

# Itaru Hamachi

## List of Publications by Year in descending order

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275  
papers

16,625  
citations

12330

69  
h-index

19749

117  
g-index

295  
all docs

295  
docs citations

295  
times ranked

13665  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Semi-wet peptide/protein array using supramolecular hydrogel. <i>Nature Materials</i> , 2004, 3, 58-64.   | 27.5 | 546       |
| 2  | Installing logic-gate responses to a variety of biological substances in supramolecular hydrogel-enzyme hybrids. <i>Nature Chemistry</i> , 2014, 6, 511-518.  | 13.6 | 370       |
| 3  | Molecular Recognition and Fluorescence Sensing of Monophosphorylated Peptides in Aqueous Solution by Bis(zinc(II))-dipicolylamine-Based Artificial Receptors. <i>Journal of the American Chemical Society</i> , 2004, 126, 2454-2463. | 13.7 | 358       |
| 4  | First Artificial Receptors and Chemosensors toward Phosphorylated Peptide in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2002, 124, 6256-6258.  | 13.7 | 347       |
| 5  | Selective and direct inhibition of TRPC3 channels underlies biological activities of a pyrazole compound. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5400-5405.              | 7.1  | 344       |
| 6  | First Thermally Responsive Supramolecular Polymer Based on Glycosylated Amino Acid. <i>Journal of the American Chemical Society</i> , 2002, 124, 10954-10955.   | 13.7 | 337       |
| 7  | Ligand-directed tosyl chemistry for protein labeling in vivo. <i>Nature Chemical Biology</i> , 2009, 5, 341-343.  | 8.0  | 318       |
| 8  | Turn-On Fluorescence Sensing of Nucleoside Polyphosphates Using a Xanthene-Based Zn(II) Complex Chemosensor. <i>Journal of the American Chemical Society</i> , 2008, 130, 12095-12101.  | 13.7 | 302       |
| 9  | Supramolecular Hydrogel Exhibiting Four Basic Logic Gate Functions To Fine-Tune Substance Release. <i>Journal of the American Chemical Society</i> , 2009, 131, 5580-5585.  | 13.7 | 295       |
| 10 | Protein Organic Chemistry and Applications for Labeling and Engineering in Live Cell Systems. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4088-4106.   | 13.8 | 284       |
| 11 | Molecular recognition, fluorescence sensing, and biological assay of phosphate anion derivatives using artificial Zn(II)-Dpa complexes. <i>Chemical Communications</i> , 2009, , 141-152.   | 4.1  | 239       |
| 12 | Rational Design of FRET-Based Ratiometric Chemosensors for in Vitro and in Cell Fluorescence Analyses of Nucleoside Polyphosphates. <i>Journal of the American Chemical Society</i> , 2010, 132, 13290-13299.                         | 13.7 | 230       |
| 13 | Chemistry for Covalent Modification of Endogenous/Native Proteins: From Test Tubes to Complex Biological Systems. <i>Journal of the American Chemical Society</i> , 2019, 141, 2782-2799.   | 13.7 | 222       |
| 14 | Photo Gel-Sol/Sol-Gel Transition and Its Patterning of a Supramolecular Hydrogel as Stimuli-Responsive Biomaterials. <i>Chemistry - A European Journal</i> , 2008, 14, 3977-3986.   | 3.3  | 208       |
| 15 | Genetically encoded fluorescent thermosensors visualize subcellular thermoregulation in living cells. <i>Nature Methods</i> , 2013, 10, 1232-1238.  | 19.0 | 207       |
| 16 | Self-assembling nanoprobe that displays off/on <sup>19</sup> F nuclear magnetic resonance signals for protein detection and imaging. <i>Nature Chemistry</i> , 2009, 1, 557-561.  | 13.6 | 204       |
| 17 | Development of Highly Sensitive Fluorescent Probes for Detection of Intracellular Copper(I) in Living Systems. <i>Journal of the American Chemical Society</i> , 2010, 132, 5938-5939.  | 13.7 | 203       |
| 18 | Fluorescence Imaging of Intracellular Cadmium Using a Dual-Excitation Ratiometric Chemosensor. <i>Journal of the American Chemical Society</i> , 2008, 130, 12564-12565.  | 13.7 | 197       |

