

Hyung-Il Lee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2378115/publications.pdf>

Version: 2024-02-01

101
papers

5,760
citations

101543

36
h-index

74163

75
g-index

104
all docs

104
docs citations

104
times ranked

6599
citing authors

#	ARTICLE	IF	CITATIONS
1	Stimuli-responsive molecular brushes. <i>Progress in Polymer Science</i> , 2010, 35, 24-44.	24.7	600
2	Biodegradable Nanogels Prepared by Atom Transfer Radical Polymerization as Potential Drug Delivery Carriers: A Synthesis, Biodegradation, in Vitro Release, and Bioconjugation. <i>Journal of the American Chemical Society</i> , 2007, 129, 5939-5945.	13.7	449
3	Light-Induced Reversible Formation of Polymeric Micelles. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 2453-2457.	13.8	368
4	Adsorption-induced scission of carbon-carbon bonds. <i>Nature</i> , 2006, 440, 191-194.	27.8	341
5	Properties of Graphene/Waterborne Polyurethane Nanocomposites Cast from Colloidal Dispersion Mixtures. <i>Journal of Macromolecular Science - Physics</i> , 2012, 51, 197-207.	1.0	263
6	Graphite oxides as effective fire retardants of epoxy resin. <i>Macromolecular Research</i> , 2011, 19, 66-71.	2.4	242
7	Molecular brushes as super-soft elastomers. <i>Polymer</i> , 2006, 47, 7198-7206.	3.8	194
8	Graphene Modified Lipophilically by Stearic Acid and its Composite With Low Density Polyethylene. <i>Journal of Macromolecular Science - Physics</i> , 2014, 53, 1193-1204.	1.0	182
9	Phototunable Temperature-Responsive Molecular Brushes Prepared by ATRP. <i>Macromolecules</i> , 2006, 39, 3914-3920.	4.8	145
10	Cylindrical Core-Shell Brushes Prepared by a Combination of ROP and ATRP. <i>Macromolecules</i> , 2006, 39, 4983-4989.	4.8	130
11	Ligand-Clustered Patchy-Nanoparticles for Modulated Cellular Uptake and In Vivo Tumor Targeting. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7266-7270.	13.8	125
12	Tadpole Conformation of Gradient Polymer Brushes. <i>Macromolecules</i> , 2004, 37, 4235-4240.	4.8	110
13	Bottle-brush macromolecules in solution: Comparison between results obtained from scattering experiments and computer simulations. <i>Polymer</i> , 2006, 47, 7318-7327.	3.8	102
14	Functionalized graphene sheet/polyurethane nanocomposites: Effect of particle size on physical properties. <i>Macromolecular Research</i> , 2011, 19, 809-814.	2.4	102
15	A Visible Light Responsive On-Off Polymeric Photoswitch for the Colorimetric Detection of Nerve Agent Mimics in Solution and in the Vapor Phase. <i>Macromolecules</i> , 2016, 49, 2568-2574.	4.8	100
16	Thermal Stability of Imidized Epoxy Blends Initiated by N-Benzylpyrazinium Hexafluoroantimonate Salt. <i>Macromolecules</i> , 2001, 34, 7573-7575.	4.8	91
17	Hetero-Grafted Block Brushes with PCL and PBA Side Chains. <i>Macromolecules</i> , 2008, 41, 6073-6080.	4.8	87
18	Molecular Brushes with Spontaneous Gradient by Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2005, 38, 8264-8271.	4.8	86

