David G Whitten

List of Publications by Year
in descending order

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78 papers	3,809 citations	87888 38 h-index	128289 60 g-index
82 all docs	82 docs citations	82 times ranked	3092 citing authors

#	Article	IF	Citations
1	Fluorescent Cellulose Wipe as a New and Sustainable Light-Activated Antibacterial and Antiviral Agent. , 2022, 4, 356-362.		8
2	Rapid and Effective Inactivation of SARS-CoV-2 with a Cationic Conjugated Oligomer with Visible Light: Studies of Antiviral Activity in Solutions and on Supports. ACS Applied Materials & Interfaces, 2022, 14, 4892-4898.	8.0	6
3	Controlled and Selective Photo-oxidation of Amyloid-Î² Fibrils by Oligomeric p-Phenylene Ethynylenes. ACS Applied Materials & Interfaces, 2022, 14, 14871-14886.	8.0	9
4	Remembering FranÃ§oise Winnik. Langmuir, 2021, 37, 7627-7629.	3.5	0
5	Understanding the Photochemical Properties of Polythiophene Polyelectrolyte Soft Aggregates with Sodium Dodecyl Sulfate for Antimicrobial Activity. ACS Applied Materials & Interfaces, 2021, 13, 55953-55965.	8.0	2
6	Highly Effective Inactivation of SARS-CoV-2 by Conjugated Polymers and Oligomers. ACS Applied Materials & Interfaces, 2020, 12, 55688-55695.	8.0	48
7	Computational Investigation of the Binding Dynamics of Oligo p-Phenylene Ethynylene Fluorescence Sensors and Aβ2 Oligomers. ACS Chemical Neuroscience, 2020, 11, 3761-3771.	3.5	4
8	Quantitative Determination of Dark and Light-Activated Antimicrobial Activity of Poly(Phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4 Interfaces, 2020, 12, 21322-21329.	8.0	27
9	A Retrospective: 10 Years of Oligo(phenylene-ethynylene) Electrolytes: Demystifying Nanomaterials. Langmuir, 2019, 35, 307-325.	3.5	23
10	High Selectivity and Sensitivity of Oligomeric p-Phenylene Ethynylenes for Detecting Fibrillar and Prefibrillar Amyloid Protein Aggregates. ACS Chemical Neuroscience, 2019, 10, 1813-1825.	3.5	29
11	Controlled Photosensitizing Activity of Oligomeric P-Phenylene Ethynylenes on Amyloid-Î² Fibrils. Biophysical Journal, 2019, 116, 275a.	0.5	2
12	Efficient Long-Range, Directional Energy Transfer through DNA-Templated Dye Aggregates. Journal of the American Chemical Society, 2019, 141, 8473-8481.	13.7	63
13	Size and Substitution Effect on Antimicrobial Activity of Polythiophene Polyelectrolyte Derivatives Under Photolysis and Dark Conditions. Photochemistry and Photobiology, 2018, 94, 1116-1123.	2.5	15
14	Skin irritation testing of antimicrobial conjugated electrolytes. Biointerphases, 2017, 12, 02C403.	1.6	8
15	Detergent-induced self-assembly and controllable photosensitizer activity of diester phenylene ethynylenes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7278-7282.	7.1	23
16	Substituent, Charge, and Size Effects on the Fluorogenic Performance of Amyloid Ligands: A Small-Library Screening Study. ACS Omega, 2017, 2, 3192-3200.	3.5	19
17	Selective Imaging and Inactivation of Bacteria over Mammalian Cells by Imidazolium-Substituted Polythiophene. Chemistry of Materials, 2017, 29, 6389-6395.	6.7	77
18	Binding-Activated Superradiant Probes for Amyloid in Solution and Tissue. Biophysical Journal, 2016, 110, 554a.	0.5	1