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|----|--|------|-----------|
| 19 | In situ real-time imaging of self-sorted supramolecular nanofibres. <i>Nature Chemistry</i> , 2016, 8, 743-752.  | 13.6 | 191       |
| 20 | Rational Molecular Design of Stimulus-Responsive Supramolecular Hydrogels Based on Dipeptides. <i>Advanced Materials</i> , 2011, 23, 2819-2822.  | 21.0 | 183       |
| 21 | Molecular Recognition in a Supramolecular Hydrogel to Afford a Semi-Wet Sensor Chip. <i>Journal of the American Chemical Society</i> , 2004, 126, 12204-12205.   | 13.7 | 175       |
| 22 | Bis(Dpa-ZnII) Appended Xanthone: Excitation Ratiometric Chemosensor for Phosphate Anions. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 5518-5521.  | 13.8 | 174       |
| 23 | MCM-Enzyme-Supramolecular Hydrogel Hybrid as a Fluorescence Sensing Material for Polyanions of Biological Significance. <i>Journal of the American Chemical Society</i> , 2009, 131, 5321-5330.  | 13.7 | 168       |
| 24 | Fluorescent BODIPY-Based Zn(II) Complex as a Molecular Probe for Selective Detection of Neurofibrillary Tangles in the Brains of Alzheimer's Disease Patients. <i>Journal of the American Chemical Society</i> , 2009, 131, 6543-6548. | 13.7 | 168       |
| 25 | Oligo-Asp Tag/Zn(II) Complex Probe as a New Pair for Labeling and Fluorescence Imaging of Proteins. <i>Journal of the American Chemical Society</i> , 2006, 128, 10452-10459.  | 13.7 | 166       |
| 26 | Ligand-Directed Acyl Imidazole Chemistry for Labeling of Membrane-Bound Proteins on Live Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 3961-3964.  | 13.7 | 161       |
| 27 | Montmorillonite-Supramolecular Hydrogel Hybrid for Fluorocolorimetric Sensing of Polyamines. <i>Journal of the American Chemical Society</i> , 2011, 133, 1670-1673.   | 13.7 | 159       |
| 28 | Design Strategies of Stimuli-Responsive Supramolecular Hydrogels Relying on Structural Analyses and Cell-Mimicking Approaches. <i>Accounts of Chemical Research</i> , 2017, 50, 740-750.   | 15.6 | 159       |
| 29 | Specific Cell Surface Protein Imaging by Extended Self-Assembling Fluorescent Turn-on Nanoprobes. <i>Journal of the American Chemical Society</i> , 2012, 134, 13386-13395.  | 13.7 | 158       |
| 30 | pH-Responsive Shrinkage/Swelling of a Supramolecular Hydrogel Composed of Two Small Amphiphilic Molecules. <i>Chemistry - A European Journal</i> , 2005, 11, 1130-1136.  | 3.3  | 156       |
| 31 | An adaptive supramolecular hydrogel comprising self-sorting double nanofibre networks. <i>Nature Nanotechnology</i> , 2018, 13, 165-172.   | 31.5 | 151       |
| 32 | Organelle-Localizable Fluorescent Chemosensors for Site-Specific Multicolor Imaging of Nucleoside Polyphosphate Dynamics in Living Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 18779-18789.                    | 13.7 | 148       |
| 33 | Cooperation between Artificial Receptors and Supramolecular Hydrogels for Sensing and Discriminating Phosphate Derivatives. <i>Journal of the American Chemical Society</i> , 2005, 127, 11835-11841.                                  | 13.7 | 143       |
| 34 | A Fluorescent Lectin Array Using Supramolecular Hydrogel for Simple Detection and Pattern Profiling for Various Glycoconjugates. <i>Journal of the American Chemical Society</i> , 2006, 128, 10413-10422.                             | 13.7 | 139       |
| 35 | Combinatorial Library of Low Molecular-Weight Organo- and Hydrogelators Based on Glycosylated Amino Acid Derivatives by Solid-Phase Synthesis. <i>Chemistry - A European Journal</i> , 2003, 9, 976-983.                               | 3.3  | 134       |
| 36 | Rapid labelling and covalent inhibition of intracellular native proteins using ligand-directed N-acyl-N-alkyl sulfonamide. <i>Nature Communications</i> , 2018, 9, 1870.   | 12.8 | 133       |

