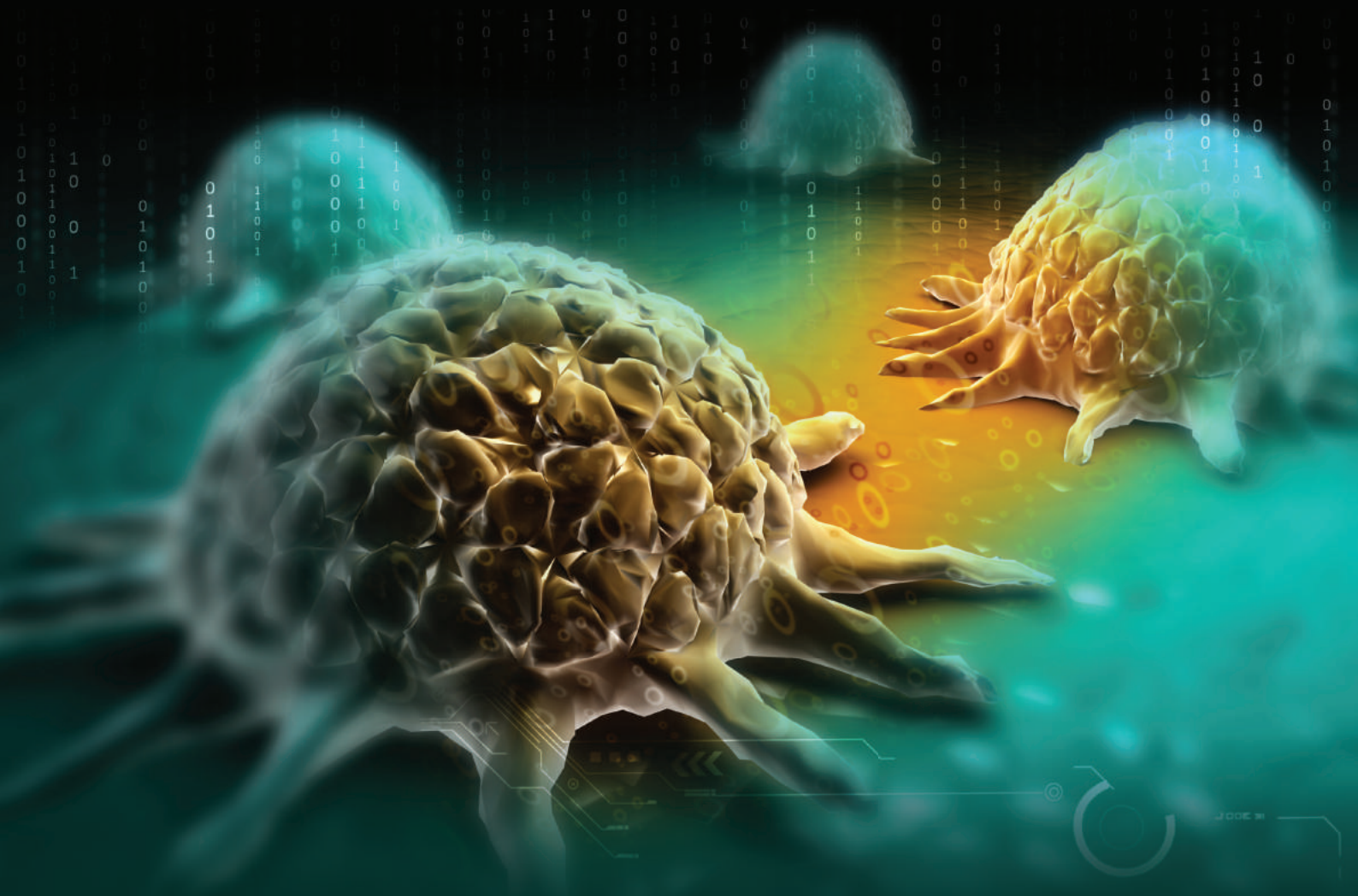
conferenceseries.com
1127th Conference

August 2017 | Volume 6 | Issue 6
ISSN: 2324-8777
Journal of Nanomaterials & Molecular Nanotechnology

Proceedings of

19th Nano Congress for Next Generation

August 31-September 01, 2017 Brussels, Belgium



Conference Series - America
One Commerce Center-1201, Orange St. #600
Wilmington, Zip 19899, Delaware, USA
P: +1-702-508-5200, F: +1-650-618-1417

Conference Series - UK
Kemp House, 152 City Road, London EC1V 2NX, UK
Toll Free: +1-800-014-8923