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19	Antifungal Properties of Cationic Phenylene Ethynylenes and Their Impact on Î²-Glucan Exposure. Antimicrobial Agents and Chemotherapy, 2016, 60, 4519-4529.	3.2	26
20	Oligomeric Conjugated Polyelectrolytes Display Site-Preferential Binding to an MS2 Viral Capsid. Langmuir, 2016, 32, 12542-12551.	3.5	11
21	Aggregation of cationic p-phenylene ethynylenes on Laponite clay in aqueous dispersions and solid films. Journal of Colloid and Interface Science, 2015, 449, 347-356.	9.4	27
22	Conjugated Polyelectrolytes with Imidazolium Solubilizing Groups. Properties and Application to Photodynamic Inactivation of Bacteria. ACS Applied Materials & Interfaces, 2015, 7, 28027-28034.	8.0	82
23	Oligo(p-phenylene ethynylene) Electrolytes: A Novel Molecular Scaffold for Optical Tracking of Amyloids. ACS Chemical Neuroscience, 2015, 6, 1526-1535.	3.5	30
24	Assessing the Sporicidal Activity of Oligo-p-phenylene Ethynylenes and Their Role as Bacillus Germinants. Langmuir, 2015, 31, 4481-4489.	3.5	13
25	Enzyme-Specific Sensors via Aggregation of Charged p-Phenylene Ethynylenes. ACS Applied Materials & Interfaces, 2015, 7, 5550-5560.	8.0	13
26	Self-Sterilizing, Self-Cleaning Mixed Polymeric Multifunctional Antimicrobial Surfaces. ACS Applied Materials & Interfaces, 2015, 7, 27632-27638.	8.0	41
27	Cationic oligo- p-phenylene ethynylenes form complexes with surfactants for long-term light-activated biocidal applications. Photochemical and Photobiological Sciences, 2014, 13, 247-253.	2.9	14
28	Computational Study of Bacterial Membrane Disruption by Cationic Biocides: Structural Basis for Water Pore Formation. Journal of Physical Chemistry B, 2014, 118, 9722-9732.	2.6	16
29	Activating the Antimicrobial Activity of an Anionic Singlet-Oxygen Sensitizer through Surfactant Complexation. Langmuir, 2014, 30, 5052-5056.	3.5	9
30	The influence of structured interfacial water on the photoluminescence of carboxyesterâ€terminated oligoâ€pâ€phenylene ethynylenes. Journal of Physical Organic Chemistry, 2014, 27, 252-257.	1.9	15
31	Photophysics and Light-Activated Biocidal Activity of Visible-Light-Absorbing Conjugated Oligomers. ACS Applied Materials & Interfaces, 2013, 5, 4516-4520.	8.0	44
32	Structural Basis for Aggregation Mode of oligo-p-Phenylene Ethynylenes with Ionic Surfactants. Langmuir, 2013, 29, 15732-15737.	3.5	22
33	When Worlds Collide: Interactions at the Interface between Biological Systems and Synthetic Cationic Conjugated Polyelectrolytes and Oligomers. Langmuir, 2013, 29, 10635-10647.	3.5	52
34	Understanding the Dark and Light-Enhanced Bactericidal Action of Cationic Conjugated Polyelectrolytes and Oligomers. Langmuir, 2013, 29, 781-792.	3.5	86
35	Antimicrobial Activity of Cationic Conjugated Polyelectrolytes and Oligomers against Saccharomyces cerevisiae Vegetative Cells and Ascospores. ACS Applied Materials & Interfaces, 2013, 5, 4555-4561.	8.0	30
36	In Vitro Cytotoxicity of Antimicrobial Conjugated Electrolytes: Interactions with Mammalian Cells. ACS Applied Materials & Interfaces, 2013, 5, 9305-9311.	8.0	17

