Xiang-Kui Ren

List of Publications by Citations

111 papers	2,185 citations	26 h-index	40 g-index
118 ext. papers	2,692 ext. citations	6.9 avg, IF	5.1 L-index

#	Paper	IF	Citations
111	Surface modification and endothelialization of biomaterials as potential scaffolds for vascular tissue engineering applications. *Chemical Society Reviews*, **2015**, 44, 5680-742	58.5	324
110	Near-IR Absorbing J-Aggregate of an Amphiphilic BF -Azadipyrromethene Dye by Kinetic Cooperative Self-Assembly. *Angewandte Chemie - International Edition*, **2017**, 56, 5729-5733	16.4	119
109	Synthesis, Self-assembly, and Crystal Structure of a Shape-Persistent Polyhedral-Oligosilsesquioxane-Nanoparticle-Tethered Perylene Diimide. *Journal of Physical Chemistry B*, **2010**, 114, 4802-4810	3.4	76
108	CREDVW-Linked Polymeric Micelles As a Targeting Gene Transfer Vector for Selective Transfection and Proliferation of Endothelial Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 12128-40	9.5	51
107	Regulation of the endothelialization by human vascular endothelial cells by ZNF580 gene complexed with biodegradable microparticles. *Biomaterials*, **2014**, 35, 7133-45	15.6	49
106	Synthesis, Aggregation-Induced Emission, and Liquid Crystalline Structure of Tetraphenylethylene□Surfactant Complex via Ionic Self-Assembly. *Journal of Physical Chemistry C*, **2016**, 120, 27577-27586	3.8	41
105	CAGW Peptide- and PEG-Modified Gene Carrier for Selective Gene Delivery and Promotion of Angiogenesis in HUVECs in Vivo. *ACS Applied Materials & Interfaces*, **2017**, 9, 4485-4497	9.5	40
104	Multifunctional Gene Carriers with Enhanced Specific Penetration and Nucleus Accumulation to Promote Neovascularization of HUVECs in Vivo. *ACS Applied Materials & Interfaces*, **2017**, 9, 35613-35627	9.5	40
103	REDV Peptide Conjugated Nanoparticles/pZNF580 Complexes for Actively Targeting Human Vascular Endothelial Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 20389-99	9.5	40
102	Rational Design of Circularly Polarized Luminescent Aggregation-Induced Emission Luminogens (AIEgens): Promoting the Dissymmetry Factor and Emission Efficiency Synchronously **2020**, 2, 505-510		40
101	Fabricating antimicrobial peptide-immobilized starch sponges for hemorrhage control and antibacterial treatment. *Carbohydrate Polymers*, **2019**, 222, 115012	10.3	38
100	Hemiphasmidic Side-Chain Liquid Crystalline Polymer: From Smectic C Phase to Columnar Phase with a Bundle of Chains as Its Building Block. *ACS Macro Letters*, **2012**, 1, 641-645	6.6	37
99	Engineering □nteractions for enhanced photoluminescent properties: unique discrete dimeric packing of perylene diimides. *RSC Advances*, **2017**, 7, 6530-6537	3.7	33
98	Peptide-immobilized starch/PEG sponge with rapid shape recovery and dual-function for both uncontrolled and noncompressible hemorrhage. *Acta Biomaterialia*, **2019**, 99, 220-235	10.8	33
97	Aqueous self-assembly of a charged BODIPY amphiphile via nucleation-growth mechanism. *Physical Chemistry Chemical Physics*, **2015**, 17, 9167-72	3.6	33
96	Mixed micelles obtained by co-assembling comb-like and grafting copolymers as gene carriers for efficient gene delivery and expression in endothelial cells. *Journal of Materials Chemistry B*, **2017**, 5, 1673-1687	7.3	32
95	Near-Infrared Laser-Triggered Dimorphic Transformation of BF-Azadipyrromethene Nanoaggregates for Enhanced Solid Tumor Penetration. *ACS Nano*, **2020**, 14, 3640-3650	16.7	32

