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	2021	PUBLICATIONS BY YEAR	CONN CENTER STAFF & ASSOCIATED FACULTY		6.245	1817	88	31	119	6.31	1446	6.06	371
#	INDEX	AUTHORS	TITLE	JOURNAL	IMPACT FACTOR (IF)	CITATIONS (CIT)	ASSOC FAC (AF) PUB	CONN STAFF (CS)-DRIVEN PUB	TOTAL PUBS	IF AF	CIT AF	IF CS	CIT CS
1	ABU	Abu UO, Musa MRK, Rajapakse M, Karki B, Vithanage D, Yu M, Sumanasekera G, Jasinski JB	Vapor-Phase Intercalation of Cesium into Black Phosphorous	JOURNAL OF PHYSICAL CHEMISTRY C	3.7	2		1	1				
2	AFR	Afreen G., Lara-Ramos J.A., Vidwans N.A., Atla V., Kumar V, Vaddiraju S., Machuca-Martinez F., Sunkara M.K., Upadhyayula S.	Bulk production of porous TiO2 nanowires by unique solvo-plasma oxidation approach for combating biotic and abiotic water contaminants	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2.8	5		1	1				
3	ALO	Alom, MS; Ramezanipour, F	Pseudocapacitive charge storage in layered oxides SrLaFe1-xCoxO4-delta (x=0-1)	MATERIALS LETTERS	3	9	1		1				
4	ALO	Alom, MS; Ramezanipour, F	Layered Oxides SrLaFe1-xCoxO4-delta (x=0-1) as Bifunctional Electrocatalysts for Water-Splitting	CHEMCATCHEM	4.5	18	1		1				
5	ALQ	Alqatamin, M; Latham, J; Smith, ZT; Grainger, BM; McIntyre, ML	Current Control of a Three-Phase, Grid-Connected Inverter in the Presence of Unknown Grid Parameters Without a Phase-Locked Loop	IEEE JOURNAL OF EMERGING AND SELECTED TOPICS IN POWER ELECTRONICS	5.5	12	1		1				
6	AND	Andriotis AN, Menon M	Codoping induced enhanced ferromagnetism in diluted magnetic semiconductors	JOURNAL OF PHYSICS-CONDENSED MATTER	2.7	9		1	1				
7	AND	Andriotis AN, Menon M	Estimation of sp-d exchange constants revisited	JOURNAL OF PHYSICS-CONDENSED MATTER	2.7	3		1	1				
8	ANS	Ansari TN, Jasinski JB, Leahy DK, Handa S	Metal-Micelle Cooperativity: Phosphine Ligand-Free Ultrasmall Palladium(II) Nanoparticles for Oxidative Mizoroki-Heck-type Couplings in Water at Room Temperature	JACS AU	8	32	1		1				
9	ANS	Ansari TN, Sharma S, Hazra S, Jasinski JB, Wilson AJ, Hicks F, Leahy DK, Handa S	Shielding Effect of Nanomicelles: Stable and Catalytically Active Oxidizable Pd(0) Nanoparticle Catalyst Compatible for Cross-Couplings of Water-Sensitive Acid Chlorides in Water	JACS AU	8	29	1		1				
10	ANS	Ansari, TN; Sharma, S; Bora, PP; Ogulu, D; Parmar, S; Gallou, F; Kozlowski, PM; Handa, S	Photoassisted Charge Transfer Between DMF and Substrate: Facile and Selective N,N-Dimethylamination of Fluoroarenes	CHEMSUSCHEM	8.4	6	1		1				
11	BAJ	Bajaj, K; Buchanan, RM; Grapperhaus, CA	Antifungal activity of thiosemicarbazones, bis(thiosemicarbazones), and their metal complexes	JOURNAL OF INORGANIC BIOCHEMISTRY	3.9	58	1		1				
12	BAL	Balla VK, Tadimeti JGD, Sudan K, Satyavolu J, Kate KH	First report on fabrication and characterization of soybean hull fiber: polymer composite filaments for fused filament fabrication	PROGRESS IN ADDITIVE MANUFACTURING	4.5	16		1	1				
13	BAR	Barai, P; Rojas, T; Narayanan, B; Ngo, AT; Curtiss, LA; Srinivasan, V	Investigation of Delamination-Induced Performance Decay at the Cathode/LLZO Interface	CHEMISTRY OF MATERIALS	8.6	25	1		1				
14	BAT	Bates A.M., Paxton W.F., Spurgeon J.M., Park S.D., Sunkara M.K.	Earth-abundant redox couples using durable boron doped diamond electrodes: Beyond vanadium redox couples	APPLIED ENERGY	11.2	4		1	1				
15	BEH	Beharic, J; James, KT; Keynton, RS; O'Toole, MG; Harnett, CK	Impact of microfabrication processing temperatures on the resonant wavelength of gold nanoplates	MATERIALS LETTERS	3	1	1		1				
16	CAL	Calvary CA, Hietsoi O, Hofsommer DT, Brun HC, Costello AM, Mashuta MS, Spurgeon MS, Buchanan RM, Grapperhaus CA	Copper bis(thiosemicarbazone) Complexes with Pendent Polyamines: Effects of Proton Relays and Charged Moieties on Electrocatalytic HER	EUROPEAN JOURNAL OF INORGANIC CHEMISTRY	2.3	9		1	1				
