Conn Center for Renewable Energy Research
Impact Report 2010 - 2020
PUBLICATIONS BY YEAR: 2014
CONN CENTER STAFF and ASSOCIATED FACULTY

		PUBLICATIONS BY YEAR	CONN CENTER STAFF & ASSOCIATED FACULTY	2014	3.948	1533		51	15	4	15	75
#	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	AHM	M. Ahmadi, E. Macias, J. Jasinski, P. Ratnasamy, M. Carreon	Decarboxylation and further transformation of oleic acid over bifunctional, Pt/SAPO-11 and Pt/chloride Al_2O_3 catalysts	*Journal of Molecular Catalysis A: Chemical*, 386, 14-19 (2014)	3.615	65	2014				1	1
2	AND	Andriotis, A. N., G. Mpourmpakis, S. Broderick, K. Rajan, S. Datta, M. Sunkara, and M. Menon	Informatics Guided Discovery of Surface Structure-Chemistry Relationships in Catalytic Nanoparticles	*Journal of Chemical Physics* 140, no. 9 (Mar 7 2014)	2.982	45	2014				1	1
3	ANT	Antimisiaris, Marika F.; Running, Mark P.	Turning moss into algae Prenylation targets in Physcomitrella patens	Plant Signaling & Behavior	1.73	4	2014	1				1
4	BAT	Bates, Alex; Mukerjee, Santanu; Lee, Sang C.; Lee, Dong-Ha; Park, Sam	An analytical study of a lead-acid flow battery as an energy storage system	Journal of Power Sources	6.762	33	2014	1				1
5	BRO	Brockway, L., V. Vasiraju, M. K. Sunkara, and S. Vaddiraju	Engineering Efficient Thermoelectrics from Large-Scale Assemblies of Doped Zno Nanowires: Nanoscale Effects and Resonant-Level Scattering	*Acs Applied Materials & Interfaces* 6, no. 17 (Sep 10 2014): 14923-30	6.723	25	2014				1	1
6	CAR	M. L. Carreon, J. B. Jasinski, M. K. Sunkara	Low temperature synthesis of silicon nanowire arrays	*Mater. Res. Express* 1, 045006 (2014)	0	13	2014		1	1		1
7	CHA	Chauhan, Rajat; Moreno, Monica; Banda, Douglas M.; Zamborini, Francis P.; Grapperhaus, Craig A.	Chemiresistive metal-stabilized thiyl radical films as highly selective ethylene sensors	Rsc Advances	3.84	11	2014	1				1
8	CHE	Chen, Jubin; Thapa, Arjun K.; Berfield, Thomas A.	In-situ characterization of strain in lithium battery working electrodes	Journal of Power Sources	6.762	30	2014	1			1	1
9	CHH	Chhantyal-Pun, Rabi; Roudjane, Mourad; Melnik, Dmitry G.; Miller, Terry A.; Liu, Jinjun	Jet-Cooled Laser-Induced Fluorescence Spectroscopy of Isopropoxy Radical: Vibronic Analysis of (B)over-tilde-(X)over-tilde and (B)over-tilde-(A)over-tilde Band Systems	Journal of Physical Chemistry A	2.833	16	2014	1				1
10	DAL	Dalfovo, M. C., G. I. Lacconi, M. Moreno, M. C. Yappert, G. U. Sumanasekera, R. C. Salvarezza, and F. J. Ibanez	Synergy between Graphene and Au Nanoparticles (Heterojunction) Towards Quenching, Improving Raman Signal, and Uv Light Sensing	*Acs Applied Materials & Interfaces* 6, no. 9 (May 14 2014): 6384-91	6.723	31	2014				1	1
11	DEY	P. Dey, J. Bible, S. Datta, S. Broderick, J. Jasinski, M. Sunkara, M. Menon and. K. Rajan	Informatics-aided bandgap engineering for solar materials	*Computational Materials Science* 83, 185-195 (2014)	2.589	125	2014				1	1
