Conn Center for Renewable Energy Research
Impact Report 2010 - 2020
PUBLICATIONS BY YEAR: 2016
CONN CENTER STAFF and ASSOCIATED FACULTY

AM Rev. 6/2022

		PUBLICATIONS BY YEAR	CONN CENTER STAFF & ASSOCIATED FACULTY	2016	6.295	3159		46	17	1	8	71
#	CODE	AUTHORS	TITLE	JOURNAL	IMPACT FACTOR	CITATIONS - 1/2022	YEAR	ASSOC FAC PUB	CONN STAFF-DRIVEN PUB	CENTER FACULTY COLLAB	FACULTY W/ CENTER CONTRIB	TOTAL PUBS
1	AJA	Ajayi, BP ; Kumari, S ; Jaramillo-Cabanzo, D ; Spurgeon, J ; Jasinski, J ; Sunkara, M	A rapid and scalable method for making mixed metal oxide alloys for enabling accelerated materials discovery	JOURNAL OF MATERIALS RESEARCH	1.699	21	2016		1			1
2	ASA	Asadi, M ; Kim, K ; Liu, C ; Addepalli, AV ; Abbasi, P ; Yasaei, P ; Phillips, P ; Behranginia, A ; Cerrato, JM ; Haasch, R ; Zapol, P ; Kumar, B ; Klie, RF; Abiade, J ; Curtiss, LA ; Salehi-Khojin, A	Nanostructured transition metal dichalcogenide electrocatalysts for CO2 reduction in ionic liquid	SCIENCE	37.205	605	2016				1	1
3	BAR	Barrio, P ; Kumar, M ; Lu, ZC ; Han, JB ; Xu, B ; Hammond, GB	Acidic Co-Catalysts in Cationic Gold Catalysis	CHEMISTRY-A EUROPEAN JOURNAL	5.517	23	2016	1				1
4	BEH	Behranginia, A ; Asadi, M ; Liu, C ; Yasaei, P ; Kumar, B ; Phillips, P ; Foroozan, T ; Waranius, JC ; Kim, K ; Abiade, J ; Klie, RF ; Curtiss, LA ; Salehi-Khojin, A	Highly Efficient Hydrogen Evolution Reaction Using Crystalline Layered Three-Dimensional Molybdenum Disulfides Grown on Graphene Film	CHEMISTRY OF MATERIALS	9.868	90	2016				1	1
5	BER	Berfield, TA ; Kitey, R ; Kandula, SS	Adhesion strength of lead zirconate titanate sol-gel thin films	THIN SOLID FILMS	2	13	2016	1				1
6	BUR	Burns, Christopher; Nantz, Michael; Satyavolu, Jagannadh	Synthesis of biorenewable C5 compounds utilizing D-xylose obtained from agricultural biomass	Abstracts of Papers of the American Chemical Society	14.421	0	2016		1	1		1
7	COH	Cohn, RW ; Panchapakesan, B	Ultraflexible nanostructures and implications for future nanorobots	SENSORS FOR NEXT-GENERATION ROBOTICS III	N/A	0	2016	1				1
8	COH	Cohn, RW ; Panchapakesan, B	Spatially Nonuniform Heating and the Nonlinear Transient Response of Elastomeric Photomechanical Actuators	ACTUATORS	1.72	1	2016	1				1
9	CRA	Crain, MM ; McNamara, S ; Depuy, G ; Keynton, RS	Formation of SiO2/Si3N4/SiO2 Positive and Negative Electrets on a Silicon Substrate	JOURNAL OF MICROELECTROMECHANICAL SYSTEMS	2.495	2	2016	1				1
10	CUM	Cummins, Dustin R.; Martinez, Ulises; Sherehiy, Andriy; Kappera, Rajesh; Martinez-Garcia, Alejandro; Schulze, Roland K.; Jasinski, Jacek; Zhang, Jing; Gupta, Ram K.; Lou, Jun; Chhowalla, Manish; Sumanasekera, Gamini; Mohite, Aditya D.; Sunkara, Mahendra K.; Gupta, Gautam	Efficient hydrogen evolution in transition metal dichalcogenides via a simple one-step hydrazine reaction	Nature Communications	12.124	156	2016		1			1
11	CUM	D. R. Cummins, R. Kappera, A. Sherehiy, A. Martinez, J. Jasinski, U. Martinez, M. Chhowalla, G. Sumanasekara, A. D. Mohite, M. K. Sunkara, G. Gupta	High Catalytic activity of Hydrazine treated MoS_2 Nanowires for HER	*Nature Communications* 7, 11857 (2016)	12.124	0	2016		1			1
