

Todd W Hudnall

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6826564/publications.pdf>

Version: 2024-02-01

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	Fluoride Ion Recognition by Chelating and Cationic Boranes. <i>Accounts of Chemical Research</i> , 2009, 42, 388-397.	15.6	494
2	Ammonium Boranes for the Selective Complexation of Cyanide or Fluoride Ions in Water. <i>Journal of the American Chemical Society</i> , 2007, 129, 11978-11986.	13.7	364
3	An $\text{N,N}^{\text{-}}\text{-Diamidocarbene}$: Studies in $\text{C}^{\text{-}}\text{H}$ Insertion, Reversible Carbonylation, and Transition-Metal Coordination Chemistry. <i>Journal of the American Chemical Society</i> , 2009, 131, 16039-16041.	13.7	288
4	Fluoride Ion Chelation By a Bidentate Phosphonium/Borane Lewis Acid. <i>Journal of the American Chemical Society</i> , 2008, 130, 10890-10891.	13.7	216
5	Ammonia $\text{N}^{\text{-}}\text{H}$ activation by a $\text{N,N}^{\text{-}}\text{-diamidocarbene}$. <i>Chemical Communications</i> , 2010, 46, 4288.	4.1	168
6	A BODIPY boronium cation for the sensing of fluoride ions. <i>Chemical Communications</i> , 2008, , 4596.	4.1	159
7	Ion-Mediated Electron Transfer in a Supramolecular Donor-Acceptor Ensemble. <i>Science</i> , 2010, 329, 1324-1327.	12.6	154
8	A Seven-Membered $\text{N,N}^{\text{-}}\text{-Diamidocarbene}$. <i>Organometallics</i> , 2010, 29, 4569-4578.	2.3	117
9	Phosphaalkene vs. phosphinidene: the nature of the $\text{P}^{\text{-}}\text{C}$ bond in carbonyl-decorated carbene $\text{at}^{\text{-}}$ PPh adducts. <i>Chemical Communications</i> , 2014, 50, 162-164.	4.1	99
10	Rapid aqueous ^{18}F -labeling of a bodipy dye for positron emission tomography/fluorescence dual modality imaging. <i>Chemical Communications</i> , 2011, 47, 9324.	4.1	97
11	Hybrid Lewis Acid/Hydrogen-Bond Donor Receptor for Fluoride. <i>Organic Letters</i> , 2006, 8, 2747-2749.	4.6	94
12	Quinobis(imidazolylidene): Synthesis and Study of an Electron-Configurable Bis($\text{N}^{\text{-}}\text{H}$ -Heterocyclic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.3	89
13	$\text{N,N}^{\text{-}}\text{-Diamidoketenimines}$ via Coupling of Isocyanides to an N -Heterocyclic Carbene. <i>Journal of Organic Chemistry</i> , 2010, 75, 2763-2766.	3.2	88
14	Reduction of a diamidocarbene-supported borenium cation: isolation of a neutral boryl-substituted radical and a carbene-stabilized aminoborylene. <i>Dalton Transactions</i> , 2016, 45, 9820-9826.	3.3	73
15	Fluoride ion complexation by a B_2/Hg heteronuclear tridentate lewis acid. <i>Dalton Transactions</i> , 2008, , 4442.	3.3	55
16	Isolation of a Neutral P_8 Cluster by $[2+2]$ Cycloaddition of a Diphosphene Facilitated by Carbene Activation of White Phosphorus. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4462-4465.	13.8	55
17	Antimony(scpv) cations for the selective catalytic transformation of aldehydes into symmetric ethers, $\text{I}^{\text{-}}$, $\text{I}^{\text{-}}$ -unsaturated aldehydes, and 1,3,5-trioxanes. <i>Dalton Transactions</i> , 2016, 45, 11150-11161.	3.3	48
18	Azide ion recognition in water $\text{at}^{\text{-}}\text{CHCl}_3$ using a chelating phosphonium borane as a receptor. <i>Chemical Communications</i> , 2009, , 3729.	4.1	47