12	DHA	Dharmadasa, I., P. Bingham, O. Echendu, H. Salim, T. Druffel, R. Dharmadasa, G. Sumanasekera, R. Dharmasena, M. Dergacheva, K. Mit, K. Urazov, L. Bowen, M. Walls and A. Abbas	Fabrication of CdS/CdTe-Based Thin Film Solar Cells Using an Electrochemical Technique	Coatings 2014, 4(3), 380-415	1.19	100	2014				1	1
13	DHA	Dharmadasa, R., B. Lavery, I. M. Dharmadasa and T. Druffel	Intense pulsed light treatment of cadmium telluride nanoparticle-based thin films	ACS Applied Materials & Interfaces 6(7): 5034-5040. DOI: 10.1021/am500124t	6.723	43	2014		1			1
14	DHA	Dharmadasa, R., I. M. Dharmadasa and T. Druffel	Intense Pulsed Light Sintering of Electrodeposited CdS Thin Films	Advanced Engineering Materials 16(11): 1351-1361. DOI: Doi 10.1002/Adem.201400008	1.963	35	2014		1			1
15	FAI	Faiz, Abderrazzak; McNamara, Shamus	Mathematical model of a nanoporous thermoelectric based Knudsen pump	Journal of Vacuum Science & Technology A	1.398	3	2014	1				1
16	FAI	Faiz, Abderrazzak; McNamara, Shamus; Bell, Alexander D.; Sumanasekera, Gamini	Nanoporous Bi2Te3 thermoelectric based Knudsen gas pump	Journal of Micromechanics and Microengineering	2.249	8	2014	1			1	1
17	FAN	Fan, X. M., B. C. King, J. Loomis, E. M. Campo, J. Hegseth, R. W. Cohn, E. Terentjev, and B. Panchapakesan	Nanotube Liquid Crystal Elastomers: Photomechanical Response and Flexible Energy Conversion of Layered Polymer Composites	*Nanotechnology* 25, no. 35 (Sep 5 2014)	4.108	17	2014	1				1
18	FER	Fernando, Kasun; Pandit, Bill; Liu, Jinjun; Alphenaar, Bruce W.	Charge transfer in rare earth oxide hybrid solar cells	Chemical Physics Letters	1.962	2	2014	1			1	1
19	FON	Fonseca, D. A., R. Lupitskyy, D. Timmons, M. Gupta, and J. Satyavoli	Towards Integrated Biorefinery from Dried Distillers Grains: Selective Extraction of Pentoses Using Dilute Acid Hydrolysis	*Biomass & Bioenergy* 71 (Dec 2014): 178-86	4.16	29	2014		1			1
20	FU	Fu, Xiao-An; Trevino, Jacob; Mehregany, Mehran; Zorman, Christian A.	Doped polycrystalline 3C-SiC films with low stress for MEMS: part I. Deposition conditions and film properties	Journal of Micromechanics and Microengineering	2.249	3	2014	1				1

21	GHO	Ghorbanian, Mahyar; Lupitskyy, Robert M.; Satyavolu, Jagannadh V.; Berson, R. Eric	Impact of Hydraulic Retention Time at Constant Organic Loading Rate in a Two- Stage Expanded Granular Sludge Bed Reactor	Environmental Engineering Science	1.205	14	2014	1		1	1
22	GHO	Ghorbanian, Mahyar; Lupitskyy, Robert M.; Satyavolu, Jagannadh V.; Berson, R. Eric	Impact of Supplemental Hydrogen on Biogas Enhancement and Substrate Removal Efficiency in a Two-Stage Expanded Granular Sludge Bed Reactor	Environmental Engineering Science	1.205	17	2014	1		1	1
23	GHO	Ghorbanian, Mahyar; Russ, David C.; Berson, R. Eric	Mixing analysis of PCS slurries in a horizontal scraped surface bioreactor	Bioprocess and Biosystems Engineering	1.997	8	2014	1			1
24	GRA	Graham, Uschi M.; Tseng, Michael T.; Jasinski, Jacek B.; Yokel, Robert A.; Unrine, Jason M.; Davis, Burtron H.; Dozier, Alan K.; Hardas, Sarita S.; Sultana, Rukhsana; Grulke, Eric A.; Butterfield, D. Allan	In Vivo Processing of Ceria Nanoparticles inside Liver: Impact on Free-Radical Scavenging Activity and Oxidative Stress	Chempluschem	3.113	63	2014	1		1	1