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|----|---|------|-----------|
| 37 | Construction of Artificial Photosynthetic Reaction Centers on a Protein Surface: A Vectorial, Multistep, and Proton-Coupled Electron Transfer for Long-Lived Charge Separation. <i>Journal of the American Chemical Society</i> , 2000, 122, 241-253. | 13.7 | 132       |
| 38 | Target-Specific Chemical Acylation of Lectins by Ligand-Tethered DMAP Catalysts. <i>Journal of the American Chemical Society</i> , 2008, 130, 245-251.  | 13.7 | 131       |
| 39 | Efficient fluorescent ATP-sensing based on coordination chemistry under aqueous neutral conditions. <i>Tetrahedron Letters</i> , 2002, 43, 6193-6195.   | 1.4  | 125       |
| 40 | Protein recognition using synthetic small-molecular binders toward optical protein sensing in vitro and in live cells. <i>Chemical Society Reviews</i> , 2015, 44, 4454-4471.   | 38.1 | 121       |
| 41 | One-Pot and Sequential Organic Chemistry on an Enzyme Surface to Tether a Fluorescent Probe at the Proximity of the Active Site with Restoring Enzyme Activity. <i>Journal of the American Chemical Society</i> , 2006, 128, 3273-3280.               | 13.7 | 120       |
| 42 | Chemically Reactive Supramolecular Hydrogel Coupled with a Signal Amplification System for Enhanced Analyte Sensitivity. <i>Journal of the American Chemical Society</i> , 2015, 137, 3360-3365.  | 13.7 | 119       |
| 43 | Erythroselectivity in addition of $\beta^3$ -substituted allylsilanes to aldehydes in the presence of titanium chloride. <i>Tetrahedron Letters</i> , 1983, 24, 2865-2868.  | 1.4  | 114       |
| 44 | Cross-Linking Strategy for Molecular Recognition and Fluorescent Sensing of a Multi-phosphorylated Peptide in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2003, 125, 10184-10185.   | 13.7 | 107       |
| 45 | Disassembly-Driven Turn-On Fluorescent Nanoprobes for Selective Protein Detection. <i>Journal of the American Chemical Society</i> , 2010, 132, 7291-7293.  | 13.7 | 107       |
| 46 | A General Semisynthetic Method for Fluorescent Saccharide-Biosensors Based on a Lectin. <i>Journal of the American Chemical Society</i> , 2000, 122, 12065-12066.   | 13.7 | 105       |
| 47 | Bacteria Interface Pickering Emulsions Stabilized by Self-assembled Bacteria- $\alpha$ -Chitosan Network. <i>Langmuir</i> , 2012, 28, 5729-5736.  | 3.5  | 105       |
| 48 | Chemical Cell-Surface Receptor Engineering Using Affinity-Guided, Multivalent Organocatalysts. <i>Journal of the American Chemical Society</i> , 2011, 133, 12220-12228.  | 13.7 | 102       |
| 49 | Non-enzymatic Covalent Protein Labeling Using a Reactive Tag. <i>Journal of the American Chemical Society</i> , 2007, 129, 15777-15779.   | 13.7 | 101       |
| 50 | Design of Dual-Emission Chemosensors for Ratiometric Detection of ATP Derivatives. <i>Chemistry - an Asian Journal</i> , 2006, 1, 555-563.  | 3.3  | 99        |
| 51 | Recent Progress in Strategies for the Creation of Protein-Based Fluorescent Biosensors. <i>ChemBioChem</i> , 2009, 10, 2560-2577.   | 2.6  | 98        |
| 52 | Synthesis of side-chain derivatives of 2,2'-bipyridine. <i>Journal of Organic Chemistry</i> , 1989, 54, 1731-1735.  | 3.2  | 95        |
| 53 | Selective Covalent Labeling of Tag-Fused GPCR Proteins on Live Cell Surface with a Synthetic Probe for Their Functional Analysis. <i>Journal of the American Chemical Society</i> , 2010, 132, 9301-9309.   | 13.7 | 93        |
| 54 | Recent Progress in Design of Protein-Based Fluorescent Biosensors and Their Cellular Applications. <i>ACS Chemical Biology</i> , 2014, 9, 2708-2717.  | 3.4  | 93        |