12	DAS	Dasari, R ; Zamborini, FP	Surface Enhanced Raman Spectroscopy at Electrochemically Fabricated Silver Nanowire Junctions	ANALYTICAL CHEMISTRY	6.713	20	2016	1				1
13	DHA	Dharmadasa, IM ; Echendu, OK ; Fauzi, F ; Salim, HI ; Abdul-Manaf, NA ; Jasinski, JB ; Sherehiy, A ; Sumanasekera, G	Study of Fermi level position before and after CdCl2 treatment of CdTe thin films using ultraviolet photoelectron spectroscopy	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2.019	12	2016		1			1
14	EBR	Ebrahimi, M ; Kazemi, H ; Mirbagheri, SA ; Rockaway, TD	An optimized biological approach for treatment of petroleum refinery wastewater	JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING	3.89	28	2016	1				1
15	FEN	Feng, XH ; Zong, ZW ; Elsaidi, SK ; Jasinski, JB ; Krishna, R ; Thallapally, PK ; Carreon, MA	Kr/Xe Separation over a Chabazite Zeolite Membrane	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	14.421	79	2016				1	1
16	GUO	Guo, YS ; Lian, YS ; Sussman, M	Investigation of drop impact on dry and wet surfaces with consideration of surrounding air	PHYSICS OF FLUIDS	2.4	65	2016	1				1
17	GUP	Gupta, M ; He, J ; Nguyen, T ; Petzold, F ; Fonseca, D ; Jasinski, JB ; Sunkara, MK	Nanowire catalysts for ultra-deep hydro-desulfurization and aromatic hydrogenation	APPLIED CATALYSIS B-ENVIRONMENTAL	9.446	52	2016		1			1
18	HAD	Haddad, AZ ; Garabato, BD ; Kozlowski, PM ; Buchanan, RM ; Grapperhaus, CA	Beyond Metal-Hydrides: Non-Transition-Metal and Metal-Free Ligand-Centered Electrocatalytic Hydrogen Evolution and Hydrogen Oxidation	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	14.421	79	2016	1				1
19	HAN	Han, X ; Mendes, SB	Spectroelectrochemical properties of ultra-thin indium tin oxide films under electric potential modulation	THIN SOLID FILMS	2	10	2016	1				1
20	HAS	Hasanzadeh, B ; Liu, FJ ; Sun, ZH	Monitoring hydration of UHPC and conventional paste by quantitative analysis on Raman patterns	CONSTRUCTION AND BUILDING MATERIALS	3.169	20	2016	1				1

21	HOR	Hord, K ; Lian, YS	Leading Edge Vortex Circulation Development on Finite Aspect Ratio Pitch-Up Wings	AIAA JOURNAL	2.563	12	2016	1				1
22	JAI	Jain, R ; Gibson, TJ ; Mashuta, MS ; Buchanan, RM ; Grapperhaus, CA	Copper catalysed aerobic oxidation of benzylic alcohols in an imidazole containing N-4 ligand framework	DALTON TRANSACTIONS	4.029	11	2016	1				1
23	JAV	Javadi, S ; Abdollahian, S ; Zhao, Q ; Ghavami, M ; Rockaway, T	Effectiveness of Heavy Metal Removal in Urban Permeable Pavement Systems	Geo-Chicago 2016: Sustainable Waste Management and Remediation	N/A	2	2016	1				1
24	KAT	Kate, KH ; Enneti, RK ; Atre, SV	Influence of feedstock properties on the injection molding of aluminum nitride	INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	2.209	7	2016	1				1
25	KAT	Kate, KH ; Enneti, RK ; McCabe, T ; Atre, SV	Simulations and injection molding experiments for aluminum nitride feedstock	CERAMICS INTERNATIONAL	2.986	17	2016	1				1
26	KIM	Kimmer, CJ ; Harnett, CK	COMBINING STRINGS AND FIBERS WITH ADDITIVE MANUFACTURING DESIGNS	PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2016,	N/A	5	2016	1				1
