

David G Whitten

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5413622/publications.pdf>

Version: 2024-02-01

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	Tuning the Properties of Conjugated Polyelectrolytes through Surfactant Complexation. <i>Journal of the American Chemical Society</i> , 2000, 122, 9302-9303.	13.7	268
2	Fluorescent-conjugated polymer superquenching facilitates highly sensitive detection of proteases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 7511-7515.	7.1	210
3	Metal ion-mediated polymer superquenching for highly sensitive detection of kinase and phosphatase activities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 15295-15300.	7.1	137
4	Detection of DNA Hybridization via Fluorescent Polymer Superquenching. <i>Langmuir</i> , 2002, 18, 7245-7249.	3.5	133
5	Light-Induced Biocidal Action of Conjugated Polyelectrolytes Supported on Colloids. <i>Langmuir</i> , 2008, 24, 11053-11062.	3.5	132
6	Biocidal Activity of a Light-Absorbing Fluorescent Conjugated Polyelectrolyte. <i>Langmuir</i> , 2005, 21, 10154-10159.	3.5	127
7	Surfactant-induced modification of quenching of conjugated polymer fluorescence by electron acceptors: applications for chemical sensing. <i>Chemical Physics Letters</i> , 2000, 330, 27-33.	2.6	114
8	Tuning of Superquenching in Layered and Mixed Fluorescent Polyelectrolytes. <i>Journal of the American Chemical Society</i> , 2001, 123, 6726-6727.	13.7	111
9	Conjugated Polyelectrolyte Capsules: Light-Activated Antimicrobial Micro "Roach Motels". <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 48-52.	8.0	105
10	Direct Visualization of Bactericidal Action of Cationic Conjugated Polyelectrolytes and Oligomers. <i>Langmuir</i> , 2012, 28, 65-70.	3.5	93
11	Understanding the Dark and Light-Enhanced Bactericidal Action of Cationic Conjugated Polyelectrolytes and Oligomers. <i>Langmuir</i> , 2013, 29, 781-792.	3.5	86
12	Superquenching in Cyanine Pendant Poly(L-lysine) Dyes: Dependence on Molecular Weight, Solvent, and Aggregation. <i>Journal of the American Chemical Society</i> , 2002, 124, 483-488.	13.7	83
13	"End-Only" Functionalized Oligo(phenylene ethynylene)s: Synthesis, Photophysical and Biocidal Activity. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 3207-3212.	4.6	82
14	Conjugated Polyelectrolytes with Imidazolium Solubilizing Groups. Properties and Application to Photodynamic Inactivation of Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 28027-28034.	8.0	82
15	Selective Imaging and Inactivation of Bacteria over Mammalian Cells by Imidazolium-Substituted Polythiophene. <i>Chemistry of Materials</i> , 2017, 29, 6389-6395.	6.7	77
16	Detection of Single Nucleotide Mismatches via Fluorescent Polymer Superquenching. <i>Langmuir</i> , 2003, 19, 6456-6464.	3.5	76
17	Light and Dark-Activated Biocidal Activity of Conjugated Polyelectrolytes. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2820-2829.	8.0	76
18	Membrane Perturbation Activity of Cationic Phenylene Ethynylene Oligomers and Polymers: Selectivity against Model Bacterial and Mammalian Membranes. <i>Langmuir</i> , 2010, 26, 12509-12514.	3.5	72