94	Living Supramolecular Polymerization of an Aza-BODIPY Dye Controlled by a Hydrogen-Bond-Accepting Triazole Unit Introduced by Click Chemistry. *Angewandte Chemie - International Edition*, **2020**, 59, 5185-5192	16.4	32
93	Near-IR Absorbing J-Aggregate of an Amphiphilic BF2-Azadipyrromethene Dye by Kinetic Cooperative Self-Assembly. *Angewandte Chemie*, **2017**, 129, 5823-5827	3.6	31
92	Synthesis, crystal structure, enhanced photoluminescence properties and fluoride detection ability of S-heterocyclic annulated perylene diimide-polyhedral oligosilsesquioxane dye. *Journal of Materials Chemistry C*, **2017**, 5, 2566-2576	7.1	30
91	Photo-enhanced gas sensing of SnS with nanoscale defects.. *RSC Advances*, **2019**, 9, 626-635	3.7	30
90	PLGA/SF blend scaffolds modified with plasmid complexes for enhancing proliferation of endothelial cells. *Reactive and Functional Polymers*, **2015**, 91-92, 19-27	4.6	29
89	From S,N-Heteroacene to Large Discotic Polycyclic Aromatic Hydrocarbons (PAHs): Liquid Crystal versus Plastic Crystalline Materials with Tunable Mechanochromic Fluorescence. *Angewandte Chemie - International Edition*, **2018**, 57, 6161-6165	16.4	29
88	Antimicrobial surfaces grafted random copolymers with REDV peptide beneficial for endothelialization. *Journal of Materials Chemistry B*, **2015**, 3, 7682-7697	7.3	28
87	Biodegradable PEI modified complex micelles as gene carriers with tunable gene transfection efficiency for ECs. *Journal of Materials Chemistry B*, **2016**, 4, 997-1008	7.3	28
86	Synthesis and properties of siloxane modified perylene bisimide discotic liquid crystals. *Soft Matter*, **2013**, 9, 10739	3.6	28
85	Lamellar orientation of polyamide 6 thin film crystallization on solid substrates. *Polymer*, **2014**, 55, 4332-4340	3.9	26
84	Biofunctionalized Electrospun PCL-PIBMD/SF Vascular Grafts with PEG and Cell-Adhesive Peptides for Endothelialization. *Macromolecular Bioscience*, **2019**, 19, e1800386	5.5	26
83	Star-shaped copolymer grafted PEI and REDV as a gene carrier to improve migration of endothelial cells. *Biomaterials Science*, **2017**, 5, 511-522	7.4	25
82	Co-immobilization of ACH antithrombotic peptide and CAG cell-adhesive peptide onto vascular grafts for improved hemocompatibility and endothelialization. *Acta Biomaterialia*, **2019**, 97, 344-359	10.8	25
81	Comb-shaped polymer grafted with REDV peptide, PEG and PEI as targeting gene carrier for selective transfection of human endothelial cells. *Journal of Materials Chemistry B*, **2017**, 5, 1408-1422	7.3	24
80	REDV-polyethyleneimine complexes for selectively enhancing gene delivery in endothelial cells. *Journal of Materials Chemistry B*, **2016**, 4, 3365-3376	7.3	24
79	Red-blood-cell-mimetic gene delivery systems for long circulation and high transfection efficiency in ECs. *Journal of Materials Chemistry B*, **2018**, 6, 5975-5985	7.3	24
78	Oligohistidine and targeting peptide functionalized TAT-NLS for enhancing cellular uptake and promoting angiogenesis in vivo. *Journal of Nanobiotechnology*, **2018**, 16, 29	9.4	23
77	Revisiting the Thermal Transition of α-Form Polyamide-6: Evolution of Structure and Morphology in Uniaxially Stretched Films. *Macromolecules*, **2018**, 51, 137-150	5.5	22

76	Biodegradable depsipeptide–PDO–PEG-based block copolymer micelles as nanocarriers for controlled release of doxorubicin. *Reactive and Functional Polymers*, **2014**, 82, 89-97	4.6	21
