ACS Nano, 2020, 14, 28-117.	7.3	2,153
2	Surface-enhanced Raman scattering for protein detection. Analytical and Bioanalytical Chemistry, 2009, 394, 1719-1727.	1.9	317
3	Observation of Enhanced Raman Scattering for Molecules Adsorbed on TiO <sub>2</sub> Nanoparticles: Charge-Transfer Contribution. Journal of Physical Chemistry C, 2008, 112, 20095-20098.	1.5	314
4	Semiconductor-enhanced Raman scattering: active nanomaterials and applications. Nanoscale, 2017, 9, 4847-4861.	2.8	289
5	Raman Investigation of Nanosized TiO <sub>2</sub> : Effect of Crystallite Size and Quantum Confinement. Journal of Physical Chemistry C, 2012, 116, 8792-8797.	1.5	269
6	Charge-Transfer-Induced Surface-Enhanced Raman Scattering on Ag~TiO <sub>2</sub> Nanocomposites. Journal of Physical Chemistry C, 2009, 113, 16226-16231.	1.5	228
7	Direct observation of surface-enhanced Raman scattering in ZnO nanocrystals. Journal of Raman Spectroscopy, 2009, 40, 1072-1077.	1.2	220
8	Label-Free Highly Sensitive Detection of Proteins in Aqueous Solutions Using Surface-Enhanced Raman Scattering. Analytical Chemistry, 2009, 81, 3329-3333.	3.2	203
9	Raman scattering study of molecules adsorbed on ZnS nanocrystals. Journal of Raman Spectroscopy, 2007, 38, 34-38.	1.2	190
10	Surface-enhanced Raman spectroscopy. Nature Reviews Methods Primers, 2021, 1, .	11.8	183
11	Seed-mediated growth of large, monodisperse core-shell gold-silver nanoparticles with Ag-like optical properties. Chemical Communications, 2002, , 144-145.	2.2	179
12	Functional nanomaterials with unique enzyme-like characteristics for sensing applications. Journal of Materials Chemistry B, 2019, 7, 850-875.	2.9	155
13	Surface-enhanced Raman spectroscopy study on the structure changes of 4-mercaptopyridine adsorbed on silver substrates and silver colloids. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 2827-2834.	2.0	152
14	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
15	Enhanced Raman Scattering by ZnO Superstructures: Synergistic Effect of Charge Transfer and Mie Resonances. Angewandte Chemie - International Edition, 2019, 58, 14452-14456.	7.2	133
16	Semiconductor materials in analytical applications of surface-enhanced Raman scattering. Journal of Raman Spectroscopy, 2016, 47, 51-58.	1.2	127
17	Metal-semiconductor heterostructures for surface-enhanced Raman scattering: synergistic contribution of plasmons and charge transfer. Materials Horizons, 2021, 8, 370-382.	6.4	124
18	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

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19	Nanoparticle Metal-Semiconductor Charge Transfer in ZnO/PATP/Ag Assemblies by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 6093-6098.	1.5	117
20	Fabrication of Ag-Cu <sub>2</sub> O/Reduced Graphene Oxide Nanocomposites as Surface-Enhanced Raman Scattering Substrates for in Situ Monitoring of Peroxidase-Like Catalytic Reaction and Biosensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19074-19081.	4.0	115
21	Laser-Induced Growth of Monodisperse Silver Nanoparticles with Tunable Surface Plasmon Resonance Properties and a Wavelength Self-Limiting Effect. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14962-14967.	1.5	114
22	Protein-Mediated Sandwich Strategy for Surface-Enhanced Raman Scattering: Application to Versatile Protein Detection. <i>Analytical Chemistry</i> , 2009, 81, 3350-3355.	3.2	112
23	ZnO nanoparticle size-dependent excitation of surface Raman signal from adsorbed molecules: Observation of a charge-transfer resonance. <i>Applied Physics Letters</i> , 2007, 91, 221106.	1.5	107
24	Recent Development of SERS Technology: Semiconductor-Based Study. <i>ACS Omega</i> , 2019, 4, 20101-20108.	1.6	105
25	Surface-Enhanced Raman Scattering of 4-Mercaptopyridine on the Surface of TiO <sub>2</sub> Nanofibers Coated with Ag Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 12786-12791.	1.5	101
26	Label-free detection in biological applications of surface-enhanced Raman scattering. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 38, 67-78.	5.8	100
27	Charge-Transfer Effect on Surface-Enhanced Raman Scattering (SERS) in an Ordered Ag NPs/4-Mercaptobenzoic Acid/TiO <sub>2</sub> System. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22439-22444.	1.5	100
28	Precisely Controllable Core-Shell Ag@Carbon Dots Nanoparticles: Application to in Situ Super-Sensitive Monitoring of Catalytic Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 27956-27965.	4.0	98
29	Enhanced Raman Scattering as a Probe for 4-Mercaptopyridine Surface-modified Copper Oxide Nanocrystals. <i>Analytical Sciences</i> , 2007, 23, 787-791.	0.8	97
