Yoon-Sik Lee

List of Publications by Year
in descending order

112 papers	3,077 citations	147566 31 h-index	189595 50 g-index
115 all docs	115 docs citations	115 times ranked	5055 citing authors

#	Article	IF	Citations
1	Single-Step and Rapid Growth of Silver Nanoshells as SERS-Active Nanostructures for Label-Free Detection of Pesticides. ACS Applied Materials & Interfaces, 2014, 6, 12541-12549.	4.0	130
2	Surface-enhanced Raman scattering-active nanostructures and strategies for bioassays. Nanomedicine, 2011, 6, 1463-1480.	1.7	127
3	Ultrasensitive, Biocompatible, Quantumâ€Dotâ€Embedded Silica Nanoparticles for Bioimaging. Advanced Functional Materials, 2012, 22, 1843-1849.	7.8	123
4	Nearâ€Infrared SERS Nanoprobes with Plasmonic Au/Ag Hollowâ€Shell Assemblies for In Vivo Multiplex Detection. Advanced Functional Materials, 2013, 23, 3719-3727.	7.8	121
5	Direct transformation of cellulose into 5-hydroxymethyl-2-furfural using a combination of metal chlorides in imidazolium ionic liquid. Green Chemistry, 2011, 13, 1503.	4.6	118
6	Application of supercritical water for green recycling of epoxy-based carbon fiber reinforced plastic. Composites Science and Technology, 2019, 173, 66-72.	3.8	117
7	Enhanced osteogenic commitment of murine mesenchymal stem cells on graphene oxide substrate. Biomaterials Research, 2018, 22, 1.	3.2	116
8	Tissue adhesive, rapid forming, and sprayable ECM hydrogel via recombinant tyrosinase crosslinking. Biomaterials, 2018, 178, 401-412.	5.7	109
9	Tyrosine-mediated two-dimensional peptide assembly and its role as a bio-inspired catalytic scaffold. Nature Communications, 2014, 5, 3665.	5.8	98
10	Fluorescence-Raman Dual Modal Endoscopic System for Multiplexed Molecular Diagnostics. Scientific Reports, 2015, 5, 9455.	1.6	73
11	Boosting Aerobic Oxidation of Alcohols via Synergistic Effect between TEMPO and a Composite Fe₃O₄/Cu-BDC/GO Nanocatalyst. ACS Omega, 2020, 5, 5182-5191.	1.6	73
12	Target-specific near-IR induced drug release and photothermal therapy with accumulated Au/Ag hollow nanoshells on pulmonary cancer cell membranes. Biomaterials, 2015, 45, 81-92.	5.7	69
13	One-step synthesis of silver nanoshells with bumps for highly sensitive near-IR SERS nanoprobes. Journal of Materials Chemistry B, 2014, 2, 4415-4421.	2.9	51
14	Ag Shellâ€“Au Satellite Hetero-Nanostructure for Ultra-Sensitive, Reproducible, and Homogeneous NIR SERS Activity. ACS Applied Materials & Interfaces, 2014, 6, 11859-11863.	4.0	49
15	Multilayer Ag-Embedded Silica Nanostructure as a Surface-Enhanced Raman Scattering-Based Chemical Sensor with Dual-Function Internal Standards. ACS Applied Materials & Interfaces, 2018, 10, 40748-40755.	4.0	49
16	Antimicrobial properties of lignin-decorated thin multi-walled carbon nanotubes in poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	2.6	49
17	Super-insulating, flame-retardant, and flexible poly(dimethylsiloxane) composites based on silica aerogel. Composites Part A: Applied Science and Manufacturing, 2019, 123, 108-113.	3.8	48
18	Encoding peptide sequences with surface-enhanced Raman spectroscopic nanoparticles. Chemical Communications, 2011, 47, 2306-2308.	2.2	47

