

**University of Louisville**  
**Conn Center for Renewable Energy Research**

Impact Reporting: Publications 2009

Rev. 06/2024, WoS by AM

2009		PUBLICATIONS BY YEAR	CONN CENTER STAFF & ASSOCIATED FACULTY						8.060	2193	24	15	39	6.25	722	10.07	1483
#	INDEX	AUTHORS	TITLE	JOURNAL	IMPACT FACTOR (F)	CITATIONS (CIT)	ASSOC FAC (AF) PUB	CONN STAFF (CS) DRIVEN PUB	TOTAL PUBS	IF AF	CIT AF	IF CS	CIT CS				
1	ADU	Adu, K. W., Q. X. Li, S. C. Desai, A. N. Sidorov, G. U. Sumanasekera, and A. D. Lueking	Morphological, Structural, and Chemical Effects in Response of Novel Carbide Derived Carbon Sensor to N <sub>h</sub> 3, N <sub>2</sub> o, and Air	Langmuir 25, no. 1 (Jan 6 2009): 582-88	3.9	23		1	1								
2	BER	Berfield, TA ; Carroll, JF; Payne, DA ; Sottos, NR	Thermal strain measurement in sol-gel lead zirconate titanate thin films	JOURNAL OF APPLIED PHYSICS	3.2	13	1		1								
3	CAR	Carroll, S ; Baldwin, RP	ANYL 220-Progress toward a smart sensing device for water quality detection	ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY	8.802	0	1		1								
4	CHA	Chakrapani, V ; Thangala, J ; Sunkara, MK	WO3 and W2N nanowire arrays for photoelectrochemical hydrogen production	INTERNATIONAL JOURNAL OF HYDROGEN ENERGY	7.2	250		1	1								
5	CHE	Chen, G., T. M. Paronyan, E. M. Pigos, G. U. Sumanasekera, and A. R. Harutyunyan	The Performance Volatility of Carbon Nanotube-Based Devices: Impact of Ambient Oxygen	Applied Physics Letters 95, no. 12 (Sep 21 2009)	4	8		1	1								
6	COP	Copic, D ; McNamara, S	Efficiency derivation for the Knudsen pump with and without thermal losses	JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A	2.9	11	1		1								
7	CVE	Cvelbar, U ; Ostrikov, K ; Levchenko, I ; Mozetic, M ; Sunkara, MK	Control of morphology and nucleation density of iron oxide nanostructures by electric conditions on iron surfaces exposed to reactive oxygen plasmas	APPLIED PHYSICS LETTERS	4	51		1	1								
8	DAS	Dasari, RK ; Dunaway, K ; Berson, RE	A Scraped Surface Bioreactor for Enzymatic Saccharification of Pretreated Corn Stover Slurries	ENERGY & FUELS	5.3	106	1		1								
9	DEB	Deb, B ; Kumar, V ; Druffel, TL ; Sunkara, MK	Functionalizing titania nanoparticle surfaces in a fluidized bed plasma reactor	NANOTECHNOLOGY	3.5	9		1	1								
10	DES	Deshmane, CA ; Jasinski, JB ; Carreon, MA	Thermally Stable Nanocrystalline Mesoporous Gallium Oxide Phases	EUROPEAN JOURNAL OF INORGANIC CHEMISTRY	2.3	28	1		1								
11	DUM	Dumpala, S ; Safir, A ; Mudd, D ; Cohn, RW ; Sunkara, MK ; Sumanasekera, GU	Controlled synthesis and enhanced field emission characteristics of conical carbon nanotubular arrays	DIAMOND AND RELATED MATERIALS	4.1	12		1	1								
12	GRA	Grapperhaus, CA ; Cui, JL ; Buchanan, RM ; Mashuta, MS	Supramolecular assembly of a dinuclear Ag(I) complex with discrete Ag2S2 centers	INORGANIC CHEMISTRY COMMUNICATIONS	3.8	1	1		1								
13	GUB	Gubbala, S ; Russell, HB ; Shah, H ; Deb, B ; Jasinski, J ; Rypkema, H ; Sunkara, MK	Surface properties of SnO2 nanowires for enhanced performance with dye-sensitized solar cells	ENERGY & ENVIRONMENTAL SCIENCE	32.5	142		1	1								
14	HAR	Harnett, CK ; Blumenthal, N ; Fox, JF ; Pulugurtha, S ; Hopf, KL	h Wireless sensor network for calibration and deployment of low-cost fluid flow-rate sensors	I2MTC: 2009 IEEE INSTRUMENTATION & MEASUREMENT TECHNOLOGY CONFERENCE, VOLS 1-3		0	1		1								
15	HAR	Harutyunyan, Avetik R.; Chen, Gugang; Paronyan, Tereza M.; Pigos, Elena M.; Kuznetsov, Oleg A.; Hewaparakrama, Kapila; Kim, Seung Min; Zakharov, Dmitri; Stach, Eric A.; Sumanasekera, Gamini U.	Preferential Growth of Single-Walled Carbon Nanotubes with Metallic Conductivity	Science 326, no. 5949 (Oct 2 2009): 116-20	56.9	452		1	1								
16	HAY	Hay, AJ ; Rypkema, HA ; Sunkara, MK	Efficiency and photocurrent response studies of photoelectrochemical cells	ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY	8.802	0		1	1								
17	HON	Hong, XT ; Willing, GA	Transition Force Measurement between Two Negligibly Charged Surfaces: A New Perspective on Nanoparticle Halos	LANGMUIR	3.9	24	1		1								
18	KON	Kona, S ; Kim, JH ; Harnett, CK ; Sunkara, MK	Carbon Nanotube Growth Studies Using an Atmospheric, Microplasma Reactor	IEEE TRANSACTIONS ON NANOTECHNOLOGY	2.4	8		1	1								

