Todd W Hudnall

List of Publications by Year
in descending order

59 papers	3,329 citations	236925 25 h-index	175258 52 g-index
64 all docs	64 docs citations	64 times ranked	3292 citing authors

#	Article	IF	Citations
1	Synthesis, optical properties and inÂvitro cell viability of novel spiropyrans and their photostationary states. Tetrahedron, 2021, 80, 131854.	1.9	17
2	Synthesis, crystal structure determination, and spectroscopic analyses of 1-chloro-2-(2,6-diisopropylphenyl)-4,4-dimethyl-2-azaspiro[5.5]undecane-3,5-dione: an unyielding precursor to a cyclic (alkyl)(amido)carbene. Acta Crystallographica Section C, Structural Chemistry, 2021, 77, 411-419.	0.5	0
3	Synthesis of Honeycombâ€Structured Beryllium Oxide via Graphene Liquid Cells. Angewandte Chemie, 2020, 132, 15864-15870.	2.0	0
4	Synthesis of Honeycombâ€Structured Beryllium Oxide via Graphene Liquid Cells. Angewandte Chemie - International Edition, 2020, 59, 15734-15740.	13.8	18
5	Microtubuleâ€Targeting 7â€Deazahypoxanthines Derived from Marine Alkaloid Rigidins: Exploration of the N3 and N9 Positions and Interaction with Multidrugâ€Resistance Proteins. ChemMedChem, 2019, 14, 322-333.	3.2	5
6	Cyclic (aryl)(amido)carbenes: pushing the Ï€-acidity of amidocarbenes through benzannulation. Chemical Communications, 2019, 55, 12300-12303.	4.1	26
7	Synthesis, Spectroscopic Characterization, and Redox Reactivity of a Cyclic (Alkyl) Amino Carbeneâ€Derived Arsamethine Cyanine Dye. Chemistry - A European Journal, 2018, 24, 9264-9268.	3.3	23
8	Novel Topologically Complex Scaffold Derived from Alkaloid Haemanthamine. Molecules, 2018, 23, 255.	3.8	11
9	Solution-processed organic light-emitting diodes with emission from a doublet exciton; using (2,4,6-trichlorophenyl)methyl as emitter. Organic Electronics, 2017, 44, 126-131.	2.6	29
10	Antimony(<scp>v</scp>) catalyzed acetalisation of aldehydes: an efficient, solvent-free, and recyclable process. Green Chemistry, 2017, 19, 1990-1998.	9.0	29
11	Photochemically Switching Diamidocarbene Spin States Leads to Reversible BÃ¼chner Ring Expansions. Journal of the American Chemical Society, 2017, 139, 14807-14814.	13.7	25
12	Stepwise Reduction of an Î±â€Phosphonioâ€“Carbocation to a Crystalline Phosphorus Radical Cation and an Acridinylâ€“Phosphorus Ylide. Chemistry - A European Journal, 2016, 22, 2882-2886.	3.3	12
13	Near-infrared fluorescent aza-BODIPY dye-loaded biodegradable polymeric nanoparticles for optical cancer imaging. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	10
14	Frontispiece: Stepwise Reduction of an Î±â€Phosphonioâ€“Carbocation to a Crystalline Phosphorus Radical Cation and an Acridinylâ€“Phosphorus Ylide. Chemistry - A European Journal, 2016, 22, .	3.3	1
15	Antimony(<scp>v</scp>) cations for the selective catalytic transformation of aldehydes into symmetric ethers, Î±,Î²-unsaturated aldehydes, and 1,3,5-trioxanes. Dalton Transactions, 2016, 45, 11150-11161.	3.3	48
16	Reduction of a diamidocarbene-supported borenium cation: isolation of a neutral boryl-substituted radical and a carbene-stabilized aminoborylene. Dalton Transactions, 2016, 45, 9820-9826.	3.3	73
17	Carbene-derived Î±-acyl formamidinium cations: organic molecules with readily tunable multiple redox processes. Chemical Communications, 2016, 52, 9024-9027.	4.1	33
18	CHAPTER 5. Main Group Complexes with N-Heterocyclic Carbenes: Bonding, Stabilization and Applications in Catalysis. RSC Catalysis Series, 2016, , 178-237.	0.1	3

