

POSTER SESSION CONTRIBUTION: Pegasus Ballroom A-F  
 Judging Session 1: Sunday, March 11, 4:00 - 5:30 pm  
 Judging Session 2: Monday, March 12, 8:00-9:00 am  
 Judging Session 3: Monday, March 12, 4:30-7:00 pm  
 Poster Session Chair: Mariana Sendova, New College of Florida

Poster Number	Poster Title	Poster Author(s)
1	In-Situ Corrosion Mapping Of Nanoceria Coated Aluminum Alloys By Ec-Afm	A. Vincent, S. Babu, S. Seal
2	Effect Of Temperature And Atp Concentration On The Kinesin-Driven Microtubule Velocity	Ajoy Kumar Saha and Henry Hess
3	Phase Identification Of Dc Magnetron Sputtered Pt-Ru Alloy Thin Films By X-Ray And Electron Diffraction	A. P. Warrena R. M. Todia,b, B. Yaa, K. B. Sundarama,b and K. R. Coffey
4	Controlled Drug Release From Electrospun Polyelectrolyte Fibers	Anindarupa Chunder, Sourangsu Sarkar, Lei Zhai
5	Standoff Explosives Detection By Differential Reflectometry: Theory And Instrumentation	Anna Fuller, Julien Gratier, Claus Schoellhorn, Rolf E. Hummel, Paul Holloway
6	Phase Coarsening Kinetics Of $\Delta'$ (Al <sub>3</sub> Li) In Binary Aluminum Lithium Alloys	Ben Pletcher, James LeBeau Martin Glicksman
7	Zns/Cdzns As Alternative Heterojunction Partner Layer For Cigs <sub>2</sub> Thin Film Solar Cells	Bhaskar Kumar, Neelkanth G. Dhere FI
8	The Derivation Of The Resistivity Of Palladium Thin Films For Use In Hydrogen Sensors	B. Fisher, D.C. Malocha
9	A Molecular Dynamics Simulation Of The Aluminum /A-Alumina Interface	Bryce D. Devine, Alan McGaughey, Simon R. Phillpot, Susan B. Sinnott
10	In Situ Neutron Diffraction Measurements At Stress And Temperature In Nitipd Shape Memory Alloys	C. Bewerse, V.B. Krishnan, B. Clausen, D. Brown, S. Padula II and R. Vaidyanathan
11	Organic-Inorganic Nano-Composites For Photocatalytic Remediation	Cecil Coutinho, Vinay K. Gupta
12	Ferromagnetic Properties Of Epitaxial Bafeo <sub>3</sub> Films	C.J. Callender, R. Das, A.F. Hebard, J.D. Budai, D.P. Norton
13	One Pot Hot Phase Route To Synthesize High Quality Cds Quantum Dots	Chetak Patel, Soumitra Kar and Swadeshmukul Santra
14	Computational Investigation Of The Chemical Modification Of A-Isotactic Polypropylene Through Fluorocarbon Ion Deposition	Chris Fell, Wen-Dung Hsu, Susan Sinnott

