Christopher B Gorman

List of Publications by Year
in descending order

116 papers	7,833 citations	57758 44 h-index	48315 88 g-index
122 all docs	122 docs citations	122 times ranked	7228 citing authors

#	Article	IF	Citations
1	Deposition of silicate coatings on poly(ethylene terephthalate) for improved scratch and solvent resistance. Journal of Applied Polymer Science, 2022, 139, 51800.	2.6	0
2	Degradable Anti-Biofouling Polyester Coatings with Controllable Lifetimes. Langmuir, 2022, 38, 1488-1496.	3.5	1
3	Synthesis, structure, and function of internally functionalized dendrimers. Journal of Polymer Science, 2021, 59, 10-28.	3.8	22
4	Dynamic Surfacesâ€"Degradable Polyester Networks that Resist Protein Adsorption. Langmuir, 2021, 37, 8978-8988.	3.5	1
5	Amphiphilic phospholipidâ€"iodinated polymer conjugates for bioimaging. Biomaterials Science, 2021, 9, 5045-5056.	5.4	1
6	Lanthanum carbonate nanofibers for phosphorus removal from water. Journal of Materials Science, 2020, 55, 5008-5020.	3.7	25
7	Exploring the physicochemical and morphological properties of peptideâ€hybridized dendrimers (<scp>DendriPeps</scp>) and their aggregates. Journal of Polymer Science, 2020, 58, 2234-2247.	3.8	2
8	DendriPeps: Expanding Dendrimer Functionality by Hybridizing Poly(amidoamine) (PAMAM) Scaffolds with Peptide Segments. Macromolecular Rapid Communications, 2019, 40, 1900325.	3.9	6
9	Synthesis of 5,12-Diazapentacenes and Their Properties. Journal of Organic Chemistry, 2019, 84, 15079-15086.	3.2	4
10	Liquid Metal Nanoparticles as Initiators for Radical Polymerization of Vinyl Monomers. ACS Macro Letters, 2019, 8, 1522-1527.	4.8	109
11	Amidation of Polyesters Is Slow in Nonaqueous Solvents: Efficient Amidation of Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 1 ACS Applied Materials & Interfaces, 2016, 8, 35641-35649.	8.0	27
12	Resisting protein adsorption on biodegradable polyester brushes. Acta Biomaterialia, 2014, 10, 3497-3504.	8.3	7
13	Comparison of the growth and degradation of poly(glycolic acid) and poly(Îµ-caprolactone) brushes. Journal of Polymer Science Part A, 2013, 51, 4643-4649.	2.3	12
14	Surface-Initiated Polymerization by Means of Novel, Stable, Non-Ester-Based Radical Initiator. Macromolecules, 2012, 45, 3802-3815.	4.8	52
15	Chemical amplification for in-gel DNA detection. Analytical Methods, 2011, 3, 2463.	2.7	9
16	Standing Up versus Looping Over: Controlling the Geometry of Self-Assembled Monolayers of Î±,Ï‰-Diynes on Gold. Langmuir, 2011, 27, 6069-6075.	3.5	9
17	Effects of Temperature and pH on the Degradation of Poly(lactic acid) Brushes. Macromolecules, 2011, 44, 4777-4782.	4.8	129
18	Overcoming challenges in the palladium-catalyzed synthesis of electron deficient ortho-substituted aryl acetonitriles. Organic and Biomolecular Chemistry, 2011, 9, 2661.	2.8	3

