

Jong-Man Kim

List of Publications by Year in descending order

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120
papers

5,813
citations

101496

36
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76872

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126
all docs

126
docs citations

126
times ranked

5290
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluorogenic Polydiacetylene Supramolecules: Immobilization, Micropatterning, and Application to Label-Free Chemosensors. <i>Accounts of Chemical Research</i> , 2008, 41, 805-816.	7.6	372
2	Recent functional material based approaches to prevent and detect counterfeiting. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2388.	2.7	338
3	Colorimetric Sensors for Volatile Organic Compounds (VOCs) Based on Conjugated Polymer-Embedded Electrospun Fibers. <i>Journal of the American Chemical Society</i> , 2007, 129, 3038-3039.	6.6	325
4	Recent conceptual and technological advances in polydiacetylene-based supramolecular chemosensors. <i>Chemical Society Reviews</i> , 2009, 38, 1958.	18.7	279
5	Colorimetric Reversibility of Polydiacetylene Supramolecules Having Enhanced Hydrogen-Bonding under Thermal and pH Stimuli. <i>Journal of the American Chemical Society</i> , 2003, 125, 8976-8977.	6.6	246
6	Inkjet Printing of Conjugated Polymer Precursors on Paper Substrates for Colorimetric Sensing and Flexible Electrothermochromic Display. <i>Advanced Materials</i> , 2011, 23, 5492-5497.	11.1	231
7	Hydrochromic conjugated polymers for human sweat pore mapping. <i>Nature Communications</i> , 2014, 5, 3736.	5.8	213
8	Polydiacetylenes: supramolecular smart materials with a structural hierarchy for sensing, imaging and display applications. <i>Chemical Communications</i> , 2012, 48, 2469.	2.2	209
9	A Polydiacetylene-Based Fluorescent Sensor Chip. <i>Journal of the American Chemical Society</i> , 2005, 127, 17580-17581.	6.6	180
10	Rational Design of Conjugated Polymer Supramolecules with Tunable Colorimetric Responses. <i>Advanced Functional Materials</i> , 2009, 19, 1483-1496.	7.8	162
11	Functional Materials and Systems for Rewritable Paper. <i>Advanced Materials</i> , 2018, 30, e1705310.	11.1	157
12	A protective layer approach to solvatochromic sensors. <i>Nature Communications</i> , 2013, 4, 2461.	5.8	136
13	A Colorimetric Hydrocarbon Sensor Employing a Swelling-Induced Mechanochromic Polydiacetylene. <i>Advanced Functional Materials</i> , 2014, 24, 5186-5193.	7.8	131
14	Universal Colorimetric Detection of Nucleic Acids Based on Polydiacetylene (PDA) Liposomes. <i>Advanced Functional Materials</i> , 2008, 18, 701-708.	7.8	113
15	Inkjet-Printable Amphiphilic Polydiacetylene Precursor for Hydrochromic Imaging on Paper. <i>Advanced Functional Materials</i> , 2016, 26, 498-506.	7.8	109
16	Mechanically Drawable Thermochromic and Mechanothermochromic Polydiacetylene Sensors. <i>Advanced Functional Materials</i> , 2016, 26, 1769-1776.	7.8	109
17	Smartphone-Based VOC Sensor Using Colorimetric Polydiacetylenes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5014-5021.	4.0	106
18	Full Color Light Responsive Diarylethene Inks for Reusable Paper. <i>Advanced Functional Materials</i> , 2016, 26, 5230-5238.	7.8	104