#	Article	IF	Citations
19	Covalent Selfâ€Assembly and Oneâ€Step Photocrosslinking of Tyrosineâ€Rich Oligopeptides to Form Diverse Nanostructures. Angewandte Chemie - International Edition, 2016, 55, 6925-6928.	7.2	46
20	Highly sensitive and reliable SERS probes based on nanogap control of a Auâ€“Ag alloy on silica nanoparticles. RSC Advances, 2017, 7, 7015-7021.	1.7	45
21	Enzyme-catalyzed Ag Growth on Au Nanoparticle-assembled Structure for Highly Sensitive Colorimetric Immunoassay. Scientific Reports, 2018, 8, 6290.	1.6	44
22	Glucose detection using 4-mercaptophenyl boronic acid-incorporated silver nanoparticles-embedded silica-coated graphene oxide as a SERS substrate. Biochip Journal, 2017, 11, 46-56.	2.5	43
23	Heterogeneous zirconia-supported ruthenium catalyst for highly selective hydrogenation of 5-hydroxymethyl-2-furaldehyde to 2,5-bis(hydroxymethyl)furans in various n-alcohol solvents. RSC Advances, 2016, 6, 93394-93397.	1.7	41
24	Highly robust and optimized conjugation of antibodies to nanoparticles using quantitatively validated protocols. Nanoscale, 2017, 9, 2548-2555.	2.8	39
25	Reaction Kineticsâ€Mediated Control over Silver Nanogap Shells as Surfaceâ€Enhanced Raman Scattering Nanoprobes for Detection of Alzheimer's Disease Biomarkers. Small, 2019, 15, e1900613.	5.2	39
26	Luminescent Graphene Oxide with a Peptideâ€Quencher Complex for Optical Detection of Cellâ€Secreted Proteases by a Turnâ€On Response. Advanced Functional Materials, 2014, 24, 5119-5128.	7.8	38
27	Proton-enabled activation of peptide materials for biological bimodal memory. Nature Communications, 2020, 11, 5896.	5.8	36
28	Large scale synthesis of surface-enhanced Raman scattering nanoprobes with high reproducibility and long-term stability. Journal of Industrial and Engineering Chemistry, 2016, 33, 22-27.	2.9	34
29	Simultaneous Detection of EGFR and VEGF in Colorectal Cancer using Fluorescence-Raman Endoscopy. Scientific Reports, 2017, 7, 1035.	1.6	33
30	Magnetic field induced aggregation of nanoparticles for sensitive molecular detection. Physical Chemistry Chemical Physics, 2011, 13, 7298.	1.3	32
31	Highly active organosilane-based N-heterocyclic carbene-palladium complex immobilized on silica particles for the Suzuki reaction. Pure and Applied Chemistry, 2007, 79, 1553-1559.	0.9	31
32	Polymerâ€Supported Electronâ€Rich Oxime Palladacycle as an Efficient Heterogeneous Catalyst for the Suzuki Coupling Reaction. Advanced Synthesis and Catalysis, 2014, 356, 1056-1064.	2.1	31
33	Î²-CD Dimer-immobilized Ag Assembly Embedded Silica Nanoparticles for Sensitive Detection of Polycyclic Aromatic Hydrocarbons. Scientific Reports, 2016, 6, 26082.	1.6	31
34	Assembly of Plasmonic and Magnetic Nanoparticles with Fluorescent Silica Shell Layer for Tri-functional SERS-Magnetic-Fluorescence Probes and Its Bioapplications. Scientific Reports, 2018, 8, 13938.	1.6	30
35	Interaction of photothermal graphene networks with polymer chains and laser-driven photo-actuation behavior of shape memory polyurethane/epoxy/epoxy-functionalized graphene oxide nanocomposites. Polymer, 2019, 181, 121791.	1.8	30
36	Theranostic iRGD peptide containing cisplatin prodrug: Dual-cargo tumor penetration for improved imaging and therapy. Journal of Controlled Release, 2019, 300, 73-80.	4.8	30