15	Computational Study Of The Deposition Of SrTiO <sub>3</sub> Thin Films	Cosima Boswell, Jennifer Wohlwend, Simon R. Phillpot, and Susan B. Sinnott
16	Single Molecule Spectroscopy Of Organic Dye Nanoparticles	Daeri Tenery, James G. Worden, and Andre J. Gesquiere
17	Quantitative Comparison Of Thin Film Adhesion Between Scratch Testing And Four Point Bend Testing Methods	Daniel Vilceus, Ashok Kumar
18	Polyaniline Actuator Benders For Creation Of A Curved Silicon Substrate	Denise Hoover, Hsing-Lin Wang, Mariana Sendova
19	Atomic Layer Deposition Of Hafnium Nitride Thin Films For Diffusion Barrier Application	Dojun Kim, Oh Hyun Kim, Tim Anderson, Lisa McElwee-White
20	Molecular Dynamics Simulations Of Pld Deposition Of Metals On Different Substrates Using The Modified Embedded Atom Method	Susan B Sinnott, Fernanda Foertter
21	Characteristics Of ZnO-Based Multiple Quantum Well (Mqw) Light Emitting Diodes (Leds)	Geunsik Lim
22	Carrier Type Conversion In Post Annealed ZnO:P Thin Films	H. S. Kim, J.-M. Erie, F. Lugo, S. J. Pearton, and D. P. Norton F. Ren
23	Time-Resolved Far-Infrared Spectroscopy Of Semiconducting And Superconducting Films In A Magnetic Field	H. Zhang, D.H. Reitze, C.J. Stanton, D.B. Tanner, G. Khodaparast, J. Kono, R.H. Munekata, TG.I. Carr
24	Synthesis Of Size Selected Gold Nanoprisms By Nanosphere Lithography	Hanoy Estrada, Luis Ono, Beatriz Roldán Cuenya
25	Reverse Orientation Atom Probe Sample Preparation Using Fib	J.S. Moore, K.S. Jones
26	Size Dependent Study Of Meoh Decomposition Over Size-Selected Pt Nanoparticles Synthesized Via Micelle Encapsulation	Jason R. Croy, Simon Mostafa , Jing Liu, Yong-ho Sohn, Beatriz Roldan Cuenya
27	Diffusion Characteristics Of Gases Through Y-Shaped Carbon Nanotubes Using Molecular Dynamics Simulations	Jason Myers, SeongJun Heo, and Susan B. Sinnott
28	Computational Study Of The Deposition Of Metal-Oxide Thin Films	Jennifer L. Wohlwend, Simon R. Phillpot, and Susan B. Sinnott
29	Electrochemical Characterization Of Bismuth Antimony For Nanowire Fabrication	Jessica E. Weber, W. Graham Yelton, Ashok Kumar

30	Control And Stabilization Of Tin-Doped Droplet For Extreme Ultraviolet Lithography	Jose A. Cunado, Kazutoshi Takenoshita, Tobias Schmid, Simi George, Robert Bernath, Christopher Brown, Somsak Teerawattanasook, & Martin Richardson
31	Self-Catalytic Growth Of Well-Aligned ZnO Nanorods By High Pressure Assisted Pulsed Laser Deposition	Li-Chia Tien, David Norton and Stephen Pearton Fan Ren
32	In-Situ Gas-Phase Catalytic Properties Of Size- And Shape-Selected Gold Nanoparticles	Lu33is K. Ono, Ahmed Naitabdi, Hano34y Estrada, Damien Denis, Beatriz 3Roldán Cuenya
33	Composition Dependence Of Transformation Temperatures In Low Temperature Nitife Shape Memory Alloys	Mario Mistretta, R. Mahadevan Manjeri, and R. Vaidyanathan
34	Magnetic And Magneto-Transport Properties In ZnO Films Heavily Doped With Cobalt	M. Ivill1, S. Rawal, D.P. Norton, R. Das, A.F. Hebard, J. Budai, and M. Chisholm
35	Excited State Dynamics In Conjugated Polymer Devices	Max Bonner, Zhongjian Hu, Ankit Gupta, Andre J. Gesquiere
36	Raman Spectroscopy Of Filled Double-Walled Carbon Nanotubes	Michael Aldridge, Mariana Sendova, and Emmanuel Flahaut
37	Strain In Sige Heteroepitaxial Films On Si(001) Studied By X-Ray Diffraction And X-Ray Reflectivity	M.S. Phen, V. Craciun, K. S. Jones
38	A Quantum Chemical Study Of The Atomic Layer Deposition Of Gan Using Gacl, Gacl3, And Degacl With Nh3	Oh Hyun Kim, Youngseok Kim, Dojun Kim, Hiral Ajmera, Tim Anderson
39	Examination Of Cucr1-Xmgxo2 Thin Film Delafossites Grown By Pulsed Laser Deposition	P.W. Sadik, M.P. Ivill, V. Craciun, & D.P. Norton
40	Ab-Initio Calculations Of Defect Formation Energies In Uranium Oxide	Pankaj Nerikar, Susan B. Sinnott
41	Ab Initio Calculations Of Rigid-Body Displacements At Grain Boundaries In Tio2	Patrick Chiu, Jun He, Susan B. Sinnott
42	Effect Of Sliding Rate On Friction In Polytetrafluoroethylene	Peter R. Barry, Inkook Jang, Wallace G. Sawyer, Susan B. Sinnott, Simon R. Phillpot
43	Shape Memory And Superelastic Behavior In Niti At Reduced Length Scales	Prakash Palanisamy, M. Mistretta and R. Vaidyanathan