25	GRA	Grapperhaus, Craig A.; Zamborini, Francis P.; Chauhan, Rajat; Moreno, Monica	Chemiresistive metal-stabilized thiyl radical films as highly selective ethylene sensors	Abstracts of Papers of the American Chemical Society	12.958	11	2014	1			1
26	GUN	Nanda Gunawardhana, Gumjae Park, Nikolay Dimov, Hongyu Wang, Manickam Sasidharan, Arjun Kumar Thapa, Hiroyoshi Nakamura, Masaki Yoshio	Effects of Mass Balance Ratio and Cut-off Voltages on the Performance of Graphite (KS-6/TiO_2) Energy Storing System	*International Journal of Electrochemical Science*, 9 (2014)195-205	1.5	12	2014			1	1
27	GUP	S. Gupta, E. Heintzman, J. Jasinski	Secondary Electron Intensity Contrast Imaging and Friction Properties of Micromechanically Cleaved Graphene Layers on Insulating Substrates	*Journal of Electronic Materials* 43 (9), 3458-3469 (2014)	1.879	19	2014		1		1
28	HAN	Han, Xue; Mendes, Sergio B.	Optical Impedance Spectroscopy with Single-Mode Electro-Active-Integrated Optical Waveguides	Analytical Chemistry	5.636	19	2014	1			1
29	HON	Hong, X. T., M. Y. Mo, X. H. Wu, G. Willing, K. S. Hui, and K. N. Hui	An Effective Zeta Potential Fitting Model for Sphere-Plate Interaction Force in Nanoparticle Suspensions	*Nanotechnology* 25, no. 35 (Sep 5 2014)	4.108	9	2014	1			1
30	HOP	Hopkins, F. Kenneth; Benken, Alexander; Walsh, Kevin M.; Jones, John; Averett, Kent	Germanium Devices for Integrated Photonic Circuits	Nanophotonics and Macrophotonics for Space Environments Viii	5.686	0	2014	1			1
31	HOR	Hord, Kyle; Lian, Yongsheng	Leading Edge Vortex Development on a Pitch-up Airfoil	Proceedings of the Asme Fluids Engineering Division Summer Meeting, 2013, Vol 1b: Symposia	N/A	3	2014	1			1
32	JAY	R. Jayasinghe, A. K. Thapa, R. R. Dharmasena, T. Q. Nguyen, B. K. Pradhan, H. S. Paudel, J. B. Jasinski, A. Sherehiy, M. Yoshio, G. U. Sumanasekera	Optimization of MWNT based CFx electrodes for improved primary and secondary battery performances	*Journal of Power Sources*, 253, 404-411 (2014)	6.762	40	2014		1		1
33	KHA	Khadgi, Prajwal; Bai, Lihui; Evans, Gerald	Using Agent Based Simulation and Model Predictive Control to Study Energy Consumption Behavior under Dynamic Pricing	Proceedings of the 2014 Winter Simulation Conference (Wsc)	N/A	2	2014	1			1
34	KHO	Khodarahmi, Iman; Shakeri, Mostafa; Kotys-Traughber, Melanie; Fischer, Stefan; Sharp, M. Keith; Amini, Amir A.	In Vitro Validation of Flow Measurement With Phase Contrast MRI at 3 Tesla Using Stereoscopic Particle Image Velocimetry and Stereoscopic Particle Image Velocimetry-Based Computational Fluid	Journal of Magnetic Resonance Imaging	3.655	24	2014	1			1
35	KIM	Joogon Kim, Hyun-Youl Chung, Alex Bates, Sobi Thomas, Byungrak Son, Sam Park, and Dong-Ha Lee	Design and Development of 600 W Proton Exchange Membrane Fuel Cell	Journal of the Korean Solar Energy Society, Vol. 34, No. 4, pp. 17-22	N/A	0	2014	1			1