#	ARTICLE	IF	CITATIONS
19	BODIPY-Derived Polymeric Chemosensor Appended with Thiosemicarbazone Units for the Simultaneous Detection and Separation of Hg(II) Ions in Pure Aqueous Media. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 13685-13693.	8.0	81
20	High Yield Synthesis of Molecular Brushes via ATRP in Miniemulsion. <i>Macromolecules</i> , 2007, 40, 6557-6563.	4.8	78
21	pH-induced conformational changes of loosely grafted molecular brushes containing poly(acrylic) Tj ETQq1 1 0.784314 rgBT /Overloc	3.8	71
22	Crystallization of Molecular Brushes with Block Copolymer Side Chains. <i>Macromolecules</i> , 2009, 42, 9008-9017.	4.8	70
23	Properties of Graphene/Shape Memory Thermoplastic Polyurethane Composites Actuating by Various Methods. <i>Materials</i> , 2014, 7, 1520-1538.	2.9	63
24	Shape memory polyurethane nanocomposites with functionalized graphene. <i>Smart Materials and Structures</i> , 2012, 21, 075017.	3.5	61
25	Temperature-triggered reversible micellar self-assembly of linear dendritic block copolymers. <i>Chemical Communications</i> , 2008, , 3726.	4.1	60
26	Fatal Adsorption of Brushlike Macromolecules: High Sensitivity of C-C Bond Cleavage Rates to Substrate Surface Energy. <i>Journal of the American Chemical Society</i> , 2008, 130, 4228-4229.	13.7	58
27	Novel Thermo-responsive Polymers Tunable by pH. <i>Macromolecules</i> , 2011, 44, 1628-1634.	4.8	58
28	Activation of Cholera Toxin Production by Anaerobic Respiration of Trimethylamine N-oxide in <i>Vibrio cholerae</i> . <i>Journal of Biological Chemistry</i> , 2012, 287, 39742-39752.	3.4	53
29	Thermo-responsive graphene nanosheets by functionalization with polymer brushes. <i>Polymer</i> , 2012, 53, 316-323.	3.8	53
30	Thermo-responsive ureido-derivatized polymers: the effect of quaternization on UCST properties. <i>Polymer Chemistry</i> , 2014, 5, 2411.	3.9	49
31	Molecular Imaging and Analysis of Branching Topology in Polyacrylates by Atomic Force Microscopy. <i>Macromolecules</i> , 2011, 44, 5928-5936.	4.8	43
32	BODIPY-derived multi-channel polymeric chemosensor with pH-tunable sensitivity: selective colorimetric and fluorimetric detection of Hg ²⁺ and HSO ₄ ⁻ in aqueous media. <i>Polymer Chemistry</i> , 2018, 9, 4882-4890.	3.9	42
33	Aldoxime-Derived Water-Soluble Polymer for the Multiple Analyte Sensing: Consecutive and Selective Detection of Hg ²⁺ , Ag ⁺ , ClO ⁻ , and Cysteine in Aqueous Media. <i>Macromolecules</i> , 2015, 48, 3934-3940.	4.8	40
34	Azoaniline-based rapid and selective dual sensor for copper and fluoride ions with two distinct output modes of detection. <i>Sensors and Actuators B: Chemical</i> , 2015, 211, 531-536.	7.8	40
35	Water-Soluble Polymeric Probes for the Selective Sensing of Mercury Ion: pH-Driven Controllable Detection Sensitivity and Time. <i>Macromolecules</i> , 2015, 48, 1048-1054.	4.8	38
36	A dual responsive molecular probe for the efficient and selective detection of nerve agent mimics and copper (II) ions with controllable detection time. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 977-982.	7.8	38