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19	An ESIPT-Based Fluorescence Probe for Colorimetric, Ratiometric, and Selective Detection of Phosgene in Solutions and the Gas Phase. <i>Analytical Chemistry</i> , 2017, 89, 12596-12601.	3.2	98
20	Hydrochromic Approaches to Mapping Human Sweat Pores. <i>Accounts of Chemical Research</i> , 2016, 49, 1211-1222.	7.6	84
21	Low Temperature Thermochromic Polydiacetylenes: Design, Colorimetric Properties, and Nanofiber Formation. <i>Macromolecules</i> , 2016, 49, 1270-1278.	2.2	76
22	Photochromic spiropyran-embedded PDMS for highly sensitive and tunable optochemical gas sensing. <i>Chemical Communications</i> , 2014, 50, 4251-4254.	2.2	74
23	Detection of adulterated gasoline using colorimetric organic microfibers. <i>Journal of Materials Chemistry</i> , 2011, 21, 2648.	6.7	73
24	Network Polydiacetylene Films: Preparation, Patterning, and Sensor Applications. <i>Advanced Functional Materials</i> , 2011, 21, 1032-1039.	7.8	72
25	Inkjet-Compatible Single-Component Polydiacetylene Precursors for Thermochromic Paper Sensors. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4527-4535.	4.0	61
26	β-Cyclodextrin: A Molecule for Testing Colorimetric Reversibility of Polydiacetylene Supramolecules. <i>Macromolecules</i> , 2007, 40, 9201-9204.	2.2	58
27	A Litmus-Type Colorimetric and Fluorometric Volatile Organic Compound Sensor Based on Inkjet-Printed Polydiacetylenes on Paper Substrates. <i>Macromolecular Rapid Communications</i> , 2013, 34, 731-735.	2.0	58
28	Chromogenic Tubular Polydiacetylenes from Topochemical Polymerization of Self-Assembled Macrocyclic Diacetylenes. <i>Macromolecules</i> , 2017, 50, 900-913.	2.2	56
29	Unique Effects of Cyclodextrins on the Formation and Colorimetric Transition of Polydiacetylene Vesicles. <i>Macromolecular Chemistry and Physics</i> , 2005, 206, 2299-2306.	1.1	55
30	A Magnetically Responsive Polydiacetylene Precursor for Latent Fingerprint Analysis. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 6245-6251.	4.0	48
31	An Electrolyte-Free Conducting Polymer Actuator that Displays Electrothermal Bending and Flapping Wing Motions under a Magnetic Field. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1289-1296.	4.0	48
32	The "Precursor Approach" to Patterned Fluorescence Images in Polymer Films. <i>Macromolecular Rapid Communications</i> , 2007, 28, 1191-1212.	2.0	45
33	Thermoplastic Polyurethane Elastomer-Based Gel Polymer Electrolytes for Sodium-Metal Cells with Enhanced Cycling Performance. <i>ChemSusChem</i> , 2019, 12, 4645-4654.	3.6	42
34	Micro-patterned polydiacetylene vesicle chips for detecting protein-protein interactions. <i>Macromolecular Research</i> , 2006, 14, 483-485.	1.0	41
35	Thermofluorescent Conjugated Polymer Sensors for Nano- and Microscale Temperature Monitoring. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 1211-1220.	1.1	40
36	An inkjet-printable microemulsion system for colorimetric polydiacetylene supramolecules on paper substrates. <i>Journal of Materials Chemistry</i> , 2012, 22, 8680.	6.7	38

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37	Water-resistant PEDOT:PSS hole transport layers by incorporating a photo-crosslinking agent for high-performance perovskite and polymer solar cells. <i>Nanoscale</i> , 2018, 10, 13187-13193.	2.8	37
38	A Microfluidic Conjugated Polymer Sensor Chip. <i>Advanced Materials</i> , 2008, 20, 1690-1694.	11.1	35
39	Creating Patterned Conjugated Polymer Images Using Water-Compatible Reactive Inkjet Printing. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1813-1818.	4.0	34
40	Covalently Linked Perylene Diimide-Polydiacetylene Nanofibers Display Enhanced Stability and Photocurrent with Reversible FRET Phenomenon. <i>Small</i> , 2019, 15, e1901342.	5.2	34
41	Thermochromic reversibility of conjugated polymers derived from a diacetylenic lipid containing lithium salt. <i>Journal of Materials Chemistry</i> , 2010, 20, 2302.	6.7	33
42	A Precursor Approach to Electrospun Polyaniline Nanofibers for Gas Sensors. <i>Macromolecular Materials and Engineering</i> , 2016, 301, 1320-1326.	1.7	33
43	Sweat pore mapping using a fluorescein-polymer composite film for fingerprint analysis. <i>Chemical Communications</i> , 2015, 51, 3177-3180.	2.2	32
44	An excimer emission approach for patterned fluorescent imaging. <i>Chemical Communications</i> , 2005, , 3427.	2.2	31
45	Cation-Directed Self-Assembly of Macrocyclic Diacetylene for Developing Chromogenic Polydiacetylene. <i>ACS Macro Letters</i> , 2019, 8, 610-615.	2.3	30
46	Fabrication of Patterned Images in Photochromic Organic Microfibers. <i>Macromolecular Rapid Communications</i> , 2010, 31, 1010-1014.	2.0	29
47	Patterned polydiacetylene-embedded polystyrene nanofibers based on electrohydrodynamic jet printing. <i>Macromolecular Research</i> , 2015, 23, 118-123.	1.0	29
48	A reversibly mechanochromic conjugated polymer. <i>Chemical Communications</i> , 2019, 55, 9395-9398.	2.2	28
49	Polydiacetylene-Perylenediimide Supercapacitors. <i>ChemSusChem</i> , 2020, 13, 3230-3236.	3.6	27
50	In situ synthesis of stimulus-responsive luminescent organic materials using a reactive inkjet printing approach. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2732-2736.	2.7	25
51	Intrinsically Porous Dual-Responsive Polydiacetylenes Based on Tetrahedral Diacetylenes. <i>Macromolecules</i> , 2018, 51, 10312-10322.	2.2	25
52	Polydiacetylene-Embedded Microbeads for Colorimetric and Volumetric Sensing of Hydrocarbons. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 8339-8343.	4.0	24
53	Photoinduced reversible phase transition of azobenzene-containing polydiacetylene crystals. <i>Chemical Communications</i> , 2016, 52, 14059-14062.	2.2	24
54	Progression in the Fountain Pen Approach: From 2D Writing to 3D Free-Form Micro/Nanofabrication. <i>Small</i> , 2017, 13, 1600137.	5.2	24