27	KUM	Kumar, B ; Brian, JP ; Atla, V ; Kumari, S ; Bertram, KA ; White, RT ; Spurgeon, JM	Controlling the Product Syngas H-2:CO Ratio through Pulsed-Bias Electrochemical Reduction of CO2 on Copper	ACS CATALYSIS	10.614	64	2016		1			1
28	KUM	Kumar, B ; Brian, JP ; Atla, V ; Kumari, S ; Bertram, KA ; White, RT ; Spurgeon, JM	New trends in the development of heterogeneous catalysts for electrochemical CO2 reduction	CATALYSIS TODAY	4.791	234	2016		1			1
29	KUM	Kumari, S ; White, RT ; Kumar, B ; Spurgeon, JM	Solar hydrogen production from seawater vapor electrolysis	ENERGY & ENVIRONMENTAL SCIENCE	29.518	64	2016		1			1
30	LAT	Latham, J ; McIntyre, ML ; Mohebbi, M	Parameter Estimation and a Series of Nonlinear Observers for the System Dynamics of a Linear Vapor Compressor	IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS	9.19	24	2016	1				1
31	LAV	Lavery, BW ; Kumari, S ; Konermann, H ; Draper, GL ; Spurgeon, J ; Druffel, T	Intense Pulsed Light Sintering of CH3NH3PbI3 Solar Cells	ACS APPLIED MATERIALS & INTERFACES	7.504	59	2016		1			1
32	LAV	Lavery, TDB ; Ankireddy, K ; Thad Druffel	Rapid Processing by Intense Pulsed Light of a CH3NH3PbI3 Perovskite Thin Film for Photovoltaics	2016 IEEE 43RD PHOTOVOLTAIC SPECIALISTS CONFERENCE (PVSC)	N/A	0	2016		1			1
33	LIU	Liu, FJ ; Sun, ZH	Chemical mapping of cement pastes by using confocal Raman spectroscopy	FRONTIERS OF STRUCTURAL AND CIVIL ENGINEERING	0.935	19	2016	1				1
34	LIU	Liu, FJ ; Sun, ZH	Study of Hydration Process of Cement Paste with Chemical Mapping	ACI MATERIALS JOURNAL	1.311	1	2016	1				1
35	LOE	Loeian, MS ; Cohn, RW ; Panchapakesan, B	A Thermoacoustic Model for High Aspect Ratio Nanostructures	ACTUATORS	1.72	2	2016	1				1
36	LOO	Loomis, J ; Ratnayake, D ; McKenna, C ; Walsh, KM	Grayscale lithography-automated mask generation for complex three-dimensional topography	JOURNAL OF MICRO-NANOLITHOGRAPHY MEMS AND MOEMS	1.513	17	2016	1				1
37	LU	Lu, J ; Lee, YJ ; Luo, XY ; Lau, KC ; Asadi, M ; Wang, HH ; Brombosz, S ; Wen, JG ; Zhai, DY ; Chen, ZH ; Miller, DJ ; Jeong, YS ; Park, JB ; Fang, ZZ ; Kumar, B ; Salehi-Khojin, A ; Sun, YK ; Curtiss, LA ; Amine, K	A lithium-oxygen battery based on lithium superoxide	NATURE	26.457	545	2016				1	1
38	LU	Lu, ZC ; Hetman, Z ; Hammond, GB ; Xu, B	Simultaneous rapid reaction workup and catalyst recovery	GREEN CHEMISTRY	9.125	1	2016	1				1
39	LUC	Lucas, TM ; Porter, DA ; Beharic, J ; Berfield, TA; Harnett, CK	Bistability in a symmetric out-of-plane microstructure	MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS	1.118	1	2016	1				1
40	LUI	Luitel, T ; Fernando, K ; Tatum, BS ; Alphenaar, BW ; Zamborini, FP	Increased efficiency of dye-sensitized solar cells by addition of rare earth oxide microparticles into a titania acceptor	ELECTROCHIMICA ACTA	4.798	12	2016	1				1
41	MAL	Mallajosyula, AT ; Fernando, K ; Bhatt, S ; Singh, A ; Alphenaar, BW ; Blancon, JC ; Nie, W ; Gupta, G ; Mohite, AD	Large-area hysteresis-free perovskite solar cells via temperature controlled doctor blading under ambient environment	APPLIED MATERIALS TODAY	7.286	73	2016	1				1
