

Shi-Bo Cheng

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

1,390
citations

361413

20
h-index

377865

34
g-index

72
all docs

72
docs citations

72
times ranked

1634
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Detection of exosomes by ZnO nanowires coated three-dimensional scaffold chip device. <i>Biosensors and Bioelectronics</i> , 2018, 122, 211-216. | 10.1 | 104 |
| 2 | Flexible Electrochemical Urea Sensor Based on Surface Molecularly Imprinted Nanotubes for Detection of Human Sweat. <i>Analytical Chemistry</i> , 2018, 90, 13081-13087. | 6.5 | 104 |
| 3 | Three-Dimensional Scaffold Chip with Thermosensitive Coating for Capture and Reversible Release of Individual and Cluster of Circulating Tumor Cells. <i>Analytical Chemistry</i> , 2017, 89, 7924-7932. | 6.5 | 68 |
| 4 | Construction of Highly Efficient Resonance Energy Transfer Platform Inside a Nanosphere for Ultrasensitive Electrochemiluminescence Detection. <i>Analytical Chemistry</i> , 2018, 90, 5075-5081. | 6.5 | 67 |
| 5 | High-Efficiency Capture of Individual and Cluster of Circulating Tumor Cells by a Microchip Embedded with Three-Dimensional Poly(dimethylsiloxane) Scaffold. <i>Analytical Chemistry</i> , 2016, 88, 6773-6780. | 6.5 | 59 |
| 6 | Engineered Decomposable Multifunctional Nanobioprobes for Capture and Release of Rare Cancer Cells. <i>Analytical Chemistry</i> , 2014, 86, 4618-4626. | 6.5 | 55 |
| 7 | Degradable Zinc-Phosphate-Based Hierarchical Nanosubstrates for Capture and Release of Circulating Tumor Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15917-15925. | 8.0 | 53 |
| 8 | Advances in Analytical Technologies for Extracellular Vesicles. <i>Analytical Chemistry</i> , 2021, 93, 4739-4774. | 6.5 | 53 |
| 9 | Construction of a flexible electrochemiluminescence platform for sweat detection. <i>Chemical Science</i> , 2019, 10, 6295-6303. | 7.4 | 49 |
| 10 | Observation of $d\pi^p$ hybridized aromaticity in lanthanum-doped boron clusters. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 533-539. | 2.8 | 46 |
| 11 | Label-free silicon nanodots featured ratiometric fluorescent aptasensor for lysosomal imaging and pH measurement. <i>Biosensors and Bioelectronics</i> , 2017, 94, 478-484. | 10.1 | 43 |
| 12 | Rational design of an efficient descriptor for single-atom catalysts in the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9202-9208. | 10.3 | 41 |
| 13 | Advances in microfluidic extracellular vesicle analysis for cancer diagnostics. <i>Lab on A Chip</i> , 2021, 21, 3219-3243. | 6.0 | 39 |
| 14 | Mimicking the magnetic properties of rare earth elements using superatoms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4941-4945. | 7.1 | 33 |
| 15 | Ag@WS ₂ quantum dots for Surface Enhanced Raman Spectroscopy: Enhanced charge transfer induced highly sensitive detection of thiram from honey and beverages. <i>Food Chemistry</i> , 2021, 344, 128570. | 8.2 | 25 |
| 16 | OH produced from o-nitrophenol photolysis: A combined experimental and theoretical investigation. <i>Journal of Chemical Physics</i> , 2009, 130, 234311. | 3.0 | 24 |
| 17 | Tuning the Electronic Properties and Performance of Low-Temperature CO Oxidation of the Gold Cluster by Oriented External Electric Field. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1093-1099. | 4.6 | 23 |
| 18 | A Three-Dimensional Conductive Scaffold Microchip for Effective Capture and Recovery of Circulating Tumor Cells with High Purity. <i>Analytical Chemistry</i> , 2021, 93, 7102-7109. | 6.5 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | S-P Coupling Induced Unusual Open-Shell Metal Clusters. <i>Journal of the American Chemical Society</i> , 2014, 136, 4821-4824. | 13.7 | 22 |
