Ivan Dmochowski

List of Publications by Year
in descending order

95	3,835	81743	138251
papers	citations	39 h-index	58 g-index

99	99	99	3486
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Counteranions at Peripheral Sites Tune Guest Affinity for a Protonated Hemicryptophane. Journal of Organic Chemistry, 2022, 87, 5158-5165.	1.7	2
2	Cryptophaneâ€“xenon complexes for ¹²⁹Xe MRI applications. RSC Advances, 2021, 11, 7693-7703.	1.7	12
3	Conditionally Activated (â€œCagedâ€) Oligonucleotides. Molecules, 2021, 26, 1481.	1.7	7
4	Photoactivatable Circular Caged Oligonucleotides for Transcriptome In Vivo Analysis (TIVA). ChemPhotoChem, 2021, 5, 940-946.	1.5	9
5	Monomeric Cryptophane with Record-High Xe Affinity Gives Insights into Aggregation-Dependent Sensing. Analytical Chemistry, 2021, 93, 1507-1514.	3.2	7
6	Design of a Superpositively Charged Enzyme: Human Carbonic Anhydrase II Variant with Ferritin Encapsulation and Immobilization. Biochemistry, 2021, 60, 3596-3609.	1.2	8
7	Caspase-Activated Oligonucleotide Probe. Bioconjugate Chemistry, 2020, 31, 2172-2178.	1.8	3
8	Oligonucleotide Probe for Transcriptome in Vivo Analysis (TIVA) of Single Neurons with Minimal Background. ACS Chemical Biology, 2020, 15, 2714-2721.	1.6	8
9	Detecting proteinâ€“protein interactions by Xe-129 NMR. Chemical Communications, 2020, 56, 11122-11125.	2.2	9
10	Paramagnetic Shifts and Guest Exchange Kinetics in Co_nFe_{4â€“n} Metalâ€“Organic Capsules. Inorganic Chemistry, 2020, 59, 12758-12767.	1.9	14
11	¹²⁹Xe NMR-Protein Sensor Reveals Cellular Ribose Concentration. Analytical Chemistry, 2020, 92, 12817-12824.	3.2	10
12	Ultrasound Responsive Noble Gas Microbubbles for Applications in Imageâ€Guided Gas Delivery. Advanced Healthcare Materials, 2020, 9, 1901721.	3.9	11
13	Paramagnetic Organocobalt Capsule Revealing Xenon Hostâ€“Guest Chemistry. Inorganic Chemistry, 2020, 59, 13831-13844.	1.9	23
14	In situ analysis and imaging of aromatic amidine at varying ligand densities in solid phase. Analytical and Bioanalytical Chemistry, 2019, 411, 1549-1559.	1.9	0
15	Ruthenium-cross-linked hydrogels for rapid, visible-light protein release. Methods in Enzymology, 2019, 624, 151-166.	0.4	4
16	Designing photolabile ruthenium polypyridyl crosslinkers for hydrogel formation and multiplexed, visible-light degradation. RSC Advances, 2019, 9, 4942-4947.	1.7	20
17	A Structural Basis for ¹²⁹Xe Hyperâ€CEST Signal in TEMâ€1 Î²â€Lactamase. ChemPhysChem, 2019, 20, 260-267.	1.0	17
18	Ferritin-based drug delivery systems: Hybrid nanocarriers for vascular immunotargeting. Journal of Controlled Release, 2018, 282, 13-24.	4.8	92