17	CAR	Carnovale, N; McIntyre, ML; Grainger, BM	Fault Detection in Inverter-Based Microgrids Utilizing a Nonlinear Observer	2021 IEEE PES INNOVATIVE SMART GRID TECHNOLOGY EUROPE (ISGT EUROPE 2021)		1	1		1				
18	CHA	Chapagain S, Chandrasekhar PS, McGott D, Bramante RC, van Hest MFAM, Reese MO, Druffel T, Grapperhaus CA	Direct Deposition of Nonaqueous SnO2 Dispersion by Blade Coating on Perovskites for the Scalable Fabrication of p-i-n Perovskite Solar Cells	ACS APPLIED ENERGY MATERIALS	6.4	10		1	1				
19	CHA	Chauhan, R; Kalbfleisch, TS; Potnis, CS; Bansal, M; Linder, MW; Keynton, RS; Gupta, G	Long term storage of miRNA at room and elevated temperatures in a silica sol-gel matrix	RSC ADVANCES	3.9	2	1		1				
20	CHA	Chan, H; Narayanan, B; Cherukara, M; Loeffler, TD; Sternberg, MG; Avarca, A; Sankaranarayanan, SKRS	BLAST: bridging length/timescales via atomistic simulation toolkit	MRS ADVANCES	0.8	8	1		1				
21	CHE	Cherati, DY; Ghasemi-Fare, O	Practical approaches for implementation of energy piles in Iran based on the lessons learned from the developed countries experiences	RENEWABLE & SUSTAINABLE ENERGY REVIEWS	15.9	20	1		1				

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22	CHE	Cherati, DY; Ghasemi-Fare, O	Unsaturated thermal consolidation around a heat source	COMPUTERS AND GEOTECHNICS	**5.3**	**11**	1		1
23	CHE	Cherati, DY; Ghasemi-Fare, O	An Analytical Model for Analyzing Transient Heat Transfer around Geothermal Piles with Time-Dependent Heat Flux	International Foundations Congress and Equipment Expo (IFCEE)		**0**	1		1
24	CHO	Chowdhury, E; Rahaman, MS; Sathitsuksanoh, N; Grapperhaus, CA; O'Toole, MG	DNA-mediated hierarchical organization of gold nanoprisms into 3D aggregates and their application in surface-enhanced Raman scattering	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	**3.3**	**2**	1		1
25	CHR	Christian, N; Basurto, BE; Toussaint, A; Xu, XY; Ainsworth, EA; Busby, PE; Heath, KD	Elevated carbon dioxide reduces a common soybean leaf endophyte	GLOBAL CHANGE BIOLOGY	**11.6**	**8**	1		1
26	CRA	Crawford JM, Jasinski JB, Carreon MA	Towards continuous deoxygenation of acetic acid catalyzed by recyclable mono/bi/trimetallic zeolite catalysts	JOURNAL OF CATALYSIS	**7.3**	**6**		1	1
27	DEK	Dekhil, O; Shalaby, A; Soliman, A; Mahmoud, A; Kong, MY; Barnes, G; Elmaghraby, A; El-Baz, A	Identifying brain areas correlated with ADOS raw scores by studying altered dynamic functional connectivity patterns	MEDICAL IMAGE ANALYSIS	**10.9**	**10**	1		1
28	DER	Derakhshani, M; Momenzadeh, N; Berfield, TA	Analytical and experimental study of a clamped-clamped, bistable buckled beam low-frequency PVDF vibration energy harvester	JOURNAL OF SOUND AND VIBRATION	**4.7**	**27**	1		1
29	DON	Dong, WK; Li, WG; Vessalas, K; He, XZ; Sun, ZH; Sheng, DC	Piezoresistivity deterioration of smart graphene nanoplate/cement-based sensors subjected to sulphuric acid attack	COMPOSITES COMMUNICATIONS	**8**	**34**	1		1
30	DON	Dong, WK; Guo, YP; Sun, ZH; Tao, Z; Li, WG	Development of piezoresistive cement-based sensor using recycled waste glass cullets coated with carbon nanotubes	JOURNAL OF CLEANER PRODUCTION	**11.1**	**37**	1		1
31	DUO	Duong U, Ansari TN, Parmar S, Sharma S, Kozlowski PM, Jasinski JB, Plummer S, Gallou F, Handa S	Nanochannels in Photoactive Polymeric Cu(I) Compatible for Efficient Micellar Catalysis: Sustainable Aerobic Oxidations of Alcohols in Water	ACS SUSTAINABLE CHEMISTRY & ENGINEERING	**8.4**	**14**	1		1
32	FAN	Fanah, SJ; Ramezanipour, F	Lithium-ion mobility in layered oxides Li2Ca1.5Nb3O10, Li2Ca1.5TaNb2O10 and Li2Ca1.5Ta2NbO10, enhanced by supercell formation	JOURNAL OF ENERGY CHEMISTRY	**13.1**	**6**	1		1
33	FAN	Fanah, SJ; Ramezanipour, F	Symmetry Effect on the Enhancement of Lithium-Ion Mobility in Layered Oxides Li(2)A(2)B(2)TiO(10) (A = La, Sr, Ca; B = Ti, Ta)	JOURNAL OF PHYSICAL CHEMISTRY C	**3.7**	**7**	1		1