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55	Topochemical polymerization of macrocyclic diacetylene with a naphthalene moiety for a tubular-shaped polydiacetylene chromophore. <i>Dyes and Pigments</i> , 2018, 154, 199-204.	2.0	24
56	Protonation-Induced Self-Assembly of Flexible Macrocyclic Diacetylene for Constructing Stimuli-Responsive Polydiacetylene. <i>Macromolecules</i> , 2020, 53, 149-157.	2.2	24
57	A colorimetric and fluorescence "turn-on" sensor for Fe(III) ion based on imidazole-functionalized polydiacetylene. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130885.	4.0	24
58	Micro-Patterning of Polydiacetylene Supramolecules using Micromolding in Capillaries (MIMIC). <i>Macromolecular Rapid Communications</i> , 2008, 29, 117-122.	2.0	23
59	A 3D networked polydiacetylene sensor for enhanced sensitivity. <i>Chemical Communications</i> , 2016, 52, 926-929.	2.2	23
60	Thermochromic Polydiacetylene Nanotube from Amphiphilic Macrocyclic Diacetylene in Aqueous Solution. <i>Macromolecules</i> , 2019, 52, 4405-4411.	2.2	23
61	A Polydiacetylene Supramolecular System That Emits Red, Green, and Blue Fluorescence. <i>Macromolecular Rapid Communications</i> , 2007, 28, 171-175.	2.0	22
62	Highly conductive PEDOT:PSS with enhanced chemical stability. <i>Organic Electronics</i> , 2019, 74, 77-81.	1.4	22
63	A colorimetric and fluorometric polydiacetylene biothiol sensor based on decomposition of a pyridine-mercury complex. <i>Sensors and Actuators B: Chemical</i> , 2020, 309, 127771.	4.0	22
64	Reversibly Thermochromic Cyclic Dipeptide Nanotubes. <i>Langmuir</i> , 2018, 34, 8365-8373.	1.6	21
65	Colorimetric detection of aluminium ion based on conjugated polydiacetylene supramolecules. <i>Macromolecular Research</i> , 2011, 19, 97-99.	1.0	20
66	Macrocyclic Diacetylene-Terthiophene Cocrystal: Molecular Self-Assembly, Topochemical Polymerization, and Energy Transfer. <i>Crystal Growth and Design</i> , 2020, 20, 434-441.	1.4	20
67	Polymerizable Supramolecular Approach to Highly Conductive PEDOT:PSS Patterns. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 19231-19237.	4.0	19
68	Self-assembly using a retro Diels-Alder reaction. <i>Nature Communications</i> , 2021, 12, 4207.	5.8	19
69	Fabrication of Conjugated Polymer Supramolecules in Electrospun Micro/Nanofibers. <i>Macromolecular Chemistry and Physics</i> , 2008, 209, 2194-2203.	1.1	18
70	Photoinduced Reversible Bending and Guest Molecule Release of Azobenzene-Containing Polydiacetylene Nanotubes. <i>Scientific Reports</i> , 2019, 9, 15982.	1.6	16
71	Conjugated polymer-embedded thermochromic strip sensors with a tunable colorimetric Response. <i>Macromolecular Research</i> , 2007, 15, 478-481.	1.0	15
72	A color display system based on thermochromic conjugated polydiacetylene supramolecules. <i>Macromolecular Research</i> , 2010, 18, 404-407.	1.0	15