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|----|---|------|-----------|
| 55 | Selective and reversible modification of kinase cysteines with chlorofluoroacetamides. <i>Nature Chemical Biology</i> , 2019, 15, 250-258.  | 8.0  | 90        |
| 56 | Supramolecular hydrogel-based protein and chemosensor array. <i>Lab on A Chip</i> , 2010, 10, 3325.   | 6.0  | 89        |
| 57 | Effective Disruption of Phosphoprotein-Protein Surface Interaction Using Zn(II) Dipicolylamine-Based Artificial Receptors via Two-Point Interaction. <i>Journal of the American Chemical Society</i> , 2006, 128, 2052-2058.                        | 13.7 | 88        |
| 58 | Traceless Affinity Labeling of Endogenous Proteins for Functional Analysis in Living Cells. <i>Accounts of Chemical Research</i> , 2012, 45, 1460-1469.   | 15.6 | 87        |
| 59 | Suzuki coupling for protein modification. <i>Tetrahedron Letters</i> , 2005, 46, 3301-3305.   | 1.4  | 85        |
| 60 | Native FKBP12 Engineering by Ligand-Directed Tosyl Chemistry: Labeling Properties and Application to Photo-Cross-Linking of Protein Complexes in Vitro and in Living Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 2216-2226. | 13.7 | 81        |
| 61 | Synthetic Self-Localizing Ligands That Control the Spatial Location of Proteins in Living Cells. <i>Journal of the American Chemical Society</i> , 2013, 135, 12684-12689.  | 13.7 | 80        |
| 62 | Label-Free, Real-Time Glycosyltransferase Assay Based on a Fluorescent Artificial Chemosensor. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 665-668.  | 13.8 | 77        |
| 63 | Quenched Ligand-Directed Tosylate Reagents for One-Step Construction of Turn-On Fluorescent Biosensors. <i>Journal of the American Chemical Society</i> , 2009, 131, 9046-9054.   | 13.7 | 77        |
| 64 | Functional conversion of myoglobin bound to synthetic bilayer membranes: from dioxygen storage protein to redox enzyme. <i>Journal of the American Chemical Society</i> , 1991, 113, 9625-9630.   | 13.7 | 76        |
| 65 | Validating subcellular thermal changes revealed by fluorescent thermosensors. <i>Nature Methods</i> , 2015, 12, 801-802.  | 19.0 | 76        |
| 66 | Supramolecular hydrogel capsule showing prostate specific antigen-responsive function for sensing and targeting prostate cancer cells. <i>Chemical Science</i> , 2010, 1, 491.  | 7.4  | 75        |
| 67 | Chemical labelling for visualizing native AMPA receptors in live neurons. <i>Nature Communications</i> , 2017, 8, 14850.  | 12.8 | 75        |
| 68 | Recent Progress in Chemical Modification of Proteins. <i>Analytical Sciences</i> , 2019, 35, 5-27.  | 1.6  | 74        |
| 69 | Enhanced N-Demethylase Activity of Cytochrome c Bound to a Phosphate-Bearing Synthetic Bilayer Membrane. <i>Journal of the American Chemical Society</i> , 1994, 116, 8811-8812.  | 13.7 | 73        |
| 70 | Photo-responsive gel droplet as a nano- or pico-litre container comprising a supramolecular hydrogel. <i>Chemical Communications</i> , 2008, , 1545.  | 4.1  | 72        |
| 71 | Design of a Hybrid Biosensor for Enhanced Phosphopeptide Recognition Based on a Phosphoprotein Binding Domain Coupled with a Fluorescent Chemosensor. <i>Journal of the American Chemical Society</i> , 2007, 129, 6232-6239.                       | 13.7 | 71        |
| 72 | Systematic Study of Protein Detection Mechanism of Self-Assembling <sup>19</sup> F NMR/MRI Nanoprobes toward Rational Design and Improved Sensitivity. <i>Journal of the American Chemical Society</i> , 2011, 133, 11725-11731.                    | 13.7 | 70        |