42	MAS	Masitas, RA ; Allen, SL ; Zamborini, FP	Size-Dependent Electrophoretic Deposition of Catalytic Gold Nanoparticles	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	14.421	47	2016	1				1
43	NGU	Nguyen, TQ ; Atla, V ; Vendra, VK ; Thapa, AK ; Jasinski, JB ; Druffel, TL ; Sunkara, MK	Scalable solvo-plasma production of porous tin oxide nanowires	CHEMICAL ENGINEERING SCIENCE	2.895	16	2016		1			1
44	NUT	Nutakki, GC ; Nasraoui, O	Compartmentalized Adaptive Topic Mining on Social Media Streams	2016 IEEE INTERNATIONAL CONFERENCE ON BIG DATA (BIG DATA)	N/A	3	2016	1				1
45	PAR	Parsons, AM ; Sharp, MK	THE POTENTIAL OF SKY RADIATION WITH CHANGE IN DESIGN PARAMETERS	PROCEEDINGS OF THE ASME 10TH INTERNATIONAL CONFERENCE ON ENERGY SUSTAINABILITY, 2016, VOL 1	N/A	6	2016	1				1

46	PAU	Paul, AC ; Reza, MA ; Liu, JJ	Dispersed-fluorescence spectroscopy of jet-cooled calcium ethoxide radical (CaoC(2)H(5))	JOURNAL OF MOLECULAR SPECTROSCOPY	1.618	9	2016	1				1
47	PON	Ponnamma, D ; Sadasivuni, KK ; Cabibihan, JJ ; Yoon, WJ ; Kumar, B	Reduced graphene oxide filled poly(dimethyl siloxane) based transparent stretchable, and touch-responsive sensors	APPLIED PHYSICS LETTERS	3.593	27	2016		1			1
48	POT	Poteat, LS ; Sharp, MK	SOLAR LOAD RATIO PARAMETERS FOR A PASSIVE SOLAR HEAT PIPE SYSTEM	PROCEEDINGS OF THE ASME 9TH INTERNATIONAL CONFERENCE ON ENERGY SUSTAINABILITY, 2015, VOL 1	N/A	0	2016	1				1
49	RAD	Radfar, A ; Rockaway, TD	Captured Runoff Prediction Model by Permeable Pavements Using Artificial Neural Networks	JOURNAL OF INFRASTRUCTURE SYSTEMS	2.112	11	2016	1				1
50	RAD	Radfar, Ata; Rockaway, Thomas Doan	Clogging Prediction of Permeable Pavement	Journal of Irrigation and Drainage Engineering	2.024	15	2016	1				1
51	RAH	Rahneshin, V ; Khosravi, F ; Ziolkowska, DA ; Jasinski, JB ; Panchapakesan, B	Chromatic Mechanical Response in 2-D Layered Transition Metal Dichalcogenide (TMDs) based Nanocomposites	SCIENTIFIC REPORTS	4.259	25	2016				1	1
52	RAJ	Rajamanickam, N ; Soundarrajan, P ; Vendra, VK ; Jasinski, JB ; Sunkara, MK ; Ramachandran, K	Efficiency enhancement of cubic perovskite BaSnO3 nanostructures based dye sensitized solar cells	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	4.189	41	2016		1			1
53	RAJ	Rajamanickam, N ; Kumari, S ; Vendra, VK ; Lavery, BW ; Spurgeon, J ; Druffel, T ; Sunkara, MK	Stable and durable CH3NH3PbI3 perovskite solar cells at ambient conditions	NANOTECHNOLOGY	3.447	61	2016		1			1
54	RAT	Ratnayake, D ; Walsh, KM	Invar Thin Films for MEMS Bistable Devices	SOUTHEASTCON 2016	0.55	4	2016	1				1
55	REZ	Reza, MA ; Paul, AC ; Reilly, NJ ; Alam, J ; Liu, JJ	Dispersed Fluorescence Spectroscopy of Jet-Cooled Isobutoxy and 2-Methyl-1-butoxy Radicals	JOURNAL OF PHYSICAL CHEMISTRY A	2.972	5	2016	1				1
56	RUS	Russ, DC ; Berson, RE	Computationally determined just suspended speed using multiphase mean age theory	CHEMICAL ENGINEERING RESEARCH & DESIGN	2.81	7	2016	1				1
57	RUS	Russ, DC ; Berson, RE	Mean age theory in multiphase systems	CHEMICAL ENGINEERING SCIENCE	2.895	10	2016	1				1
58	RUS	Russell, HB ; Andriotis, AN ; Menon, M ; Jasinski, JB ; Martinez-Garcia, A ; Sunkara, MK	Direct Band Gap Gallium Antimony Phosphide (GaSbxP1-x) Alloys	SCIENTIFIC REPORTS	4.259	42	2016		1			1