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73	Size-dependent intercalation of alkylamines within polydiacetylene supramolecules. <i>Supramolecular Chemistry</i> , 2013, 25, 54-59.	1.5	15
74	A Free-Standing Self-Assembled Tubular Conjugated Polymer Sensor. <i>Macromolecules</i> , 2016, 49, 5841-5848.	2.2	15
75	Light-directed trapping of metastable intermediates in a self-assembly process. <i>Nature Communications</i> , 2020, 11, 6260.	5.8	15
76	Creation of functional polydiacetylene images on paper using inkjet printing technology. <i>Macromolecular Research</i> , 2016, 24, 943-950.	1.0	14
77	Reversible Solvatochromism of Polydiacetylenes Based on Extensively Hydrogen-Bonded Tubular Arrays. <i>Macromolecules</i> , 2021, 54, 2485-2493.	2.2	14
78	Magnetically Responsive Inorganic/Polydiacetylene Nanohybrids. <i>Macromolecular Chemistry and Physics</i> , 2012, 213, 893-903.	1.1	13
79	A Tetrahydrofuran-selective Optical Solvent Sensor Based on Solvatochromic Polydiacetylene. <i>Bulletin of the Korean Chemical Society</i> , 2016, 37, 793-794.	1.0	13
80	Flexible patch-type hydrochromic polydiacetylene sensor for human sweat pore mapping. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	13
81	Highly conductive PEDOT:PSS patterns based on photo-crosslinkable and water-soluble diacetylene diol additives. <i>Organic Electronics</i> , 2018, 58, 1-5.	1.4	13
82	Fluorogenic conjugated polymer fibers from amphiphilic diacetylene supramolecules. <i>Macromolecular Research</i> , 2008, 16, 73-75.	1.0	12
83	Micropatterning Polydiacetylene Supramolecular Vesicles on Glass Substrates using a Pre-patterned Hydrophobic Thin Film. <i>Macromolecular Chemistry and Physics</i> , 2012, 213, 610-616.	1.1	12
84	Highly responsive triethylamine vapor sensor based on a perylene diimide-polydiacetylene system via heat-induced tuning of the molecular packing approach. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129660.	4.0	12
85	Promotion of strongly anchored dyes on the surface of titania by tetraethyl orthosilicate treatment for enhanced solar cell performance. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2250-2255.	5.2	11
86	Immobilized Polydiacetylene Lipid Vesicles on Polydimethylsiloxane Micropillars as a Surfactin-Based Label-Free Bacterial Sensor Platform. <i>Frontiers in Materials</i> , 2018, 5, .	1.2	11
87	Protonation-Triggered Supramolecular Gel from Macrocyclic Diacetylene: Gelation Behavior, Topochemical Polymerization, and Colorimetric Response. <i>Langmuir</i> , 2020, 36, 13971-13980.	1.6	11
88	A Polydiacetylene Supramolecular System that Displays Reversible Thermochromism. <i>Chemistry Letters</i> , 2007, 36, 682-683.	0.7	10
89	Controlling and Assessing the Surface Display of Cell-Binding Domains on Magnetite Conjugated Fluorescent Liposomes. <i>Langmuir</i> , 2013, 29, 7949-7956.	1.6	10
90	Layer-by-layer deposition of polydiacetylene vesicles and linear poly(sulfonates). <i>Macromolecular Research</i> , 2006, 14, 478-482.	1.0	9