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|----|---|------|-----------|
| 73 | Coupling a Natural Receptor Protein with an Artificial Receptor to Afford a Semisynthetic Fluorescent Biosensor. <i>Journal of the American Chemical Society</i> , 2004, 126, 490-495.  | 13.7 | 69        |
| 74 | Fluorophore Labeling of Native FKBP12 by Ligand-Directed Tosyl Chemistry Allows Detection of Its Molecular Interactions in Vitro and in Living Cells. <i>Journal of the American Chemical Society</i> , 2013, 135, 6782-6785.   | 13.7 | 68        |
| 75 | pH Nanosensor Using Electronic Spins in Diamond. <i>ACS Nano</i> , 2019, 13, 11726-11732.   | 14.6 | 68        |
| 76 | Ligand-directed dibromophenyl benzoate chemistry for rapid and selective acylation of intracellular natural proteins. <i>Chemical Science</i> , 2015, 6, 3217-3224.   | 7.4  | 67        |
| 77 | Site-specific Discrimination by Cyanovirin-N for Î±-Linked Trisaccharides Comprising the Three Arms of Man8 and Man9. <i>Journal of Molecular Biology</i> , 2002, 322, 881-889.   | 4.2  | 65        |
| 78 | Chemical Tools for Endogenous Protein Labeling and Profiling. <i>Cell Chemical Biology</i> , 2020, 27, 970-985.   | 5.2  | 65        |
| 79 | Construction of Artificial Signal Transducers on a Lectin Surface by Post-Photoaffinity-Labeling Modification for Fluorescent Saccharide Biosensors. <i>Chemistry - A European Journal</i> , 2003, 9, 3660-3669.  | 3.3  | 64        |
| 80 | Site-specific covalent labeling of His-tag fused proteins with a reactive Ni(ii)â€“NTA probe. <i>Chemical Communications</i> , 2009, , 5880.  | 4.1  | 64        |
| 81 | Intracellular Protein-Responsive Supramolecules: Protein Sensing and In-Cell Construction of Inhibitor Assay System. <i>Journal of the American Chemical Society</i> , 2014, 136, 16635-16642.  | 13.7 | 64        |
| 82 | Double-Modification of Lectin Using Two Distinct Chemistries for Fluorescent Ratiometric Sensing and Imaging Saccharides in Test Tube or in Cell. <i>Journal of the American Chemical Society</i> , 2005, 127, 13253-13261.   | 13.7 | 62        |
| 83 | Light-driven activation of reconstituted myoglobin with a ruthenium tris(2,2'-bipyridine) pendant. <i>Journal of the American Chemical Society</i> , 1993, 115, 10458-10459.  | 13.7 | 61        |
| 84 | Protein Engineering Using Molecular Assembly:Â Functional Conversion of Cytochrome c via Noncovalent Interactions. <i>Journal of the American Chemical Society</i> , 1997, 119, 9096-9102.  | 13.7 | 60        |
| 85 | LDAI-Based Chemical Labeling of Intact Membrane Proteins and Its Pulse-Chase Analysis under Live Cell Conditions. <i>Chemistry and Biology</i> , 2014, 21, 1013-1022.   | 6.0  | 60        |
| 86 | A supramolecular hydrogel containing boronic acid-appended receptor for fluorocolorimetric sensing of polyols with a paper platform. <i>Chemical Communications</i> , 2012, 48, 2716.   | 4.1  | 59        |
| 87 | Organelle membrane-specific chemical labeling and dynamic imaging in living cells. <i>Nature Chemical Biology</i> , 2020, 16, 1361-1367.  | 8.0  | 59        |
| 88 | Direct Observation of the Ferric-Porphyrin Cation Radical as an Intermediate in the Phototriggered Oxidation of Ferric- to Ferryl-Heme Tethered to Ru(bpy) <sub>3</sub> in Reconstituted Myoglobin. <i>Journal of the American Chemical Society</i> , 1999, 121, 5500-5506. | 13.7 | 58        |
| 89 | Twoâ€“Photonâ€“Responsive Supramolecular Hydrogel for Controlling Materials Motion in Micrometer Space. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7264-7267.   | 13.8 | 57        |
| 90 | Design and Semisynthesis of Photoactive Myoglobin Bearing Ruthenium Tris(2,2'-bipyridine) Using Cofactor-Reconstitution. <i>Inorganic Chemistry</i> , 1998, 37, 4380-4388.  | 4.0  | 55        |

