Lei Chen

List of Publications by Year
in descending order

109 papers	2,659 citations	126907 33 h-index	254184 43 g-index
109 all docs	109 docs citations	109 times ranked	2793 citing authors

#	Article	IF	Citations
1	Enhanced semiconductor charge-transfer resonance: Unprecedented oxygen bidirectional strategy. Sensors and Actuators B: Chemical, 2021, 327, 128903.	7.8	19
2	Photo-Induced Charge Transfer Enhancement for SERS in a SiO₂â€“Agâ€“Reduced Graphene Oxide System. ACS Applied Materials & Interfaces, 2021, 13, 5699-5705.	8.0	18
3	Surface-Doped Organic Charge Transfer Cocrystal Heterostructures and Their Variable Dual-Color Light Emission and Propagation. Crystal Growth and Design, 2021, 21, 2699-2710.	3.0	9
4	Charge Transfer on the Surface-Enhanced Raman Scattering of Ag/4-MBA/PEDOT:PSS System: Intermolecular Hydrogen Bonding. Chemosensors, 2021, 9, 111.	3.6	7
5	Charge-Transfer Induced by the Oxygen Vacancy Defects in the Ag/MoO3 Composite System. Nanomaterials, 2021, 11, 1292.	4.1	17
6	Modulating Mechanism of the LSPR and SERS in Ag/ITO Film: Carrier Density Effect. Journal of Physical Chemistry Letters, 2021, 12, 7612-7618.	4.6	24
7	Raman Scattering Methods for Monitoring the Electric Properties of the Postannealed Bulk Heterojunction. ACS Applied Energy Materials, 2021, 4, 8360-8367.	5.1	1
8	Enhanced Surface-Enhanced Raman Scattering Activity of MoS₂â€“Ag-Reduced Graphene Oxide: Structure-Mediated Excitonic Transition. Journal of Physical Chemistry C, 2021, 125, 23259-23266.	3.1	8
9	Design and Characterization of Ag@Cu2O-rGO Nanocomposite for the p-Nitrophenol Reduction. Catalysts, 2021, 11, 43.	3.5	3
10	Preparation of Reduced-Graphene-Oxide-Supported CoPt and Ag Nanoparticles for the Catalytic Reduction of 4-Nitrophenol. Catalysts, 2021, 11, 1336.	3.5	10
11	Biomarkers Determination Based on Surface-Enhanced Raman Scattering. Chemosensors, 2020, 8, 118.	3.6	20
12	Improved Charge Transfer Contribution by Cosputtering Ag and ZnO. Nanomaterials, 2020, 10, 1455.	4.1	10
13	SERS Immunosensor of Array Units Surrounded by Particles: A Platform for Auxiliary Diagnosis of Hepatocellular Carcinoma. Nanomaterials, 2020, 10, 2090.	4.1	2
14	Recyclable Magnetic MIP-Based SERS Sensors for Selective, Sensitive, and Reliable Detection of Paclobutrazol Residues in Complex Environments. ACS Sustainable Chemistry and Engineering, 2020, 8, 14549-14556.	6.7	39
15	Damping resonance and refractive index effect on the layer-by-layer sputtering of Ag and Al2O3 on the polystyrene template. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 238, 118430.	3.9	4
16	Size-Dependent Surface-Enhanced Raman Scattering Activity of Ag@Cu_xOS Yolkâ€“Shell Nanostructures: Surface Plasmon Resonance Induced Charge Transfer. Journal of Physical Chemistry C, 2020, 124, 16616-16623.	3.1	20
17	Detect, remove and re-use: Sensing and degradation pesticides via 3D tilted ZMRs/Ag arrays. Journal of Hazardous Materials, 2020, 391, 122222.	12.4	50
18	Bridging the neighbor plasma coupling on curved surface array for early hepatocellular carcinoma detection. Sensors and Actuators B: Chemical, 2020, 309, 127759.	7.8	15