Nano Congress 2017

Day 1 August 31, 2017

09:30 - 09:45 Registrations

Meeting Hall @ Ambassdor

conferenceseries.com 09:45 -10:00 **Opening Ceremony**

Keynote Forum

Introduction

10:00-10:35 **Title: Microtubular NEMS: From concepts to applications**
Oliver G. Schmidt, Institute for Integrative Nanosciences(IIN), Germany

10:35-11:10 **Title: A Three-stage mechanism of ZnO nanoparticles formation at the surface of ZnO crystal by laser radiation**
Arturs Medvids, Riga Technical University, Latvia

Group Photo @ 11:10-11:15

Networking and Refreshment Break 11:15-11:30 @ Veranda

Sessions: Nano Biomaterials | Nano Materials Synthesis and Characterisation | Nano Applications | Molecular Nano Technology | Nano Science and Technology | Nanotech for Energy and Environment | Nano Computational Modeling

Session Chair: Hyung-Ho Park, Yonsei University, South Korea
Session Co-Chair: Phuong Mai Dinh, University Paul Sabatier, France

Session Introduction

11:30- 12:00 **Title: A Study on the Characteristics of Ni-Cr-Mn-Y-Dy Thin Film Resistors Using High Entropy Method**
Ying Chieh Lee, National Pingtung University of Science and Technology, Taiwan

12:00-12:30 **Title: EHDA Technologies for the Next Generation**
Zeeshan Ahmad, University Leicester, UK

12:30-13:00 **Title: Preparation of acrylic silicon oxide nanoparticles as a binder in leather finishing**
Ola Mohamed, National Research Center, Egypt

Lunch Break 13:00-13:45 @ Restaurant

Plenary Session

13:45-14:20 **Title: Molecular Theory of Solvation for Supramolecular Nanostructures and Nanomaterials**
Andriy Kovalenko, University of Alberta, Canada

14:20-14:55 **Title: Strain induced effects of hexagonal boron nitride atomic layers: A first-principles density-functional investigation**
Yoshitaka Fujimoto, Tokyo Institute of Technology, Japan

14:55-15:30 **Title: Introducing Backside Absorbing Layer Microscopy (BALM)**
Dominique Ausserre, CNRS, Le Mans University, France

Networking and Refreshment Break 15:30-15:50 @ Veranda

15:50-16:25 **Title: Dynamical treatment of dissipation in finite quantum electronic systems**
Phuong Mai Dinh, University Paul Sabatier, France

16:25-17:00 **Title: Mesoporous Thermoelectric Oxides**
Hyung Ho Park, Yonsei University, South Korea

Panel Discussion

Day 2 September 01, 2017

Meeting Hall @ Ambassdor

Keynote Forum

10:00-10:35	**Title: AFM Physicochemical Properties and Activity of Single Protein Molecules of CYP 102A1 (BM3)** **Alexander Archakov,** Institute of Biomedical Chemistry, Russian Federation
10:35-11:10	**Title: Small is Big: Magic Microfluidic Droplets** **Liqiu Wang,** The University of Hong Kong, Hong Kong

Networking and Refreshment Break 11:10-11:30 @ Veranda

Molecular Nanotechnology | Nano Applications | Advanced Nanomaterials | Nano Materials Synthesis and Characterisation | Nano Medicine and Nano Biotechnology | Nano Electronics

Session Chair: Fernando Castro, National Physical Laboratory, UK
Session Co-Chair: Darja Lisjak, Josef Stefan Institute, Slovenia

Session Introduction

Plenary Session

11:30-12:05	**Title: Flexible and versatile nanoparticle synthesis platform by gas-diffusion electrocrystallization** **Xochitl Dominguez Benetton,** Flemish Institute for Technological Research(VITO), Belgium
12:05-12:40	**Title: Functional Two-Dinensional Materials for Energy and Environment** **Kiminori Sato,** Tokyo Gakugei University, Japan
12:40-13:15	**Title: Plate-like nanomagnets for New Advanced Materials** **Darja Lisjak,** Josef Stefan Institute, Slovenia

Lunch Break 13:15-14:00 @ Restaurant

14:00-14:35	**Title: Nano-structures enabling sunlight- and candlelight-style OLEDs** **Jwo Huei Jou,** National Tsing Hua University, Taiwan
14:35-15:10	**Title: Undestanding complex thin films at the nanoscale** **Fernando Castro,** National Physical Laboratory, UK

Video Presentation

15:10-15:25	**Title: Macro and micro biological systems as source of bioactive molecules useful for cultural assets conservation.** **Franco Palla,** University of Palermo, Italy
15:25-15:40	**Title: E-BABE-Proposed Module of Environmental Degradability for PLA Based Green Geosynthetics under Considering Limited Index Test Conditions** **Han-Yong Jeon,** Inha University, South korea