36	KRA	M. Krajewski, M. Michalska, B. Hamankiewicz, D. Ziolkowska, K.P. Korona, J. B. Jasinski, M. Kaminska, L. Lipinska, A. Czerwinski	$Li_4Ti_5O_{12}$ modified with Ag nanoparticles as an advanced anode material in lithium-ion batteries	*Journal of Power Sources* 245, 764-771 (2014)	6.762	88	2014			1	1
37	KUM	Kumar, Davinder; Nguyen, Tho N.; Grapperhaus, Craig A.	Kinetic Effects of Sulfur Oxidation on Catalytic Nitrile Hydration: Nitrile Hydratase Insights from Bioinspired Ruthenium(II) Complexes	Inorganic Chemistry	2.538	9	2014	1			1
38	KUM	Kumar, Davinder; Nguyen, Tho N.; Grapperhaus, Craig A.	Mechanistic insights into the catalytic nitrile hydration mechanism using bioinspired mimics: Implications to nitrile hydratase	Abstracts of Papers of the American Chemical Society	12.958	0	2014	1			1
39	KUM	M. Kumar, J. Jasinski, G. Hammond, B. Xu	Alkyne/Alkene/Allene-Induced Disproportionation of Cationic Gold(I) Catalyst	*Chemistry - A European Journal*, 20, 3113-3119 (2014).	6.07	69	2014	1		1	1
40	LEE	Lee, Sang C.; Kwon, Osung; Thomas, Sobi; Park, Sam; Choi, Gyeung-Ho	Graphical and mathematical analysis of fuel cell/battery passive hybridization with K factors	Applied Energy	6.78	18	2014	1			1
41	LI	Li, Guibo; Lian, Yongsheng; Mersch, Matt; Omalley, Chris; Hofmann, Adam	Liquid-Gas Two-Phase Flow Simulation for Flat Fan Nozzles	Asme Fluids Engineering Division Summer Meeting - 2014, Vol 1c: Symposia	N/A	1	2014	1			1
42	LI	Li, Guibo; Lian, Yongsheng; Sussman, Mark	Simulations of Gas-Liquid Two-Phase Jet Flows Using the Moment of Fluid Method	Proceedings of the Asme Fluids Engineering Division Summer Meeting, 2013, Vol 1c: Symposia	N/A	4	2014	1			1
43	LIA	S Liang, J Jasinski, GB Hammond, B Xu	Supported Gold Nanoparticle-Catalyzed Hydration of Alkynes under Basic Conditions	*Organic letters* 17, 162-165 (2014)	6.364	66	2014	1		1	1
44	LIN	Lin, Ji-Tzuoh; Lee, Barclay; Alphenaar, Bruce W.	Acceleration Threshold Reduction for Nonlinear Energy Harvesting	International Journal of Structural Stability and Dynamics	0.986	0	2014	1			1
45	LIU	Liu, Jinjun; Miller, Terry A.	Jet-Cooled Laser-Induced Fluorescence Spectroscopy of Cycl-ohexoxy: Rotational and Fine Structure of Molecules in Nearly Degenerate Electronic States	Journal of Physical Chemistry A	2.833	19	2014	1			1

46	LUC	Lucas, Thomas M.; James, Kurtis T.; Beharic, Jasmin; Moiseeva, Evgeniya V.; Keynton, Robert S.; O'Toole, Martin G.; Harnett, Cindy K.	Wavelength specific excitation of gold nanoparticle thin-films	Applied Physics Letters	3.302	6	2014	1					1
47	LUP	R. Lupitskyy, V. K. Vendra, J. Jasinski, D. A. Amos, M. K. Sunkara, T. Druffel	Towards High Efficiency Dye Sensitized Solar Cells with a Photoanode Fabricated Via a Simple Water Based Formulation	*Progress in Photovoltaics* (2014); DOI: 10.1002/pip.2502	7.584	6	2014		1				1
48	MA	Ma, D. H., R. Jayasingha, D. T. Hess, K. W. Adu, G. U. Sumanasekera, and M. Terrones	Enhancing the Superconducting Temperature of Mgb2 by Swcnt Dilution	*Physica C-Superconductivity and Its Applications* 497 (Feb 2014): 43	1.106	6	2014					1	1