| 20 | Current techniques and future advance of microfluidic devices for circulating tumor cells. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 117, 116-127. | 11.4 | 21 |
| 21 | Polymeric tungsten carbide nanoclusters: structural evolution, ligand modulation, and assembled nanomaterials. <i>Nanoscale</i> , 2019, 11, 19903-19911. | 5.6 | 20 |
| 22 | Adsorption energy as a promising single-parameter descriptor for single atom catalysis in the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6442-6450. | 10.3 | 18 |
| 23 | Unveiling the electronic structures and ligation effect of the superatom-like polymeric zirconium oxide clusters: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 14865-14872. | 2.8 | 17 |
| 24 | Direct experimental observation of weakly-bound character of the attached electron in europium anion. <i>Scientific Reports</i> , 2015, 5, 12414. | 3.3 | 16 |
| 25 | Modulating N-H-based excited-state intramolecular proton transfer by different electron-donating/withdrawing substituents in 2-(2-aminophenyl)benzothiazole compounds. <i>Chemical Physics Letters</i> , 2019, 724, 57-66. | 2.6 | 16 |
| 26 | Filling Mesopores of Conductive Metal-Organic Frameworks with Cu Clusters for Selective Nitrate Reduction to Ammonia. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 32176-32182. | 8.0 | 16 |
| 27 | Theoretical investigations on the d-p hybridized aromaticity, photoelectron spectroscopy and neutral salts of the $\text{LaX}_2^{\text{+}}$ (X=Al, Ga, In) clusters. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 203, 132-138. | 3.9 | 15 |
| 28 | Fluorescence and solvent-dependent phosphorescence studies of o-nitrobenzaldehyde: A combined experimental and theoretical investigation. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9067. | 2.8 | 14 |
| 29 | Molecular designing of naphthalene diimide based fullerene-free small organic solar cell - Acceptors with high photovoltaic performance by density functional theory. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 228, 117685. | 3.9 | 14 |
| 30 | General Dual-Switched Dynamic Singlet Fission Channels in Solvents Governed Jointly by Chromophore Structural Dynamics and Solvent Impact: Singlet Prefission Energetics Analyses. <i>Journal of the American Chemical Society</i> , 2020, 142, 17469-17479. | 13.7 | 14 |
| 31 | OH Fragment from Benzoic Acid Monomer Photolysis: Threshold and Product State Distribution. <i>Journal of Physical Chemistry A</i> , 2008, 112, 4727-4731. | 2.5 | 13 |
| 32 | Photolysis of o-Nitrobenzaldehyde in the Gas Phase: A New OH ⁺ Formation Channel. <i>ChemPhysChem</i> , 2009, 10, 1135-1142. | 2.1 | 13 |
| 33 | Electronic structure of the diatomic VO anion: A combined photoelectron-imaging spectroscopic and theoretical investigation. <i>Physical Review A</i> , 2016, 94, . | 2.5 | 13 |
| 34 | Flexible Three-Dimensional Net for Intravascular Fishing of Circulating Tumor Cells. <i>Analytical Chemistry</i> , 2020, 92, 5447-5455. | 6.5 | 13 |
| 35 | Dynamics of OH Formation in the Photodissociation of o-Nitrobenzoic Acid at 295 and 355 nm. <i>Journal of Physical Chemistry A</i> , 2009, 113, 4923-4929. | 2.5 | 12 |
| 36 | Designing difluoro substituted benzene ring based fullerene free acceptors for small Naphthalene Di-Imide based molecules with DFT approaches. <i>Optical and Quantum Electronics</i> , 2019, 51, 1. | 3.3 | 12 |