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19	LEE	Lee, S ; Cummins, MD ; Willing, GA ; Firestone, MA	Conductivity of ionic liquid-derived polymers with internal gold nanoparticle conduits	JOURNAL OF MATERIALS CHEMISTRY	6.626	28	1		1
20	MED	Meduri, P ; Pendyala, C ; Kumar, V ; Sumanasekera, GU ; Sunkara, MK	Hybrid Tin Oxide Nanowires as Stable and High Capacity Anodes for Li-Ion Batteries	NANO LETTERS	10.8	405		1	1
21	MOG	Mog, J., W. Kersten, M. M. Rahaman, M. Keskinen, T. J. Downs, S. M. Wahid, R. D. Martins, et al.	What Would Be the Three Key Preconditions for Jumpstarting or Scaling up the Transfer of Environmentally Sound Technologies for Climate Change to Developing Countries?	<i>Natural Resources Forum</i> 33, no. 4 (Nov 2009): 334-37	3.3	1		1	1
22	MOH	Mohite, AD ; Santos, TS ; Moodera, JS ; Alphenaar, BW	Observation of the triplet excitation in EuS-coated single-walled nanotubes	NATURE NANOTECHNOLOGY	38.3	37	1		1
23	MUL	Mullins, CS ; Grapperhaus, CA ; Frye, BC ; Wood, LH ; Hay, AJ ; Buchanan, RM ; Mashuta, MS	Synthesis and Sulfur Oxygenation of a (N3S)Ni Complex Related to Nickel-Containing Superoxide Dismutase	INORGANIC CHEMISTRY	4.6	44	1		1
24	PAI	Pai, RS ; Walsh, KM ; Crain, MM ; Roussel, TJ ; Jackson, DJ ; Baldwin, RP ; Keynton, RS ; Naber, JF	Fully Integrated Three-Dimensional Electrodes for Electrochemical Detection in Microchips: Fabrication, Characterization, and Applications	ANALYTICAL CHEMISTRY	7.4	53	1		1
25	PAT	Patil, AC ; Fu, XA ; Anuponggarch, C ; Mehregany, M ; Garverick, SL	6H-SiC JFETs for 450 degrees C Differential Sensing Applications	JOURNAL OF MICROELECTROMECHANICAL SYSTEMS	2.7	25	1		1
26	RAT	Rathfon, JM ; Al-Badri, ZM ; Shunmugam, R ; Berry, SM ; Pabba, S ; Keynton, RS ; Cohn, RW ; Tew, GN	Fluorimetric Nerve Gas Sensing Based on Pyrene Imines Incorporated into Films and Sub-Micrometer Fibers	ADVANCED FUNCTIONAL MATERIALS	19	43	1		1
27	REZ	Rezania, S ; Ye, ZL ; Berson, RE	Enzymatic Saccharification and Viscosity of Sawdust Slurries Following Ultrasonic Particle Size Reduction	APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY	3	27	1		1
28	ROY	Roy, S ; Tuinenga, C ; Fungura, F ; Dagepe, P ; Chikan, V ; Jasinski, J	Progress toward Producing n-Type CdSe Quantum Dots: Tin and Indium Doped CdSe Quantum Dots	JOURNAL OF PHYSICAL CHEMISTRY C	3.7	61		1	1
29	SID	Sidorov, A ; Mudd, D ; Sumanasekera, G ; Ouseph, PJ ; Jayanthi, CS ; Wu, SY	Electrostatic deposition of graphene in a gaseous environment: a deterministic route for synthesizing rolled graphenes?	NANOTECHNOLOGY	3.5	43	1		1
30	THA	Thangala, J ; Vaddiraju, S ; Malhotra, S ; Chakrapani, V ; Sunkara, MK	A hot-wire chemical vapor deposition (HWCVD) method for metal oxide and their alloy nanowire arrays	THIN SOLID FILMS	2.1	19		1	1
31	THA	Thangala, J ; Chen, ZQ ; Chin, A ; Ning, CZ ; Sunkara, MK	Phase Transformation Studies of Metal Oxide Nanowires	CRYSTAL GROWTH & DESIGN	3.8	30		1	1
32	TIA	Tian, WQ ; Yu, M ; Leahy, C ; Jayanthi, CS ; Wu, SY	The Self-Consistent and Environment-Dependent Hamiltonian and Its Application to Carbon Nanoparticles	JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE	1.666	10	1		1
33	YAM	Yamarthy, C ; McNamara, S	Design of a MEMS Sensor to Detect the Casimir Force	2009 4TH IEEE INTERNATIONAL CONFERENCE ON NANO/MICRO ENGINEERED AND MOLECULAR SYSTEMS, VOLS 1 AND 2		3	1		1
34	YAM	Yamarthy, C ; Pharas, K ; Schultz, A ; McNamara, S	PNEUMATIC PUMPING OF LIQUIDS USING THERMAL TRANSPIRATION FOR LAB-ON-A-CHIP APPLICATIONS	2009 IEEE SENSORS, VOLS 1-3	2.307	8	1		1
35	YOK	Yokel, Robert A.; Florence, Rebecca L.; Unrine, Jason M.; Tseng, Michael T.; Graham, Uschi M.; Sultana, Rukhsana; Butterfield, D. Allan; Wu, Peng; Grulke, Eric	Biodistribution and toxicity of systemically-introduced ceria engineered nanomaterial	Abstracts of Papers of the American Chemical Society	8.802	1	1		1
36	YOK	Yokel, Robert A.; Florence, Rebecca L.; Unrine, Jason M.; Tseng, Michael T.; Graham, Uschi M.; Wu, Peng; Grulke, Eric A.; Sultana, Rukhsana; Hardas, Sarita S.; Butterfield, D. Allan	Biodistribution and oxidative stress effects of a systemically-introduced commercial ceria engineered nanomaterial	Nanotoxicology	5	166	1		1
37	YU	Yu, M ; Chaudhuri, I ; Leahy, C ; Wu, SY ; Jayanthi, CS	Energetics, relative stabilities, and size-dependent properties of nanosized carbon clusters of different families: Fullerenes, bucky-diamond, icosahedral, and bulk-truncated structures	JOURNAL OF CHEMICAL PHYSICS	4.4	23	1		1