75	Multi-targeting peptides for gene carriers with high transfection efficiency. *Journal of Materials Chemistry B*, **2017**, 5, 8035-8051	7.3	21
74	Electrospun Poly(lactide--glycolide--3()-methyl-morpholine-2,5-dione) Nanofibrous Scaffolds for Tissue Engineering. *Polymers*, **2016**, 8,	4.5	21
73	Electrospun PCL-PIBMD/SF blend scaffolds with plasmid complexes for endothelial cell proliferation. *RSC Advances*, **2017**, 7, 39452-39464	3.7	20
72	Multitargeting Gene Delivery Systems for Enhancing the Transfection of Endothelial Cells. *Macromolecular Rapid Communications*, **2016**, 37, 1926-1931	4.8	20
71	Turn-off/on fluorescent sensors for Cu2+ and ATP in aqueous solution based on a tetraphenylethylene derivative. *Journal of Materials Chemistry C*, **2019**, 7, 2640-2645	7.1	19
70	Multifunctional gene delivery systems with targeting ligand CAGW and charge reversal function for enhanced angiogenesis. *Journal of Materials Chemistry B*, **2019**, 7, 1906-1919	7.3	19
69	A progressively targeted gene delivery system with a pH triggered surface charge-switching ability to drive angiogenesis in vivo. *Biomaterials Science*, **2019**, 7, 2061-2075	7.4	19
68	Multitargeting Peptide-Functionalized Star-Shaped Copolymers with Comblike Structure and a POSS-Core To Effectively Transfect Endothelial Cells. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2155-2168	5.5	18
67	Ligand targeting and peptide functionalized polymers as non-viral carriers for gene therapy. *Biomaterials Science*, **2019**, 8, 64-83	7.4	18
66	Polyhedral oligosilsesquioxane tethered perylene diimide for application in optical limiting and rapid detection of fluoride ions. *Chemical Communications*, **2019**, 55, 3012-3014	5.8	18
65	Isophthalate-Based Room Temperature Phosphorescence: From Small Molecule to Side-Chain Jacketed Liquid Crystalline Polymer. *Macromolecules*, **2019**, 52, 2495-2503	5.5	17
64	A PEG-b-poly(disulfide-l-lysine) based redox-responsive cationic polymer for efficient gene transfection. *Journal of Materials Chemistry B*, **2019**, 7, 1893-1905	7.3	16
63	POSS-cored and peptide functionalized ternary gene delivery systems with enhanced endosomal escape ability for efficient intracellular delivery of plasmid DNA. *Journal of Materials Chemistry B*, **2018**, 6, 4251-4263	7.3	16
62	Homopolymer and Random Copolymer of Polyhedral Oligomeric Silsesquioxane (POSS)-Based Side-Chain Polynorbornenes: Flexible Spacer Effect and Composition Dependence. *Macromolecules*, **2018**, 51, 4484-4493	5.5	15
61	Alignment of supramolecular J-aggregates based on uracil-functionalized BODIPY dye for polarized photoluminescence. *Chemical Communications*, **2020**, 56, 12069-12072	5.8	15
60	Core/Shell Gene Carriers with Different Lengths of PLGA Chains to Transfect Endothelial Cells. *Langmuir*, **2017**, 33, 13315-13325	4	14
59	Evaluation of Electrospun PCL-PIBMD Meshes Modified with Plasmid Complexes and. *Polymers*, **2016**, 8,	4.5	13

58	Ionic Self-Assembled Derivative of Tetraphenylethylene: Synthesis, Enhanced Solid-State Emission, Liquid-Crystalline Structure, and Cu Detection Ability. *ChemPhysChem*, **2017**, 18, 3605-3613	3.2	12
57	Brill Transition Shown by Green Material Poly(octamethylene carbonate). *ACS Macro Letters*, **2015**, 4, 317-321	6.6	12