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19	Carrier dynamic monitoring of a Ï€-conjugated polymer: a surface-enhanced Raman scattering method. Chemical Communications, 2020, 56, 2779-2782.	4.1	16
20	Probing the charge-transfer of Ag/PEDOT:PSS/4-MBA by surface-enhanced raman scattering. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 239, 118451.	3.9	10
21	Fundamental Formation of Three-Dimensional Fe₃O₄ Microcrystals and Practical Application in Anchoring Au as Recoverable Catalyst for Effective Reduction of 4-Nitrophenol. Industrial & Engineering Chemistry Research, 2019, 58, 15151-15161.	3.7	31
22	ZnO nanoparticles on MoS2 microflowers for ultrasensitive SERS detection of bisphenol A. Mikrochimica Acta, 2019, 186, 593.	5.0	47
23	Increasing polarization-dependent SERS effects by optimizing the axial symmetry of plasmonic nanostructures. Applied Surface Science, 2019, 494, 87-93.	6.1	16
24	Catalysis of Organic Pollutants Abatement Based on Pt-Decorated Ag@Cu2O Heterostructures. Molecules, 2019, 24, 2721.	3.8	1
25	Architecture design and applications of nanopatterned arrays based on colloidal lithography. Journal of Applied Physics, 2019, 126, .	2.5	23
26	Nanohoneycomb Surface-Enhanced Raman Spectroscopy-Active Chip for the Determination of Biomarkers of Hepatocellular Carcinoma. ACS Applied Materials & Interfaces, 2019, 11, 44617-44623.	8.0	31
27	Controlling the Growth Locations of Ag Nanoparticles at Nanoscale by Shifting LSPR Hotspots. Nanomaterials, 2019, 9, 1553.	4.1	6
28	Facile synthesis of Fe₃O₄@Au coreâ€“shell nanocomposite as a recyclable magnetic surface enhanced Raman scattering substrate for thiram detection. Nanotechnology, 2019, 30, 465703.	2.6	33
29	Disease-related proteins determination based on surface-enhanced Raman spectroscopy. Applied Spectroscopy Reviews, 2019, 54, 856-872.	6.7	10
30	Site-selective growth of Ag nanoparticles controlled by localized surface plasmon resonance of nanobowl arrays. Nanoscale, 2019, 11, 6576-6583.	5.6	34
31	Improved Charge Transfer and Hot Spots by Doping and Modulating the Semiconductor Structure: A High Sensitivity and Renewability Surface-Enhanced Raman Spectroscopy Substrate. Langmuir, 2019, 35, 8921-8926.	3.5	18
32	AgNPs decorated Mg-doped ZnO heterostructure with dramatic SERS activity for trace detection of food contaminants. Journal of Materials Chemistry C, 2019, 7, 8199-8208.	5.5	40
33	Controllable Preparation of SERS-Active Ag-FeS Substrates by a Cosputtering Technique. Molecules, 2019, 24, 551.	3.8	13
34	SERS study of Ag/FeS/4-MBA interface based on the SPR effect. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 219, 147-153.	3.9	21
35	Recent Development of SERS Technology: Semiconductor-Based Study. ACS Omega, 2019, 4, 20101-20108.	3.5	105
36	New Insight into Charge-Transfer Enhancement for SERS in Cosputtering (Ag)_x(ZnS)_y System: The Carrier Density Effect. Journal of Physical Chemistry C, 2019, 123, 28846-28851.	3.1	12