#	ARTICLE	IF	CITATIONS
37	A Pyrene Derived CO ₂ -Responsive Polymeric Probe for the Turn-On Fluorescent Detection of Nerve Agent Mimics with Tunable Sensitivity. <i>Macromolecules</i> , 2017, 50, 6888-6895.	4.8	37
38	The modification of graphene with alcohols and its use in shape memory polyurethane composites. <i>Polymer International</i> , 2013, 62, 54-63.	3.1	36
39	Alumina-coated graphene nanosheet and its composite of acrylic rubber. <i>Journal of Colloid and Interface Science</i> , 2014, 416, 38-43.	9.4	36
40	Structural mobility of molecular bottle-brushes investigated by NMR relaxation dynamics. <i>Polymer</i> , 2007, 48, 496-501.	3.8	35
41	Thermoresponsive fluorinated polyacrylamides with low cytotoxicity. <i>Polymer Chemistry</i> , 2013, 4, 2219-2223.	3.9	35
42	Triazole-Containing Hydrogels for Time-Dependent Sustained Drug Release. <i>Macromolecular Rapid Communications</i> , 2014, 35, 442-446.	3.9	34
43	Comparative dielectric studies of nanostructured BaTiO ₃ , CaCu ₃ Ti ₄ O ₁₂ and 0.5BaTiO ₃ â€¦0.5CaCu ₃ Ti ₄ O ₁₂ nano-composites synthesized by modified sol-gel and solid state methods. <i>Materials Characterization</i> , 2014, 96, 54-62.	4.4	34
44	Dangling Chain Elastomers as Repeatable Fibrillar Adhesives. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 2277-2287.	8.0	32
45	A Reusable Polymeric Film for the Alternating Colorimetric Detection of a Nerve Agent Mimic and Ammonia Vapor with Sub-Parts-per-Million Sensitivity. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11055-11062.	8.0	32
46	Single molecular probe for multiple analyte sensing: Efficient and selective detection of mercury and fluoride ions. <i>Sensors and Actuators B: Chemical</i> , 2015, 216, 80-85.	7.8	31
47	Effect of chain topology on the self-organization and the mechanical properties of poly(n-butyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.8	30
48	pH-tunable aqueous dispersion of graphene nanocomposites functionalized with poly(acrylic acid) brushes. <i>Polymer</i> , 2012, 53, 4955-4960.	3.8	29
49	Flory Theorem for Structurally Asymmetric Mixtures. <i>Physical Review Letters</i> , 2007, 99, 137801.	7.8	28
50	The effects of graphene on the properties of acrylic pressure-sensitive adhesive. <i>Journal of Industrial and Engineering Chemistry</i> , 2014, 20, 4108-4111.	5.8	26
51	The first kinetic hydrate inhibition investigation on fluorinated polymers: Poly(fluoroalkylacrylamide)s. <i>Chemical Engineering Science</i> , 2014, 119, 230-235.	3.8	26
52	A recyclable polymeric film for the consecutive colorimetric detection of cysteine and mercury ions in the aqueous solution. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 728-733.	7.8	26
53	Recyclable Polymeric Thin Films for the Selective Detection and Separation of Picric Acid. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41717-41723.	8.0	26
54	Chromophore-Free photonic multilayer films for the ultra-sensitive colorimetric detection of nerve agent mimics in the vapor phase. <i>Sensors and Actuators B: Chemical</i> , 2020, 323, 128698.	7.8	24