34	FTH	Fthenakis ZG, Jaishi M, Narayanan B, Andriotis AN, Menon M	High temperature stability, metallic character and bonding of the Si2BN planar structure	JOURNAL OF PHYSICS-CONDENSED MATTER	**2.7**	**2**		1	1
35	GHA	Ghahremani AH, Ratnayake D, Sherehiy A, Popa DO, Druffel T	Automated Fabrication of Perovskite Photovoltaics Using Inkjet Printing and Intense Pulse Light Annealing	ENERGY TECHNOLOGY	**3.8**	**10**		1	1
36	GHA	Ghanem, SY; Bowling, J; Sun, ZH	Mechanical Properties of Hybrid Synthetic Fiber Reinforced Self-Consolidating Concrete	COMPOSITES PART C: OPEN ACCESS	**4.2**	**4**	1		1
37	GHI	Ghithan, JH; Moreno, M; Keynton, RS; O'Toole, MG; Mendes, SB	Adsorption Properties and Electron-transfer Rates of a Redox Probe at Different Interfaces of an Immunoassay Assembled on an Electro-active Photonic Platform	ANALYTICAL SCIENCES	**1.6**	**2**	1		1
38	GHI	Ghithan, JH; Noel, JM; Roussel, TJ; McCall, MA; Alphenaar, BW; Mendes, SB	Photobleaching reduction in modulated super-resolution microscopy	MICROSCOPY	**1.8**	**2**	1		1
39	GON	Gong, HJ; Rallabandi, V; McIntyre, ML; Hossain, E; Ionel, DM	Peak Reduction and Long Term Load Forecasting for Large Residential Communities Including Smart Homes With Energy Storage	IEEE ACCESS	**3.9**	**34**	1		1
40	GOR	Gorky F, Best A, Jasinski J, Allen BJ, Alba-Rubio AC, Carreon ML	Plasma catalytic ammonia synthesis on Ni nanoparticles: The size effect	JOURNAL OF CATALYSIS	**7.3**	**40**	1		1
41	GUO	Guo AF, Sun ZH, Satyavolu J	Experimental and finite element analysis on flexural behavior of mortar beams with chemically modified kenaf fibers	CONSTRUCTION AND BUILDING MATERIALS	**7.4**	**11**		1	1
42	GUP	Gupta, S; Periasamy, P; Narayanan, B	Defect dynamics in two-dimensional black phosphorus under argon ion irradiation	NANOSCALE	**6.7**	**11**	1		1
43	GUP	Gupta, MK; Ding, JX; Osti, NC; Abernathy, DL; Arnold, W; Wang, H; Hood, Z; Delaire, O	Fast Na diffusion and anharmonic phonon dynamics in superionic Na3PS4	ENERGY & ENVIRONMENTAL SCIENCE	**32.5**	**40**	1		1
44	HAL	Halacoglu S, Chertmanova S, Chen Y, Li Y, Rajapakse M, Sumanasekera G, Narayanan B, Wang H	Visualization of Solid-State Synthesis for Chalcogenide Na Superionic Conductors by in-situ Neutron Diffraction	CHEMSUSCHEM	**8.4**	**2**		1	1

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45	HAW	Hawkins, N; Bhagwat, B; McIntyre, ML	Nonlinear Current-Mode Control of SCIG Wind Turbines	ENERGIES	**3.2**	**2**	1		1
46	HAW	Hawkins, N; Mcintyre, ML	A Robust Nonlinear Controller for PMSG Wind Turbines	ENERGIES	**3.2**	**5**	1		1
47	HAZ	Hazra, S; Kaur, G; Handa, S	Reactivity of Styrenes in Micelles: Safe, Selective, and Sustainable Functionalization with Azides and Carboxylic Acids	ACS SUSTAINABLE CHEMISTRY & ENGINEERING	**8.4**	**11**	1		1
48	HON	Hona, RK; Karki, SB; Cao, TF; Mishra, R; Sterbinsky, GE; Ramezanipour, F	Sustainable Oxide Electrocatalyst for Hydrogen- and Oxygen-Evolution Reactions	ACS CATALYSIS	**12.9**	**34**	1		1
49	HOS	Hossain M.A., Tulaphol S, Thapa A.K., Rahaman M.S., Jasinski J.B., Wang H., Sunkara M.K., Syzdek J., Ozdemir O.K., Ornstein J.M., Sathitsuksanoh N.	Metal-Organic Framework Separator as a Polyselenide Filter for High-Performance Lithium-Selenium Batteries	ACS APPLIED ENERGY MATERIALS, AMER CHEMICAL SOC	**6.4**	**6**		1	1
50	HOS	Hossain M.A., Mills K.N., Molley A.M., Rahaman M.S., Tulaphol S, Lalvani S.B., Dong J., Sunkara M.K., Sathitsuksanoh N.	Catalytic isomerization of dihydroxyacetone to lactic acid by heat treated zeolites	APPLIED CATALYSIS A-GENERAL	**5.5**	**19**	1		1
51	HOS	Hossain, MA; Rahaman, MS; Yelle, D; Shang, H; Sun, ZH; Renneckar, S; Dong, J; Tulaphol, S; Sathitsuksanoh, N	Effects of polyol-based deep eutectic solvents on the efficiency of rice straw enzymatic hydrolysis	INDUSTRIAL CROPS AND PRODUCTS	**5.9**	**48**	1		1
52	HUD	Huddleston, L; McNamara, S	Transfer Doping in Diamond for Channel Doping and Electrical Contacts	IEEE TRANSACTIONS ON ELECTRON DEVICES	**3.1**	**1**	1		1