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37	Nickel Nanowires Combined with Surface-Enhanced Raman Spectroscopy: Application in Label-Free Detection of Cytochrome c-Mediated Apoptosis. Analytical Chemistry, 2019, 91, 1213-1216.	6.5	24
38	SERS effect on the presence and absence of rGO for Ag@Cu2O core-shell. Materials Science in Semiconductor Processing, 2019, 91, 290-295.	4.0	18
39	Charge Transfer in an Ordered Ag/Cu₂S/4-MBA System Based on Surface-Enhanced Raman Scattering. Journal of Physical Chemistry C, 2018, 122, 5599-5605.	3.1	40
40	Surface-enhanced Raman scattering from metal and transition metal nano-caped arrays. Superlattices and Microstructures, 2018, 115, 59-66.	3.1	4
41	Design of tunable ultraviolet (UV) absorbance by controlling the Ag Al co-sputtering deposition. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 197, 37-42.	3.9	11
42	Evolution of Micro-structure and Magnetic Properties in L10 CoPt Nanoparticles by Au Addition. Journal of Superconductivity and Novel Magnetism, 2018, 31, 2553-2557.	1.8	7
43	Eco-friendly seeded Fe₃O₄-Ag nanocrystals: a new type of highly efficient and low cost catalyst for methylene blue reduction. RSC Advances, 2018, 8, 2209-2218.	3.6	41
44	SERS polarization-dependent effects for an ordered 3D plasmonic tilted silver nanorod array. Nanoscale, 2018, 10, 8106-8114.	5.6	44
45	SERS study of surface plasmon resonance induced carrier movement in Au@Cu 2 O core-shell nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 189, 608-612.	3.9	28
46	Highly sensitive determination of iron (III) ion based on phenanthroline probe: Surface-enhanced Raman spectroscopy methods. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 197, 43-46.	3.9	9
47	Enhanced catalyst activity by decorating of Au on Ag@Cu2O nanoshell. Applied Surface Science, 2018, 435, 72-78.	6.1	38
48	Antibody-Free Discrimination of Protein Biomarkers in Human Serum Based on Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2018, 90, 12342-12346.	6.5	22
49	Carrier Density-Dependent Localized Surface Plasmon Resonance and Charge Transfer Observed by Controllable Semiconductor Content. Journal of Physical Chemistry Letters, 2018, 9, 6047-6051.	4.6	36
50	Facile SERS-active chip (PS@Ag/SiO2/Ag) for the determination of HCC biomarker. Sensors and Actuators B: Chemical, 2018, 272, 34-42.	7.8	37
51	Enhanced Catalytic Reduction of 4-Nitrophenol Driven by Fe3O4-Au Magnetic Nanocomposite Interface Engineering: From Facile Preparation to Recyclable Application. Nanomaterials, 2018, 8, 353.	4.1	52
52	Detection and Identification of Estrogen Based on Surface-Enhanced Resonance Raman Scattering (SERRS). Molecules, 2018, 23, 1330.	3.8	29
53	Highly Efficient, Low-Cost, and Magnetically Recoverable FePtâ€“Ag Nanocatalysts: Towards Green Reduction of Organic Dyes. Nanomaterials, 2018, 8, 329.	4.1	21
54	Self-Assembled Ag-Cu2O Nanocomposite Films at Air-Liquid Interfaces for Surface-Enhanced Raman Scattering and Electrochemical Detection of H2O2. Nanomaterials, 2018, 8, 332.	4.1	8