59	SAL	Salgaeva, UO ; Volyncev, AB ; Mendes, SB	Surface modification of optical materials with hydrogen plasma for fabrication of Bragg gratings	APPLIED OPTICS	1.65	7	2016	1				1
60	SCH	Schuppert, ND ; Mukherjee, S ; Bates, AM ; Son, EJ ; Choi, MJ ; Park, S	Ex-situ X-ray diffraction analysis of electrode strain at TiO2 atomic layer deposition/alpha-MoO3 interface in a novel aqueous potassium ion battery	JOURNAL OF POWER SOURCES	6.79	34	2016	1				1
61	SHU	Shuvra, PD ; McNamara, S ; Lin, JT ; Alphenaar, B ; Walsh, K ; Davidson, J	Axial asymmetry for improved sensitivity in MEMS piezoresistors	JOURNAL OF MICROMECHANICS AND MICROENGINEERING	1.794	15	2016	1				1
62	SON	S'ong, ZN ; Nambo, A ; Tate, KL ; Bao, AN ; Zhu, MQ ; Jasinsk, JB ; Zhou, SJJ ; Meyer, HS ; Carreon, MA ; Li, SG ; Yu, M	Nanovalved Adsorbents for CH4 Storage	NANO LETTERS	12.712	19	2016				1	1
63	THO	Thomas, S ; Bates, A ; Park, S ; Sahu, AK ; Lee, SC ; Son, BR ; Kim, JG ; Lee, DH	An experimental and simulation study of novel channel designs for open-cathode high-temperature polymer electrolyte membrane fuel cells	APPLIED ENERGY	7.182	21	2016	1				1
64	TOM	Toma, FM ; Cooper, JK ; Kunzelmann, V ; McDowell, MT ; Yu, J ; Larson, DM ; Borys, NJ ; Abelyan, C ; Beeman, JW ; Yu, KM ; Yang, JH ; Chen, L ; Shaner, MR ; Spurgeon, J ; Houle, FA ; Persson, KA ; Sharp, ID	Mechanistic insights into chemical and photochemical transformations of bismuth vanadate photoanodes	NATURE COMMUNICATIONS	12.124	188	2016				1	1
65	WAT	Watson, E ; McIntyre, M	PV System Architecture Improvement using nano-LAPS Boost Converter to Eliminate Cell Failure Downtime	2016 IEEE 43RD PHOTOVOLTAIC SPECIALISTS CONFERENCE (PVSC)	0.58	1	2016	1				1
66	YAN	Yang, Y ; Cornwell, LB ; Ibanez, FJ ; Zamborini, FP	Chemiresistor Arrays Prepared by Simple and Fast Vapor-Phase Thiol Place-Exchange Functionalization of Gold Monolayer-Protected Cluster Films	CHEMELECTROCHEM	4.136	5	2016	1				1
67	ZHA	R. Zhao, T. Afaneh, R. Dharmasena, J. Jasinski, G. Sumanasekera, V. Henner	Study of nitrogen doping of graphene via in-situ transport measurements	*Physica B: Condensed Matter* 490, 21-24 (2016)	1.585	9	2016				1	1
68	ZHA	Zhang, Wei; Sathitsuksanoh, Noppadon; Barone, Justin R.; Renneckar, Scott	Enhanced enzymatic saccharification of pretreated biomass using glycerol thermal processing (GTP)	Bioresource Technology	5.651	33	2016	1				1
69	ZHA	Zhang, Wei; Sathitsuksanoh, Noppadon; Simmons, Blake A.; Frazier, Charles E.; Barone, Justin R.; Renneckar, Scott	Revealing the thermal sensitivity of lignin during glycerol thermal processing through structural analysis	Rsc Advances	3.233	22	2016	1				1
70	ZHA	Zhang, WY ; Saraei, N ; Nie, HL ; Vaughn, JR ; Jones, AS ; Mashuta, MS ; Buchanan, RM ; Grapperhaus, CA	Reversible methanol addition to copper Schiff base complexes: a kinetic, structural and spectroscopic study of reactions at azomethine C = N bonds	DALTON TRANSACTIONS	4.029	11	2016	1				1

71	ZIO	Ziolkowska, DA ; Jasinski, JB ; Hamankiewicz, B ; Korona, KP ; Wu, SH ; Czerwinski, A	In Situ XRD and TEM Studies of Sol-Gel-Based Synthesis of LiFePO4	CRYSTAL GROWTH & DESIGN	4.055	19	2016	1	1