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19	Cascade Cyclization To Produce a Series of Fused, Aromatic Molecules. Organic Letters, 2010, 12, 2146-2148.	4.6	7
20	Dendritically Encapsulated, Water-Soluble Fe₄S₄: Synthesis and Electrochemical Properties. Inorganic Chemistry, 2010, 49, 5072-5078.	4.0	16
21	Terminal Alkynes as an Ink or Background SAM in Replacement Lithography: Adventitious versus Directed Replacement. Langmuir, 2010, 26, 15027-15034.	3.5	8
22	Poly(lactic acid) brushes grow longer at lower temperatures. Journal of Polymer Science Part A, 2010, 48, 3362-3367.	2.3	5
23	Aminoisoquinolines as colorimetric Hg2+ sensors: the importance of molecular structure and sacrificial base. Tetrahedron, 2009, 65, 4293-4297.	1.9	35
24	Reversible Additionâˆ’Fragmentation Chain Transfer Polymerization in DNA Biosensing. Analytical Chemistry, 2008, 80, 3633-3639.	6.5	59
25	Nanoencapsulation and Stabilization of Single-Molecule/Particle Electronic Nanoassemblies Using Low-Temperature Atomic Layer Deposition. Journal of Physical Chemistry C, 2008, 112, 20510-20517.	3.1	9
26	Effect of Substrate Geometry on Polymer Molecular Weight and Polydispersity during Surface-Initiated Polymerization. Macromolecules, 2008, 41, 4856-4865.	4.8	98
27	Conduction mechanisms and stability of single molecule nanoparticle/molecule/nanoparticle junctions. Nanotechnology, 2007, 18, 035203.	2.6	23
28	Real-time conductivity analysis through single-molecule electrical junctions. Nanotechnology, 2007, 18, 424001.	2.6	8
29	Effect of dendrimer generation on electron self-exchange kinetics between metal tris(bipyridine) core dendrimers. Chemical Communications, 2007, , 3195.	4.1	6
30	Self-Assembled Monolayers of Terminal Alkynes on Gold. Journal of the American Chemical Society, 2007, 129, 4876-4877.	13.7	96
31	Enhanced Conduction through Isocyanide Terminal Groups in Alkane and Biphenylene Molecules Measured in Molecule/Nanoparticle/Molecule Junctions. Journal of Physical Chemistry C, 2007, 111, 8080-8085.	3.1	23
32	Scanning Tunneling Microscopy-Based Replacement Lithography on Self-Assembled Monolayers:Â Comparison of Gold, Palladium, and Platinum Substrates. Langmuir, 2007, 23, 3103-3105.	3.5	16
33	Alkanethiol Reductive Desorption from Self-Assembled Monolayers on Gold, Platinum, and Palladium Substrates. Journal of Physical Chemistry C, 2007, 111, 12804-12810.	3.1	37
34	Efficient synthesis of halo indanones via chlorosulfonic acid mediated Friedelâ€“Crafts cyclization of aryl propionic acids and their use in alkylation reactions. Tetrahedron, 2007, 63, 389-395.	1.9	25
35	An effective, orthogonal deprotection strategy for differentially functionalized, linear and Y-shaped oligo phenylene ethynylenes. Tetrahedron, 2007, 63, 7120-7132.	1.9	11
36	Patterned Self-Assembled Monolayers via Scanning Probe Lithography. , 2007, , 929-942.		0

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37	Attenuating Electron-Transfer Rates via Dendrimer Encapsulation:â€‰ The Case of Metal Tris(bipyridine) Core Dendrimers. Langmuir, 2006, 22, 10506-10509.	3.5	15
38	Encapsulation Effects on Homogeneous Electron Self-Exchange Dynamics in Tris(Bipyridine) Iron-Core Dendrimers. ACS Symposium Series, 2006, , 205-214.	0.5	0
39	Redox-gated electron transport in electrically wired ferrocene molecules. Chemical Physics, 2006, 326, 138-143.	1.9	109
40	Hierarchical assembly for molecular electronics. , 2005, 6003, 62.		0
41	Detection of DNA Point Mutation by Atom Transfer Radical Polymerization. Analytical Chemistry, 2005, 77, 4698-4705.	6.5	93
42	Establishing the Molecular Basis for Molecular Electronics. Angewandte Chemie - International Edition, 2004, 43, 5120-5123.	13.8	68
43	Scanning Probe Lithography Using Self-Assembled Monolayers. ChemInform, 2004, 35, no.	0.0	0
44	Synthetic Approaches to an Isostructural Series of Redox-Active, Metal Tris(bipyridine) Core Dendrimers.. ChemInform, 2004, 35, no.	0.0	1
45	Establishing the Molecular Basis for Molecular Electronics. ChemInform, 2004, 35, no.	0.0	0
46	Fast Directed Motion of â€œFakirâ€•Droplets. Langmuir, 2004, 20, 9893-9896.	3.5	41
47	Time-Resolved Fluorescence Investigation of Energy Transfer in Compact Phenylacetylene Dendrimersâ€. Journal of Physical Chemistry B, 2004, 108, 8543-8549.	2.6	38
48	Scanning Tunneling Microscope-Based Replacement Lithography on Self-Assembled Monolayers. Investigation of the Relationship between Monolayer Structure and Replacement Biasâ€. Journal of Physical Chemistry B, 2004, 108, 8581-8583.	2.6	12
49	Bifunctional, Conjugated Oligomers for Orthogonal Self-Assembly:â€‰ Selectivity Varies from Planar Substrates to Nanoparticles. Journal of the American Chemical Society, 2004, 126, 16330-16331.	13.7	6
50	Attenuating Negative Differential Resistance in an Electroactive Self-Assembled Monolayer-Based Junction. Journal of the American Chemical Society, 2004, 126, 295-300.	13.7	99
51	Effect of Structure on the Reduction Potentials of Films of Constitutional Isomers of Ironâ ́Sulfur Cluster Core Dendrimers. Langmuir, 2004, 20, 8792-8795.	3.5	14
52	Effect of the Counterion on the Rate of Electron Transfer in Dendrimer Films. Langmuir, 2004, 20, 3501-3503.	3.5	4
53	Infrared Detection of a Phenylboronic Acid Terminated Alkane Thiol Monolayer on Gold Surfaces. Langmuir, 2004, 20, 5512-5520.	3.5	102
54	Dendritic encapsulation as probed in redox active core dendrimers. Comptes Rendus Chimie, 2003, 6, 911-918.	0.5	20