Networking and Refreshment Break 15:40-16:00 @ Veranda

Poster Presentations 16:00-16:30 @ Gallery

Poster Judge: Arturs Medvids, Riga Technical University, Latvia

Panel Discussion

Award & Closing Ceremony

Bookmark your dates

Nano Congress for Next Generation

August 16-18, 2018 | Dublin, Ireland

E-mail: nanocongress@nanotechconferences.org; nanocongress@conferenceseries.net
Website: http://nanocongress.conferenceseries.com/

List of Open Access Journals

Agri, Food & Aqua

Advances in Crop Science and Technology	2329-8863
Advances in Dairy Research	2329-888X
Agrotechnology	2168-9881
Aquaculture Research & Development	2155-9546
Arabidopsis C. Elegans and Zebrafish	-
Biofertilizers & Biopesticides	2155-6202
Crop Research	2454-1761
Experimental Food Chemistry	-
Fisheries & Livestock Production	2332-2608
Fisheries and Aquaculture Journal	2150-3508
Fisheriessciences	1307-234X
Food & Industrial Microbiology	-
Food & Nutritional Disorders	2324-9323
Food Processing & Technology	2157-7110
Food: Microbiology, Safety & Hygiene	-
Forest Research	2168-9776
Horticulture	2376-0354
International Biodiversity, Bioprospecting and Development	2376-0214
Marine Science: Research & Development	2155-9910
Medicinal & Aromatic Plants	2167-0412
Nutrition & Food Sciences	2155-9600
Plant Pathology & Microbiology	2157-7471
Poultry, Fisheries & Wildlife Sciences	2375-446X
Probiotics & Health	2329-8901
Research & Reviews: Journal of Agriculture and Allied Sciences	2347-226X
Research & Reviews: Journal of Food and Dairy Technology	2321-6204
Rice Research	2375-4338
Traditional Medicine and Clinical Naturopathy (Homeopathy & Ayurvedic Medicine-2167-1206)	-

Business & Management

Accounting & Marketing	2168-9601
Arabian Journal of Business and Management Review	2223-5833
Business & Financial Affairs	2167-0234
Business & Hotel Management	2324-9129
Business and Economics Journal	2151-6219
Defense Studies & Resource Management	2324-9314
Entrepreneurship & Organization Management	2169-026X
Global Economics	2375-4389
Hotel & Business Management	2169-0286
International Journal of Accounting Research	-
International Journal of Economics and Management Science	2162-6359
Internet Banking & Commerce	1204-5357
Review of Public Administration and Management	2315-7844
Stock & Forex Trading	2168-9458
Tourism & Hospitality	2167-0269

Chemical Engineering

Advanced Chemical Engineering	2090-4568
Bioprocessing & Biotechniques	2155-9821
Chemical Engineering & Process Technology	2157-7048
Thermodynamics & Catalysis	2157-7544

Chemistry

Analytical & Bioanalytical Techniques	2155-9872
Analytical & Electrochemical Insights	-
Bioenergetics: Open Access	2167-7662
Chemical Informatics	-
Chemical Sciences Journal	2150-3494
Chromatography & Separation Techniques	2157-7064
Clinical & Medical Biochemistry: Open Access	-
Clinical Chemistry: Open Access	-
Environmental & Analytical Toxicology	2161-0525
Environmental Analytical Chemistry	-
Glycobiology	2168-958X
Herbal Medicine: Open Access	-
Immuno Chemistry: Open Access	-
Industrial Chemistry: Open Access	-
International Journal of Applied Biology and Pharmaceutical Technology	0976-4550
International Journal of Drug Development & Research	0975-9344
Mass Spectrometry: Open Access	-
Medicinal Chemistry	2161-0444
Modern Chemistry & Applications	2329-6798
Natural Products Chemistry & Research Journal	2329-6836
Neuro Chemistry: Open Access	-
Organic & Inorganic Chemistry	-
Organic Chemistry: Current Research	2161-0401
Pharmaceutical Analytical Chemistry: Open Access	-
Physical Chemistry & Biophysics	2161-0398
RROIJ: Medicinal Chemistry	-
Structural Chemsitry & Crystallography Communication	-
Trends in Green Chemistry	-
Vitamins & Minerals	2376-1318