#	Article	IF	Citations
37	Direct Identification of On-Bead Peptides Using Surface-Enhanced Raman Spectroscopic Barcoding System for High-Throughput Bioanalysis. Scientific Reports, 2015, 5, 10144.	1.6	29
38	Gold-silver bimetallic nanoparticles with a Raman labeling chemical assembled on silica nanoparticles as an internal-standard-containing nanoprobe. Journal of Alloys and Compounds, 2019, 779, 360-366.	2.8	29
39	Activatable iRGD-based peptide monolith: Targeting, internalization, and fluorescence activation for precise tumor imaging. Journal of Controlled Release, 2016, 237, 177-184.	4.8	28
40	A dual modal silver bumpy nanoprobe for photoacoustic imaging and SERS multiplexed identification of in vivo lymph nodes. Nanoscale, 2017, 9, 12556-12564.	2.8	28
41	Improvement in mechanical and thermal properties of polypropylene nanocomposites using an extremely small amount of alkyl chain-grafted hexagonal boron nitride nanosheets. Polymer, 2019, 180, 121714.	1.8	28
42	Double-Layer Magnetic Nanoparticle-Embedded Silica Particles for Efficient Bio-Separation. PLoS ONE, 2015, 10, e0143727.	1.1	27
43	Recyclable, flame-retardant and smoke-suppressing tannic acid-based carbon-fiber-reinforced plastic. Composites Part B: Engineering, 2020, 197, 108173.	5.9	26
44	The effect of PEG groups on swelling properties of PEG-grafted-polystyrene resins in various solvents. Reactive and Functional Polymers, 2000, 44, 41-46.	2.0	23
45	Proton Conduction in a Tyrosineâ€Rich Peptide/Manganese Oxide Hybrid Nanofilm. Advanced Functional Materials, 2017, 27, 1702185.	7.8	23
46	Starbon/Highâ€Amylose Corn Starchâ€Supported Nâ€Heterocyclic Carbeneâ€“Iron(III) Catalyst for Conversion of Fructose into 5â€Hydroxymethylfurfural. ChemSusChem, 2018, 11, 716-725.	3.6	23
47	Physically Transient Field-Effect Transistors Based on Black Phosphorus. ACS Applied Materials & Interfaces, 2018, 10, 42630-42636.	4.0	22
48	Injectable Single-Component Peptide Depot: Autonomously Rechargeable Tumor Photosensitization for Repeated Photodynamic Therapy. ACS Nano, 2020, 14, 15793-15805.	7.3	22
49	Solid-Phase Synthesis of Biphenyls and Terphenyls by the Traceless Multifunctional Cleavage of Polymer-Bound Arenesulfonates. European Journal of Organic Chemistry, 2005, 2005, 3177-3181.	1.2	21
50	Highly Selective Catalytic Hydrogenation and Etherification of 5-Hydroxymethyl-2-furaldehyde to 2,5-Bis(alkoxymethyl)furans for Potential Biodiesel Production. Synlett, 2017, 28, 2299-2302.	1.0	21
51	Effect of Alkylamines on Morphology Control of Silver Nanoshells for Highly Enhanced Raman Scattering. ACS Applied Materials & Interfaces, 2019, 11, 8374-8381.	4.0	21
52	Proteolytic disassembly of peptide-mediated graphene oxide assemblies for turn-on fluorescence sensing of proteases. Nanoscale, 2016, 8, 12272-12281.	2.8	19
53	Size effect of gold on Ag-coated Au nanoparticle-embedded silica nanospheres. RSC Advances, 2016, 6, 48644-48650.	1.7	19
54	Facile Nondestructive Assembly of Tyrosineâ€Rich Peptide Nanofibers as a Biological Glue for Multicomponentâ€Based Nanoelectrode Applications. Advanced Functional Materials, 2018, 28, 1705729.	7.8	18

#	Article	IF	Citations
55	Rapid remote actuation in shape memory hyperbranched polyurethane composites using cross-linked photothermal reduced graphene oxide networks. Sensors and Actuators B: Chemical, 2020, 321, 128468.	4.0	18
56	Plasmon-enhanced dye-sensitized solar cells using SiO2 spheres decorated with tightly assembled silver nanoparticles. RSC Advances, 2014, 4, 19851.	1.7	17
57	SERS-Based Flavonoid Detection Using Ethylenediamine-Î²-Cyclodextrin as a Capturing Ligand. Nanomaterials, 2017, 7, 8.	1.9	17
58	Tailoring a Tyrosine-Rich Peptide into Size- and Thickness-Controllable Nanofilms. ACS Omega, 2018, 3, 3901-3907.	1.6	17
59	Caffeoylâ€“Proâ€“His amide relieve DNCB-Induced Atopic Dermatitis-Like phenotypes in BALB/c mice. Scientific Reports, 2020, 10, 8417.	1.6	17
60	Î²-Lactoglobulin Peptide Fragments Conjugated with Caffeic Acid Displaying Dual Activities for Tyrosinase Inhibition and Antioxidant Effect. Bioconjugate Chemistry, 2018, 29, 1000-1005.	1.8	16
61	Tumor microenvironment-responsive fluorogenic nanoprobe for ratiometric dual-channel imaging of lymph node metastasis. Colloids and Surfaces B: Biointerfaces, 2019, 179, 9-16.	2.5	16
62	Redox-Active Tyrosine-Mediated Peptide Template for Large-Scale Single-Crystalline Two-Dimensional Silver Nanosheets. ACS Nano, 2020, 14, 1738-1744.	7.3	16
63	Synthesis of optically tunable bumpy silver nanoshells by changing the silica core size and their SERS activities. RSC Advances, 2017, 7, 40255-40261.	1.7	15
64	Template-Assisted Plasmonic Nanogap Shells for Highly Enhanced Detection of Cancer Biomarkers. International Journal of Molecular Sciences, 2021, 22, 1752.	1.8	14
65	Fully Degradable Memristors and Humidity Sensors Based on a Tyrosine-Rich Peptide. ACS Applied Electronic Materials, 2021, 3, 3372-3378.	2.0	14
66	Preparation of Coreâ€“Shell-Type Poly(ethylene glycol)-Grafted Polystyrene Resins and Their Characteristics in Solid-Phase Peptide Synthesis. Macromolecular Chemistry and Physics, 2002, 203, 2211-2217.	1.1	13
67	Improved immobilized enzyme systems using spherical micro silica sol-gel enzyme beads. Biotechnology and Bioprocess Engineering, 2006, 11, 277-281.	1.4	13
68	Fabrication of mono-dispersed silica-coated quantum dot-assembled magnetic nanoparticles. RSC Advances, 2015, 5, 32072-32077.	1.7	13
69	Silver Nanoparticle-Embedded Thin Silica-Coated Graphene Oxide as an SERS Substrate. Nanomaterials, 2016, 6, 176.	1.9	13
70	Milk Protein-Derived Antioxidant Tetrapeptides as Potential Hypopigmenting Agents. Antioxidants, 2020, 9, 1106.	2.2	13
71	Facile Synthesis of N-(9-Fluorenylmethyloxycarbonyl)-3-amino-3-(4,5-dimethoxy-2-nitrophenyl)propionic Acid as a Photocleavable Linker for Solid-Phase Peptide Synthesis. Synlett, 2013, 24, 733-736.	1.0	12
72	Preparation of plasmonic magnetic nanoparticles and their light scattering properties. RSC Advances, 2015, 5, 21050-21053.	1.7	12