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55	Ag Nanotwin-Assisted Grain Growth-Induced by Stress in SiO2/Ag/SiO2 Nanocap Arrays. Nanomaterials, 2018, 8, 436.	4.1	4
56	In Situ Synthesis of Ag@Cu2O-rGO Architecture for Strong Light-Matter Interactions. Nanomaterials, 2018, 8, 444.	4.1	10
57	Controlling the 3D Electromagnetic Coupling in Co-Sputtered Agâ€“SiO2 Nanomace Arrays by Lateral Sizes. Nanomaterials, 2018, 8, 493.	4.1	5
58	Design of Hybrid Nanostructural Arrays to Manipulate SERS-Active Substrates by Nanosphere Lithography. ACS Applied Materials & Interfaces, 2017, 9, 7710-7716.	8.0	47
59	Subtle vertical structures of porous anodic alumina films for use as waveguides. Nanotechnology, 2017, 28, 185703.	2.6	3
60	Surface-Enhanced Raman Scattering (SERS) Active Gold Nanoparticles Decorated on a Porous Polymer Filter. Applied Spectroscopy, 2017, 71, 1543-1550.	2.2	17
61	Effects of amount of benzyl ether and reaction time on the shape and magnetic properties of Fe3O4 nanocrystals. Powder Technology, 2017, 319, 53-59.	4.2	24
62	Rational synthesis and tailored optical and magnetic characteristics of Fe3O4â€“Au composite nanoparticles. Journal of Materials Science, 2017, 52, 10163-10174.	3.7	40
63	Plasmonic-induced SERS enhancement of shell-dependent Ag@Cu₂O coreâ€“shell nanoparticles. RSC Advances, 2017, 7, 16553-16560.	3.6	55
64	Preparation of Silver Nanocap Arrays and Their Surfaceâ€enhanced Raman Scattering Activity. Bulletin of the Korean Chemical Society, 2017, 38, 1179-1182.	1.9	1
65	Increasing local field by interfacial coupling in nanobowl arrays. RSC Advances, 2017, 7, 43671-43680.	3.6	10
66	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.	6.5	88
67	Iron layer-dependent surface-enhanced raman scattering of hierarchical nanocap arrays. Applied Surface Science, 2017, 423, 1124-1133.	6.1	15
68	Quantitative Determination of Iron Ions Based on a Resonance Raman (RR) Probe-Phenanthroline. Analytical Sciences, 2017, 33, 23-27.	1.6	8
69	Quantitative Determination of Total Amino Acids Based on Surface-Enhanced Raman Scattering and Ninhydrin Derivatization. Analytical Sciences, 2017, 33, 53-57.	1.6	8
70	Controllable Charge Transfer in Ag-TiO2 Composite Structure for SERS Application. Nanomaterials, 2017, 7, 159.	4.1	41
71	Pillar-cap shaped arrays of Ag/SiO2 multilayers after annealing treatment as a SERSâ€”active substrate. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 96-103.	4.7	11
72	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.	2.8	11

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73	Au-MPY/DTNB@SiO 2 SERS nanoprobe for immunosorbent assay. Vibrational Spectroscopy, 2016, 87, 34-39.	2.2	2
74	Design of Cu2O-Au composite microstructures for surface-enhanced Raman scattering study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 507, 96-102.	4.7	32
75	Mercury species induced frequency-shift of molecular orientational transformation based on SERS. Analyst, The, 2016, 141, 4782-4788.	3.5	24
76	A Turn-On Resonance Raman Scattering (BCS/Cu+) Sensor for Quantitative Determination of Proteins. Applied Spectroscopy, 2016, 70, 355-362.	2.2	4
77	Nanocap array of Au:Ag composite for surface-enhanced Raman scattering. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 152, 461-467.	3.9	24
78	Au/Ag bimetal nanogap arrays with tunable morphologies for surface-enhanced Raman scattering. RSC Advances, 2015, 5, 7454-7460.	3.6	18
79	Enhanced Raman scattering when scatterer molecules located in TiO2/Ag nanojunctions. RSC Advances, 2015, 5, 64235-64239.	3.6	8
80	Preparation of a Superhydrophobic and Peroxidase-like Activity Array Chip for H₂O₂ Sensing by Surface-Enhanced Raman Scattering. ACS Applied Materials & Interfaces, 2015, 7, 23472-23480.	8.0	59
81	Simple immersion to prepare a Zn/Ag biomimetic superhydrophobic surface and exploring its applications on SERS. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 467, 224-232.	4.7	15
82	Vibrational spectroscopy and density functional theory study of 3-[4,5-dimethyl-2-thiazolyl]-2,5-diphenyl-2H-tetrazolium bromide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 135, 1-6.	3.9	4
83	Ordered Nanocap Array Composed of SiO₂-Isolated Ag Islands as SERS Platform. Langmuir, 2014, 30, 15285-15291.	3.5	38
84	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.	13.8	57
85	A SERSâ€active enzymatic product used for the quantification of diseaseâ€related molecules. Journal of Raman Spectroscopy, 2014, 45, 75-81.	2.5	35
86	Multiple detection of proteins by SERS-based immunoassay with core shell magnetic gold nanoparticles. Vibrational Spectroscopy, 2014, 72, 44-49.	2.2	44
87	Vibrational spectroscopy and density functional theory study of 4-mercaptophenol. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 122, 698-703.	3.9	14
88	Magnetic imprinted surface enhanced Raman scattering (MI-SERS) based ultrasensitive detection of ciprofloxacin from a mixed sample. Analytical Methods, 2014, 6, 1627-1632.	2.7	38
89	One-step detection of melamine in milk by hollow gold chip based on surface-enhanced Raman scattering. Talanta, 2014, 122, 80-84.	5.5	40
90	Sensitive metal ions (II) determination with resonance Raman method. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 105, 52-56.	3.9	9