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|----|---|------|-----------|
| 37 | Modulating mechanism of N H-based excited-state intramolecular proton transfer by electron-withdrawing substituent at aromatic para-position. <i>Chemical Physics Letters</i> , 2019, 730, 76-83. | 2.6 | 12 |
| 38 | Caramelized carbonaceous shell-coated Fe_3O_4 as a magnetic solid-phase extraction sorbent for LC-MS/MS analysis of triphenylmethane dyes. <i>Mikrochimica Acta</i> , 2020, 187, 371. | 5.0 | 12 |
| 39 | Surface Modification Strategy for Promoting the Performance of Non-noble Metal Single-Atom Catalysts in Low-Temperature CO Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 19457-19466. | 8.0 | 12 |
| 40 | Probing the Electronic Structures and Relative Stabilities of Monomagnesium Oxide Clusters MgO_x and MgO_x ($x = 1-4$): A Combined Photoelectron Imaging and Theoretical Investigation. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11896-11905. | 2.5 | 11 |
| 41 | Probing the Geometric and Electronic Structures of the Monogadolinium Oxide GdO_x ($x = 1-4$) Clusters. <i>Journal of Physical Chemistry A</i> , 2018, 122, 8776-8782. | 2.5 | 11 |
| 42 | Organic ligand mediated evolution from aluminum-based superalkalis to superatomic molecules and one-dimensional nanowires. <i>Nano Research</i> , 2022, 15, 1162-1170. | 10.4 | 11 |
| 43 | Unusual Indirect Nuclear Spin-Spin Exchange Coupling through Solvated Electron. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 689-695. | 4.6 | 10 |
| 44 | Revealing the effect of the oriented external electronic field on the superatom-polymeric Zr_3O_3 cluster: Superhalogen modulation and spectroscopic characteristics. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 237, 118400. | 3.9 | 10 |
| 45 | Dynamic SPME-SERS Induced by Electric Field: Toward In Situ Monitoring of Pharmaceuticals and Personal Care Products. <i>Analytical Chemistry</i> , 2022, 94, 9270-9277. | 6.5 | 9 |
| 46 | Photodissociation dynamics of n-butyl nitrite at 266nm: Internal state distributions of nascent NO fragments. <i>Chemical Physics Letters</i> , 2008, 452, 14-19. | 2.6 | 8 |
| 47 | Joint Photoelectron Imaging Spectroscopic and Theoretical Characterization on the Electronic Structures of the Anionic and Neutral ZrC_2 Clusters. <i>Journal of Physical Chemistry A</i> , 2014, 118, 6935-6939. | 2.5 | 8 |
| 48 | Photoinduced excited state dynamical behavior and ESIPT mechanism for 2-(2-hydroxy-3,5-dimethyl-phenyl)-benzooxazole-5-carboxylic acid molecule. <i>Chemical Physics Letters</i> , 2019, 730, 485-490. | 2.6 | 7 |
| 49 | Assigning the mass spectrum of NbN^+ : Photoelectron imaging spectroscopy and nominal-mass counterpart analysis. <i>International Journal of Mass Spectrometry</i> , 2014, 365-366, 222-224. | 1.5 | 6 |
| 50 | On the theoretical construction of Nb_2N_2 -based superatoms by external field strategies. <i>Chemical Physics Letters</i> , 2020, 754, 137709. | 2.6 | 6 |
| 51 | Theoretical study of charge-transport and optical properties of organic crystals: 4,5,9,10-pyrenediimides. <i>IUCr</i> , 2019, 6, 603-609. | 2.2 | 6 |
| 52 | Theoretical study of charge-transport and optical properties of indeno[1,2-b]fluorene-6,12-dione-based semiconducting materials. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2018, 74, 705-711. | 1.1 | 5 |
| 53 | A theoretical investigation on the excited state intramolecular single or double proton transfer mechanism of a salicyladiazine system. <i>Journal of the Chinese Chemical Society</i> , 2019, 66, 1416-1421. | 1.4 | 5 |
| 54 | Ladder Oxygenation of Group VIII Metal Clusters and the Formation of Metalloxocubes M_{13}O_8 . <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 733-739. | 4.6 | 5 |