#	Article	IF	Citations
19	Exploring the redox reactivity of the [B20H18]2â˜ ion with carbon-based nucleophiles and electrophiles. Journal of Organometallic Chemistry, 2015, 798, 141-145.	1.8	2
20	Metalâ€Free Stabilization of Monomeric Antimony(I): A Carbeneâ€Supported Stibinidene. Chemistry - A European Journal, 2014, 20, 8914-8917.	3.3	43
21	L_gâ€‰=â€‰100â€‰nm In_{0.7}Ga_{0.3}As quantum well metal-oxide semiconductor field-effect transistors with atomic layer deposited beryllium oxide as interfacial layer. Applied Physics Letters, 2014, 104, 163502.	3.3	7
22	Characterization of ALD Beryllium Oxide as a Potential High-k Gate Dielectric for Low-Leakage AlGaN/GaN MOSHEMTs. Journal of Electronic Materials, 2014, 43, 151-154.	2.2	13
23	Phosphaalkene vs. phosphinidene: the nature of the Pâ€“C bond in carbonyl-decorated carbene â†’ PPh adducts. Chemical Communications, 2014, 50, 162-164.	4.1	99
24	Investigation of atomic layer deposited beryllium oxide material properties for high-k dielectric applications. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	1.2	17
25	Atomic layer etching of BeO using BCl3/Ar for the interface passivation layer of IIIâ€“V MOS devices. Microelectronic Engineering, 2014, 114, 121-125.	2.4	16
26	Preparation and Use of Carbonyl-decorated Carbenes in the Activation of White Phosphorus. Journal of Visualized Experiments, 2014, , e52149.	0.3	0
27	Reactivity of tetrahydrochromeno[2,3â€b]indoles: chromic indicators of cyanide. Journal of Physical Organic Chemistry, 2013, 26, 688-695.	1.9	6
28	A comparative study of gate first and last Si MOSFETs fabrication processes using ALD beryllium oxide as an interface passivation layer. , 2013, , .		0
29	Isolation of a Neutral P₈ Cluster by [2+2] Cycloaddition of a Diphosphene Facilitated by Carbene Activation of White Phosphorus. Angewandte Chemie - International Edition, 2013, 52, 4462-4465.	13.8	55
30	Innentitelbild: Isolation of a Neutral P8Cluster by [2+2] Cycloaddition of a Diphosphene Facilitated by Carbene Activation of White Phosphorus (Angew. Chem. 16/2013). Angewandte Chemie, 2013, 125, 4372-4372.	2.0	0
31	Low interface defect density of atomic layer deposition BeO with self-cleaning reaction for InGaAs metal oxide semiconductor field effect transistors. Applied Physics Letters, 2013, 103, .	3.3	11
32	Spectroscopic evaluation of band alignment of atomic layer deposited BeO on Si(100). Applied Physics Letters, 2012, 100, .	3.3	18
33	A study of capping layers for sulfur monolayer doping on III-V junctions. Applied Physics Letters, 2012, 101, .	3.3	21
34	Comparative Study of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mn mathvariant="bold">2</mml:mn></mml:msub></mml:mrow></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M2"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Al</mml:mtext></mml:mrow><mml:mn mathvariant="bold">2</mml:mn></mml:msub><mml:msub><mml:mrow><mml:mtext>O</mml:mtext></mml:mrow><mml:mn mathva	0.3	5
35	Amino-Acrylamido Carbenes: Modulating Carbene Reactivity via Decoration with an Î±,Î²-Unsaturated Carbonyl Moiety. Organometallics, 2012, 31, 4862-4870.	2.3	25
36	Novel atomic layer deposited thin film beryllium oxide for InGaAs MOS Devices. , 2012, , .		1