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19	Efficient Synthesis of Lightâ€Triggered Circular Antisense Oligonucleotides Targeting Cellular Protein Expression. ChemBioChem, 2018, 19, 1250-1254.	1.3	27
20	Frontispiece: Rutheniumâ€Crosslinked Hydrogels with Rapid, Visibleâ€Light Degradation. Chemistry - A European Journal, 2018, 24, .	1.7	0
21	Ferritin Nanocages with Biologically Orthogonal Conjugation for Vascular Targeting and Imaging. Bioconjugate Chemistry, 2018, 29, 1209-1218.	1.8	32
22	Circular siRNAs for Reducing Off-Target Effects and Enhancing Long-Term Gene Silencing in Cells and Mice. Molecular Therapy - Nucleic Acids, 2018, 10, 237-244.	2.3	36
23	Rutheniumâ€Crosslinked Hydrogels with Rapid, Visibleâ€Light Degradation. Chemistry - A European Journal, 2018, 24, 2328-2333.	1.7	36
24	Spatially controlled assembly of affinity ligand and enzyme cargo enables targeting ferritin nanocarriers to caveolae. Biomaterials, 2018, 185, 348-359.	5.7	49
25	Cryptophane Nanoscale Assemblies Expand ¹²⁹Xe NMR Biosensing. Analytical Chemistry, 2018, 90, 7730-7738.	3.2	13
26	Fluorescent Anesthetics. Methods in Enzymology, 2018, 603, 93-101.	0.4	0
27	A proteinâ€“protein hostâ€“guest complex: Thermostable ferritin encapsulating positively supercharged green fluorescent protein. Protein Science, 2018, 27, 1755-1766.	3.1	17
28	Xenonâ€“Protein Interactions: Characterization by X-Ray Crystallography and Hyper-CEST NMR. Methods in Enzymology, 2018, 602, 249-272.	0.4	14
29	Structural-functional analysis of engineered protein-nanoparticle assemblies using graphene microelectrodes. Chemical Science, 2017, 8, 5329-5334.	3.7	4
30	A cryptophane-based â€œturn-onâ€•129Xe NMR biosensor for monitoring calmodulin. Organic and Biomolecular Chemistry, 2017, 15, 8883-8887.	1.5	10
31	Oligonucleotide modifications enhance probe stability for single cell transcriptomein vivoanalysis (TIVA). Organic and Biomolecular Chemistry, 2017, 15, 10001-10009.	1.5	11
32	Nanomolar small-molecule detection using a genetically encoded¹²⁹Xe NMR contrast agent. Chemical Science, 2017, 8, 7631-7636.	3.7	24
33	Controlling gold nanoparticle seeded growth in thermophilic ferritin protein templates. Journal of Inorganic Biochemistry, 2017, 174, 169-176.	1.5	15
34	Thermophilic Ferritin 24mer Assembly and Nanoparticle Encapsulation Modulated by Interdimer Electrostatic Repulsion. Biochemistry, 2017, 56, 3596-3606.	1.2	31
35	Programming A Molecular Relay for Ultrasensitive Biodetection through ¹²⁹Xeâ€...NMR. Angewandte Chemie, 2016, 128, 1765-1768.	1.6	10
36	A Genetically Encoded Î²â€Lactamase Reporter for Ultrasensitive ¹²⁹Xe NMR in Mammalian Cells. Angewandte Chemie, 2016, 128, 9130-9133.	1.6	8