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91	Predictive Value of the Surface-Enhanced Resonance Raman Scattering-Based MTT Assay: A Rapid and Ultrasensitive Method for Cell Viability in Situ. Analytical Chemistry, 2013, 85, 7361-7368.	6.5	33
92	Immune recognition construct plasmonic dimer for SERSâ€based bioassay. Journal of Raman Spectroscopy, 2013, 44, 1253-1258.	2.5	5
93	Recyclable, Biocompatible, Magnetic Titanium Dioxide Nanoparticles with Immobilized Enzymes for Biocatalysis. ChemPlusChem, 2013, 78, 1437-1439.	2.8	6
94	Detection of the potential tumor marker of AFP using surfaceâ€enhanced Raman scatteringâ€based immunoassay. Journal of Raman Spectroscopy, 2013, 44, 1649-1653.	2.5	36
95	Multiphonon Resonant Raman Scattering and Photoinduced Charge-Transfer Effects at ZnOâ€“Molecule Interfaces. Journal of Physical Chemistry C, 2012, 116, 26908-26918.	3.1	37
96	Interfacial Charge-Transfer Effects in Semiconductorâ€“Moleculeâ€“Metal Structures: Influence of Contact Variation. Journal of Physical Chemistry C, 2012, 116, 14701-14710.	3.1	40
97	Biomagnetic glass beads for protein separation and detection based on surface-enhanced Raman scattering. Analytical Methods, 2012, 4, 1643.	2.7	14
98	Quantitative evaluation of proteins with bicinchoninic acid (BCA): resonance Raman and surface-enhanced resonance Raman scattering-based methods. Analyst, The, 2012, 137, 5834.	3.5	29
99	Magnetic assistance highly sensitive protein assay based on surface-enhanced resonance Raman scattering. Journal of Colloid and Interface Science, 2012, 368, 282-286.	9.4	24
100	Surfaceâ€enhanced Raman scattering of molecules adsorbed on Coâ€doped ZnO nanoparticles. Journal of Raman Spectroscopy, 2012, 43, 61-64.	2.5	48
101	Metalâ€“Semiconductor Contacts Induce the Charge-Transfer Mechanism of Surface-Enhanced Raman Scattering. Journal of Physical Chemistry C, 2011, 115, 18378-18383.	3.1	67
102	Tunable plasmon properties of Fe2O3@Ag substrate for surface-enhanced Raman scattering. Analytical Methods, 2011, 3, 1622.	2.7	15
103	Labelâ€Free Indirect Immunoassay Using an Avidinâ€Induced Surfaceâ€Enhanced Raman Scattering Substrate. Small, 2011, 7, 316-320.	10.0	35
104	SERS detection of proteins on micropatterned proteinâ€mediated sandwich substrates. Journal of Raman Spectroscopy, 2011, 42, 1492-1496.	2.5	16
105	Zincon as resonance Raman probe for quantitative evaluation of proteins. Journal of Raman Spectroscopy, 2011, 42, 1963-1966.	2.5	11
106	Detection of proteins on Silicaâ€“Silver Coreâ€“Shell substrates by surface-enhanced Raman spectroscopy. Journal of Colloid and Interface Science, 2011, 360, 482-487.	9.4	45
107	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.	2.5	54
108	Coomassie Brilliant Dyes as Surface-Enhanced Raman Scattering Probes for Proteinâ^'Ligand Recognitions. Analytical Chemistry, 2010, 82, 4102-4106.	6.5	50

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109	Ultrasensitive Detection of 1, 4-Bis(4-Vinylpyridyl)Phenylene in a Small Volume of Low Refractive Index Liquid by Surface-Enhanced Raman Scattering-Active Light Waveguide. Applied Spectroscopy, 2004, 58, 414-419.	2.2	19