30	Surface characteristics and potential ecological risk evaluation of heavy metals in the bio-char produced by co-pyrolysis from municipal sewage sludge and hazelnut shell with zinc chloride. <i>Bioresource Technology</i> , 2017, 243, 375-383.	4.8	96
31	Simple Method for Preparing Controllably Aggregated Silver Particle Films Used as Surface-Enhanced Raman Scattering Active Substrates. <i>Langmuir</i> , 2002, 18, 6839-6844.	1.6	95
32	Mercaptopyridine Surface-Functionalized CdTe Quantum Dots with Enhanced Raman Scattering Properties. <i>Journal of Physical Chemistry C</i> , 2008, 112, 996-1000.	1.5	94
33	Semiconductor-driven $\pi$ - $\pi$ surface-enhanced Raman scattering spectroscopy: application in selective determination of chromium(VI) in water. <i>Chemical Science</i> , 2015, 6, 342-348.	3.7	92
34	Exploring the Effect of Intermolecular H-Bonding: A Study on Charge-Transfer Contribution to Surface-Enhanced Raman Scattering of <i>p</i> -Mercaptobenzoic Acid. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10191-10197.	1.5	91
35	Three-dimensional superhydrophobic surface-enhanced Raman spectroscopy substrate for sensitive detection of pollutants in real environments. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4330-4337.	5.2	88
36	Multiplex Immuno-chips for High-Accuracy Detection of AFP-L3% Based on Surface-Enhanced Raman Scattering: Implications for Early Liver Cancer Diagnosis. <i>Analytical Chemistry</i> , 2017, 89, 8877-8883.	3.2	88

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37	A dual colorimetric and SERS detection of Hg <sup>2+</sup> based on the stimulus of intrinsic oxidase-like catalytic activity of Ag-CoFe <sub>2</sub> O <sub>4</sub> /reduced graphene oxide nanocomposites. <i>Chemical Engineering Journal</i> , 2018, 350, 120-130.	6.6	87
38	Enantioselective Discrimination of Alcohols by Hydrogen Bonding: A SERS Study. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13866-13870.	7.2	83
39	Controllable Synthesis of SERS-Active Magnetic Metal-Organic Framework-Based Nanocatalysts and Their Application in Photoinduced Enhanced Catalytic Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 25726-25736.	4.0	79
40	Spectroscopic studies of the optical properties of carbon dots: recent advances and future prospects. <i>Materials Chemistry Frontiers</i> , 2020, 4, 472-488.	3.2	79
41	Surface-Enhanced Raman Scattering from Synergistic Contribution of Metal and Semiconductor in TiO <sub>2</sub> /MBA/Ag(Au) and Ag(Au)/MBA/TiO <sub>2</sub> Assemblies. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14650-14655.	1.5	78
42	Scanned chemical enhancement of surface-enhanced Raman scattering using a charge-transfer complex. <i>Chemical Communications</i> , 2011, 47, 2426-2428.	2.2	75
43	Co-pyrolysis characteristics of municipal sewage sludge and hazelnut shell by TG-DTG-MS and residue analysis. <i>Waste Management</i> , 2017, 62, 91-100.	3.7	74
44	Kinetics evaluation and thermal decomposition characteristics of co-pyrolysis of municipal sewage sludge and hazelnut shell. <i>Bioresource Technology</i> , 2018, 247, 21-29.	4.8	74
45	Self-assembly directed synthesis of Au nanorices induced by polyaniline and their enhanced peroxidase-like catalytic properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7465-7471.	2.7	72
46	Metal-Semiconductor Contacts Induce the Charge-Transfer Mechanism of Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2011, 115, 18378-18383.	1.5	67
47	Recyclable Au-TiO <sub>2</sub> nanocomposite SERS-active substrates contributed by synergistic charge-transfer effect. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11212-11219.	1.3	67
48	Effect of TiO <sub>2</sub> on Altering Direction of Interfacial Charge Transfer in a TiO <sub>2</sub> -Ag-MPY-FePc System by SERS. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8172-8176.	7.2	66
49	Size and Wavelength Dependence of the Charge-Transfer Contributions to Surface-Enhanced Raman Spectroscopy in Ag/PATP/ZnO Junctions. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1610-1614.	1.5	63
50	Selective SERS detection of each polycyclic aromatic hydrocarbon (PAH) in a mixture of five kinds of PAHs. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 945-950.	1.2	63
51	Contribution of ZnO to Charge-Transfer Induced Surface-Enhanced Raman Scattering in Au/ZnO/PATP Assembly. <i>Journal of Physical Chemistry C</i> , 2009, 113, 117-120.	1.5	62