Clinical

Ageing Science	2329-8847
Ancient Diseases & Preventive Remedies	2329-8731
Anesthesia & Clinical Research	2155-6148
Annals of Clinical and Laboratory Research	2386-5180
Arrhythmia: Open Access	-
Atherosclerosis: Open Access	-
Cell Biology: Research & Therapy	2324-9293
Cellular & Molecular Pathology	-
Clinical & Experimental Cardiology	2155-9880
Clinical & Experimental Dermatology Research	2155-9554
Clinical & Experimental Nephrology	-
Clinical & Experimental Oncology	2324-9110
Clinical & Experimental Ophthalmology	2155-9570
Clinical & Experimental Orthopaedics	-
Clinical & Experimental Pathology	2161-0681
Clinical & Molecular Endocrinology	-
Clinical and Experimental Psychology	-
Clinical and Experimental Transplantation	-
Clinical Case Reports	2165-7920
Clinical Depression	-
Clinical Dermatology Research Journal	-
Clinical Diabetes & Practice	-
Clinical Nutrition & Dietetics	-
Clinical Oncology and Practice	-
Clinical Pediatrics	-
Clinical Pediatrics & Dermatology	-
Clinical Psychiatry	-
Clinical Research & Bioethics	2155-9627
Clinical Research On Foot & Ankle	2329-910X
Clinical Respiratory: Open Access	-
Clinical Toxicology	2161-0495
Clinical Trials	2167-0870
Clinics in Mother and Child Health	2090-7214
Cosmetology & Orofacial Surgery	-
Cosmetology & Trichology	-
Dermatitis	-
Diabetes Case Reports	-
Dialysis and Clinical Practice	-
Drug Intoxication & Detoxification : Novel Approaches	2327-4557
Dual Diagnosis: Open Access	-
Eye & Cataract Refractive Surgery	-
Forensic Toxicology & Pharmacology	2325-9841
Glaucoma: Open Access	-
HIV & Retro Virus	-
Immunooncology	-
Insights in Pediatric Cardiology	-

Intensive and Critical Care	-
International Journal of Anesthesiology & Pain Medicine	-
International Journal of Cardiovascular Research	2324-8602
International Journal of Digestive Diseases	-
International Journal of Ophthalmic Pathology	2324-8599
Interventional Cardiology: Open Access	-
JBR Journal of Clinical Diagnosis and Research	2376-0311
Optometry: Open Access	-
Phonetics & Audiology	-
Speech Pathology & Therapy	-
Stem Cell Research & Therapy	2157-7633
Toxicology: Open Access	-
Vasculitis	-

Earth & Environmental Sciences

Advances in Recycling	-
Astrobiology & Outreach	2332-2519
Biodiversity & Endangered Species	2332-2543
Biodiversity Management & Forestry	2327-4417
Bioremediation & Biodegradation	2155-6199
Biosafety	2167-0331
Climatology & Weather Forecasting	2332-2594
Coastal Zone Management	-
Earth Science & Climatic Change	2157-7617
Ecosystem & Ecography	2157-7625
Entomology, Ornithology & Herpetology	2161-0983
Expert Opinion On Environmental Biology	2325-9655
Fundamentals of Renewable Energy and Applications	2090-4541
Geography & Natural Disasters	2167-0587
Geoinformatics & Geostatistics: An Overview	2327-4581
Geology & Geosciences	2329-6577
Geophysics & Remote Sensing	2169-0049
Hydrogeology & Hydrologic Engineering	2325-9647
Hydrology: Current Research	2157-7587
Industrial Pollution Control	-
Innovative Energy Policies	2090-5009
International Journal of Evolution	2324-8548
International Journal of Waste Resources	2252-5211
Marine Biology & Oceanography	2324-8661
Oceanography: Open Access	2332-2632
Oil & Gas: Open Access	-
Petroleum & Environmental Engineering	2157-7463
Plant Physiology & Pathology	2329-955X
Pollution Effects & Control	2375-4397
Research & Reviews: Journal of Ecology and Environmental Sciences	-

EEE

Electrical & Electronic Systems	2332-0796
Electrical Engineering & Electronic Technology	2325-9833

Engineering

Advances in Automobile Engineering	2167-7670
Advances in Robotics & Automation	2168-9695
Aeronautics & Aerospace Engineering	2168-9792
Applied Bioinformatics & Computational Biology	2329-9533
Applied Mechanical Engineering	2168-9873
Architectural Engineering Technology	2168-9717
Automatic Control of Physiological State and Function	2090-5092
Biochips & Tissue Chips	2153-0777
Bioengineering & Biomedical Science	2155-9538
Biomusical Engineering	2090-2719
Biosensors & Bioelectronics	2155-6210
Biosensors Journal	2090-4967
Civil & Environmental Engineering	2165-784X
Computer Engineering & Information Technology	2324-9307
Computer Engineering and Information Technology	2324-9307
Defense Management	2167-0374
Fashion Technology & Textile Engineering	2329-9568
Global Journal of Technology and Optimization	2229-8711
Global Research in Computer Science	2229-371X
Industrial Engineering & Management	2169-0316
Information Technology & Software Engineering	2165-7866
International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering	2278-8875
International Journal of Advancements in Technology	0976-4860
International Journal of Biomedical Data Mining	2090-4924
International Journal of Innovative Research in Computer and Communication Engineering	2278-1021
International Journal of Innovative Research in Science, Engineering and Technology	2319-8753
International Journal of Sensor Networks and Data Communications	2090-4886
International Journal of Swarm Intelligence and Evolutionary Computation	2090-4908
Irrigation & Drainage Systems Engineering	2168-9768
Lasers, Optics & Photonics	-
Lovotics	2090-9888
Membrane Science & Technology	2155-9589
Molecular Imaging & Dynamics	2155-9937
Nuclear Energy Science & Power Generation Technology	2325-9809
Research & Reviews: Journal of Engineering and Technology	2319-9873
Steel Structures & Construction	-
Telecommunications System & Management	2167-0919
Textile Science & Engineering	2165-8064