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|-----|---|------|-----------|
| 91  | Meter-long and Robust Supramolecular Strands Encapsulated in Hydrogel Jackets. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1553-1557.  | 13.8 | 55        |
| 92  | Analysis of Cell-Surface Receptor Dynamics through Covalent Labeling by Catalyst-Tethered Antibody. <i>Journal of the American Chemical Society</i> , 2015, 137, 5372-5380.   | 13.7 | 55        |
| 93  | A Set of Organelle-Localizable Reactive Molecules for Mitochondrial Chemical Proteomics in Living Cells and Brain Tissues. <i>Journal of the American Chemical Society</i> , 2016, 138, 7592-7602.                        | 13.7 | 55        |
| 94  | Discovery of allosteric modulators for GABAA receptors by ligand-directed chemistry. <i>Nature Chemical Biology</i> , 2016, 12, 822-830.  | 8.0  | 53        |
| 95  | Shank and Zinc Mediate an AMPA Receptor Subunit Switch in Developing Neurons. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 405.   | 2.9  | 53        |
| 96  | Ru(bpy) <sub>3</sub> -based artificial receptors toward a protein surface: selective binding and efficient photoreduction of cytochrome c. <i>Chemical Communications</i> , 1999, , 2345-2346.                            | 4.1  | 52        |
| 97  | Ligand-directed tosyl chemistry for in situ native protein labeling and engineering in living systems: from basic properties to applications. <i>Current Opinion in Chemical Biology</i> , 2014, 21, 136-143.             | 6.1  | 52        |
| 98  | Sugar sensing utilizing aggregation properties of a boronic-acid-appended porphyrin. <i>Tetrahedron Letters</i> , 1993, 34, 6273-6276.  | 1.4  | 51        |
| 99  | Identification of a New Class of Low Molecular Weight Antagonists against the Chemokine Receptor CXCR4 Having the Dipicolylamine~Zinc(II) Complex Structure. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 3412-3415. | 6.4  | 51        |
| 100 | Post-assembly Fabrication of a Functional Multicomponent Supramolecular Hydrogel Based on a Self-Sorting Double Network. <i>Journal of the American Chemical Society</i> , 2019, 141, 4997-5004.                          | 13.7 | 51        |
| 101 | Semisynthetic Lectin~4-Dimethylaminopyridine Conjugates for Labeling and Profiling Glycoproteins on Live Cell Surfaces. <i>Journal of the American Chemical Society</i> , 2013, 135, 12252-12258.                         | 13.7 | 50        |
| 102 | Phosphopeptide-Dependent Labeling of 14<sup>3</sup>C-labeled Proteins by Fusicoccin-Based Fluorescent Probes. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 509-512.                                       | 13.8 | 49        |
| 103 | In-cell covalent labeling of reactive His-tag fused proteins. <i>Chemical Communications</i> , 2013, 49, 5022.  | 4.1  | 47        |
| 104 | Quantitative comparison of protein dynamics in live cells and in vitro by in-cell 19F-NMR. <i>Chemical Communications</i> , 2013, 49, 2801.   | 4.1  | 47        |
| 105 | Protein-responsive protein release of supramolecular/polymer hydrogel composite integrating enzyme activation systems. <i>Nature Communications</i> , 2020, 11, 3859.   | 12.8 | 47        |
| 106 | Heat-Induced Morphological Transformation of Supramolecular Nanostructures by Retro-Diels-Alder Reaction. <i>Chemistry - A European Journal</i> , 2012, 18, 13091-13096.  | 3.3  | 45        |
| 107 | Supramolecular hydrogels based on bola-amphiphilic glycolipids showing color change in response to glycosidases. <i>Chemical Communications</i> , 2013, 49, 2115-2117.  | 4.1  | 45        |
| 108 | A conditional proteomics approach to identify proteins involved in zinc homeostasis. <i>Nature Methods</i> , 2016, 13, 931-937.   | 19.0 | 45        |