52	Surface-enhanced Raman scattering on mercaptopyridine-capped CdS microclusters. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 66, 1199-1203.	2.0	60
53	pH-Response Mechanism of <i>p</i> -Aminobenzenethiol on Ag Nanoparticles Revealed By Two-Dimensional Correlation Surface-Enhanced Raman Scattering Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3204-3209.	2.1	60
54	Preparation of a Superhydrophobic and Peroxidase-like Activity Array Chip for H <sub>2</sub> O <sub>2</sub> Sensing by Surface-Enhanced Raman Scattering. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 23472-23480.	4.0	59

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55	Fabrication of surface-enhanced Raman scattering-active ZnO/Ag composite microspheres. <i>Journal of Raman Spectroscopy</i> , 2007, 38, 1320-1325.	1.2	58
56	Preparation of Nanoscale Ag Semishell Array with Tunable Interparticle Distance and Its Application in Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2886-2890.	1.5	56
57	Coupling Reaction-Based Ultrasensitive Detection of Phenolic Estrogens Using Surface-Enhanced Resonance Raman Scattering. <i>Analytical Chemistry</i> , 2011, 83, 8582-8588.	3.2	56
58	Semiconductor-enhanced Raman scattering for highly robust SERS sensing: the case of phosphate analysis. <i>Chemical Communications</i> , 2015, 51, 7641-7644.	2.2	56
59	Adsorption study of 4- <i>ε</i> MBA on TiO <sub>2</sub> nanoparticles by surface-enhanced Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 2004-2008.	1.2	54
60	Site-specific deposition of Ag nanoparticles on ZnO nanorod arrays via galvanic reduction and their SERS applications. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 907-913.	1.2	54
61	A Ag synchronously deposited and doped TiO <sub>2</sub> hybrid as an ultrasensitive SERS substrate: a multifunctional platform for SERS detection and photocatalytic degradation. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15149-15157.	1.3	52
62	Improved surface-enhanced Raman scattering properties of TiO <sub>2</sub> nanoparticles by Zn dopant. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 721-726.	1.2	50
63	Contribution of hydrogen bonding to charge-transfer induced surface-enhanced Raman scattering of an intermolecular system comprising p-aminothiophenol and benzoic acid. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3153.	1.3	49
64	Enhanced Raman Spectroscopy of Nanostructured Semiconductor Phonon Modes. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 671-674.	2.1	48
65	Surface-enhanced Raman scattering of molecules adsorbed on Co-doped ZnO nanoparticles. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 61-64.	1.2	48
66	The hierarchical porous structure bio-char assessments produced by co-pyrolysis of municipal sewage sludge and hazelnut shell and Cu(II) adsorption kinetics. <i>Environmental Science and Pollution Research</i> , 2018, 25, 19423-19435.	2.7	48
67	Pressure-induced SERS enhancement in a MoS <sub>2</sub> /Au/R6G system by a two-step charge transfer process. <i>Nanoscale</i> , 2019, 11, 21493-21501.	2.8	48
68	Dithiouracil, a highly efficient depressant for the selective separation of molybdenite from chalcopyrite by flotation: Applications and mechanism. <i>Minerals Engineering</i> , 2022, 175, 107287.	1.8	47
69	Fabrication of a highly sensitive surface-enhanced Raman scattering substrate for monitoring the catalytic degradation of organic pollutants. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13556-13562.	5.2	46
70	Vibrational spectroscopy and density functional theory study of 4-mercaptobenzoic acid. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 148, 369-374.	2.0	45
71	Synthesis of bifunctional reduced graphene oxide/CuS/Au composite nanosheets for in situ monitoring of a peroxidase-like catalytic reaction by surface-enhanced Raman spectroscopy. <i>RSC Advances</i> , 2016, 6, 54456-54462.	1.7	45
72	Investigation of Charge Transfer in Ag/N719/TiO <sub>2</sub> Interface by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016, 120, 13078-13086.	1.5	43

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73	Structural Features of DNA G-Quadruplexes Revealed by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3245-3252.	2.1	41
74	Interfacial Charge-Transfer Effects in Semiconductor-Molecule-Metal Structures: Influence of Contact Variation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14701-14710.	1.5	40
75	Effects of Mn doping on surface enhanced Raman scattering properties of TiO <sub>2</sub> nanoparticles. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 95, 213-217.	2.0	40