General Science

Computer Science & Systems Biology Journal	0974-7230
Ergonomics	2165-7556
Research and Development	-
International Journal of Advance Innovations, Thoughts & Ideas	2277-1891
Metrology	-
Research & Reviews: Journal of Botanical Sciences	2320-0189
Research & Reviews: Journal of Chemistry	2319-9849
Tomography	-

Genetics & Molecular Biology

Advanced Techniques in Biology & Medicine	2379-1764
Advancements in Genetic Engineering	2169-0111
Advances in Molecular Diagnostics	-
Biochemistry & Analytical Biochemistry	2161-1009
Biochemistry & Molecular Biology Journal	-
Biochemistry & Physiology	2329-9029
Biological Systems	2329-6577
Biotechnology & Biomaterials	2155-952X
Bipolar Disorder: Open Access	-
Cell & Developmental Biology	2168-9296
Cell Science & Therapy	2157-7013
Cell Signaling	-
Cellular & Molecular Medicine: Open Access	-
Chemical Biology & Therapeutics	-
Clinical Epigenetics	-
Cloning & Transgenesis	2168-9849
Current Synthetic and Systems Biology	2332-0737
Cytology & Histology	2157-7099
Down Syndrome & Chromosome Abnormalities	-
Electronic Journal of Biology	-
Enzyme Engineering	2329-6674
Fertilization: in Vitro	2375-4508
Fungal Genomics & Biology	2165-8056
Gene Technology	2329-6682
Genetic Syndromes & Gene Therapy	2157-7412
Hereditary Genetics: Current Research	2161-1041
Human Genetics & Embryology	2161-0436
Insights in Cell Science	-
Insights in Stem Cells	-
International Journal of Genomic Medicine	2332-0672
Metabolomics: Open Access	2153-0769
Metabonomics & Metabolites	2325-9736
Microbial & Biochemical Technology	1948-5948
Microbial Methods & Assays Open Access	-
Molecular and Genetic Medicine	1747-0862
Molecular Biology	2168-9547
Molecular Biomarkers & Diagnosis	2155-9929
Molecular Cloning & Genetic Recombination	2325-9787
Nanomedicine & Biotherapeutic Discovery	2155-983X
Next Generation: Sequencing & Applications	-
Phylogenetics & Evolutionary Biology	2329-9002

Physiobiochemical Metabolism	2324-8793
Plant Biochemistry & Physiology	2329-9029
Proteomics & Enzymology	-
Single Cell Biology	2168-9431
Tissue Science & Engineering	2157-7552
Transcriptomics: Open Access	2329-8936
Translational Biomedicine	2172-0479

Health Care

Diversity and Equality and Health and Care	2049-5471
Health Care: Current Reviews	2375-4273
Health Science Journal	1791-809X
Pregnancy & Child Health	2376-127X
Primary Health Care	2167-1079
Quality in Primary Care	1479-1072
Tropical Diseases & Public Health	2329-891X
Women'S Health, Issues & Care	2325-9795

Immunology

Advances in Antibiotics & Antibodies	-
Allergy & Therapy	2155-6121
Autoimmune Diseases: Open Access	-
Clinical & Cellular Immunology	2155-9899
Cytokine Biology	-
Immunobiology	-
Immunogenetics: Open Access	-
Immunome Research	1745-7580
Immunotherapy: Open Access	-
Infectious Diseases & Immunological Techniques	2325-9752
Inflammatory Bowel Diseases & Disorders	-
Innate Immunity & Immunological Disorders	-
Interdisciplinary Journal of Microinflammation	-
Lupus: Open Access	-
Molecular Immunology	-
Osteoarthritis	-
Reproductive Immunology	-
Rheumatology: Current Research	2161-1149
Sarcoidosis	-
Vaccines & Vaccination	2157-7560

Informatics

Data Mining in Genomics & Proteomics	2153-0602
Glycomics and Lipidomics	2153-0637
Health & Medical Informatics	2157-7420
Proteomics & Bioinformatics	0974-276X
Theoretical and Computational Science	2376-130X