#	ARTICLE	IF	CITATIONS
55	Precisely Tunable Humidity Color Indicator Based on Photonic Polymer Films. <i>Macromolecules</i> , 2021, 54, 621-628.	4.8	23
56	Effect of pyrene treatment on the properties of graphene/epoxy nanocomposites. <i>Macromolecular Research</i> , 2010, 18, 1125-1128.	2.4	22
57	Polymeric micelles based on photocleavable linkers tethered with a model drug. <i>Polymer</i> , 2014, 55, 1436-1442.	3.8	21
58	Polymeric Micelles Based on Light-Responsive Block Copolymers for the Phototunable Detection of Mercury(II) Ions Modulated by Morphological Changes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34634-34639.	8.0	20
59	A fluorimetric water-soluble polymeric pH chemosensor for extremely acidic conditions: Live-cell and bacterial imaging application. <i>Sensors and Actuators B: Chemical</i> , 2020, 320, 128379.	7.8	20
60	Reusable polymeric films for fluorometric Al ³⁺ detection in anti-counterfeiting and security applications. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130420.	7.8	19
61	Novel thermoresponsive fluorinated double- α -hydrophilic poly{[<i>N</i> -(2,2-difluoroethyl)acrylamide]- <i>b</i> -[<i>N</i> -(2-fluoroethyl)acrylamide]} block copolymers. <i>Journal of Polymer Science Part A</i> , 2013, 51, 1976-1982.	2.3	18
62	Direct covalent modification of thermally exfoliated graphene forming functionalized graphene stably dispersible in water and poly(vinyl alcohol). <i>Colloid and Polymer Science</i> , 2013, 291, 2365-2374.	2.1	18
63	Recyclable macromolecular thermogels for Hg(II) detection and separation via sol-gel transition in complex aqueous environments. <i>Journal of Hazardous Materials</i> , 2021, 410, 124625.	12.4	16
64	The properties of functionalized graphene sheet/poly(ethyl methacrylate) nanocomposites: The effects of preparation method. <i>Macromolecular Research</i> , 2011, 19, 379-384.	2.4	15
65	Toward rapid and selective detection of hypochlorous acid in pure aqueous media and its application to cell imaging: BODIPY-derived water-soluble macromolecular chemosensor with high sensitivity. <i>Dyes and Pigments</i> , 2020, 172, 107858.	3.7	15
66	The Effect of Oxidation on Properties of Graphene and Its Polycaprolactone Nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 8420-8430.	0.9	14
67	A water-soluble polymer for selective colorimetric sensing of cysteine and homocysteine with temperature-tunable sensitivity. <i>Polymer Chemistry</i> , 2014, 5, 4405.	3.9	13
68	Water-Soluble Polymeric Probe for the Selective Sensing and Separation of Cu(II) Ions in Aqueous Media: pH-Tunable Detection Sensitivity and Efficient Separation by Thermal Precipitation. <i>Macromolecules</i> , 2017, 50, 8529-8535.	4.8	13
69	Water-soluble polymeric probe with dual recognition sites for the sequential colorimetric detection of cyanide and Fe (III) ions. <i>Dyes and Pigments</i> , 2019, 167, 174-180.	3.7	12
70	Background color dependent photonic multilayer films for anti-counterfeiting labeling. <i>Nanoscale</i> , 2022, 14, 5377-5383.	5.6	12
71	Thermo-tunable colorimetric detection of mercury(^{II}) ions driven by the temperature-dependent assembly and disassembly of a block copolymer. <i>Polymer Chemistry</i> , 2019, 10, 4017-4024.	3.9	11
72	Two-in-One Dual-Channel Boronic Ester Block Copolymer for the Colorimetric Detection of Cysteine and Glucose at Neutral pH. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9915-9922.	6.7	11