76	Electrospun nanofibrous materials: A versatile platform for enzyme mimicking and their sensing applications. <i>Composites Communications</i> , 2019, 12, 1-13.	3.3	40
77	A Chiral-Label-Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19079-19086.	7.2	40
78	Label-Free Detection of Tetramolecular i-Motifs by Surface-Enhanced Raman Spectroscopy. <i>Analytical Chemistry</i> , 2018, 90, 2996-3000.	3.2	39
79	Multiphonon Resonant Raman Scattering and Photoinduced Charge-Transfer Effects at ZnO-Molecule Interfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 26908-26918.	1.5	37
80	Surface-Enhanced Raman Scattering for Direct Protein Function Investigation: Controlled Immobilization and Orientation. <i>Analytical Chemistry</i> , 2019, 91, 8767-8771.	3.2	37
81	An enhanced degree of charge transfer in dye-sensitized solar cells with a ZnO-TiO <sub>2</sub> /N <sub>3</sub> /Ag structure as revealed by surface-enhanced Raman scattering. <i>Nanoscale</i> , 2017, 9, 15303-15313.	2.8	36
82	Direct Approach toward Label-Free DNA Detection by Surface-Enhanced Raman Spectroscopy: Discrimination of a Single-Base Mutation in 50 Base-Paired Double Helices. <i>Analytical Chemistry</i> , 2019, 91, 7980-7984.	3.2	36
83	Revealing interfacial charge transfer in TiO <sub>2</sub> /reduced graphene oxide nanocomposite by surface-enhanced Raman scattering (SERS): Simultaneous a superior SERS-active substrate. <i>Applied Surface Science</i> , 2019, 487, 938-944.	3.1	36
84	Accurate Monitoring Platform for the Surface Catalysis of Nanozyme Validated by Surface-Enhanced Raman-Kinetics Model. <i>Analytical Chemistry</i> , 2020, 92, 11763-11770.	3.2	36
85	A SERS-active enzymatic product used for the quantification of disease-related molecules. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 75-81.	1.2	35
86	Mesoporous semiconducting TiO <sub>2</sub> with rich active sites as a remarkable substrate for surface-enhanced Raman scattering. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 18731-18738.	1.3	35
87	Facile synthesis of silver nanoparticles/carbon dots for a charge transfer study and peroxidase-like catalytic monitoring by surface-enhanced Raman scattering. <i>Applied Surface Science</i> , 2017, 410, 42-50.	3.1	34
88	Predictive Value of the Surface-Enhanced Resonance Raman Scattering-Based MTT Assay: A Rapid and Ultrasensitive Method for Cell Viability in Situ. <i>Analytical Chemistry</i> , 2013, 85, 7361-7368.	3.2	33
89	Surface Plasmon Resonance from Gallium-Doped Zinc Oxide Nanoparticles and Their Electromagnetic Enhancement Contribution to Surface-Enhanced Raman Scattering. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 35038-35045.	4.0	33
90	pH-Dependent SERS by Semiconductor-Controlled Charge-Transfer Contribution. <i>Journal of Physical Chemistry C</i> , 2012, 116, 24829-24836.	1.5	32

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91	Generation of Pronounced Resonance Profile of Charge-Transfer Contributions to Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2515-2520.	1.5	32
92	Surface-enhanced Raman scattering (SERS) as a probe for detection of charge-transfer between TiO <sub>2</sub> and CdS nanoparticles. <i>New Journal of Chemistry</i> , 2019, 43, 230-237.	1.4	32
93	Redox-State-Mediated Regulation of Cytochrome-c Release in Apoptosis Revealed by Surface-Enhanced Raman Scattering on Nickel Substrates. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16499-16503.	7.2	31
94	Indirect glyphosate detection based on ninhydrin reaction and surface-enhanced Raman scattering spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 197, 78-82.	2.0	30
95	Surface-enhanced Raman scattering on organic-inorganic hybrid perovskites. <i>Chemical Communications</i> , 2018, 54, 2134-2137.	2.2	30
96	A highly sensitive SERS platform based on small-sized Ag/GQDs nanozyme for intracellular analysis. <i>Chemical Engineering Journal</i> , 2022, 430, 132687.	6.6	30
97	Surface enhanced Raman scattering from a hierarchical substrate of micro/nanostructured silver. <i>Journal of Raman Spectroscopy</i> , 2006, 37, 755-761.	1.2	29
98	A chiral signal-amplified sensor for enantioselective discrimination of amino acids based on charge transfer-induced SERS. <i>Chemical Communications</i> , 2019, 55, 9697-9700.	2.2	29
99	Charge-Transfer-Induced Enantiomer Selective Discrimination of Chiral Alcohols by SERS. <i>Journal of Physical Chemistry C</i> , 2016, 120, 29374-29381.	1.5	28
100	Plasmonic Molybdenum Tungsten Oxide Hybrid with Surface-Enhanced Raman Scattering Comparable to that of Noble Metals. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 19153-19160.	4.0	28