56	From single to a dual-gene delivery nanosystem: coordinated expression matters for boosting the neovascularization in vivo. *Biomaterials Science*, **2020**, 8, 2318-2328	7.4	12
55	Agmatine-grafted bioreducible poly(l-lysine) for gene delivery with low cytotoxicity and high efficiency. *Journal of Materials Chemistry B*, **2020**, 8, 2418-2430	7.3	11
54	W Modified Polymeric Micelles with Different Hydrophobic Cores for Efficient Gene Delivery and Capillary-like Tube Formation. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2870-2878	5.5	11
53	Crystal Structure and Molecular Packing Behavior of Poly(2,3-diphenyl-1,4-phenylenevinylene) Derivatives Containing Alkyl Side-Chains. *Macromolecules*, **2013**, 46, 155-163	5.5	11
52	Construction of Hemocompatible and Histocompatible Surface by Grafting Antithrombotic Peptide ACH and Hydrophilic PEG. *ACS Biomaterials Science and Engineering*, **2019**, 5, 2846-2857	5.5	10
51	Multifunctional Gene Carriers Labeled by Perylene Diimide Derivative as Fluorescent Probe for Tracking Gene Delivery. *Macromolecular Rapid Communications*, **2019**, 40, e1800916	4.8	10
50	Living Supramolecular Polymerization of an Aza-BODIPY Dye Controlled by a Hydrogen-Bond-Accepting Triazole Unit Introduced by Click Chemistry. *Angewandte Chemie*, **2020**, 132, 5223-5230	3.6	10
49	Co-self-assembly of cationic microparticles to deliver pEGFP-ZNF580 for promoting the transfection and migration of endothelial cells. *International Journal of Nanomedicine*, **2017**, 12, 137-149	7.3	10
48	Development of Ca-based, ion-responsive superabsorbent hydrogel for cement applications: Self-healing and compressive strength. *Journal of Colloid and Interface Science*, **2019**, 538, 397-403	9.3	10
47	Ionic self-assembled derivatives of perylene diimide: Synthesis, aggregated structure and molecular packing behavior. *Dyes and Pigments*, **2017**, 139, 79-86	4.6	9
46	A "self-accelerating endosomal escape" siRNA delivery nanosystem for significantly suppressing hyperplasia via blocking the ERK2 pathway. *Biomaterials Science*, **2019**, 7, 3307-3319	7.4	9
45	Multifunctional REDV-G-TAT-G-NLS-Cys peptide sequence conjugated gene carriers to enhance gene transfection efficiency in endothelial cells. *Colloids and Surfaces B: Biointerfaces*, **2019**, 184, 110510	6	8
44	Synthesis, helical columnar liquid crystalline structure, and charge transporting property of perylene diimide derivative bearing oligosiloxane chains. *Dyes and Pigments*, **2018**, 152, 139-145	4.6	8
43	Polyhedral-oligosilsesquioxane containing poly(methyl methacrylate) perylenebisimide microspheres with high solid state emission. *Dyes and Pigments*, **2017**, 137, 584-592	4.6	8
42	Cascaded bio-responsive delivery of eNOS gene and ZNF gene to collaboratively treat hindlimb ischemia via pro-angiogenesis and anti-inflammation. *Biomaterials Science*, **2020**, 8, 6545-6560	7.4	8
41	A controlled CO release and pro-angiogenic gene dually engineered stimulus-responsive nanoplatform for collaborative ischemia therapy. *Chemical Engineering Journal*, **2021**, 424, 130430	14.7	8

40	Synthesis and self-assembly of unconventional C3-symmetrical trisubstituted triphenylenes. *Materials Chemistry Frontiers*, **2017**, 1, 2599-2605	7.8	6
39	Multifunctional peptide conjugated amphiphilic cationic copolymer for enhancing ECs targeting, penetrating and nuclear accumulation. *Frontiers of Chemical Science and Engineering*, **2020**, 14, 889-901	4.5	6