#	Article	IF	Citations
73	Facile method of preparing silver-embedded polymer beads and their antibacterial effect. Journal of Materials Science, 2010, 45, 3106-3108.	1.7	11
74	Humidity-induced synaptic plasticity of ZnO artificial synapses using peptide insulator for neuromorphic computing. Journal of Materials Science and Technology, 2022, 119, 150-155.	5.6	11
75	Practical neutral aromatic nitration with nitrogen dioxide in the presence of heterogeneous catalysts under moderate oxygen pressure. Research on Chemical Intermediates, 2006, 32, 759-766.	1.3	10
76	A tyrosine-rich peptide induced flower-like palladium nanostructure and its catalytic activity. RSC Advances, 2015, 5, 78026-78029.	1.7	9
77	Increased electrical conductivity of peptides through annealing process. APL Materials, 2017, 5, .	2.2	9
78	Solid-Phase Synthesis of Peptide-Conjugated Perylene Diimide Bolaamphiphile and Its Application in Photodynamic Therapy. ACS Omega, 2018, 3, 5896-5902.	1.6	9
79	Graphene oxide film guided skeletal muscle differentiation. Materials Science and Engineering C, 2021, 126, 112174.	3.8	9
80	Highly Sensitive Magnetic-SERS Dual-Function Silica Nanoprobes for Effective On-Site Organic Chemical Detection. Nanomaterials, 2017, 7, 146.	1.9	8
81	Adenosine Triphosphate-Encapsulated Liposomes with Plasmonic Nanoparticles for Surface Enhanced Raman Scattering-Based Immunoassays. Sensors, 2017, 17, 1480.	2.1	8
82	Tyrosineâ€Rich Peptide Insulator for Rapidly Dissolving Transient Electronics. Advanced Materials Technologies, 2020, 5, 2000516.	3.0	7
83	Selective removal of anti-Î±-Gal antibodies from human serum by using synthetic Î±-Gal epitope on a core-shell type resin. Biotechnology and Bioprocess Engineering, 2008, 13, 445-452.	1.4	6
84	Heterogeneous Transition-Metal-Free Alcohol Oxidation by Graphene Oxide Supported Iodoxybenzoic Acid in Water. Synlett, 2013, 24, 2282-2286.	1.0	5
85	Dye-sensitized solar cells with silica-coated quantum dot-embedded nanoparticles used as a light-harvesting layer. New Journal of Chemistry, 2014, 38, 910.	1.4	5
86	Production of Valuable Esters from Oleic Acid with a Porous Polymeric Acid Catalyst without Water Removal. Synlett, 2015, 27, 29-32.	1.0	5
87	Endoscopic imaging using surface-enhanced Raman scattering. European Journal of Nanomedicine, 2017, 9, .	0.6	5
88	A phase-reversible Pd containing sphere-to-bridge-shaped peptide nanostructure for cross-coupling reactions. RSC Advances, 2017, 7, 33162-33165.	1.7	5
89	Nickel-catalyzed cross-coupling of bromophenols with Grignard reagents in the solid phase synthesis. Molecular Diversity, 2000, 5, 57-60.	2.1	4
90	Solid Phase Synthesis of an Analogue of Insulin, A0:R glargine, That Exhibits Decreased Mitogenic Activity. International Journal of Peptide Research and Therapeutics, 2010, 16, 153-158.	0.9	4