101	Investigation of charge-transfer between a 4-mercaptobenzoic acid monolayer and TiO <sub>2</sub> nanoparticles under high pressure using surface-enhanced Raman scattering. <i>Chemical Communications</i> , 2018, 54, 6280-6283.	2.2	27
102	Frequency Shifts in Surface-Enhanced Raman Spectroscopy-Based Immunoassays: Mechanistic Insights and Application in Protein Carbonylation Detection. <i>Analytical Chemistry</i> , 2019, 91, 9376-9381.	3.2	27
103	Investigation of charge transfer at the TiO <sub>2</sub> -MBA-Au interface based on surface-enhanced Raman scattering: SPR contribution. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5666-5673.	1.3	25
104	Investigation of the Charge-Transfer Between Ga-Doped ZnO Nanoparticles and Molecules Using Surface-Enhanced Raman Scattering: Doping Induced Band-Gap Shrinkage. <i>Frontiers in Chemistry</i> , 2019, 7, 144.	1.8	25
105	Comprehensive Strategy for Sample Preparation for the Analysis of Food Contaminants and Residues by GC-MS/MS: A Review of Recent Research Trends. <i>Foods</i> , 2021, 10, 2473.	1.9	25
106	Mercury species induced frequency-shift of molecular orientational transformation based on SERS. <i>Analyst</i> , 2016, 141, 4782-4788.	1.7	24
107	Nickel Nanowires Combined with Surface-Enhanced Raman Spectroscopy: Application in Label-Free Detection of Cytochrome c-Mediated Apoptosis. <i>Analytical Chemistry</i> , 2019, 91, 1213-1216.	3.2	24
108	Label-Free and Highly Sensitive Detection of Native Proteins by Ag IANPs via Surface-Enhanced Raman Spectroscopy. <i>Analytical Chemistry</i> , 2020, 92, 14325-14329.	3.2	24

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109	Ultra-sensitive SERS detection, rapid selective adsorption and degradation of cationic dyes on multifunctional magnetic metal-organic framework-based composite. <i>Nanotechnology</i> , 2020, 31, 315501.	1.3	24
110	Modulating Mechanism of the LSPR and SERS in Ag/ITO Film: Carrier Density Effect. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 7612-7618.	2.1	24
111	Anatase TiO <sub>2</sub> nanoparticles with controllable crystallinity as a substrate for SERS: improved charge-transfer contribution. <i>RSC Advances</i> , 2015, 5, 80269-80275.	1.7	23
112	Ultrasensitive Detection of Capsaicin in Oil for Fast Identification of Illegal Cooking Oil by SERRS. <i>ACS Omega</i> , 2017, 2, 8401-8406.	1.6	23
113	SERS Selective Enhancement on Monolayer MoS <sub>2</sub> Enabled by a Pressure-Induced Shift from Resonance to Charge Transfer. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 26551-26560.	4.0	23
114	Design of an anti-aggregated SERS sensing platform for metal ion detection based on bovine serum albumin-mediated metal nanoparticles. <i>Chemical Communications</i> , 2013, 49, 7334.	2.2	22
115	Antibody-Free Discrimination of Protein Biomarkers in Human Serum Based on Surface-Enhanced Raman Spectroscopy. <i>Analytical Chemistry</i> , 2018, 90, 12342-12346.	3.2	22
116	In-situ fingerprinting phosphorylated proteins via surface-enhanced Raman spectroscopy: Single-site discrimination of Tau biomarkers in Alzheimer's disease. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112748.	5.3	22
117	Hollow Multi-Shelled V <sub>2</sub> O <sub>5</sub> Microstructures Integrating Multiple Synergistic Resonances for Enhanced Semiconductor SERS. <i>Advanced Optical Materials</i> , 2021, 9, 2101866.	3.6	22
118	Charge transfer process at the Ag/MPH/TiO <sub>2</sub> interface by SERS: alignment of the Fermi level. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30053-30060.	1.3	20
119	Ginsenoside compound K inhibits nuclear factor-kappa B by targeting Annexin A2. <i>Journal of Ginseng Research</i> , 2019, 43, 452-459.	3.0	20
120	Accurate SERS monitoring of the plasmon mediated UV/visible/NIR photocatalytic and photothermal catalytic process involving Ag@carbon dots. <i>Nanoscale</i> , 2021, 13, 1006-1015.	2.8	20
121	One plus one greater than Two: Ultrasensitive Surface-Enhanced Raman scattering by TiO <sub>2</sub> /ZnO heterojunctions based on Electron-Hole separation. <i>Applied Surface Science</i> , 2022, 584, 152609.	3.1	20
122	Innovative Application of SERS in Food Quality and Safety: A Brief Review of Recent Trends. <i>Foods</i> , 2022, 11, 2097.	1.9	20
123	Base-Pair Contents and Sequences of DNA Double Helices Differentiated by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3013-3018.	2.1	19