#	ARTICLE	IF	CITATIONS
19	Insight into the Mechanism of Antimicrobial Conjugated Polyelectrolytes: Lipid Headgroup Charge and Membrane Fluidity Effects. <i>Langmuir</i> , 2010, 26, 5544-5550.	3.5	71
20	Light-Induced Antibacterial Activity of Symmetrical and Asymmetrical Oligophenylene Ethynyls. <i>Langmuir</i> , 2011, 27, 4956-4962.	3.5	68
21	Cationic Phenylene Ethynylene Polymers and Oligomers Exhibit Efficient Antiviral Activity. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2209-2214.	8.0	67
22	Synthesis, Self-Assembly, and Photophysical Properties of Cationic Oligo(<i>p</i> -phenyleneethynylene)s. <i>Langmuir</i> , 2011, 27, 4945-4955.	3.5	67
23	Surface-Enhanced Superquenching of Cyanine Dyes as J-Aggregates on Laponite Clay Nanoparticles. <i>Langmuir</i> , 2002, 18, 7706-7713.	3.5	64
24	Membrane activity of antimicrobial phenylene ethynylene based polymers and oligomers. <i>Soft Matter</i> , 2012, 8, 8547.	2.7	63
25	Efficient Long-Range, Directional Energy Transfer through DNA-Templated Dye Aggregates. <i>Journal of the American Chemical Society</i> , 2019, 141, 8473-8481.	13.7	63
26	Light and dark biocidal activity of cationic poly(arylene ethynylene) conjugated polyelectrolytes. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 998.	2.9	61
27	Conjugated Polyelectrolyte-Grafted Silica Microspheres. <i>Langmuir</i> , 2007, 23, 4541-4548.	3.5	58
28	Conjugated Polyelectrolyte Supported Bead Based Assays for Phospholipase A2 Activity. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14492-14499.	2.6	57
29	Synthesis, Self-Assembly, and Photophysical Behavior of Oligo Phenylene Ethynyls: From Molecular to Supramolecular Properties. <i>Langmuir</i> , 2009, 25, 21-25.	3.5	55
30	Insight into the Mechanism of Antimicrobial Poly(phenylene ethynylene) Polyelectrolytes: Interactions with Phosphatidylglycerol Lipid Membranes. <i>Langmuir 25th Year: Molecular and macromolecular self-assemblies</i> . <i>Langmuir</i> , 2009, 25, 13742-13751.	3.5	52
31	When Worlds Collide: Interactions at the Interface between Biological Systems and Synthetic Cationic Conjugated Polyelectrolytes and Oligomers. <i>Langmuir</i> , 2013, 29, 10635-10647.	3.5	52
32	Highly Effective Inactivation of SARS-CoV-2 by Conjugated Polymers and Oligomers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55688-55695.	8.0	48
33	Molecular Dynamics Simulation Study of the Interaction of Cationic Biocides with Lipid Bilayers: Aggregation Effects and Bilayer Damage. <i>Langmuir</i> , 2012, 28, 14849-14854.	3.5	46
34	Photophysics and Light-Activated Biocidal Activity of Visible-Light-Absorbing Conjugated Oligomers. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4516-4520.	8.0	44
35	Superquenching and Its Applications in J-Aggregated Cyanine Polymers. <i>Langmuir</i> , 2001, 17, 2568-2571.	3.5	43
36	Effect of Polymer Chain Length on Membrane Perturbation Activity of Cationic Phenylene Ethynylene Oligomers and Polymers. <i>Langmuir</i> , 2011, 27, 10770-10775.	3.5	42

#	ARTICLE	IF	CITATIONS
37	Dark Antimicrobial Mechanisms of Cationic Phenylene Ethynylene Polymers and Oligomers against <i>Escherichia coli</i> . <i>Polymers</i> , 2011, 3, 1199-1214.	4.5	41
38	Self-Sterilizing, Self-Cleaning Mixed Polymeric Multifunctional Antimicrobial Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27632-27638.	8.0	41
39	Antibacterial Activity of Conjugated Polyelectrolytes with Variable Chain Lengths. <i>Langmuir</i> , 2011, 27, 10763-10769.	3.5	39
40	Conjugated-Polyelectrolyte-Grafted Cotton Fibers Act as "Micro Flypaper" for the Removal and Destruction of Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2932-2937.	8.0	35
41	Applications of Fluorescent Polymer Superquenching to High Throughput Screening Assays for Protein Kinases. <i>Assay and Drug Development Technologies</i> , 2004, 2, 183-192.	1.2	30
42	Antimicrobial Activity of Cationic Conjugated Polyelectrolytes and Oligomers against <i>Saccharomyces cerevisiae</i> Vegetative Cells and Ascospores. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4555-4561.	8.0	30
43	Oligo(<i>p</i> -phenylene ethynylene) Electrolytes: A Novel Molecular Scaffold for Optical Tracking of Amyloids. <i>ACS Chemical Neuroscience</i> , 2015, 6, 1526-1535.	3.5	30
44	High Selectivity and Sensitivity of Oligomeric <i>p</i> -Phenylene Ethynylenes for Detecting Fibrillar and Prefibrillar Amyloid Protein Aggregates. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1813-1825.	3.5	29
45	Aggregation of cationic <i>p</i> -phenylene ethynylenes on Laponite clay in aqueous dispersions and solid films. <i>Journal of Colloid and Interface Science</i> , 2015, 449, 347-356.	9.4	27
46	Quantitative Determination of Dark and Light-Activated Antimicrobial Activity of Poly(Phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 Interfaces, 2020, 12, 21322-21329.	8.0	27
47	Antifungal Properties of Cationic Phenylene Ethynylenes and Their Impact on β -Glucan Exposure. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 4519-4529.	3.2	26
48	Cooperative self-assembly of cyanines on carboxymethylamylose and other anionic scaffolds as tools for fluorescence-based biochemical sensing. <i>Pure and Applied Chemistry</i> , 2006, 78, 2313-2323.	1.9	24
49	Detergent-induced self-assembly and controllable photosensitizer activity of diester phenylene ethynylenes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7278-7282.	7.1	23
50	A Retrospective: 10 Years of Oligo(phenylene-ethynylene) Electrolytes: Demystifying Nanomaterials. <i>Langmuir</i> , 2019, 35, 307-325.	3.5	23
51	Structural Basis for Aggregation Mode of oligo- <i>p</i> -Phenylene Ethynylenes with Ionic Surfactants. <i>Langmuir</i> , 2013, 29, 15732-15737.	3.5	22
52	Efficacy of End-Only-Functionalized Oligo(arylene-ethynylene)s in Killing Bacterial Biofilms. <i>Langmuir</i> , 2012, 28, 11286-11290.	3.5	19
53	Substituent, Charge, and Size Effects on the Fluorogenic Performance of Amyloid Ligands: A Small-Library Screening Study. <i>ACS Omega</i> , 2017, 2, 3192-3200.	3.5	19
54	In Vitro Cytotoxicity of Antimicrobial Conjugated Electrolytes: Interactions with Mammalian Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 9305-9311.	8.0	17