53	JAR	Jaramillo-Cabanzo D.F., Ajayi B.P., Meduri P., Sunkara M.K.	One-dimensional nanomaterials in lithium-ion batteries	JOURNAL OF PHYSICS D-APPLIED PHYSICS	**3.4**	**13**		1	1
54	JOS	Joshaghani, M; Ghasemi-Fare, O	Exploring the effects of temperature on intrinsic permeability and void ratio alteration through temperature-controlled experiments	ENGINEERING GEOLOGY	**7.4**	**22**	1		1
55	KAH	Kah, CB; Smith, L; Jayanthi, CS; Yu, M	The electronic structure studies of hybrid h-BNC sheets based on a semi-empirical Hamiltonian	MATERIALS TODAY COMMUNICATIONS	**3.8**	**2**	1		1
56	KAN	Kananke-Gamage, CCW; Ramezanipour, F	Variation of the electrocatalytic activity of isostructural oxides Sr2LaFeMnO7 and Sr2LaCoMnO7 for hydrogen and oxygen-evolution reactions	DALTON TRANSACTIONS	**4**	**18**	1		1
57	KAR	Karki SB, Andriotis AN, Menon M, Ramezanipour F	Bifunctional Water-Splitting Electrocatalysis Achieved by Defect Order in LaA(2)Fe(3)O(8)(A = Ca, Sr)	ACS APPLIED ENERGY MATERIALS - AMER CHEMICAL SOC	**6.4**	**15**	1		1
58	KEA	Kearns, A; Bansal, M; Kalbfleisch, T; Keller, A; Ellison, K; Chauhan, R; Ghorbanian, M; Gupta, G	Stabilization and solidification of brine water containing selenium, chromium, copper, and mercury utilizing a microwave enabled sol-gel process	ENVIRONMENTAL SCIENCE-WATER RESEARCH & TECHNOLOGY	**5**	**5**	1		1
59	KEM	Kempaiah, R; Chan, H; Srinivasan, S; Sankaranarayanan, SKRS; Narayanan, B; Subramanian, A	Impact of Stabilizing Cations on Lithium Intercalation in Tunneled Manganese Oxide Cathodes	ACS APPLIED ENERGY MATERIALS	**6.4**	**7**	1		1
60	LER	Leroy, A; Bhatia, B; Sircar, J; Wang, EN	Thermal transport in solar-reflecting and infrared-transparent polyethylene aerogels	INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER	**5.2**	**5**	1		1
61	LER	Leroy, A; Bhatia, B; Njike, UT; Vaartstra, G; Wang, EN	Zinc sulfide-pigmented polyethylene aerogel covers for daytime radiative cooling	JOURNAL OF PHOTONICS FOR ENERGY	**1.7**	**6**	1		1
62	LIP	Li, PR; Li, WG; Sun, ZH; Shen, LM; Sheng, DC	Development of sustainable concrete incorporating seawater: A critical review on cement hydration, microstructure and mechanical strength	CEMENT & CONCRETE COMPOSITES	**10.5**	**66**	1		1
63	LIU	Liu, JJ; Chen, MW; Miller, TA	Laser-Induced Fluorescence Spectroscopy of Large Secondary Alkoxy Radicals: Part II. Rotational and Fine Structure	JOURNAL OF PHYSICAL CHEMISTRY A	**2.9**	**3**	1		1
64	LIU	Liu, JJ; Miller, TA	Laser-Induced Fluorescence Spectroscopy of Large Secondary Alkoxy Radicals: Part I. Spectral Overviews and Vibronic Analysis	JOURNAL OF PHYSICAL CHEMISTRY A	**2.9**	**4**	1		1
65	LIY	Li Y, Arnold W, Halacoglu S, Jasinski JB, Druffel T, Wang H	Phase-Transition Interlayer Enables High-Performance Solid-State Sodium Batteries with Sulfide Solid Electrolyte	ADVANCED FUNCTIONAL MATERIALS	**19**	**24**		1	1
66	LIY	Li Y., WM McGinley	Macromodeling of SFRC Flexural Behavior and Impact of Fiber Characteristics on Flexural Behavior	JOURNAL OF MATERIALS IN CIVIL ENGINEERING	**3.2**	**1**		1	1
67	LIY	Li, Y; Wang, H	Composite Solid Electrolytes with NASICON-Type LATP and PVdF-HFP for Solid-State Lithium Batteries	INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH	**4.2**	**38**	1		1

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68	MAC	Macewicz L, Pyrchla K, Bogdanowicz R, Sumanasekera G, Jasinski JB	Chemical Vapor Transport Route toward Black Phosphorus Nanobelts and Nanoribbons	JOURNAL OF PHYSICAL CHEMISTRY LETTERS	**5.7**	**13**		1	1
69	MAJ	Majzoubi, F; Bai, LH; Heragu, SS	The EMS vehicle patient transportation problem during a demand surge	JOURNAL OF GLOBAL OPTIMIZATION	**1.8**	**8**	1		1
70	MIC	Michalska M., Buchberger D.A., Jasinski J.B., Thapa A.K., Jain A.	Surface Modification of Nanocrystalline LiMn2O4 Using Graphene Oxide Flakes	MATERIALS	**3.4**	**12**		1	1