124	Putting surface-enhanced Raman spectroscopy to work for nanozyme research: Methods, materials and applications. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 152, 116603.	5.8	18
125	Nickel electrodes as a cheap and versatile platform for studying structure and function of immobilized redox proteins. <i>Analytica Chimica Acta</i> , 2016, 941, 35-40.	2.6	17
126	Double Metal Co-Doping of TiO <sub>2</sub> Nanoparticles for Improvement of their SERS Activity and Ultrasensitive Detection of Enrofloxacin: Regulation Strategy of Energy Levels. <i>ChemistrySelect</i> , 2017, 2, 3099-3105.	0.7	17



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127	Electrospun magnetic CoFe <sub>2</sub> O <sub>4</sub> /Ag hybrid nanotubes for sensitive SERS detection and monitoring of the catalytic degradation of organic pollutants. RSC Advances, 2017, 7, 40334-40341.	1.7	17
128	SERS detection of proteins on micropatterned protein-mediated sandwich substrates. Journal of Raman Spectroscopy, 2011, 42, 1492-1496.	1.2	16
129	Probing the Interfacial Charge-Transfer Process of Uniform ALD Semiconductor-Molecule-Metal Models: A SERS Study. Journal of Physical Chemistry C, 2017, 121, 26939-26948.	1.5	16
130	Controlling the orientation of probe molecules on surface-enhanced Raman scattering substrates: A novel strategy to improve sensitivity. Analytica Chimica Acta, 2017, 994, 65-72.	2.6	16
131	Metal-free SERS substrate based on rGO-TiO <sub>2</sub> -Fe <sub>3</sub> O <sub>4</sub> nanohybrid: contribution from interfacial charge transfer and magnetic controllability. Physical Chemistry Chemical Physics, 2019, 21, 12850-12858.	1.3	16
132	Preparation of Porous Biochars by the Co-Pyrolysis of Municipal Sewage Sludge and Hazelnut Shells and the Mechanism of the Nano-Zinc Oxide Composite and Cu(II) Adsorption Kinetics. Sustainability, 2020, 12, 8668.	1.6	16
133	Ultrasensitive Stimulation Effect of Fluoride Ions on a Novel Nanozyme-SERS System. ACS Sustainable Chemistry and Engineering, 2020, 8, 11906-11913.	3.2	16
134	Direct Dynamic Evidence of Charge Separation in a Dye-Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 10780-10784.	7.2	16
135	Remediation of Cu(II) and its adsorption mechanism in aqueous system by novel magnetic biochar derived from co-pyrolysis of sewage sludge and biomass. Environmental Science and Pollution Research, 2021, 28, 16408-16419.	2.7	16
136	Simultaneous enhancement of phonons modes with molecular vibrations due to Mg doping of a TiO <sub>2</sub> substrate. RSC Advances, 2013, 3, 20891.	1.7	15
137	Organoruthenium-Supported Polyoxotungstate - Synthesis, Structure and Oxidation of n-Hexadecane with Air. European Journal of Inorganic Chemistry, 2013, 2013, 1935-1942.	1.0	15
138	Electron Transfer of Cytochrome c on Surface-Enhanced Raman Scattering-Active Substrates: Material Dependence and Biocompatibility. Chemistry - A European Journal, 2017, 23, 9034-9038.	1.7	15
139	Enhanced Raman Scattering by ZnO Superstructures: Synergistic Effect of Charge Transfer and Mie Resonances. Angewandte Chemie, 2019, 131, 14594-14598.	1.6	15
140	Charge Transfer in 4-Mercaptobenzoic Acid-Stabilized Au Nanorod@Cu <sub>2</sub> O Nanostructures: Implications for Photocatalysis and Photoelectric Devices. ACS Applied Nano Materials, 2021, 4, 381-388.	2.4	15
141	SERS spectroscopy of kaempferol and galangin under the interaction of human serum albumin with adsorbed silver nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 92, 234-237.	2.0	14
142	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
143	An in situ reduction method for preparing novel surface-enhanced Raman scattering substrates. Journal of Raman Spectroscopy, 2005, 36, 635-639.	1.2	13
144	A reagent-assisted method in SERS detection of methyl salicylate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 195, 172-175.	2.0	13

#	ARTICLE	IF	CITATIONS
145	Reduced Charge-Transfer Threshold in Dye-Sensitized Solar Cells with an Au@Ag/N <sub>3</sub> -TiO <sub>2</sub> Structure As Revealed by Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2018, 122, 12748-12760.	1.5	13
146	Crocein Orange G mediated detection and modulation of amyloid fibrillation revealed by surface-enhanced Raman spectroscopy. <i>Biosensors and Bioelectronics</i> , 2020, 148, 111816.	5.3	13
147	Highly efficient core-shell Ag@carbon dot modified TiO <sub>2</sub> nanofibers for photocatalytic degradation of organic pollutants and their SERS monitoring. <i>RSC Advances</i> , 2020, 10, 26639-26645.	1.7	13
148	Factors affecting <sup>13</sup> C enrichment of vegetation and soil in temperate grasslands in Inner Mongolia, China. <i>Journal of Soils and Sediments</i> , 2019, 19, 2190-2199.	1.5	12