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37	Photochemistry of â€œEnd-Onlyâ€•Oligo-p-phenylene Ethynylenes: Complexation with Sodium Dodecyl Sulfate Reduces Solvent Accessibility. Langmuir, 2013, 29, 9712-9720.	3.5	15
38	Efficacy of End-Only-Functionalized Oligo(arylene-ethynylene)s in Killing Bacterial Biofilms. Langmuir, 2012, 28, 11286-11290.	3.5	19
39	Direct Visualization of Bactericidal Action of Cationic Conjugated Polyelectrolytes and Oligomers. Langmuir, 2012, 28, 65-70.	3.5	93
40	Membrane activity of antimicrobial phenylene ethynylene based polymers and oligomers. Soft Matter, 2012, 8, 8547.	2.7	63
41	Photochemistry of a Model Cationic p-Phenylene Ethynylene in Water. Journal of Physical Chemistry Letters, 2012, 3, 1363-1368.	4.6	13
42	Molecular Dynamics Simulation Study of the Interaction of Cationic Biocides with Lipid Bilayers: Aggregation Effects and Bilayer Damage. Langmuir, 2012, 28, 14849-14854.	3.5	46
43	Cationic Phenylene Ethynylene Polymers and Oligomers Exhibit Efficient Antiviral Activity. ACS Applied Materials & Interfaces, 2011, 3, 2209-2214.	8.0	67
44	Rapid Evaluation of the Antibacterial Activity of Aryleneâ€“Ethynylene Compounds. ACS Applied Materials & Interfaces, 2011, 3, 2938-2943.	8.0	11
45	Light and Dark-Activated Biocidal Activity of Conjugated Polyelectrolytes. ACS Applied Materials & Interfaces, 2011, 3, 2820-2829.	8.0	76
46	Effect of Polymer Chain Length on Membrane Perturbation Activity of Cationic Phenylene Ethynylene Oligomers and Polymers. Langmuir, 2011, 27, 10770-10775.	3.5	42
47	Conjugated-Polyelectrolyte-Grafted Cotton Fibers Act as â€œMicro Flypaperâ€•for the Removal and Destruction of Bacteria. ACS Applied Materials & Interfaces, 2011, 3, 2932-2937.	8.0	35
48	Synthesis, Self-Assembly, and Photophysical Properties of Cationic Oligo(p-phenyleneethynylene)s. Langmuir, 2011, 27, 4945-4955.	3.5	67
49	Antibacterial Activity of Conjugated Polyelectrolytes with Variable Chain Lengths. Langmuir, 2011, 27, 10763-10769.	3.5	39
50	Light-Induced Antibacterial Activity of Symmetrical and Asymmetrical Oligophenylene Ethynylenes. Langmuir, 2011, 27, 4956-4962.	3.5	68
51	Dark Antimicrobial Mechanisms of Cationic Phenylene Ethynylene Polymers and Oligomers against Escherichia coli. Polymers, 2011, 3, 1199-1214.	4.5	41
52	Insight into the Mechanism of Antimicrobial Conjugated Polyelectrolytes: Lipid Headgroup Charge and Membrane Fluidity Effects. Langmuir, 2010, 26, 5544-5550.	3.5	71
53	â€œEnd-Onlyâ€•Functionalized Oligo(phenylene ethynylene)s: Synthesis, Photophysical and Biocidal Activity. Journal of Physical Chemistry Letters, 2010, 1, 3207-3212.	4.6	82
54	Membrane Perturbation Activity of Cationic Phenylene Ethynylene Oligomers and Polymers: Selectivity against Model Bacterial and Mammalian Membranes. Langmuir, 2010, 26, 12509-12514.	3.5	72