71	MIC	Michalska M, Jasinski JB, Pavlovsky J, Zurek-Siworska P, Sikora A, Golebiewski P, Szysiak A, Matejka V, Seidlerova J	Solid state-synthesized lanthanum orthovanadate (LaVO4) Co-doped with Eu as efficient photoluminescent material	JOURNAL OF LUMINESCENCE	**3.6**	**7**		1	1
72	MOL	Molas MR, Macewicz L, Wieloszynska A, Jakobczyk P, Wysmolek A, Bogdanowicz R, Jasinski JB	Photoluminescence as a probe of phosphorene properties	NPJ 2D MATERIALS AND APPLICATIONS	**9.7**	**13**		1	1
73	MOM	Momenzadeh, N; Derakhshani, M; Berfield, TA	Influences of post-processing treatments on mechanical properties and beta-phase content in material extrusion additively manufactured polyvinylidene fluoride structures	PROGRESS IN ADDITIVE MANUFACTURING	**4.5**	**2**	1		1
74	MUS	Musa MRK, Zhang CY, Rajapakse M, Jasinski JB, Sumanasekera G, Yu M	Li interaction-induced phase transition from black to blue phosphorene	PHYSICAL REVIEW MATERIALS	**3.4**	**14**		1	1
75	NAM	Nambo A., Atla V., Vasireddy S., Kumar V., Jasinski J.B., Upadhyayula S., Sunkara M.K.	Nanowire-Based Materials as Coke-Resistant Catalyst Supports for Dry Methane Reforming	CATALYSTS	**3.9**	**3**		1	1
76	PAT	Pattadar DK, Nambiar HN, Allen SL, Jasinski JB, Zamborini FP	Effect of Metal Nanoparticle Aggregate Structure on the Thermodynamics of Oxidative Dissolution	LANGMUIR	**3.9**	**10**	1		1
77	PAU	Paudel, M; Daniels, B; Arts, AM; Gupta, A; Kalbfleisch, T; Hofsommer, DT; Grapperhaus, CA; Buchanan, RM; Gupta, G	Unravelling the potential of disposable and modifiable pencils as catalyst supports for hydrogen evolution reaction	NEW JOURNAL OF CHEMISTRY	**3.3**	**0**	1		1
78	PAU	Paul, AC; Sharma, K; Telfah, H; Miller, TA; Liu, JJ	Electronic spectroscopy of the (A)over-tilde(1)(2)A "/(A)over-tilde(2)(2)A ' - (X)over-tilde(2)A ' transitions of jet-cooled calcium ethoxide radicals: Vibronic structure of alkaline earth monoalkoxide radicals of C-s symmetry	JOURNAL OF CHEMICAL PHYSICS	**4.4**	**2**	1		1
79	PAX	Paxton, WF; Rozsa, JL; Brooks, MM; Running, MP; Schultz, DJ; Jasinski, JB; Jung, HJ; Akram, MZ	A scalable approach to topographically mediated antimicrobial surfaces based on diamond	JOURNAL OF NANOBIOTECHNOLOGY	**10.2**	**6**		1	1
80	PIS	Pishgar S, Mulvehill MC, Gulati S, Sumanasekera GU, Spurgeon JM	Investigation of n-GaAs Photoanode Corrosion in Acidic Media with Various Thin Ir Cocatalyst Layers	ACS APPLIED ENERGY MATERIALS	**6.4**	**2**		1	1
81	PIS	Pishgar S, Gulati S, Strain JM, Liang Y, Mulvehill MC, Spurgeon JM	In Situ Analytical Techniques for the Investigation of Material Stability and Interface Dynamics in Electrocatalytic and Photoelectrochemical Applications	SMALL METHODS	**12.4**	**27**		1	1
82	QUC	Qu, C; Alphenaar, B; McNamara, S; Walsh, K	OPTIMIZATION OF ULTRA-HIGH ASPECT RATIO NANOSTRUCTURES FABRICATED USING GLANCING ANGLE DEPOSITION	16th ASME International Manufacturing Science and Engineering Conference (MSEC)		**0**	1		1
83	QUC	Qu, C; McNamara, S; Walsh, K	Line Seeds With Parabolic Profile For Glancing Angle Deposition	IEEEE Southeast Conference (SoutheastCon)		**0**	1		1
84	QUC	Qu, C; Alphenaar, B; McNamara, S; Walsh, K	OPTIMIZATION OF ULTRA-HIGH ASPECT RATIO NANOSTRUCTURES FABRICATED USING GLANCING ANGLE DEPOSITION	PROCEEDINGS OF THE ASME 2021 16TH INTERNATIONAL MANUFACTURING SCIENCE AND ENGINEERING CONFERENCE (MSEC2021), VOL 2		**0**	1		1
85	QUC	Qu, C; Alphenaar, B; McNamara, S; Walsh, K	Design of line seeds for glancing angle deposition	JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A	**2.9**	**8**	1		1
86	RAH	Rahaman MS, Tulaphol S, Hossain MA, Jasinski JB, Sun N, George A, Simmons BA, Maihom T, Crocker M, Sathitsuksanoh N	Cooperative Bronsted-Lewis acid sites created by phosphotungstic acid encapsulated metal-organic frameworks for selective glucose conversion to 5-hydroxymethylfurfural	FUEL	**7.4**	**30**	1		1