49	MAR	Marei, Mohamed M.; Roussel, Thomas J.; Keynton, Robert S.; Baldwin, Richard P.	Electrochemical Dissolved Oxygen Removal from Microfluidic Streams for LOC Sample Pretreatment	Analytical Chemistry	5.636	4	2014	1					1
50	MAS	Masitas, Rafael A.; Khachian, Irina V.; Bill, Bryan L.; Zamborini, Francis P.	Effect of Surface Charge and Electrode Material on the Size-Dependent Oxidation of Surface-Attached Metal Nanoparticles	Langmuir	4.457	29	2014	1					1
51	MOH	Mohebbi, Mohammad; McIntyre, Michael L.; Naber, John F.; Hickman, Robert	13.8 kV Five Level ANPC Inverter for Wind Power	2014 Ieee Energy Conversion Congress and Exposition (Ecce)	N/A	3	2014		1	1			1
52	NAG	Nagisetty, Raja M.; Rockaway, Thomas D.; Willing, Gerold A.	Drinking water quality concerns from chloramine-induced degradation of elastomeric compounds	Journal American Water Works Association	0.518	2	2014	1					1
53	NGU	T. Q. Nguyen, A. K. Thapa, V. K. Vendra, J. B. Jasinski, G. U. Sumanasekera, M. K. Sunkara	High Rate Capacity Retention of Binder-free, Tin Oxide Nanowire Arrays Using Thin Titania and Alumina Coating	*RSC Adv*., 2014, 4, 3312-3317	3.84	13	2014		1				1
54	POR	Porter, Daniel A.; Berfield, Thomas A.	A bi-stable buckled energy harvesting device actuated via torque arms	Smart Materials and Structures	2.449	20	2014	1					1
55	PRA	Prater, Russell; Lian, Yongsheng	Detached Eddy Simulation of High Pressure Diesel Injectors	Asme Fluids Engineering Division Summer Meeting - 2014, Vol 1c: Symposia	N/A	0	2014	1					1
56	PRZ	R. Przeniosło, I. Sosnowska, M. Stękiel, D. Wardecki, A. Fitch, J. B. Jasiński	Monoclinic deformation of the crystal lattice of hematite α-Fe_2O_3	*Physica B: Condensed Matter*, 449, 72–76 (2014).	1.474	22	2014		1				1
57	ROB	Robinson, Brian S.; Sharp, M. Keith	Comparative Performance of Two Protoypes of a Passive Solar Heat Pipe System	Proceedings of the Asme 8th International Conference on Energy Sustainability, 2014, Vol 2	N/A	1	2014	1					1
58	ROB	Robinson, Brian S.; Sharp, M. Keith	Effect of Thermal Storage on the Cooling Capacity of Ambient Sources	Proceedings of the Asme 8th International Conference on Energy Sustainability, 2014, Vol 2	N/A	1	2014	1					1
59	ROB	Robinson, Brian S.; Sharp, M. Keith	Heating season performance improvements for a solar heat pipe system	Solar Energy	4.505	25	2014	1					1
60	SHA	Shakeri, Mostafa; Soltanzadeh, Maryam; Berson, R. Eric; Sharp, M. Keith	Comparison of Energy Storage Methods for Solar Electric Production	Proceedings of the Asme 8th International Conference on Energy Sustainability, 2014, Vol 1	N/A	2	2014	1					1
61	SHE	A. Sherehiy, S. Dumpala, M. K. Sunkara, J. B. Jasinski, R. W. Cohn, G. U. Sumanasekera	Thermionic emission from phosphorus (P) doped diamond nanocrystals supported by conical carbon nanotubes and ultraviolet photoelectron spectroscopy study of P-doped diamond films	*Diamond & Related Materials* 50 (2014) 66–76	2.302	10	2014		1	1			1
62	SHU	Shuvra, Pranoy Deb; McNamaraa, Shamus	The strain capacitor: A novel energy storage device	Aip Advances	1.524	1	2014	1					1