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55	Photophysics and self-assembly of symmetrical and unsymmetrical cationic oligophenylene ethynylenes. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 207, 4-6.	3.9	14
56	Insight into the Mechanism of Antimicrobial Poly(phenylene ethynylene) Polyelectrolytes: Interactions with Phosphatidylglycerol Lipid Membranesâ€Langmuir 25th Year: Molecular and macromolecular self-assemblies. Langmuir, 2009, 25, 13742-13751.	3.5	52
57	Synthesis, Self-Assembly, and Photophysical Behavior of Oligo Phenylene Ethynylenes: From Molecular to Supramolecular Properties. Langmuir, 2009, 25, 21-25.	3.5	55
58	Conjugated Polyelectrolyte Capsules: Light-Activated Antimicrobial Micro â€œRoach Motelsâ€: ACS Applied Materials & Interfaces, 2009, 1, 48-52.	8.0	105
59	Light and dark biocidal activity of cationic poly(arylene ethynylene) conjugated polyelectrolytes. Photochemical and Photobiological Sciences, 2009, 8, 998.	2.9	61
60	Conjugated Polyelectrolyte Supported Bead Based Assays for Phospholipase A2 Activity. Journal of Physical Chemistry B, 2008, 112, 14492-14499.	2.6	57
61	Light-Induced Biocidal Action of Conjugated Polyelectrolytes Supported on Colloids. Langmuir, 2008, 24, 11053-11062.	3.5	132
62	Conjugated Polyelectrolyte-Grafted Silica Microspheres. Langmuir, 2007, 23, 4541-4548.	3.5	58
63	Superquenching as a detector for microsphere-based flow cytometric assays. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2006, 69A, 335-341.	1.5	16
64	Cooperative self-assembly of cyanines on carboxymethylamylose and other anionic scaffolds as tools for fluorescence-based biochemical sensing. Pure and Applied Chemistry, 2006, 78, 2313-2323.	1.9	24
65	Biocidal Activity of a Light-Absorbing Fluorescent Conjugated Polyelectrolyte. Langmuir, 2005, 21, 10154-10159.	3.5	127
66	Applications of Fluorescent Polymer Superquenching to High Throughput Screening Assays for Protein Kinases. Assay and Drug Development Technologies, 2004, 2, 183-192.	1.2	30
67	Fluorescent-conjugated polymer superquenching facilitates highly sensitive detection of proteases. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7511-7515.	7.1	210
68	Metal ion-mediated polymer superquenching for highly sensitive detection of kinase and phosphatase activities. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15295-15300.	7.1	137
69	Detection of Single Nucleotide Mismatches via Fluorescent Polymer Superquenchingâ€. Langmuir, 2003, 19, 6456-6464.	3.5	76
70	Detection of DNA Hybridization via Fluorescent Polymer Superquenching. Langmuir, 2002, 18, 7245-7249.	3.5	133
71	Surface-Enhanced Superquenching of Cyanine Dyes as J-Aggregates on Laponite Clay Nanoparticles. Langmuir, 2002, 18, 7706-7713.	3.5	64
72	Superquenching in Cyanine Pendant Poly(l-lysine) Dyes:â€‰ Dependence on Molecular Weight, Solvent, and Aggregation. Journal of the American Chemical Society, 2002, 124, 483-488.	13.7	83

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73	Tuning of Superquenching in Layered and Mixed Fluorescent Polyelectrolytes. Journal of the American Chemical Society, 2001, 123, 6726-6727.	13.7	111
74	Superquenching and Its Applications in J-Aggregated Cyanine Polymers. Langmuir, 2001, 17, 2568-2571.	3.5	43
75	Superquenching of fluorescent polyelectrolytes and its applications for chemical and biological sensing. , 2001, 4279, 94.		1
76	Surfactant-induced modification of quenching of conjugated polymer fluorescence by electron acceptors: applications for chemical sensing. Chemical Physics Letters, 2000, 330, 27-33.	2.6	114
77	Tuning the Properties of Conjugated Polyelectrolytes through Surfactant Complexation. Journal of the American Chemical Society, 2000, 122, 9302-9303.	13.7	268
78	Superquenching behavior between a conjugated polymer and molecular quenchers and its application in biological/chemical sensors. , 1999, , .		2