87	RAJ	Rajapakse M, Karki B, Abu UO, Pishgar S, Musa MRK, Riyadh SMS, Yu M, Sumanasekera G, Jasinski JB	Intercalation as a versatile tool for fabrication, property tuning, and phase transitions in 2D materials	NPJ 2D MATERIALS AND APPLICATIONS	**9.7**	**124**		1	1
88	RAJ	Rajapakse M, Musa MRK, Vithanage D, Abu UO, Karki B, Yu M, Jasinski JB, Sumanasekera G	Vibrational Properties of Pristine and Lithium-Intercalated Black Phosphorous under High-Pressure	ANNALEN DER PHYSIK	**2.4**	**3**		1	1
89	RAM	Ramezani, M; Kim, YH; Sun, ZH	Elastic modulus formulation of cementitious materials incorporating carbon nanotubes: Probabilistic approach	CONSTRUCTION AND BUILDING MATERIALS	**7.4**	**36**	1		1

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90	RAT	Ratnayake, D; Curry, AT; Qu, C; Usher, J; Walsh, K	CHARACTERIZING THE CONDUCTIVITY OF AEROSOL JET PRINTED SILVER FEATURES ON GLASS	PROCEEDINGS OF THE ASME 2021 16TH INTERNATIONAL MANUFACTURING SCIENCE AND ENGINEERING CONFERENCE (MSEC2021), VOL 2		0	1		1
91	RAT	Ratnayake, D; Curry, A; Walsh, K	Demonstrating a new ink material for aerosol printing conductive traces and custom strain gauges on flexible surfaces	International Conference on Flexible and Printable Sensors and Systems (FLEPS)		9	1		1
92	REN	Ren KM, Druffel T	Copper Electrode on Flexible Substrate by Intense Pulsed Light Sintering of Microsized Copper Particles	IEEE 48TH PHOTOVOLTAIC SPECIALISTS CONFERENCE (PVSC) Book SeriesIEEE Photovoltaic Specialists Conference		0		1	1
93	SAR	Saraei, N; Gupta, AJ; Hietsoi, O; Frye, BC; Hofsommer, DT; Sumanasekera, G; Gupta, G; Mashuta, MS; Buchanan, RM; Grapperhaus, CA	Small molecule crystals with 1D water wires modulate electronic properties of surface water networks	APPLIED MATERIALS TODAY	8.3	1	1		1
94	SAT	Satyavolu J, Tadimeti JGD, Thilakaratne R	Xylose production and the associated integration for biocoal production	ENERGY CONVERSION AND MANAGEMENT-X	6.3	7		1	1
95	SHA	Sharma S, Ansari TN, Handa S	HPMC: A Biomass-Based Semisynthetic Sustainable Additive Enabling Clean and Fast Chemistry in Water	ACS SUSTAINABLE CHEMISTRY & ENGINEERING	8.4	20	1		1
96	SHA	Shaikh, MQ; Nath, SD; Akilan, AA; Khanjar, S; Balla, VK; Grant, GT; Atre, SV	Investigation of Patient-Specific Maxillofacial Implant Prototype Development by Metal Fused Filament Fabrication (MF3) of Ti-6Al-4V	DENTISTRY JOURNAL	2.6	13	1		1
97	SHA	Shaikh, MQ; Graziosi, S; Atre, SV	Supportless printing of lattice structures by metal fused filament fabrication (MF3) of Ti-6Al-4V: design and analysis	RAPID PROTOTYPING JOURNAL	3.9	15	1		1
98	SHA	Shaikh, MQ; Singh, P; Kate, KH; Freese, M; Atre, SV	Finite Element-Based Simulation of Metal Fused Filament Fabrication Process: Distortion Prediction and Experimental Verification	JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	2.3	14	1		1
99	SHA	Shaikh, MQ; Lavertu, PY; Kate, KH; Atre, SV	Process Sensitivity and Significant Parameters Investigation in Metal Fused Filament Fabrication of Ti-6Al-4V	JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	2.3	128	1		1
100	SHA	Shan, XQ; Pidathala, RT; Kim, S; Xu, WQ ; Abeykoon, M; Kwon, G; Olds, D; Narayanan, B	Exemption of lattice collapse in Ni-MnO2 birnessite regulated by the structural water mobility	JOURNAL OF MATERIALS CHEMISTRY A	11.9	11	1		1
101	SHA	Shang, H; Sun, ZH	Laboratory evaluation of PAHs removal by multi-functional green pervious concrete (MGPC) pavement	JOURNAL OF CLEANER PRODUCTION	11.1	4	1		1
102	SHO	Shao YC, Karki B, Huang W, Feng X, Sumanasekera G, Guo JH, Chuang YD, Freelon B	Spectroscopic Determination of Key Energy Scales for the Base Hamiltonian of Chromium Trihalides	JOURNAL OF PHYSICAL CHEMISTRY LETTERS	5.7	5	1		1
103	SIN	Singh, P; Balla, VK; Atre, SV; German, RM; Kate, KH	Factors affecting properties of Ti-6Al-4V alloy additive manufactured by metal fused filament fabrication	POWDER TECHNOLOGY	5.2	33	1		1