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|-----|---|------|-----------|
| 109 | Chemical Modification of the Structures and Functions of Proteins by the Cofactor Reconstitution Method. <i>European Journal of Organic Chemistry</i> , 1999, 1999, 539-549.  | 2.4  | 44        |
| 110 | Pyrene Excimer-Based Dual-Emission Detection of a Oligoaspartate Tag-Fused Protein by Using a Zn(II)-DpaTyr Probe. <i>ChemBioChem</i> , 2007, 8, 1370-1372.   | 2.6  | 44        |
| 111 | Activity-Based Sensing with a Metal-Directed Acyl Imidazole Strategy Reveals Cell Type-Dependent Pools of Labile Brain Copper. <i>Journal of the American Chemical Society</i> , 2020, 142, 14993-15003.  | 13.7 | 44        |
| 112 | Three Distinct Read-Out Modes for Enzyme Activity Can Operate in a Semi-Wet Supramolecular Hydrogel. <i>Chemistry - A European Journal</i> , 2005, 11, 7294-7304.   | 3.3  | 43        |
| 113 | Ratiometric fluorescence detection of a tag fused protein using the dual-emission artificial molecular probe. <i>Chemical Communications</i> , 2006, , 4024.  | 4.1  | 43        |
| 114 | Affinity-Guided Oxime Chemistry for Selective Protein Acylation in Live Tissue Systems. <i>Journal of the American Chemical Society</i> , 2017, 139, 14181-14191.   | 13.7 | 43        |
| 115 | Rigid Luminescent Bis-Zinc(II)-Bis-Cyclen Complexes for the Detection of Phosphate Anions and Non-Covalent Protein Labeling in Aqueous Solution. <i>European Journal of Organic Chemistry</i> , 2011, 2011, 2807-2817.  | 2.4  | 42        |
| 116 | Fluorescence Sensing of Inorganic Phosphate and Pyrophosphate Using Small Molecular Sensors and Their Applications. <i>Topics in Current Chemistry</i> , 2017, 375, 30.   | 5.8  | 42        |
| 117 | Design and Synthesis of Bis(Zn(II)-Dipicolylamine)-Based Fluorescent Artificial Chemosensors for Phosphorylated Proteins/Peptides. <i>Bulletin of the Chemical Society of Japan</i> , 2006, 79, 35-46.  | 3.2  | 41        |
| 118 | Mechanisms of chemical protein <sup>19</sup> F-labeling and NMR-based biosensor construction in vitro and in cells using self-assembling ligand-directed tosylate compounds. <i>Chemical Science</i> , 2011, 2, 511-520.  | 7.4  | 40        |
| 119 | Post-photoaffinity labeling modification using aldehyde chemistry to produce a fluorescent lectin toward saccharide-biosensors. <i>Chemical Communications</i> , 2001, , 229-230.   | 4.1  | 39        |
| 120 | Phosphoprotein-Selective Recognition and Staining in SDS-PAGE by Bis-Zn(II)-dipicolylamine-Appended Anthracene. <i>Chemistry Letters</i> , 2004, 33, 1024-1025.   | 1.3  | 39        |
| 121 | Recent Progress of Phosphate Derivatives Recognition Utilizing Artificial Small Molecular Receptors in Aqueous Media. , 2007, , 95-125.   |      | 39        |
| 122 | Live-Cell Protein Sulfonylation Based on Proximity-Driven N-Sulfonyl Pyridone Chemistry. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 659-662.  | 13.8 | 39        |
| 123 | The Power of Confocal Laser Scanning Microscopy in Supramolecular Chemistry: In situ Real-time Imaging of Stimuli-Responsive Multicomponent Supramolecular Hydrogels. <i>ChemistryOpen</i> , 2020, 9, 67-79.  | 1.9  | 39        |
| 124 | Layered arrangement of oriented myoglobins in cast films of a phosphate bilayer membrane. <i>Journal of the American Chemical Society</i> , 1990, 112, 6744-6745.   | 13.7 | 38        |
| 125 | Direct Comparison of Electron Transfer Properties of Two Distinct Semisynthetic Triads with Non-Protein Based Triad: Unambiguous Experimental Evidences on Protein Matrix Effects. <i>Chemistry - A European Journal</i> , 2000, 6, 1907-1916.                                | 3.3  | 37        |
| 126 | Fluorophore Appended Saccharide Cyclophane: Self-Association, Fluorescent Properties, Heterodimers with Cyclodextrins, and Cross-Linking Behavior with Peanut Agglutinin of Dansyl-Modified Saccharide Cyclophane. <i>Journal of Organic Chemistry</i> , 2004, 69, 3509-3516. | 3.2  | 37        |



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|-----|--|------|-----------|
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