#	ARTICLE	IF	CITATIONS
19	Metal-Free Stabilization of Monomeric Antimony(I): A Carbene-Supported Stibinidene. <i>Chemistry - A European Journal</i> , 2014, 20, 8914-8917.	3.3	43
20	Substitution of hydroxide by fluoride at the boron center of a BODIPY dye. <i>Journal of Fluorine Chemistry</i> , 2010, 131, 1182-1186.	1.7	36
21	Carbene-derived $\hat{1}\pm$ -acyl formamidinium cations: organic molecules with readily tunable multiple redox processes. <i>Chemical Communications</i> , 2016, 52, 9024-9027.	4.1	33
22	Solution-processed organic light-emitting diodes with emission from a doublet exciton; using (2,4,6-trichlorophenyl)methyl as emitter. <i>Organic Electronics</i> , 2017, 44, 126-131.	2.6	29
23	Antimony($\langle\text{scpv}\rangle$) catalyzed acetalisation of aldehydes: an efficient, solvent-free, and recyclable process. <i>Green Chemistry</i> , 2017, 19, 1990-1998.	9.0	29
24	Cyclic (aryl)(amido)carbenes: pushing the $\hat{1}\epsilon$ -acidity of amidocarbenes through benzannulation. <i>Chemical Communications</i> , 2019, 55, 12300-12303.	4.1	26
25	Comparison of the self-cleaning effects and electrical characteristics of BeO and Al ₂ O ₃ deposited as an interface passivation layer on GaAs MOS devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011, 29, .	2.1	25
26	Amino-Acrylamido Carbenes: Modulating Carbene Reactivity via Decoration with an $\hat{1}\pm, \hat{1}^2$ -Unsaturated Carbonyl Moiety. <i>Organometallics</i> , 2012, 31, 4862-4870.	2.3	25
27	Photochemically Switching Diamidocarbene Spin States Leads to Reversible B $\hat{1}$ / $\hat{4}$ chner Ring Expansions. <i>Journal of the American Chemical Society</i> , 2017, 139, 14807-14814.	13.7	25
28	Aliphatic-aromatic copolyesters derived from 2,2,4,4-tetramethyl-1,3-cyclobutanediol. <i>Journal of Polymer Science Part A</i> , 2004, 42, 3473-3478.	2.3	24
29	Epitaxial ALD BeO: Efficient Oxygen Diffusion Barrier for EOT Scaling and Reliability Improvement. <i>IEEE Transactions on Electron Devices</i> , 2011, 58, 4384-4392.	3.0	23
30	Synthesis, Spectroscopic Characterization, and Redox Reactivity of a Cyclic (Alkyl) Amino Carbene-Derived Arsamethine Cyanine Dye. <i>Chemistry - A European Journal</i> , 2018, 24, 9264-9268.	3.3	23
31	A study of capping layers for sulfur monolayer doping on III-V junctions. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	21
32	Spectroscopic evaluation of band alignment of atomic layer deposited BeO on Si(100). <i>Applied Physics Letters</i> , 2012, 100, .	3.3	18
33	Synthesis of Honeycomb-Structured Beryllium Oxide via Graphene Liquid Cells. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15734-15740.	13.8	18
34	Investigation of atomic layer deposited beryllium oxide material properties for high-k dielectric applications. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014, 32, .	1.2	17
35	Synthesis, optical properties and <i>in-Vitro</i> cell viability of novel spiropyran and their photostationary states. <i>Tetrahedron</i> , 2021, 80, 131854.	1.9	17
36	Atomic layer etching of BeO using BCl ₃ /Ar for the interface passivation layer of III-V MOS devices. <i>Microelectronic Engineering</i> , 2014, 114, 121-125.	2.4	16