Materials Science

Bioceramics Developments and Applications	2090-5025
Material Sciences & Engineering	2169-0022
Nano Research & Applications	-
Nanomaterials & Molecular Nanotechnology	2324-8777
Nanomedicine & Nanotechnology	2157-7439
Plastic & Polymer Sciences	-
Powder Metallurgy & Mining	2168-9806
Research & Reviews: Journal of Material Sciences	2321-6212

Mathematics

Applied & Computational Mathematics	2168-9679
Biometrics & Biostatistics	2155-6180
Generalized Lie Theory and Applications	1736-4337
Physical Mathematics	2090-0902
Research & Reviews: Journal of Statistics and Mathematical Sciences	-

Medical

Abnormal and Behavioural Psychology	-
Acta Psychopathologica	-
Acta Rheumatologica	-
Addictive Behaviors , Therapy & Rehabilitation	2324-9005
Adenocarcinoma	-
Advances in Cancer Prevention	-
Advances in Genetic Engineering & Biotechnology	-
Advances in Weight Loss Management & Medical Devices	-
Aerobics & Fitness	-
Aesthetic & Reconstructive Surgery	-
Aids & Clinical Research	2155-6113
Air and Water Borne Diseases	2167-7719
Alternative & Integrative Medicine	2327-5162
Analgesia & Resuscitation : Current Research	2324-903X
Anaplastology	2161-1173
Anatomy & Physiology: Current Research	2161-0940
Andrology & Gynecology: Current Research	2327-4360
Andrology	2167-0250
Angiology: Open Access	2329-9495
Annals of Behavioural Science	-
Applied and Rehabilitation Psychology: Open Access	-
Archives in Cancer Research	2254-6081
Archives of Medicine	1989-5216
Archives of Surgical Oncology	-
Archivos De Medicina	1698-9465
Arthritis	2167-7921
Asthma and Bronchitis	-
Athletic Enhancement	2324-9080
Autacoids & Hormones	2161-0479
Biology and Medicine	0974-8369
Biomedical Engineering & Medical Devices	-
Biomedical Sciences	2254-609X
Bioterrorism & Biodefense	2157-2526
Blood	-
Blood & Lymph	2165-7831
Blood Disorders & Transfusion	2155-9864
Blood Pressure: Open Access	-
Bone Marrow Research	2329-8820
Bone Reports & Recommendations	-
Brain Tumors	-
Breast Cancer: Current Research	-
Cancer Biomarkers	-
Cancer Clinical Trials	-
Cancer Diagnosis	-
Cancer Medicine & Anticancer Drugs	-
Cancer Science & Therapy	1948-5956
Cancer Surgery	-
Carcinogenesis & Mutagenesis	2157-2518
Cardiovascular Diseases & Diagnosis	2329-9517
Cardiovascular Pathology: Open Access	-
Celiac Disease: Open Access	-
Cervical Cancer: Open Access	-
Chemotherapy	2167-7700
Chest Diseases	-
Childhood & Developmental Disorders	-
Childhood Obesity	-
Chronic Obstructive Pulmonary Disease: Open Access	-
Colorectal Cancer: Open Access	-
Communication Disorders, Deaf Studies & Hearing Aids	2375-4427
Community Medicine & Health Education	2161-0711
Complex Diseases and Treatment	-
Contraceptive Studies	-
Critical Care Obstetrics & Gynecology	-
Current Trends in Gynecologic Oncology	-
Dental Health: Current Research	-
Dental Implants and Dentures: Open Access	-
Dentistry	2161-1122
Depression and Anxiety	2167-1044
Dermatology Case Reports	-
Diabetes & Metabolism	2155-6156
Diabetes Medication and Care	-
Diabetic Complications and Medicine	-
Drug Abuse	-
Emergency Medicine	2165-7548
Endocrinology & Diabetes Research	-
Endocrinology & Metabolic Syndrome	2161-1017
Epidemiology: Open Access	2161-1165
Evidence based Medicine and Practice	-
Family Medicine & Medical Science Research	2327-4972
Forensic Biomechanics	2090-2697
Forensic Medicine	-