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55	The Genesis of Molecular Electronics. ChemInform, 2003, 34, no.	0.0	0
56	Dendritic Encapsulation-Roles of Cores and Branches.. ChemInform, 2003, 34, no.	0.0	0
57	Dendritic encapsulation-roles of cores and branches. Tetrahedron, 2003, 59, 3853-3861.	1.9	23
58	Stochastic Variation in Conductance on the Nanometer Scale:â€‰ A General Phenomenon. Nano Letters, 2003, 3, 1617-1620.	9.1	73
59	Synthetic Approaches to an Isostructural Series of Redox-Active, Metal Tris(bipyridine) Core Dendrimers. Journal of Organic Chemistry, 2003, 68, 9019-9025.	3.2	60
60	Using Probe Lithography and Self-Assembled Monolayers To Investigate Potential Molecular Electronics Systems. ACS Symposium Series, 2003, , 10-15.	0.5	2
61	Scanning Probe Lithography Using Self-Assembled Monolayers. Chemical Reviews, 2003, 103, 4367-4418.	47.7	421
62	Structural Effects on Encapsulation As Probed in Redox-Active Core Dendrimer Isomers. Journal of the American Chemical Society, 2003, 125, 8250-8254.	13.7	60
63	Supramolecular Assembly on Surfaces:Â Manipulating Conductance in Noncovalently Modified Mesoscale Structures. Journal of the American Chemical Society, 2002, 124, 9036-9037.	13.7	37
64	Nanoparticle Layers Assembled through DNA Hybridization:â€‰ Characterization and Optimization. Langmuir, 2002, 18, 1825-1830.	3.5	71
65	Future directions in solid state chemistry: report of the NSF-sponsored workshop. Progress in Solid State Chemistry, 2002, 30, 1-101.	7.2	24
66	The Genesis of Molecular Electronics. Angewandte Chemie - International Edition, 2002, 41, 4378-4400.	13.8	786
67	Patterning Mesoscale Gradient Structures with Self-Assembled Monolayers and Scanning Tunneling Microscopy Based Replacement Lithography. Advanced Materials, 2002, 14, 154-157.	21.0	112
68	Effects of Site Encapsulation on Electrochemical Behavior of Redox-Active Core Dendrimers. Advanced Functional Materials, 2002, 12, 17.	14.9	74
69	One generation at a time. Nature, 2002, 415, 487-488.	27.8	14
70	Structureâˆ'Property Relationships in Dendritic Encapsulation. Accounts of Chemical Research, 2001, 34, 60-71.	15.6	222
71	Negative Differential Resistance in Patterned Electroactive Self-Assembled Monolayers. Langmuir, 2001, 17, 6923-6930.	3.5	111
72	The Influence of Headgroup on the Structure of Self-Assembled Monolayers As Viewed by Scanning Tunneling Microscopy. Langmuir, 2001, 17, 5324-5328.	3.5	34