104	SIN	Singh, P; Balla, VK; Gokce, A; Atre, SV; Kate, KH	Additive manufacturing of Ti-6Al-4V alloy by metal fused filament fabrication (MF3): producing parts comparable to that of metal injection molding	PROGRESS IN ADDITIVE MANUFACTURING	4.5	35	1		1
105	SLE	Sleman, AA; Soliman, A; Elsharkawy, M; Giridharan, G; Ghazal, M; Sandhu, H; Schaal, S; Keynton, R; Elmaghraby, A; El-Baz, A	A novel 3D segmentation approach for extracting retinal layers from optical coherence tomography images	MEDICAL PHYSICS	3.8	10	1		1
106	TAM	Tamizdoust, MM; Ghasemi-Fare, O	Assessment of Thermo-Osmosis Effect on Thermal Pressurization in Saturated Porous Media	International Foundations Congress and Equipment Expo (IFCEE)		0	1		1
107	UPP	Uppal, R; Ajjarapu, K; Kate, K; Harnett, CK	Low attenuation soft and stretchable elastomeric optical waveguides	MATERIALS LETTERS	3	2	1		1
108	WAN	Wang, D; Yang, YQ ; Wang, YJ; Yang, L; Wang, H; Yang, SF	Introduction to the Special Issue on Design and Simulation in Additive Manufacturing	CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES	2.4	4	1		1
109	WAR	Ward, L; Dandu, N; Blaiszik, ; Narayanan, B; Assary, RS; Redfern, PC; Foster, ; Curtiss, LA	Graph-Based Approaches for Predicting Solvation Energy in Multiple Solvents: Open Datasets and Machine Learning Models	JOURNAL OF PHYSICAL CHEMISTRY A	2.9	7	1		1
110	WIL	Wilson, AJ; Sundaresan, V; Rodriguez-Lopez, J	Introducing the ECS Mid-America Section	ELECTROCHEMICAL SOCIETY INTERFACE	1.8	0	1		1
111	WIN	Wincukiewicz A, Jasinski JB, Tokarczyk M, Pietruszka R, Godlewski M, Kaminska M	The effects of doping and coating on degradation kinetics in perovskites	SOLAR ENERGY MATERIALS AND SOLAR CELLS	6.9	7		1	1
112	WOZ	Wozniak, Marcin; de Albuquerque, Victor Hugo C; Elmaghraby, Adel Said	Editorial: Enabling Wearable Brain Technologies - Methods and Applications.	FRONTIERS IN HUMAN NEUROSCIENCE	2.9	0	1		1

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113	WUY	Wu, Y; Yang, L	Elastic and failure characteristics of additive manufactured thin wall lattice structures with defects	THIN-WALLED STRUCTURES	**6.4**	**19**	1		1
114	WUY	Wu, Y; Yang, L	Modeling of the effect of local material imperfection to the structural mechanical property variability of 2D fi nite -size cellular structures	COMPOSITE STRUCTURES	**6.3**	**3**	1		1
115	WUY	Wu, Y; Yang, L	Modeling and analysis of material anisotropy-topology effects of 3D cellular structures fabricated by powder bed fusion additive manufacturing	INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES	**7.3**	**17**	1		1
116	YAN	Yang, S; Strobach, E; Bierman, D; Zhao, L; Bhatia, B; Wang, EN	Effect of Al2O3 ALD coating on thermal stability of silica aerogel	JOURNAL OF POROUS MATERIALS	**2.6**	**5**	1		1
117	ZHA	Zhang, LN; Xu, ZY; Zhao, L; Bhatia, B; Zhong, Y; Gong, S; Wang, EN	Passive, high-efficiency thermally-localized solar desalination	ENERGY & ENVIRONMENTAL SCIENCE	**32.5**	**170**	1		1
118	ZHA	Zhang, Y; Trainer, DJ; Narayanan, B; Li, Y; Ngo, AT; Khadka, S; Neogi, A; Fisher, B; Curtiss, LA; Sankaranarayanan, SKRS; Hla, SW	One-Dimensional Lateral Force Anisotropy at the Atomic Scale in Sliding Single Molecules on a Surface	NANO LETTERS	**10.8**	**2**	1		1
119	ZHA	Zhang, Q; Arnold, W; Hood, ZD; Li, Y; DeWees, R; Chi, MF; Chen, ZW; Chen, Y; Wang, H	Li0.625Al0.125H0.25Cl0.75O0.25 Superionic Conductor with Disordered Rock-Salt Structure	ACS APPLIED ENERGY MATERIALS	**6.4**	**2**	1		1

PERSONNEL 2021	ASSOCIATED FACULTY	DEPARTMENT, COLLEGE		**46**
	Amos, Delaina	Chemical Engineering, JB Speed School of Engineering		1
	Atre, Sundar	Mechanical Engineering, JB Speed School of Engineering		1
	Bai, Lihui	Industrial Engineering, JB Speed School of Engineering		1
	Baldwin, Richard	Chemistry, College of Arts & Sciences		1
	Berfield, Thomas	Mechanical Engineering, JB Speed School of Engineering		1
	Berson, Eric	Chemical Engineering, JB Speed School of Engineering		1