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38	YU	Yu, M ; Wu, SY ; Jayanthi, CS	A self-consistent and environment-dependent Hamiltonian for large-scale simulations of complex nanostructures	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES	3.3	21	1		1
39	ZHA	Zhang, SY; Prater, G	A study of the effect of elastic instability on stiffness-based gauge sensitivity indices for vehicle body structure assessment	THIN-WALLED STRUCTURES	6.4	7	1		1

PERSONNEL 2009		ASSOCIATED FACULTY	DEPARTMENT, COLLEGE						30
	Alexander, Suraj		Industrial Engineering, JB Speed School of Engineering						1
	Alphenaar, Bruce		Electrical & Computer 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
	Buchanan, Robert		Chemistry, College of Arts & Sciences						1
	Carreon, Moises		Chemical Engineering, JB Speed School of Engineering						1
	Cohn, Robert		Electrical & Computer Engineering, JB Speed School of Engineering						1
	Elmaghraby, Adel		Computer Science & Engineering, JB Speed School of Engineering						1
	French, Mark		Civil & Environmental Engineering, JB Speed School of Engineering						1
	Fu, Xiao-An "Sean"		Chemical Engineering, JB Speed School of Engineering						1
	Graham, James		Electrical & Computer Engineering, JB Speed School of Engineering						1
	Hammond, Gerald GB		Chemistry, College of Arts & Sciences						1
	Harnett, Cindy		Electrical & Computer Engineering, JB Speed School of Engineering						1
	Jayanthi, Chakram		Physics & Astronomy, College of Arts & Sciences						1
	McGinley, Mark		Civil & Environmental 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
	Naber, John		Electrical & Computer Engineering, JB Speed School of Engineering						1
	Prater, Glen		Mechanical Engineering, JB Speed School of Engineering						1
	Rockaway, Thomas		Civil & Environmental Engineering, JB Speed School of Engineering						1
	Running, Mark		Biology, College of Arts & Sciences						1
	Rypkema, Heather		Chemistry, College of Arts & Sciences						1
	Schultz, David		Biology, College of Arts & Sciences						1
	Sharp, Keith		Mechanical Engineering, JB Speed School of Engineering						1
	Starr, Thomas		Chemical Engineering, JB Speed School of Engineering						1
	Stucker, Brent		Industrial Engineering, JB Speed School of Engineering						1
	Walsh, Kevin		Electrical & Computer Engineering, JB Speed School of Engineering						1
	Willing, Gerold		Chemical Engineering, JB Speed School of Engineering						1
	Zamborini, Frank		Chemistry, College of Arts & Sciences						1
	CENTER STAFF								9
	Chaney, John		Postdoctoral Associate						1
	Chen, Zhiqiang		Postdoctoral Associate						1
	Jasinski, Jacek		Sr. Research Scientist/Engineer						1
	Kim, Jeong		Research Associate						1
	Macias, Eugenia		Research Associate						1
	McCoy, Rodica		Research Manager						1
	Ratnasamy, Paul		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
	VISITING SCHOLARS								0