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73	Effect of repeat unit flexibility on dendrimer conformation as studied by atomistic molecular dynamics simulations. Polymer, 2000, 41, 675-683.	3.8	52
74	Control of electron transport using redox-active core dendrimers. Macromolecular Symposia, 2000, 156, 61-68.	0.7	1
75	Chemically Well-Defined Lithography Using Self-Assembled Monolayers and Scanning Tunneling Microscopy in Nonpolar Organothiol Solutions. Langmuir, 2000, 16, 6312-6316.	3.5	78
76	Ironâ˜'Sulfur Core Dendrimers Display Dramatically Different Electrochemical Behavior in Films Compared to Solution. Journal of the American Chemical Society, 2000, 122, 9342-9343.	13.7	43
77	Molecular Structureâ˜'Property Relationships for Electron-Transfer Rate Attenuation in Redox-Active Core Dendrimers. Journal of the American Chemical Society, 1999, 121, 9958-9966.	13.7	162
78	Hybrid organicâ€"inorganic, hexa-arm dendrimers based on an Mo6Cl8 core. Chemical Communications, 1999, , 877-878.	4.1	29
79	Preparation of Poly(cyanoacetylene) Using Late-Transition-Metal Catalysts. Macromolecules, 1999, 32, 4157-4165.	4.8	20
80	Metallodendrimers: Structural Diversity and Functional Behavior. Advanced Materials, 1998, 10, 295-309.	21.0	227
81	Semipermeable, Chemisorbed Adlayers of Focally-Substituted Organothiol Dendrons on Gold. Langmuir, 1998, 14, 3312-3319.	3.5	52
82	Ordered Adlayers of a Nonplanar Molecule on a Surface:Â Misfit Monolayers and Intercalated Bilayers as the Result of a Dialkyl Amino Group. Langmuir, 1998, 14, 3052-3061.	3.5	6
83	Use of a Paramagnetic Core to Affect Longitudinal Nuclear Relaxation in DendrimersA Tool for Probing Dendrimer Conformation. Macromolecules, 1998, 31, 815-822.	4.8	81
84	Ordering of a Functional Molecules on a Flat Surface as Evidenced by Scanning Probe Microscopies: The Case of a Di-Alkyl Amino Group. Microscopy and Microanalysis, 1998, 4, 304-305.	0.4	0
85	A Model for Single-Molecule Information Storage. , 1998, , 231-240.		0
86	Tip-Induced Structural Rearrangements of Alkanethiolate Self-Assembled Monolayers on Gold. Journal of Physical Chemistry B, 1997, 101, 5263-5276.	2.6	80
87	Encapsulated Electroactive Molecules Based upon an Inorganic Cluster Surrounded by Dendron Ligands. Journal of the American Chemical Society, 1997, 119, 1141-1142.	13.7	134
88	A Scanning Tunneling Microscopy Study of the Interaction of H2S with a Au(111) Surface:Â Characterization of Corrosion and Monolayer Structures. Langmuir, 1997, 13, 4850-4854.	3.5	21
89	Encapsulated electroactive molecules. Advanced Materials, 1997, 9, 1117-1119.	21.0	54
90	Synthesis of a Series of Focally-Substituted Organothiol Dendrons. Journal of Organic Chemistry, 1996, 61, 9229-9235.	3.2	22