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37	A Genetically Encoded Î²â€Lactamase Reporter for Ultrasensitive ¹²⁹Xe NMR in Mammalian Cells. Angewandte Chemie - International Edition, 2016, 55, 8984-8987.	7.2	50
38	Ferritin: Versatile Host, Nanoreactor, and Delivery Agent. Israel Journal of Chemistry, 2016, 56, 660-670.	1.0	18
39	An Expanded Palette of Xenon-129 NMR Biosensors. Accounts of Chemical Research, 2016, 49, 2179-2187.	7.6	65
40	Kinetics and Photochemistry of Ruthenium Bisbipyridine Diacetonitrile Complexes: An Interdisciplinary Inorganic and Physical Chemistry Laboratory Exercise. Journal of Chemical Education, 2016, 93, 2101-2105.	1.1	13
41	Programming A Molecular Relay for Ultrasensitive Biodetection through ¹²⁹Xeâ€¦NMR. Angewandte Chemie - International Edition, 2016, 55, 1733-1736.	7.2	26
42	Vascular Accessibility of Endothelial Targeted Ferritin Nanoparticles. Bioconjugate Chemistry, 2016, 27, 628-637.	1.8	28
43	Xe affinities of water-soluble cryptophanes and the role of confined water. Chemical Science, 2015, 6, 7238-7248.	3.7	21
44	Cryptophane-Folate Biosensor for ¹²⁹Xe NMR. Bioconjugate Chemistry, 2015, 26, 101-109.	1.8	36
45	Enantiopure cryptophane-¹²⁹Xe nuclear magnetic resonance biosensors targeting carbonic anhydrase. Supramolecular Chemistry, 2015, 27, 65-71.	1.5	16
46	Caging Metal Ions with Visible Light-Responsive Nanopolymersomes. Langmuir, 2015, 31, 799-807.	1.6	12
47	Caged oligonucleotides for studying biological systems. Journal of Inorganic Biochemistry, 2015, 150, 182-188.	1.5	48
48	Ruthenium-caged antisense morpholinos for regulating gene expression in zebrafish embryos. Chemical Science, 2015, 6, 2342-2346.	3.7	56
49	Cucurbit[6]uril is an ultrasensitive¹²⁹Xe NMR contrast agent. Chemical Communications, 2015, 51, 8982-8985.	2.2	68
50	A â€œSmartâ€•¹²⁹Xe NMR Biosensor for pH-Dependent Cell Labeling. Journal of the American Chemical Society, 2015, 137, 5542-5548.	6.6	71
51	Taxane modulation of anesthetic sensitivity in surgery for nonmetastatic breast cancer. Journal of Clinical Anesthesia, 2015, 27, 481-485.	0.7	4
52	Ferritin Encapsulation and Templated Synthesis of Inorganic Nanoparticles. Methods in Molecular Biology, 2015, 1252, 27-37.	0.4	10
53	Engineering a well-ordered, functional protein-gold nanoparticle assembly. Journal of Inorganic Biochemistry, 2014, 130, 59-68.	1.5	31
54	Transcriptome in vivo analysis (TIVA) of spatially defined single cells in live tissue. Nature Methods, 2014, 11, 190-196.	9.0	235

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55	Bacterial spore detection and analysis using hyperpolarized ¹²⁹Xe chemical exchange saturation transfer (Hyper-CEST) NMR. Chemical Science, 2014, 5, 3197-3203.	3.7	42
56	Caged oligonucleotides for bidirectional photomodulation of let-7 miRNA in zebrafish embryos. Bioorganic and Medicinal Chemistry, 2013, 21, 6198-6204.	1.4	47
57	Direct Modulation of Microtubule Stability Contributes to Anthracene General Anesthesia. Journal of the American Chemical Society, 2013, 135, 5389-5398.	6.6	45
58	Utilizing a Water-Soluble Cryptophane with Fast Xenon Exchange Rates for Picomolar Sensitivity NMR Measurements. Analytical Chemistry, 2012, 84, 9935-9941.	3.2	62
59	Synthesis of Enantiopure, Trisubstituted Cryptophane-A Derivatives. Organic Letters, 2012, 14, 3580-3583.	2.4	29
60	Mismatch discrimination and efficient photomodulation with split 10â€“23 DNAzymes. Inorganica Chimica Acta, 2012, 380, 386-391.	1.2	22
61	Beyond the detergent effect: a binding site for sodium dodecyl sulfate (SDS) in mammalian apoferritin. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 497-504.	2.5	12
62	A Novel Fluorescent General Anesthetic Enables Imaging of Sites of Action In VivoÂ. Anesthesiology, 2012, 116, 1363-1363.	1.3	5
63	Multiple Hindered Rotators in a Gyroscope-Inspired Tribenzylamine Hemicryptophane. Journal of Organic Chemistry, 2011, 76, 1418-1424.	1.7	39
64	Shorter Synthesis of Trifunctionalized Cryptophane-A Derivatives. Organic Letters, 2011, 13, 1414-1417.	2.4	45
65	Cell-compatible, integrin-targeted cryptophane-129XeNMR biosensors. Chemical Science, 2011, 2, 1103-1110.	3.7	79
66	Measurement of radon and xenon binding to a cryptophane molecular host. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10969-10973.	3.3	59
67	Sensing membrane stress with near IR-emissive porphyrins. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13984-13989.	3.3	56
68	A Generalized System for Photoresponsive Membrane Rupture in Polymersomes. Advanced Functional Materials, 2010, 20, 2588-2596.	7.8	39
69	Turning the 10â€“23 DNAzyme On and Off with Light. ChemBioChem, 2010, 11, 320-324.	1.3	69
70	Functionalized 129Xe contrast agents for magnetic resonance imaging. Current Opinion in Chemical Biology, 2010, 14, 97-104.	2.8	75
71	Crystallographic observation of 'induced fit' in a cryptophane hostâ€“guest model system. Nature Communications, 2010, 1, 148.	5.8	91
72	Xenon out of its shell. Nature Chemistry, 2009, 1, 250-250.	6.6	16