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91	Polymerization Temperature-Dependent Thermochromism of Polydiacetylene. <i>Bulletin of the Korean Chemical Society</i> , 2015, 36, 1949-1950.	1.0	8
92	Fluorometric Measurement of Individual Stomata Activity and Transpiration via a "Brush-on" Water-Responsive Polymer. <i>Scientific Reports</i> , 2016, 6, 32394.	1.6	8
93	Cyclodextrin-Induced Fluorescence Enhancement of an Ionic Polyacetylene Having Phenylethylpyridinium Groups. <i>Macromolecular Symposia</i> , 2007, 249-250, 67-70.	0.4	7
94	Nickel-Ion-Coordinated Reversibly Solvatochromic Polydiacetylene Based on Tubular Assembly of Macrocylic Diacetylene. <i>Macromolecules</i> , 2021, 54, 8220-8228.	2.2	7
95	Virus-based surface patterning of biological molecules, probes, and inorganic materials. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 122, 851-856.	2.5	6
96	Size-Controlled Fabrication of Polyaniline Microfibers Based on 3D Hydrodynamic Focusing Approach. <i>Macromolecular Rapid Communications</i> , 2015, 36, 1272-1276.	2.0	6
97	Water-stable polymer hole transport layer in organic and perovskite light-emitting diodes. <i>Journal of Power Sources</i> , 2020, 478, 228810.	4.0	6
98	Patterned fluorescence images with at-Boc-protected coumarin derivative. <i>Macromolecular Research</i> , 2004, 12, 615-617.	1.0	5
99	Thermochromic polydiacetylene supramolecules with oligo(ethylene oxide) headgroups for tunable colorimetric response. <i>Macromolecular Research</i> , 2009, 17, 441-444.	1.0	5
100	Aminopyridine-containing supramolecular polydiacetylene: film formation, thermochromism and micropatterning. <i>Supramolecular Chemistry</i> , 2017, 29, 395-400.	1.5	5
101	Co-solvent polarity tuned thermochromic nanotubes of cyclic dipeptide-polydiacetylene supramolecular system. <i>RSC Advances</i> , 2020, 10, 35389-35396.	1.7	5
102	Preparation and colorimetric response of an aldehyde-functionalized macrocyclic diacetylene-derived polydiacetylene. <i>Dyes and Pigments</i> , 2021, 187, 109114.	2.0	5
103	Layered macrocycles with flexibility and tunable dynamic properties for wide-range thermoresponsive color changes. <i>Sensors & Diagnostics</i> , 0, , .	1.9	5
104	The first synthesis of a transition metal-catalyzed homopolymer having pendentt-boc-protected quinizarin for patterned fluorescence images. <i>Macromolecular Research</i> , 2003, 11, 69-72.	1.0	4
105	The solid-phase synthesis of amino acid-derived diacetylene lipids. <i>Macromolecular Research</i> , 2005, 13, 253-256.	1.0	3
106	Fluorescence quenching of a partially conjugated polymer by hemoglobin. <i>Macromolecular Research</i> , 2007, 15, 90-92.	1.0	3
107	Detection of a Nanoscale Hot Spot by Hot Carriers in a Poly-Si TFT Using Polydiacetylene-Based Thermoresponsive Fluorometry. <i>IEEE Transactions on Electron Devices</i> , 2011, 58, 1570-1574.	1.6	2
108	A polymerizable supramolecular approach for the fabrication of patterned magnetic nanoparticles. <i>Chemical Communications</i> , 2015, 51, 10734-10737.	2.2	2

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109	Sweat Pore Mapping Using Hydrophilic Polymer Films. Journal of Nanoscience and Nanotechnology, 2016, 16, 12263-12267.	0.9	2
110	Transient protection of intramolecular hydrogen bonding: A simple but elegant approach for functional imaging. Macromolecular Research, 2004, 12, 493-500.	1.0	1
111	Inkjet Printing: Inkjet-Printable Amphiphilic Polydiacetylene Precursor for Hydrochromic Imaging on Paper (Adv. Funct. Mater. 4/2016). Advanced Functional Materials, 2016, 26, 631-631.	7.8	1
112	A Directly Writable Photochromic Bisthienylethene. Bulletin of the Korean Chemical Society, 2016, 37, 2047-2049.	1.0	1
113	Erasable Ink: Full Color Light Responsive Diarylethene Inks for Reusable Paper (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT ₁ Overload	7.8	1
114	Microscale Metallization on Conducting Polyaniline Patterns. Bulletin of the Korean Chemical Society, 2016, 37, 2073-2075.	1.0	1
115	Patterned color images with a triphenylmethane-derived acrylate polymer. Macromolecular Research, 2008, 16, 81-83.	1.0	0
116	Macromol. Rapid Commun. 3/2010. Macromolecular Rapid Communications, 2010, 31, .	2.0	0
117	Micropatterning of aligned polydiacetylene fibers using micromolding in capillaries (MIMIC). Macromolecular Research, 2012, 20, 1201-1204.	1.0	0
118	Colorimetry: A Colorimetric Hydrocarbon Sensor Employing a Swelling-Induced Mechanochromic Polydiacetylene (Adv. Funct. Mater. 33/2014). Advanced Functional Materials, 2014, 24, 5185-5185.	7.8	0
119	A side-chain crosslinking approach for the fabrication of conjugated polymer patterns. Macromolecular Research, 2016, 24, 1126-1129.	1.0	0
120	Synthesis of a Trimeric Macrocyclic Diacetylene. Macromolecular Research, 2020, 28, 793-795.	1.0	0