44	Synthesis And Characterization Of Dye-Doped Silica Nanoparticles Of Various Sizes In Water-In-Oil Microemulsion	Preethi Mylavarapu, Padmavathy Tallury and Swadeshmukul Santra
45	Molecular Dynamics Simulation Of Surface Effects On Ferroelectricity In Pbtio3 Thin Films	Rakesh K. Behera, Susan B. Sinnott and Simon R. Phillpot
46	Photophysical Properties Of Highly Alkyl-Substituted Templated Alq3 Derivatives	Ricardo D. Torres, Monta R. Holzworth, Paul H. Holloway, Olga Osetska, Markus Albrecht, Nisha Anathkrishnan, John Reynolds
47	Characterization Of High Aspect Ratio Particles In Air	S. Tedeschi, N. Stevens, K. Powers, A. Ranade, H. El-Shall
48	Novel Dopants In Silicon Carbide For Light Emission	Sachin Bet, Nathaniel Quick and Aravinda Kar Laser-Aided Manufacturing, Materials and Micro-processing
49	Cigs2 Thin Film Solar Cells	Santosh khatri, Ashwani Kaul, Bhaskar Kumar, Shirish Pethe, Neelkanth G. Dhere
50	Study Of Pairwise Interactions From The First Principles For Simulations Of Nanotubes/Nanocluster Systems	Satyender Goel and Artem Masunov
51	Argon Beam Mediated Modification Of Nanotube-Based Structures Using Classical Molecular Dynamics	Sharon K. Pregler, Susan B. Sinnott
52	In Situ Neutron Diffraction Measurements Of Internal Strain Evolution During Creep In Directionally Solidified Ni-Base Superalloys	S. Qiu V.B. Krishnana A.P. Gordon, D.W. Brown, B. Clausen and R. Vaidyanathana
53	Effect Of The Catalyst Support On Methanol Decomposition Over Size-Selected Platinum Nanoparticles	Jason R. Croy, Simon Mostafa, Beatriz Roldán Cuenya
54	Multi-Scale Instrumented Indentation Studies Of Deformation In Zr-Based Bulk Metallic Glasses	Subhaashree Sridharana C. N. Bewersea, C. Suryanarayanab, R. Vaidyanathana
55	Effect Of Mechanical Stresses On The Segregation Profiles Of Alloy Nanowires	Subramanian Sankaranarayanan, Venkat R. Bhethanabotla and Babu Joseph
56	Allotropic Transformation In Hafnium By Mechanical Milling	S. Umamaheswara Rao† and C. Suryanarayana
57	Investigation Of Defects During Copper Chemical Mechanical Planarization	Veera Raghava Kakireddy, Raghu Mudhivarthi, Ashok Kumarb

58	A New Method Of Measuring Electronic Grüneisen Constant	Shouhua Nie, Xuan Wang, Hyuk Park, Rick Clinite, Junjie Li, and Jianming Cao
59	Wear In Active Nanosystems Powered By Biomolecular Motors	Yoli Jeune, Henry Hess
60	Mechanical Properties Of Self-Assembled Nanostructural Lipid Tubules	Yue Zhao and Jiyu Fang
61	Synthesis And Characterization Of High Strength Nanocrystalline Diamond Wires	Zhenqing Xu Ashok Kumar Zhi-Hui Xu, Xiaodong Li
62	A Comparison Of The Digestive Diverticula Of 4 Sacoglossan Species With Respect To Chloroplast Sequestering Ability Using Transmission Electron Microscopy	Julian Anderson, Nicholas E. Curtis, and Sidney K. Pierce
63	Thermodynamic Stability Of High Hydrogen Storage Capacity Zn(Bh4)2: First-Principle Study	Pabitra Choudhury, Venkat R. Bhethanabotla and Ellias Stefanakos S
64	Nano-Fabricated Barium Strontium Titanate Varactors For Tunable Microwave Applications	Samuel Baylis, V. Gurumurthy, Ashok Kumar, T. Weller