	Bhatia, Bikram	Mechanical Engineering, JB Speed School of Engineering		1
	Buchanan, Robert	Chemistry, College of Arts & Sciences		1
	Chen, Yanyu	Mechanical Engineering, JB Speed School of Engineering		1
	Christian, Natalie	Biology, College of Arts & Sciences		1
	Elmaghraby, Adel	Computer Science & Engineering, JB Speed School of Engineering		1
	Emery, Sarah	Biology, College of Arts & Sciences		1
	Farag, Aly	Electrical & Computer Engineering, JB Speed School of Engineering		1
	Fu, Xiao-An "Sean"	Chemical Engineering, JB Speed School of Engineering		1
	Ghasemi-Fare, Omid	Civil & Environmental Engineering, JB Speed School of Engineering		1
	Grapperhaus, Craig	Chemistry, College of Arts & Sciences		1
	Gupta, Gautum	Chemical Engineering, JB Speed School of Engineering		1
	Handa, Sachin	Chemistry, College of Arts & Sciences		1
	Harnett, Cindy	Electrical & Computer Engineering, JB Speed School of Engineering		1
	Himes, Paul	Biology, College of Arts & Sciences		1
	Hsu, Keng	Mechanical Engineering, JB Speed School of Engineering		1
	Jayanthi, Chakram	Physics & Astronomy, College of Arts & Sciences		1
	Kate, Kunal	Mechanical Engineering, JB Speed School of Engineering		1
	Lian, Yongsheng	Mechanical Engineering, JB Speed School of Engineering		1
	Liu, Jinjun	Chemistry, College of Arts & Sciences		1
	McIntyre, Michael	Electrical & Computer Engineering, JB Speed School of Engineering		1
	McNamara, Shamus	Electrical & Computer Engineering, JB Speed School of Engineering		1
	Mendes, Sergio	Physics & Astronomy, College of Arts & Sciences		1
	Narayanan, Badri	Mechanical Engineering, JB Speed School of Engineering		1
	Nasraoui, Olfa	Computer Science & Engineering, JB Speed School of Engineering		1
	Park, Sam	Mechanical Engineering, JB Speed School of Engineering		1
	Prater, Glen	Mechanical Engineering, JB Speed School of Engineering		1
	Ramazanipour, Farshid	Chemistry, College of Arts & Sciences		1

Rockaway, Thomas	Civil & Environmental Engineering, JB Speed School of Engineering		1
Running, Mark	Biology, College of Arts & Sciences		1
Sathitsuksanoah, Noppadon	Chemical Engineering, JB Speed School of Engineering		1
Schultz, David	Biology, College of Arts & Sciences		1
Starr, Thomas	Chemical Engineering, JB Speed School of Engineering		1
Sun, Zhihui	Civil & Environmental Engineering, JB Speed School of Engineering		1
Walsh, Kevin	Electrical & Computer Engineering, JB Speed School of Engineering		1
Wang, Hui	Mechanical Engineering, JB Speed School of Engineering		1
Willing, Gerold	Chemical Engineering, JB Speed School of Engineering		1
Wilson, Andrew	Chemistry, College of Arts & Sciences		1
Yang, Li	Industrial Engineering, JB Speed School of Engineering		1
Yu, Ming	Physics & Astronomy, College of Arts & Sciences		1
Zamborini, Frank	Chemistry, College of Arts & Sciences		1

CENTER STAFF			18
Bu Aamiri, Osama	Postdoctoral Associate		1
Druffel, Thad	Sr. Research Scientist/Engineer		1
Gautam, Manu	Postdoctoral Associate		1
Jasinski, Jacek	Sr. Research Scientist/Engineer		1
Marsh, Andrew	Assistant Director/Program Officer		1
McGinley, Mark	Theme Leader; Civil & Environmental Engineering, JB Speed School of Engineering		1
Menon, Madhusudan	Research Scientist		1
Mishra, Roshan	Postdoctoral Associate		1
Pakanati, Siva Chandra Sekhar	Postdoctoral Associate		1
Paxton, William "Hank"	Research Scientist/Engineer		1
Ren, Keming	Postdoctoral Associate		1
Salazar, Eunice	Unit Business Manager		1
Satyavolu, Jagannadh	Sr. Research Scientist/Engineer		1
Spurgeon, Joshua	Sr. Research Scientist/Engineer		1
Sumanasekera, Gamini	Theme Leader; Physics & Astronomy, College of Arts & Sciences		1
Sunkara, Mahendra	Director; Chemical Engineering, JB Speed School of Engineering		1
Tadimeti, Jogi Ganesh Dattatreya	Postdoctoral Associate		1
Thapa, Arjun	Research Manager		1

VISITING SCHOLARS			1
Lateef,Fatai Abiola	Visiting PhD student Scholar, NIGERIA		1