38	Precise polyethylene derivatives bearing mesogenic side-chains: delicate self-assembly depending on graft density. *Polymer Chemistry*, **2020**, 11, 1454-1461	4.9	6
37	Near-infrared fluorescent amphiphilic Aza-BODIPY dye: Synthesis, solvatochromic properties, and selective detection of Cu2+. *Dyes and Pigments*, **2020**, 183, 108714	4.6	6
36	Peripherally Modified Tetraphenylethene: Emerging as a Room-Temperature Luminescent Disc-Like Nematic Liquid Crystal. *ACS Applied Materials & Interfaces*, **2021**, 13, 35207-35213	9.5	6
35	J-aggregation induced emission enhancement of BODIPY dyes via H-bonding directed supramolecular polymerization: the importance of substituents at boron. *Organic Chemistry Frontiers*, **2021**, 8, 4078-4085	5.2	6
34	Direct investigations of temperature related structure transitions in strained poly(butylene succinate) with SAXS and WAXS. *Colloid and Polymer Science*, **2016**, 294, 321-328	2.4	5
33	From S,N-Heteroacene to Large Discotic Polycyclic Aromatic Hydrocarbons (PAHs): Liquid Crystal versus Plastic Crystalline Materials with Tunable Mechanochromic Fluorescence. *Angewandte Chemie*, **2018**, 130, 6269-6273	3.6	5
32	Helical Polyacetylene-Based Switchable Chiral Columnar Phases: Frustrated Chain Packing and Two-Way Shape Actuator. *Chemistry - an Asian Journal*, **2016**, 11, 2387-91	4.5	5
31	Preservation of Photoluminescence Efficiency in the Ordered phases of Poly(2,3-diphenyl-1,4-phenylenevinylene) via Disturbing the Intermolecular □nteractions with Dendritic Aliphatic Side Chains. *Macromolecules*, **2012**, 45, 4540-4549	5.5	5
30	Polyhedral oligosilsesquioxane tethered tetraphenylethylene as turn-on fluorescent sensor for fluoride ions detection. *Dyes and Pigments*, **2021**, 193, 109491	4.6	5
29	Heat-setting Effect on the Morphology and Phase Structures of PPS Nonwovens. *ACS Applied Polymer Materials*, **2020**, 2, 1997-2007	4.3	4
28	One-pot synthesis of carbon dots@ZrO2 nanoparticles with tunable solid-state fluorescence. *Polymers for Advanced Technologies*, **2020**, 31, 1744-1751	3.2	4
27	Perylene diimide derivative via ionic self-assembly: helical supramolecular structure and selective detection of ATP. *Journal of Materials Chemistry C*, **2020**, 8, 10422-10430	7.1	4
26	Synthesis, self-assembly and nonlinear optical activity of selenium-annulated perylene diimide. *Chemical Communications*, **2020**, 56, 3123-3126	5.8	4
25	Aggregation-induced red-shifted emission and fluorescent patterning of poly(aryleneethynylene) with a lateral AIEgen substituent. *Journal of Materials Chemistry C*, **2020**, 8, 1010-1016	7.1	4
24	Surfactant-Stripped Micelles with Aggregation-Induced Enhanced Emission for Bimodal Gut Imaging In Vivo and Microbiota Tagging Ex Vivo. *Advanced Healthcare Materials*, **2021**, e2100356	10.1	4
23	Side-Chain Jacketed Liquid Crystalline Polymer Forming Double-Chain Supramolecular Column and Hexagonal Superlattice. *Macromolecules*, **2018**, 51, 6949-6957	5.5	4

22	Green process Inspires gene delivery: Establishing positive feedback between CO2-enhanced bioactive carrier and gene expression to maximize ECs outputs for multi-pathways CLI therapy. *Chemical Engineering Journal*, **2021**, 421, 127808	14.7	4
21	CAGW and TAT-NLS peptides functionalized multitargeting gene delivery system with high transfection efficiency. *Polymers for Advanced Technologies*, **2019**, 30, 2567-2576	3.2	3