63	STE	Stewart, Robert L.; Fox, James F.; Harnett, Cindy K.	Estimating Suspended Sediment Concentration in Streams by Diffuse Light Attenuation	Journal of Hydraulic Engineering	1.714	3	2014	1					1
64	SUN	S. Sunkara, V. K.Vendra, J. Jasinski, T. Deutsch, A. N. Andriotis, K. Rajan, M. Menon, and M. Sunkara	New Visible Light Absorbing Materials for Solar Fuels, $GaSb_xN_{1-x}$	*Adv. Mater*., 26, 2878–2882 (2014)	6.147	40	2014		1				1
65	THA	A. K. Thapa, B. B. Pandit, H. S. Paudel, R. Thapa, S. Ida, J. B. Jasinski, G. U. Sumanasekera, T. Ishihara	Polythiophene Mesoporous Birnessite-MnO_2/Pd Cathode Air Electrode for Rechargeable Li-Air Battery	*Electrochimica Acta*, 127, 410-415 (2014).	4.75	31	2014		1				1
66	THA	Arjun Kumar Thapa, Bill Pandit, Rajesh Thapa, Tulashi Luitel, Hem Sharma Paudel, Nanda Gunawardhana, Mahendra K. Sunkara, Gamini U. Sumanasekera, Tatsumi Ishihara, Masaki Yoshio	Synthesis of mesoporous birnessite MnO_2 as a cathode electrode for Lithium battery	*Electrochimica Acta* 116 (2014)188-193	4.75	39	2014		1				1
67	THO	Thomas, Sobi; Lee, Sang C.; Sahu, A. K.; Park, Sam	Online health monitoring of a fuel cell using total harmonic distortion analysis	International Journal of Hydrogen Energy	3.7	24	2014	1					1
68	VEN	Vendra, Venkat Kalyan; Tu Quang, Nguyen; Druffel, Thad; Jasinski, Jacek B.; Amos, Delaina A.; Sunkara, Mahendra K.	Nanowire architectures for iodide free dye-sensitized solar cells	Journal of Materials Chemistry A	7.443	7	2014		1	1			1
69	XIA	Xiao, J. Z.; Huang, Y. J.; Sun, Z. H.	Seismic Behavior of Recycled Aggregate Concrete Filled Steel and Glass Fiber Reinforced Plastic Tube Columns	Advances in Structural Engineering	0.801	40	2014	1					1
70	YE	Ye, Zhuoliang; Berson, R. Eric	Factors affecting cellulose hydrolysis based on inactivation of adsorbed enzymes	Bioresource Technology	4.494	25	2014	1					1

71	YE	Ye, Zhuoliang; Hatfield, Kristen M.; Berson, R. Eric	Relative extents of activity loss between enzyme-substrate interactions and combined environmental mechanisms	Bioresource Technology	4.494	5	2014	1	1
72	ZHA	Zhang, Chaolei; Lian, Yongsheng	Conjugate heat transfer analysis using a simplified household refrigerator model	International Journal of Refrigeration-Revue Internationale Du Froid	2.241	13	2014	1	1
73	ZHA	Zhang, Chaolei; Lian, Yongsheng	Numerical Investigation of Heat Transfer and Flow Field in Domestic Refrigerators	Proceedings of the Asme Fluids Engineering Division Summer Meeting, 2013, Vol 1a: Symposia	N/A	2	2014	1	1
74	ZHA	Zhang, Chaolei; Lian, Yongsheng; Kempiak, Michael; Hitzelberger, Erik; Crane, Scott	Experimental and Numerical Investigation of a Domestic Refrigerator	Proceedings of the Asme Fluids Engineering Division Summer Meeting - 2014, Vol 1a: Symposia	N/A	0	2014	1	1
75	ZHA	Zhang, Muheng; Lian, Yongsheng	Numerical Investigation of the Coulter Principle in a Microfluidic Device	Proceedings of the Asme Fluids Engineering Division Summer Meeting, 2013, Vol 2: Fora	N/A	0	2014	1	1