Forensic Nursing: Open Access	-
Forensic Odontology	-
Forensic Psychology	-
Forensic Research	2157-7145
Gastrointestinal & Digestive System	2161-069x
Gastrointestinal Cancer and Stromal Tumors	-
General Medicine	2327-5146
General Practice	2329-9126
Genetic Disorders & Genetic Reports	2327-5790
Genital System & Disorders	2325-9728
Geriatric Psychiatry	-
Gerontology & Geriatric Research	2167-7182
Gynecology & Obstetrics	2161-0932
Gynecology & Obstetrics- Case Report	-
Haematology & Thromboembolic Diseases	2329-8790
Hair: Therapy & Transplantation	2167-0951
Head and Neck Cancer Research	-
Health & Medical Economics	-
Health Care Communications	-
Health Economics & Outcome Research: Open Access	-
Health Education Research & Development (Biosafety & Health Education: Open Access-2332-0893)	-
Health Systems and Policy Research	2254-9137
Heart Transplant and Surgery	-
Heavy Metal & Chelation Therapy	-
Hepatology and Gastrointestinal Disorders	-
Hospital & Medical Management	-
Hypertension- Open Access	2167-1095
Hypo & Hyperglycemia	2327-4700
Imaging and Interventional Radiology	-
Medical Implants & Surgery	-
Informatics and Data Mining	-
Insights in Biomedicine	-
Insights in Medical Physics	-
Integrative Oncology	2329-6771
Internal Medicine	2165-8048
International Journal of Clinical & Medical Imaging	2376-0249
International Journal of Collaborative Research on Internal Medicine & Public Health	-
International Journal of Emergency Mental Health and Human Resilience	1522-4821
International Journal of Mental Health & Psychiatry	2327-4654
International Journal of Pediatric Neurosciences	-
International Journal of Physical Medicine & Rehabilitation	2329-9096
International Journal of Public Health and Safety	-
International Journal of School and Cognitive Psychology	-
Interventional Pediatrics	-
Invasive Cardiology Future Medicine	-
JBR Journal of Interdisciplinary Medicine and Dental Sciences	2376-032X
Kidney	-
Kidney Transplant	-
La Prensa Medica	0032-745X
Laser Surgery and Therapy	-
Leukemia	2329-6917
Liposuction	-
Liver	2167-0889
Liver: Disease & Transplantation	2325-9612
Lung Cancer Diagnosis & Treatment	-
Lung Diseases & Treatment	-
Malaria Control & Elimination	2090-2778
Maternal and Pediatric Nutrition	-
Medical & Surgical Pathology	-
Medical & Surgical Urology	2168-9857
Medical and Clinical Reviews	-
Medical Case Reports	-
Medical Diagnostic Methods	2168-9784
Medical Toxicology and Clinical Forensic Medicine	-
Melanoma and Skin Diseases	-
Mental Health in Family Medicine	2327-4972
Mental Illness and Treatment	-
Metabolic Syndrome	2167-0943
Molecular & Medical Histology	-
Molecular Medicine & Therapeutics	2324-8769
Neonatal Biology	2167-0897
Neonatal Studies	-
Neonatal Medicine	-
Neoplasm	-
Nephrology & Therapeutics	2161-0959
Neurobiotechnology	-
Neuroinfectious Diseases	2314-7326
Neurooncology: Open Access	-
Neurosurgery & Cardiac Surgery	-
Novel Physiotherapies	2165-7025
Nuclear Medicine & Radiation Therapy	2155-9619
Nutritional Disorders & Therapy	2161-0509
Obesity & Eating Disorders	-
Obesity & Weight Loss Therapy	2165-7904
Occupational Medicine Health Affairs	2329-6879
Omics Journal of Radiology	2167-7964
Oncology & Cancer Case Reports	-
Oncology Translational Research	-
Oral Health and Dental Management	2247-2452
Oral Health Case Reports	-
Oral Hygiene & Health	2332-0702
Orthodontics & Endodontics	-
Orthopedic & Muscular System: Current Research	2161-0533
Orthopedic Oncology	-
Osteoporosis & Physical Activity	2329-9509
Otolaryngology:Open Access	2161-119X
Otology & Rhinology	2324-8785
Pain & Relief	2167-0846
Pain Management & Medicine	-
Palliative Care & Medicine	2165-7386
Pancreatic Disorders & Therapy	2165-7092
Pediatric Care	-
Pediatric Dental Care	-
Pediatric Emergency Care and Medicine- Open Access	-
Pediatric Nephrology Practice	-
Pediatric Neurology and Medicine	-
Pediatric Nursing: Open Access	-
Pediatric Oncology: Open Access	-
Pediatric Physiotherapy	-
Pediatric Psychology and Psychiatry	-
Pediatrics & Therapeutics	2161-0665
Periodontics and Prosthodontics: Open Access	-
Pigmentary Disorders	2376-0427
Prevention Infection Control: Open Access	-
Preventive Medicine	-
Primary & Acquired Immunodeficiency Research	2324-853X
Prostate Cancer	-
Psoriasis & Rosacea Open Access	-
Psychiatry	2378-5756
Psychological Abnormalities in Children	2329-9525
Psychology & Psychotherapy	2161-0487
Pulmonary & Respiratory Medicine	2161-105x
Rare Disorders & Diseases	-
Regenerative Medicine	2325-9620
Reproductive Endocrinology & Infertility	-
Reproductive System & Sexual Disorders	2161-038x
Research & Reviews: Journal of Dental Sciences	2320-7949
Research & Reviews: Journal of Medical and Health Sciences	2319-9865
Research Journal of Biology	2322-0066
Sleep Disorders & Therapy	2167-0277
Sleep Disorders : Treatment & Care	2325-9639
Spine	2165-7939
Spine & Neurosurgery	2325-9701
Spine Research	-
Sports Medicine & Doping Studies	2161-0673
Sports Nutrition and Therapy	-
Steroids & Hormonal Science	2157-7536
Stroke Research & Therapy	-
Journal of Surgery [Jurnalul de Chirurgie]	1584-9341
Surgery: Current Research	2161-1076
The Headache Journal	-
The International Journal of Apitherapy	-
The Pancreas	1590-8577
Therapeutic Care and Physical Rehabilitation	-