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91	Platinum-Catalyzed Oxidations of Organic Compounds by Ferric Sulfate: Use of a Redox Fuel Cell to Mediate Complete Oxidation of Ethylene Glycol by Dioxygen at 80Â°C. Journal of Catalysis, 1996, 158, 92-96.	6.2	10
92	Control of the Shape of Liquid Lenses on a Modified Gold Surface Using an Applied Electrical Potential across a Self-Assembled Monolayer. Langmuir, 1995, 11, 2242-2246.	3.5	124
93	Use of a Patterned Self-Assembled Monolayer To Control the Formation of a Liquid Resist Pattern on a Gold Surface. Chemistry of Materials, 1995, 7, 252-254.	6.7	39
94	Active Control of Wetting Using Applied Electrical Potentials and Self- Assembled Monolayers. Langmuir, 1995, 11, 16-18.	3.5	131
95	Effect of Molecular Polarization on Bond-Length Alternation, Linear Polarizability, First and Second Hyperpolarizability in Donor-Acceptor Polyenes as a Function of Chain Length. Chemistry of Materials, 1995, 7, 215-220.	6.7	84
96	Fabrication of Patterned, Electrically Conducting Polypyrrole Using a Self-Assembled Monolayer: A Route to All-Organic Circuits. Chemistry of Materials, 1995, 7, 526-529.	6.7	119
97	Self-Assembled Monolayers of Long-Chain Hydroxamic Acids on the Native Oxide of Metals. Langmuir, 1995, 11, 813-824.	3.5	325
98	A Redox Fuel Cell That Operates with Methane as Fuel at 120ÂC. Science, 1994, 265, 1418-1420.	12.6	33
99	A Unified Description of Linear and Nonlinear Polarization in Organic Polymethine Dyes. Science, 1994, 265, 632-635.	12.6	615
100	Experimental demonstration of the relationship between the second- and third-order polarizabilities of conjugated donor-acceptor molecules. , 1994, , .		3
101	Relation Between Bond-Length Alternation and Second Electronic Hyperpolarizability of Conjugated Organic Molecules. Science, 1993, 261, 186-189.	12.6	391
102	Voltammetric characterization of soluble polyacetylene derivatives obtained from the ring-opening metathesis polymerization (ROMP) of substituted cyclooctatetraenes. Journal of the American Chemical Society, 1993, 115, 4705-4713.	13.7	39
103	Direct observation of reduced bond-length alternation in donor/acceptor polyenes. Journal of the American Chemical Society, 1993, 115, 2524-2526.	13.7	199
104	Stronger acceptors can diminish nonlinear optical response in simple donor-acceptor polyenes. Journal of the American Chemical Society, 1993, 115, 3006-3007.	13.7	187
105	Soluble, highly conjugated derivatives of polyacetylene from the ring-opening metathesis polymerization of monosubstituted cyclooctatetraenes: synthesis and the relationship between polymer structure and physical properties. Journal of the American Chemical Society, 1993, 115, 1397-1409.	13.7	119
106	An investigation of the interrelationships between linear and nonlinear polarizabilities and bond-length alternation in conjugated organic molecules. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11297-11301.	7.1	238
107	Third-order polarizabilities of symmetric and nonsymmetric polyene and cyanine-like organic molecules. , 1993, , .		1
108	Substituted polyacetylenes through the ring-opening metathesis polymerization (ROMP) of substituted cyclooctatetraenes: A route into soluble polyacetylene. Synthetic Metals, 1991, 41, 1033-1038.	3.9	26

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109	Soluble, chiral polyacetylenes: syntheses and investigation of their solution conformation. Journal of the American Chemical Society, 1991, 113, 1704-1712.	13.7	158
110	<title>Soluble polyacetylenes derived from the ring-opening metathesis polymerization of substituted cyclooctatetraenes: electrochemical characterization and Schottky barrier devices</title>. , 1991, , .		5
111	Thin Films of n-Si/Poly-(CH3)3Si-Cyclooctatetraene: Conducting-Polymer Solar Cells and Layered Structures. Science, 1990, 249, 1146-1149.	12.6	175
112	The Application of Ring-Opening Metathesis Polymerization to the Synthesis of Substituted Polyacetylenes. , 1990, , 537-541.		1
113	Highly conjugated, substituted polyacetylenes via the ring-opening metathesis polymerization of substituted cyclooctatetraenes. Advanced Materials, 1989, 1, 389-392.	21.0	1
114	Highly conjugated, substituted polyacetylenes via the ringâ€opening metathesis polymerization of substituted cyclooctatetraenes. Angewandte Chemie, 1989, 101, 1603-1606.	2.0	10
115	Highly Conjugated, Substituted Polyacetylenes via the Ring-Opening Metathesis Polymerization of Substituted Cyclooctatetraenes. Angewandte Chemie International Edition in English, 1989, 28, 1571-1574.	4.4	6
116	Poly(trimethylsilylcyclooctatetraene): a soluble conjugated polyacetylene via olefin metathesis. Journal of the American Chemical Society, 1989, 111, 7621-7622.	13.7	68