#	ARTICLE	IF	CITATIONS
73	Azobenzene- π -Hemicyanine Conjugated Polymeric Chemosensor for the Rapid and Selective Detection of Cyanide in Pure Aqueous Media. <i>Journal of Polymer Science</i> , 2020, 58, 124-131.	3.8	10
74	Graphenes for low percolation threshold in electroconductive nylon 6 composites. <i>Polymer International</i> , 2014, 63, 1003-1010.	3.1	8
75	Rheooscillations of a Bottlebrush Polymer Solution Due to Shear-Induced Phase Transitions between a Shear Molten State and a Line Hexatic Phase. <i>Macromolecules</i> , 2007, 40, 7680-7688.	4.8	7
76	Time-dependent increase in aqueous solubility caused by the gradual disruption of hydrophobic aggregation. <i>Polymer Chemistry</i> , 2012, 3, 1002.	3.9	7
77	Use of Core-Cross-Linked Polymeric Micelles Induced by the Selective Detection of Cu(II) Ions for the Sustained Release of a Model Drug. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14368-14375.	8.0	7
78	Well-Defined Thermoresponsive Copolymers with Tunable LCST and UCST in Water. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 501-504.	1.9	7
79	Photonic multilayers for ultrasensitive millisecond colorimetric discrimination between benzene, toluene, and xylene. <i>Sensors and Actuators B: Chemical</i> , 2022, 351, 130974.	7.8	6
80	New benzylidene oxazolone derived polymeric photoswitches for light-induced tunable thermoresponsive behaviors. <i>Polymer Chemistry</i> , 2014, 5, 6426-6430.	3.9	5
81	Efficient colorimetric detection of cyanide ions using hemicyanine-based polymeric probes with detection-induced self-assembly in water. <i>Polymer</i> , 2021, 213, 123320.	3.8	5
82	Transparent nanocellulose paper-based biodegradable colorimetric nerve agent detectors. <i>Carbohydrate Polymers</i> , 2022, 295, 119845.	10.2	4
83	Functionalized graphene sheets/polycarbonate nanocomposites compatibilized by poly(phenylenevinylene). <i>Macromolecular Research</i> , 2012, 20, 768-771.	2.4	3
84	Tunable thermoresponsiveness of copolymers with various amine groups in the side chains. <i>Macromolecular Research</i> , 2013, 21, 202-206.	2.4	3
85	pH-Induced reversible formation of core-crosslinked star polymers. <i>Macromolecular Research</i> , 2017, 25, 542-545.	2.4	3
86	Microwave-Assisted Synthesis of Core-Crosslinked Star Polymers with Benzophenone Derivatives in the Core. <i>Macromolecular Research</i> , 2019, 27, 476-480.	2.4	3
87	Tuning the ability to discriminate between geometric isomers maleic acid and fumaric acid of water-soluble polymeric probes with a donor- π -acceptor skeleton. <i>Polymer</i> , 2020, 186, 122040.	3.8	3
88	Thermoresponsive Sulfone and Sulfoxide-Containing Polyacrylamides. <i>Bulletin of the Korean Chemical Society</i> , 2021, 42, 1143-1150.	1.9	3
89	A Multisegmented Polystyrene with pH-Cleavable Linkages. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 2694-2698.	1.9	3
90	Shape memory polyurethane nanocomposites with a functionalized graphene. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
91	pH-responsive polymeric micelles from sulfamate-conjugated block copolymers. <i>Macromolecular Research</i> , 2015, 23, 129-133.	2.4	2
92	Efficient oxidative self-coupling of polystyrene bearing chain-end primary amines. <i>Polymer</i> , 2015, 72, 336-340.	3.8	2
93	Water-soluble Polymeric Probes for the pH-tunable Fluorometric Detection of Hydrogen Peroxide. <i>Bulletin of the Korean Chemical Society</i> , 2020, 41, 537-541.	1.9	2
94	Thin Polymeric Films for Real-Time Colorimetric Detection of Hydrazine Vapor with Parts-per-Million Sensitivity. <i>ACS Applied Polymer Materials</i> , 0, , .	4.4	2
95	Recent advances in polymeric chemosensors for the detection and removal of mercury ions in complex aqueous media. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2022, 59, 389-402.	2.2	2
96	Functionalized graphene sheet/polyurethane nanocomposites: Effect of particle size on the physical properties. , 2010, , .		1
97	Molecular brushes with extreme grafted side chain densities. <i>Polymer</i> , 2012, 53, 3462-3468.	3.8	1
98	Clustering and Dissolution of Triazole Branched Poly(ethyl methacrylate). <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1251-1259.	2.2	1
99	Synthesis of Protein-polymer-protein Bioconjugates by the Combination of Atom Transfer Radical Polymerization and Click Reaction. <i>Bulletin of the Korean Chemical Society</i> , 2016, 37, 1961-1965.	1.9	0
100	Azobenzene-p-Hemicyanine Conjugated Polymeric Chemosensor for the Rapid and Selective Detection of Cyanide in Pure Aqueous Media. <i>Journal of Polymer Science</i> , 2020, 58, 124-131.	3.8	0
101	Influence of Quaternization on UCST Properties of Hydroxyl-Derivatized Polymers. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 3001-3004.	1.9	0