#	Article	IF	Citations
37	A study of novel ALD beryllium oxide as an interface passivation layer for Si MOS devices. , 2012, , .		2
38	Rapid aqueous [18F]-labeling of a bodipy dye for positron emission tomography/fluorescence dual modality imaging. Chemical Communications, 2011, 47, 9324.	4.1	97
39	Inversion type InP metal oxide semiconductor field effect transistor using novel atomic layer deposited BeO gate dielectric. Applied Physics Letters, 2011, 99, 033502.	3.3	13
40	Epitaxial ALD BeO: Efficient Oxygen Diffusion Barrier for EOT Scaling and Reliability Improvement. IEEE Transactions on Electron Devices, 2011, 58, 4384-4392.	3.0	23
41	Comparison of the self-cleaning effects and electrical characteristics of BeO and Al2O3 deposited as an interface passivation layer on GaAs MOS devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	25
42	ALD beryllium oxide: Novel barrier layer for high performance gate stacks on Si and high mobility substrates. , 2011, , .		1
43	Quinobis(imidazolylidene): Synthesis and Study of an Electronâ€Configurable Bis(Nâ€Heterocyclic) Tj ETQq1 1 0.784314 rgBT /Overlo	3.3	89
44	Substitution of hydroxide by fluoride at the boron center of a BODIPY dye. Journal of Fluorine Chemistry, 2010, 131, 1182-1186.	1.7	36
45	A Seven-MemberedN,Nâ€²-Diamidocarbene. Organometallics, 2010, 29, 4569-4578.	2.3	117
46	N,Nâ€²-Diamidoketenimines via Coupling of Isocyanides to an N-Heterocyclic Carbene. Journal of Organic Chemistry, 2010, 75, 2763-2766.	3.2	88
47	Ion-Mediated Electron Transfer in a Supramolecular Donor-Acceptor Ensemble. Science, 2010, 329, 1324-1327.	12.6	154
48	Ammonia Nâ€“H activation by a N,Nâ€²-diamidocarbene. Chemical Communications, 2010, 46, 4288.	4.1	168
49	An N,Nâ€²-Diamidocarbene: Studies in Câˆ’H Insertion, Reversible Carbonylation, and Transition-Metal Coordination Chemistry. Journal of the American Chemical Society, 2009, 131, 16039-16041.	13.7	288
50	Fluoride Ion Recognition by Chelating and Cationic Boranes. Accounts of Chemical Research, 2009, 42, 388-397.	15.6	494
51	Azide ion recognition in waterâ€“CHCl3 using a chelating phosphonium borane as a receptor. Chemical Communications, 2009, , 3729.	4.1	47
52	Fluoride ion complexation by a B2/Hg heteronuclear tridentate lewis acid. Dalton Transactions, 2008, , 4442.	3.3	55
53	A BODIPY boronium cation for the sensing of fluoride ions. Chemical Communications, 2008, , 4596.	4.1	159
54	Fluoride Ion Chelation By a Bidentate Phosphonium/Borane Lewis Acid. Journal of the American Chemical Society, 2008, 130, 10890-10891.	13.7	216

#	Article	IF	Citations
55	ortho-Borylated trifluoroacetanilides: synthesis and fluoride ion binding properties. Main Group Chemistry, 2007, 5, 319-327.	0.8	9
56	Ammonium Boranes for the Selective Complexation of Cyanide or Fluoride Ions in Water. Journal of the American Chemical Society, 2007, 129, 11978-11986.	13.7	364
57	Hybrid Lewis Acid/Hydrogen-Bond Donor Receptor for Fluoride. Organic Letters, 2006, 8, 2747-2749.	4.6	94
58	Aliphatic-aromatic copolyesters derived from 2,2,4,4-tetramethyl-1,3-cyclobutanediol. Journal of Polymer Science Part A, 2004, 42, 3473-3478.	2.3	24
59	A Diamidocarbene-Supported Aminoborylene: Characterization and Discussion of the Elusive Crystal Structurepl. make the figures 1 and 3 bigger in PDF. the lines are too thin.. Journal of Chemical Crystallography, 0, , .	1.1	1