20	Synthesis and properties of tetraphenylethylene derivatives with different chiral substituents: From helical supermolecular structure to circularly polarized luminescence. *Dyes and Pigments*, **2021**, 188, 109148	4.6	3
19	Siloxane tethered perylene diimide: from monotropic phase structures to tunable photoconductivity. *Journal of Materials Chemistry C*,	7.1	3
18	Synthesis, Self-Assembly and Characterization of Tandem Triblock BPOSS-PDI-X Shape Amphiphiles. *Molecules*, **2019**, 24,	4.8	2
17	Structures and properties of side-chain liquid crystalline polynorbornenes containing an amide group: hydrogen bonding interactions and spacer length effects. *Polymer Chemistry*, **2020**, 11, 4749-4759	4.9	2
16	Conformation Variation Induced Crystallization Enhancement of Poly(l-lactic acid) by Gluconic Derivatives. *Crystal Growth and Design*, **2020**, 20, 653-660	3.5	2
15	Aggregation-mediated photo-responsive luminescence of cyanostilbene based cruciform AIEgens. *Journal of Materials Chemistry C*, **2021**, 9, 975-981	7.1	2
14	An amphiphilic B,O-chelated aza-BODIPY dye: synthesis, pH-sensitivity, and aggregation behaviour in a HO/DMSO mixed solvent. *Organic and Biomolecular Chemistry*, **2021**, 19, 6108-6114	3.9	2
13	Redox stimulus disulfide conjugated polyethyleneimine as a shuttle for gene transfer. *Journal of Materials Science: Materials in Medicine*, **2020**, 31, 118	4.5	1
12	The construction of a 2D MoS-based binder-free electrode with a honeycomb structure for enhanced electrochemical performance. *Dalton Transactions*, **2020**, 49, 8036-8040	4.3	1
11	Superlow Dosage of Intrinsically Bioactive Zinc Metal-Organic Frameworks to Modulate Endothelial Cell Morphogenesis and Significantly Rescue Ischemic Disease.. *ACS Nano*, **2022**,	16.7	1
10	Unexpected Amplification of Synergistic Gene Expression to Boom Vascular Flow in Advantageous Dual-Gene Co-expression Plasmid Delivery Systems over Physically Mixed Strategy.. *ACS Applied Bio Materials*, **2020**, 3, 7228-7235	4.1	1
9	Competition of Lamellar Crystal and Smectic Liquid Crystal in Precise Polyethylene Derivative Bearing Mesogenic Side-Chains. *CCS Chemistry*,763-772	7.2	1
8	NIR absorbing dimeric aza-BODIPY dye with J-type aggregation and photothermal properties. *Tetrahedron Letters*, **2021**, 76, 153216	2	1
7	Activation of Pd-precatalysts by organic compounds for vinyl-addition polymerization of a norbornene derivative. *Chemical Communications*, **2021**, 57, 4255-4258	5.8	1
6	A two-pronged approach to regulate the behaviors of ECs and SMCs by the dual targeting-nanoparticles. *Colloids and Surfaces B: Biointerfaces*, **2021**, 208, 112068	6	1
5	Blue emissive dimethylmethylene-bridged triphenylamine derivatives appending cross-linkable groups. *Organic and Biomolecular Chemistry*, **2020**, 18, 3754-3760	3.9	0

4	Sub-10-nm ordered structure and mechanochromism property of polyhedral oligosilsesquioxane tethered tetraphenylethylene. *Giant*, **2022**, 9, 100090	5.6	0
3	Columnar Liquid Crystalline Corannulenes: Synthesis, Assembly and Charge-Carrier Transport Properties. *Chinese Journal of Chemistry*, **2021**, 39, 2354-2358	4.9	0
2	Titelbild: Near-IR Absorbing J-Aggregate of an Amphiphilic BF2-Azadipyrromethene Dye by Kinetic Cooperative Self-Assembly (Angew. Chem. 21/2017). *Angewandte Chemie*, **2017**, 129, 5725-5725	3.6	
1	Structural and Nanotribological Properties of a BODIPY Self-Assembly. *Frontiers in Chemistry*, **2021**, 9, 704915	5	