#	ARTICLE	IF	CITATIONS
55	Superquenching as a detector for microsphere-based flow cytometric assays. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2006, 69A, 335-341.	1.5	16
56	Computational Study of Bacterial Membrane Disruption by Cationic Biocides: Structural Basis for Water Pore Formation. <i>Journal of Physical Chemistry B</i> , 2014, 118, 9722-9732.	2.6	16
57	Photochemistry of ω -Oligo- <i>p</i> -phenylene Ethynylenes: Complexation with Sodium Dodecyl Sulfate Reduces Solvent Accessibility. <i>Langmuir</i> , 2013, 29, 9712-9720.	3.5	15
58	The influence of structured interfacial water on the photoluminescence of carboxyester-terminated oligo- <i>p</i> -phenylene ethynylenes. <i>Journal of Physical Organic Chemistry</i> , 2014, 27, 252-257.	1.9	15
59	Size and Substitution Effect on Antimicrobial Activity of Polythiophene Polyelectrolyte Derivatives Under Photolysis and Dark Conditions. <i>Photochemistry and Photobiology</i> , 2018, 94, 1116-1123.	2.5	15
60	Photophysics and self-assembly of symmetrical and unsymmetrical cationic oligophenylene ethynylenes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 207, 4-6.	3.9	14
61	Cationic oligo- <i>p</i> -phenylene ethynylenes form complexes with surfactants for long-term light-activated biocidal applications. <i>Photochemical and Photobiological Sciences</i> , 2014, 13, 247-253.	2.9	14
62	Photochemistry of a Model Cationic <i>p</i> -Phenylene Ethynylene in Water. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1363-1368.	4.6	13
63	Assessing the Sporicidal Activity of Oligo- <i>p</i> -phenylene Ethynylenes and Their Role as <i>Bacillus</i> Germinants. <i>Langmuir</i> , 2015, 31, 4481-4489.	3.5	13
64	Enzyme-Specific Sensors via Aggregation of Charged <i>p</i> -Phenylene Ethynylenes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5550-5560.	8.0	13
65	Rapid Evaluation of the Antibacterial Activity of Arylene-Ethynylene Compounds. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2938-2943.	8.0	11
66	Oligomeric Conjugated Polyelectrolytes Display Site-Preferential Binding to an MS2 Viral Capsid. <i>Langmuir</i> , 2016, 32, 12542-12551.	3.5	11
67	Activating the Antimicrobial Activity of an Anionic Singlet-Oxygen Sensitizer through Surfactant Complexation. <i>Langmuir</i> , 2014, 30, 5052-5056.	3.5	9
68	Controlled and Selective Photo-oxidation of Amyloid- β Fibrils by Oligomeric <i>p</i> -Phenylene Ethynylenes. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 14871-14886.	8.0	9
69	Skin irritation testing of antimicrobial conjugated electrolytes. <i>Biointerphases</i> , 2017, 12, 02C403.	1.6	8
70	Fluorescent Cellulose Wipe as a New and Sustainable Light-Activated Antibacterial and Antiviral Agent. , 2022, 4, 356-362.		8
71	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. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 4892-4898.	8.0	6
72	Computational Investigation of the Binding Dynamics of Oligo <i>p</i> -Phenylene Ethynylene Fluorescence Sensors and Al^2 Oligomers. <i>ACS Chemical Neuroscience</i> , 2020, 11, 3761-3771.	3.5	4

#	ARTICLE	IF	CITATIONS
73	Superquenching behavior between a conjugated polymer and molecular quenchers and its application in biological/chemical sensors. , 1999, , .		2
74	Controlled Photosensitizing Activity of Oligomeric P-Phenylene Ethynylenes on Amyloid- β Fibrils. Biophysical Journal, 2019, 116, 275a.	0.5	2
75	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
76	Superquenching of fluorescent polyelectrolytes and its applications for chemical and biological sensing. , 2001, 4279, 94.		1
77	Binding-Activated Superradiant Probes for Amyloid in Solution and Tissue. Biophysical Journal, 2016, 110, 554a.	0.5	1
78	Remembering Françoise Winnik. Langmuir, 2021, 37, 7627-7629.	3.5	0