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|----|--|------|-----------|
| 55 | Theoretical study of the conformers of n-butyl nitrite and their dissociation pathways leading to OH formation. <i>Chemical Physics Letters</i> , 2009, 481, 39-45. | 2.6 | 4 |
| 56 | Magnetic Dioxygen Clathrate Hydrates: A Type of Promising Building Blocks for Icy Crystalline Materials. <i>Journal of Physical Chemistry C</i> , 2020, 124, 10669-10678. | 3.1 | 4 |
| 57 | A sandwich-like Ga ₂ FeS ₄ -supported single metal atom as a promising bifunctional electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18594-18603. | 10.3 | 4 |
| 58 | Ligand-field regulated superalkali behavior of the aluminum-based clusters with distinct shell occupancy. <i>Chinese Chemical Letters</i> , 2022, 33, 5147-5151. | 9.0 | 4 |
| 59 | Dual External Field-Engineered Hyperhalogen. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3942-3948. | 4.6 | 4 |
| 60 | Photodissociation dynamics of benzenesulfonic acid at 266nm: OH detection by laser-induced fluorescence. <i>Chemical Physics Letters</i> , 2008, 466, 27-31. | 2.6 | 3 |
| 61 | A detailed theoretical simulation about the excited state dynamical process for the novel (benzo[d]thiazol-2-yl)â€“(9Hâ€“(carbazol-9-yl))phenol molecule. <i>Journal of Physical Organic Chemistry</i> , 2019, 32, e3942. | | 3 |
| 62 | A density functional theory calculation on the geometrical structures and electronic properties of Ag ₁₉ under the oriented external electric field. <i>Chemical Physics Letters</i> , 2020, 754, 137703. | 2.6 | 3 |
| 63 | High Efficient Isolation of Tumor Cells by a Three Dimensional Scaffold Chip for Diagnosis of Malignant Effusions. <i>ACS Applied Bio Materials</i> , 2020, 3, 2177-2184. | 4.6 | 3 |
| 64 | Fluorescence enhancement mechanism of thymolphthalein-based probe by coordination interaction with zinc ion. <i>Journal of Molecular Liquids</i> , 2021, 339, 116275. | 4.9 | 3 |
| 65 | On the Precise and Continuous Regulation of the Superatomic and Spectroscopic Behaviors of the Quasi-Cubic W ₄ C ₄ Cluster by the Oriented External Electric Field. <i>Journal of Physical Chemistry A</i> , 2022, 126, 29-35. | 2.5 | 3 |
| 66 | Formation of Hydroxyl Radical from the Photolysis of Salicylic Acid. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5062-5068. | 2.5 | 2 |
| 67 | Photoelectron imaging spectroscopy of niobium mononitride anion NbN ⁻ . <i>Journal of Chemical Physics</i> , 2016, 145, 034301. | 3.0 | 2 |
| 68 | On the structures, electronic properties, and superhalogen regulation of the MnB ₆ ⁻ cluster: A density functional theory investigation. <i>Chemical Physics Letters</i> , 2020, 754, 137723. | 2.6 | 2 |
| 69 | Observation of â€“(Outlawâ€“(Dual Aromaticity in Unexpectedly Stable Open-Shell Metal Clusters Caused by Near-Degenerate Molecular Orbital Coupling. <i>CCS Chemistry</i> , 2021, 3, 1913-1920. | 7.8 | 2 |
| 70 | Detection of OH Radical in the Photodissociation of <i>p</i> -Aminobenzoic Acid at 266 nm. <i>Chinese Journal of Chemical Physics</i> , 2009, 22, 681-685. | 1.3 | 1 |
| 71 | Unique Solvating Effect in Azabenzene Clathrate Hydrates. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28466-28477. | 3.1 | 1 |
| 72 | On the dual aromaticity and external field induced superhalogen modulation of the AuSc ₂ cluster: A computational study. <i>Chemical Physics Letters</i> , 2020, 754, 137767. | 2.6 | 0 |