#	Article	IF	Citations
91	Efficient Synthesis and Characterization of Monoprotected Symmetrical Poly(Ethylene Glycol) Diamine. Bulletin of the Korean Chemical Society, 2018, 39, 29-32.	1.0	4
92	Introduction of Nanobiotechnology. Advances in Experimental Medicine and Biology, 2021, 1309, 1-22.	0.8	4
93	Effect of alpha-resorcylic acidâ€“l-phenylalanine amide on collagen synthesis and matrix metalloproteinase expression in fibroblasts. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 742-745.	1.0	3
94	Corrigendum to â€œTarget-specific near-IR induced drug release and photothermal therapy with accumulated Au/Ag hollow nanoshells on pulmonary cancer cell membranesâ€• [Biomaterials 45 (2015) 81â€“92]. Biomaterials, 2015, 65, 124-125.	5.7	3
95	Bioapplications of Nanomaterials. Advances in Experimental Medicine and Biology, 2021, 1309, 235-255.	0.8	3
96	Adsorption characteristics of direct blue 78 onto polyethylene glycol grafted polystyrene resin. Separation Science and Technology, 2002, 37, 2405-2419.	1.3	2
97	Simple and sensitive method of microcantilever-based DNA detection using nanoparticles conjugates. , 2008, , .		2
98	Nanoprobes: Nearâ€Infrared SERS Nanoprobes with Plasmonic Au/Ag Hollowâ€Shell Assemblies for In Vivo Multiplex Detection (Adv. Funct. Mater. 30/2013). Advanced Functional Materials, 2013, 23, 3828-3828.	7.8	2
99	Synaptic transistors based on a tyrosine-rich peptide for neuromorphic computing. RSC Advances, 2021, 11, 39619-39624.	1.7	2
100	Protein patterning by virtual mask photolithography using micromirror array. , 0, , .		1
101	Nanoslit-concentration-chip integrated microbead-based protein assay system for sensitive and quantitative detection. RSC Advances, 2017, 7, 29679-29685.	1.7	1
102	Preparation of tri(ethylene glycol) grafted coreâ€shell type polymer support for solidâ€phase peptide synthesis. Journal of Peptide Science, 2018, 24, e3061.	0.8	1
103	Micro biomedical diagnostic system for endoscopic microcapsule. , 0, , .		0
104	Single crystalline silicon micromirror array for peptide synthesis applications. , 0, , .		0
105	Enhancement method of limit of frequency resolution using magnetic bead on the microcantilever. , 2006, , .		0
106	Application of Nanotechnology into Life Science: Benefit or Risk. , 0, , 491-501.		0
107	Facile Synthetic Method of Alkanethiol Spacer for Biointerface. Synlett, 2012, 24, 20-23.	1.0	0
108	Quantum Dots: Ultrasensitive, Biocompatible, Quantum-Dot-Embedded Silica Nanoparticles for Bioimaging (Adv. Funct. Mater. 9/2012). Advanced Functional Materials, 2012, 22, 1774-1774.	7.8	0

#	Article	IF	Citations
109	RÃ¼cktitelbild: Covalent Self-Assembly and One-Step Photocrosslinking of Tyrosine-Rich Oligopeptides to Form Diverse Nanostructures (Angew. Chem. 24/2016). Angewandte Chemie, 2016, 128, 7122-7122.	1.6	0
110	Antibodyâ€Based Therapeutics: Ultrasensitive NIRâ€SERRS Probes with Multiplexed Ratiometric Quantification for In Vivo Antibody Leads Validation (Adv. Healthcare Mater. 4/2018). Advanced Healthcare Materials, 2018, 7, 1870019.	3.9	0
111	Conclusion and Perspective. Advances in Experimental Medicine and Biology, 2021, 1309, 289-292.	0.8	0
112	Synthesis of Caffeoyl-Prolyl-Histidyl-Xaa Derivatives and Evaluation of Their Activities and Stability upon Long-Term Storage. International Journal of Molecular Sciences, 2021, 22, 6301.	1.8	0