149	Effect of TiO <sub>2</sub> on Altering Direction of Interfacial Charge Transfer in a TiO <sub>2</sub> -Ag-FePc System by SERS. <i>Angewandte Chemie</i> , 2019, 131, 8256-8260.	1.6	12
150	New Insight into Charge-Transfer Enhancement for SERS in Cosputtering (Ag)(ZnS) System: The Carrier Density Effect. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28846-28851.	1.5	12
151	A SERS Study of Charge Transfer Process in Au Nanorod@MBA@Cu <sub>2</sub> O Assemblies: Effect of Length to Diameter Ratio of Au Nanorods. <i>Nanomaterials</i> , 2021, 11, 867.	1.9	12
152	Zincon as resonance Raman probe for quantitative evaluation of proteins. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 1963-1966.	1.2	11
153	The mechanism of an enzymatic reaction-induced SERS transformation for the study of enzyme-molecule interfacial interactions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 31787-31795.	1.3	11
154	Charge Transfer at the TiO <sub>2</sub> /N <sub>3</sub> /Ag Interface Monitored by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5145-5153.	1.5	11
155	Bi-functional reduced graphene oxide/AgCo composite nanosheets: an efficient catalyst and SERS substrate for monitoring the catalytic reactions. <i>RSC Advances</i> , 2017, 7, 41962-41969.	1.7	11
156	Integrated plasmon-enhanced Raman scattering (iPERS) spectroscopy. <i>Scientific Reports</i> , 2017, 7, 14630.	1.6	11
157	Facile Synthesis of C <sub>3</sub> N <sub>4</sub> /Ag Composite Nanosheets as SERS Substrate for Monitoring the Catalytic Degradation of Methylene Blue. <i>Chemical Research in Chinese Universities</i> , 2018, 34, 290-295.	1.3	11
158	Enhanced Raman spectroscopic analysis of protein post-translational modifications. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 131, 116019.	5.8	11
159	Study of charge transfer effect in Surface-Enhanced Raman scattering (SERS) by using Antimony-doped tin oxide (ATO) nanoparticles as substrates with tunable optical band gaps and free charge carrier densities. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 264, 120288.	2.0	11
160	In situ semi-quantitative assessment of single-cell viability by resonance Raman spectroscopy. <i>Chemical Communications</i> , 2018, 54, 7135-7138.	2.2	10
161	Interfacial Charge Transfer in TiO <sub>2</sub> /PTCA/Ag Revealed by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15208-15213.	1.5	10
162	The evaluation of immobilization behavior and potential ecological risk of heavy metals in bio-char with different alkaline activation. <i>Environmental Science and Pollution Research</i> , 2021, 28, 21396-21410.	2.7	9

#	ARTICLE	IF	CITATIONS
163	Enhanced charge-transfer induced by conduction band electrons in aluminum-doped zinc oxide/molecule/Ag sandwich structures observed by surface-enhanced Raman spectroscopy. <i>Journal of Colloid and Interface Science</i> , 2022, 610, 164-172.	5.0	9
164	Observation of tunable surface plasmon resonances and surface enhanced infrared absorption (SEIRA) based on indium tin oxide (ITO) nanoparticle substrates. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 271, 120914.	2.0	9
165	Fabrication of large-scale nanostructure by Langmuir-Blodgett technique. <i>Journal of Bionic Engineering</i> , 2006, 3, 59-62.	2.7	8
166	A Chiral-Label-Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules. <i>Angewandte Chemie</i> , 2020, 132, 19241-19248.	1.6	7
167	Research progress and the application of near-infrared spectroscopy in protein structure and molecular interaction analysis. <i>Vibrational Spectroscopy</i> , 2022, 121, 103390.	1.2	7
168	SERS as a probe for the charge-transfer process in a coupled semiconductor nanoparticle system TiO <sub>2</sub> /MBA/PbS. <i>RSC Advances</i> , 2017, 7, 42138-42145.	1.7	6
169	Micro-nano zinc oxide film fabricated by biomimetic mineralization: Designed architectures for SERS substrates. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 197, 83-87.	2.0	6
170	Ferrous cytochrome c-nitric oxide oxidation for quantification of protein S-nitrosylation probed by resonance Raman spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2020, 308, 127706.	4.0	6
171	Surface-Enhanced Raman Scattering Activity of ZrO <sub>2</sub> Nanoparticles: Effect of Tetragonal and Monoclinic Phases. <i>Nanomaterials</i> , 2021, 11, 2162.	1.9	6
172	Mixed valence Ce-doped TiO <sub>2</sub> with multiple energy levels and efficient charge transfer for boosted SERS performance. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 281, 121643.	2.0	6