#	ARTICLE	IF	CITATIONS
37	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
38	Characterization of ALD Beryllium Oxide as a Potential High-k Gate Dielectric for Low-Leakage AlGaIn/GaN MOSHEMTs. Journal of Electronic Materials, 2014, 43, 151-154.	2.2	13
39	Stepwise Reduction of an $\hat{\text{I}}^{\pm}$ Phosphonio Carbocation to a Crystalline Phosphorus Radical Cation and an Acridinyl Phosphorus Ylide. Chemistry - A European Journal, 2016, 22, 2882-2886.	3.3	12
40	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
41	Novel Topologically Complex Scaffold Derived from Alkaloid Haemanthamine. Molecules, 2018, 23, 255.	3.8	11
42	Near-infrared fluorescent aza-BODIPY dye-loaded biodegradable polymeric nanoparticles for optical cancer imaging. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	10
43	<i>ortho</i> -Borylated trifluoroacetanilides: synthesis and fluoride ion binding properties. Main Group Chemistry, 2007, 5, 319-327.	0.8	9
44	L_{g} ≈ 100 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
45	Reactivity of tetrahydrochromeno[2,3- <i>b</i>]indoles: chromic indicators of cyanide. Journal of Physical Organic Chemistry, 2013, 26, 688-695.	1.9	6
46	Comparative Study of SiO_2 and Al_2O_3 Microtubule Targeting 7-Deazahypoxanthines Derived from Marine Alkaloid Rigidins: Exploration of the N3 and N9 Positions and Interaction with Multidrug Resistance Proteins. ChemMedChem, 2019, 14, 322-333.	0.3	5
47	Microtubule Targeting 7-Deazahypoxanthines Derived from Marine Alkaloid Rigidins: Exploration of the N3 and N9 Positions and Interaction with Multidrug Resistance Proteins. ChemMedChem, 2019, 14, 322-333.	3.2	5
48	CHAPTER 5. Main Group Complexes with N-Heterocyclic Carbenes: Bonding, Stabilization and Applications in Catalysis. RSC Catalysis Series, 2016, , 178-237.	0.1	3
49	A study of novel ALD beryllium oxide as an interface passivation layer for Si MOS devices. , 2012, , .		2
50	Exploring the redox reactivity of the $[\text{B}_{20}\text{H}_{18}]^{2-}$ ion with carbon-based nucleophiles and electrophiles. Journal of Organometallic Chemistry, 2015, 798, 141-145.	1.8	2
51	ALD beryllium oxide: Novel barrier layer for high performance gate stacks on Si and high mobility substrates. , 2011, , .		1
52	Novel atomic layer deposited thin film beryllium oxide for InGaAs MOS Devices. , 2012, , .		1
53	Frontispiece: Stepwise Reduction of an $\hat{\text{I}}^{\pm}$ Phosphonio Carbocation to a Crystalline Phosphorus Radical Cation and an Acridinyl Phosphorus Ylide. Chemistry - A European Journal, 2016, 22, .	3.3	1
54	A Diamidocarbene-Supported Aminoborylene: Characterization and Discussion of the Elusive Crystal Structure. pl. make the figures 1 and 3 bigger in PDF. the lines are too thin.. Journal of Chemical Crystallography, 0, , .	1.1	1

#	ARTICLE	IF	CITATIONS
55	A comparative study of gate first and last Si MOSFETs fabrication processes using ALD beryllium oxide as an interface passivation layer. , 2013, , .		0
56	Innentitelbild: Isolation of a Neutral P ₈ Cluster 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
57	Preparation and Use of Carbonyl-decorated Carbenes in the Activation of White Phosphorus. Journal of Visualized Experiments, 2014, , e52149.	0.3	0
58	Synthesis of Honeycomb-Structured Beryllium Oxide via Graphene Liquid Cells. Angewandte Chemie, 2020, 132, 15864-15870.	2.0	0
59	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