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73	Cryptophane Xenon-129 Nuclear Magnetic Resonance Biosensors Targeting Human Carbonic Anhydrase. Journal of the American Chemical Society, 2009, 131, 563-569.	6.6	136
74	Efficient Self-Assembly of Archaeoglobus fulgidus Ferritin around Metallic Cores. Langmuir, 2009, 25, 5219-5225.	1.6	60
75	Photoinitiated Destruction of Composite Porphyrinâ^'Protein Polymersomes. Journal of the American Chemical Society, 2009, 131, 3872-3874.	6.6	69
76	Substituent Effects on Xenon Binding Affinity and Solution Behavior of Water-Soluble Cryptophanes. Journal of the American Chemical Society, 2009, 131, 3069-3077.	6.6	81
77	Identification of a fluorescent general anesthetic, 1-aminoanthracene. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6501-6506.	3.3	44
78	RNA bandages for photoregulating in vitro protein synthesis. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 6255-6258.	1.0	38
79	Directing Noble Metal Ion Chemistry within a Designed Ferritin Protein[,]. Biochemistry, 2008, 47, 12729-12739.	1.2	84
80	Structure of a 129Xe-Cryptophane Biosensor Complexed with Human Carbonic Anhydrase II. Journal of the American Chemical Society, 2008, 130, 6942-6943.	6.6	58
81	Peptide-Mediated Cellular Uptake of Cryptophane. Bioconjugate Chemistry, 2008, 19, 2129-2135.	1.8	64
82	Regulating gene expression in human leukemia cells using light-activated oligodeoxynucleotides. Nucleic Acids Research, 2007, 36, 559-569.	6.5	79
83	Regulating gene expression with light-activated oligonucleotides. Molecular BioSystems, 2007, 3, 100-110.	2.9	136
84	Regulating Gene Expression in Zebrafish Embryos Using Light-Activated, Negatively Charged Peptide Nucleic Acids. Journal of the American Chemical Society, 2007, 129, 11000-11001.	6.6	111
85	Thermodynamics of Xenon Binding to Cryptophane in Water and Human Plasma. Journal of the American Chemical Society, 2007, 129, 9262-9263.	6.6	69
86	Taking control of gene expression with light-activated oligonucleotides. BioTechniques, 2007, 43, 161-171.	0.8	42
87	Structure and activity of apoferritin-stabilized gold nanoparticles. Journal of Inorganic Biochemistry, 2007, 101, 1719-1729.	1.5	61
88	Design of Functional Ferritin-Like Proteins with Hydrophobic Cavities. Journal of the American Chemical Society, 2006, 128, 6611-6619.	6.6	55
89	Designing129Xe NMR Biosensors for Matrix Metalloproteinase Detection. Journal of the American Chemical Society, 2006, 128, 13274-13283.	6.6	134
90	Synthesis of light-activated antisense oligodeoxynucleotide. Nature Protocols, 2006, 1, 3041-3048.	5.5	24

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91	Controlling RNA Digestion by RNase H with a Light-Activated DNA Hairpin. Angewandte Chemie - International Edition, 2006, 45, 3523-3526.	7.2	53
92	Photoregulation of DNA polymerase I (Klenow) with caged fluorescent oligodeoxynucleotides. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 5303-5306.	1.0	31
93	Phototriggering of Caged Fluorescent Oligodeoxynucleotides. Organic Letters, 2005, 7, 279-282.	2.4	56
94	Using Reporter Genes to Study cis-Regulatory Elements. Methods in Cell Biology, 2004, 74, 621-652.	0.5	71
95	Quantitative imaging of cis-regulatory reporters in living embryos. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12895-12900.	3.3	17