173	Immune recognition construct plasmonic dimer for SERS-based bioassay. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 1253-1258.	1.2	5
174	Functionalization of magnetic titanium dioxide for targeted drug delivery and UV-induced release. <i>Chemical Research in Chinese Universities</i> , 2017, 33, 294-297.	1.3	5
175	Investigation of compositionally tunable localized surface plasmon resonances (LSPRs) of a series of indium tin oxide nanocrystals prepared by one-step solvothermal synthesis. <i>Journal of Materials Science</i> , 2019, 54, 2918-2927.	1.7	5
176	Surface-enhanced Raman scattering (SERS) and applications. , 2020, , 349-386.		5
177	Direct Dynamic Evidence of Charge Separation in a Dye-Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy. <i>Angewandte Chemie</i> , 2020, 132, 10872-10876.	1.6	5
178	Operando Raman spectroscopic evidence of electron-phonon interactions in NiO/TiO <sub>2</sub> pn junction photodetectors. <i>Chemical Communications</i> , 2021, 57, 12333-12336.	2.2	5
179	Revealing the effect of intramolecular interactions on DNA SERS detection: SERS capability for structural analysis. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10311-10317.	1.3	5
180	Spectroscopy of mass-selected VCo and VFe in argon matrices. <i>Journal of Chemical Physics</i> , 2003, 118, 9704-9709.	1.2	4

#	ARTICLE	IF	CITATIONS
181	Enhanced Raman scattering on lead iodide film. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 223, 117336.	2.0	4
182	Redox characterisation of Erv1, a key component for protein import and folding in yeast mitochondria. <i>FEBS Journal</i> , 2020, 287, 2281-2291.	2.2	4
183	Identification of native charge-transfer status of p-aminothiophenol adsorbed on noble metallic substrates by surface-enhanced infrared absorption (SEIRA) spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 204, 532-536.	2.0	3
184	The Efficient Improvement of Original Magnetite in Iron Ore Reduction Reaction in Magnetization Roasting Process and Mechanism Analysis by In Situ and Continuous Image Capture. <i>Minerals (Basel)</i> , 2020, 10, 1087.	0.8	10
185	Accurate assembly and direct characterization of DNA nanogels crosslinked by G-quadruplex, i-motif and duplex with surface-enhanced Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 275, 121161.	2.0	3
186	Probing the Open-Circuit Voltage Improvement of DSSC via Raman Spectroscopy: <i>In Situ</i> Dynamic Tracking Photoanode/Electrolyte Interfaces. <i>ACS Applied Energy Materials</i> , 2022, 5, 8391-8399.	2.5	3
187	Investigation of Spontaneous Polycondensation of N-(O, O-Ditetradecyl) Phosphorylalanine in Highly Ordered Films by Ftir Spectroscopy. <i>Journal of Chemical Research</i> , 2004, 2004, 143-144.	0.6	2
188	Surface-Enhanced Raman Scattering (SERS) on Indium-Doped CdO (ICO) Substrates: A New Charge-Transfer Enhancement Contribution from Electrons in Conduction Bands. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17125-17132.	1.5	2
189	An investigation of the effect of high-pressure on charge transfer in dye-sensitized solar cells based on surface-enhanced Raman spectroscopy. <i>Nanoscale</i> , 2022, 14, 373-381.	2.8	2
190	Investigation of Sulfur Doping in Mn <sup>2+</sup> /Co Oxide Nanotubes on Surface-Enhanced Raman Scattering Properties. <i>Analytical Chemistry</i> , 2022, 94, 5987-5995.	3.2	2
191	Quantitative analysis of catalpol in chinese patent medicine Lixin pill by near-infrared diffuse reflectance spectroscopy. <i>Chemical Research in Chinese Universities</i> , 2013, 29, 1059-1062.	1.3	1
192	Vibrational spectroscopy and DFT analysis of 4-cyanophenylhydrazine: A potential SERS probe. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 253, 119574.	2.0	1
193	Surface-enhanced Raman scattering (SERS) Sensing of Biomedicine and Biomolecules. , 2023, , 441-455.		1
194	Surface-enhanced Raman scattering (SERS) Sensors for Food Safety. , 2023, , 456-470.		1
195	Redox State-Mediated Regulation of Cytochrome <sub>c</sub> Release in Apoptosis Revealed by Surface-Enhanced Raman Scattering on Nickel Substrates. <i>Angewandte Chemie</i> , 2019, 131, 16651-16655.	1.6	0
196	Innentitelbild: Direct Dynamic Evidence of Charge Separation in a Dye-Sensitized Solar Cell Obtained under Operando Conditions by Raman Spectroscopy ( <i>Angew. Chem.</i> 27/2020). <i>Angewandte Chemie</i> , 2020, 132, 10758-10758.	1.6	0
197	Innentitelbild: A Chiral-Label-Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules ( <i>Angew. Chem.</i> 43/2020). <i>Angewandte Chemie</i> , 2020, 132, 18982-18982.	1.6	0