Thrombosis and Circulation	-
Thyroid Disorders & Therapy	2167-7948
Translational Medicine	2161-1025
Transplant Reports : Open Access	-
Transplantation Technologies & Research	2161-0991
Trauma & Acute Care	-
Trauma & Treatment	2167-1222
Traumatic Stress Disorders & Treatment	2324-8947
Tropical Medicine & Surgery	2329-9088
Tumor Diagnostics and Reports	-
Universal Surgery	2254-6758
Vascular Medicine & Surgery	2329-6925
Vitiligo & Dermatomyositis	-
Voice Medicine & Surgery	-
Women's Health Care	2167-0420
Wound Medicine and Tissue Repair	-
Yoga & Physical Therapy	2157-7595

Microbiology

Advances in Influenza Research	-
Antimicrobial Agents	-
Antivirals & Antiretrovirals	1948-5964
Applied Microbiology: Open Access	-
Archives of Clinical Microbiology	1989-8436
Bacteriology and Parasitology	2155-9597
Clinical Infectious Diseases & Practice	-
Clinical Microbiology: Open Access	2327-5073
Colitis & Diverticulitis	-
Emerging Infectious Diseases	-
Fermentation Technology	2167-7972
Fibromyalgia: Open Access	-
Forensic Pathology	-
Hepatitis	-
Human Papillomavirus	-
Infectious Diseases and Diagnosis	-
Infectious Diseases and Therapy	2332-0877
Medical Microbiology & Diagnosis	2161-0703
Medical Mycology: Open Access	-
Meningitis	-
Mycobacterial Diseases	2161-1068
Pediatric Infectious Diseases: Open Access	-
Research & Reviews: Journal of Microbiology and Biotechnology	2320-3528
Research & Reviews: Journal of Inflammation	-
Research & Reviews: Journal of Pathology & Epidemiology	-
Virology & Mycology	2161-0517

Neuroscience

Addiction Research & Therapy	2155-6105
Alzheimers Disease & Parkinsonism	2161-0460
Autism-Open Access	2165-7890
Brain Disorders & Therapy	2168-975X
Child & Adolescent Behavior	2375-4494
Clinical & Experimental Neuroimmunology	-
Dementia & Mental Health	-
Epilepsy Journal	-
Insights in Clinical Neurology	-
International Journal of Neurorehabilitation	2376-0281
Multiple Sclerosis	2376-0389
Neurological Disorders	2329-6895
Neurology & Neurophysiology	2155-9562
Neurology and Neuroscience	2171-6625
Neuropsychiatry	-
Neuroscience & Clinical Research	-
Schizophrenia Journal	-

Health Care & Nursing

Advanced Practices in Nursing	-
Community & Public Health Nursing	-
Nursing & Care	2167-1168
Nursing & Clinical Research	-
Patient Care	-
Perioperative & Critical Intensive Care Nursing	-
Research & Reviews: Journal of Nursing and Health Sciences	-

Pharmaceutical Sciences

Advances in Pharmacoepidemiology & Drug Safety	2167-1052
Alcoholism & Drug Dependence	2329-6488
Bioanalysis & Biomedicine	1948-593X
Biochemistry & Pharmacology: Open Access Journal	2167-0501
Bioequivalence & Bioavailability	0975-0851
Biomarkers in Drug Development	2327-4441
Biomarkers Journal	-
Biomolecular Research & Therapeutics	2167-7956
Cardiovascular Pharmacology: Open Access	2329-6607
Clinical & Experimental Pharmacology	2161-1459
Clinical Pharmacology and Biopharmaceutics	2167-065X
Current Trends in Nutraceuticals	-
Developing Drugs	2329-6631
Diagnostic Techniques & Biomedical Analysis	-
Drug Designing: Open Access	2169-0138
Drug Metabolism & Toxicology	2157-7609
in Silico & in Vitro Pharmacology	-
Molecular Enzymology and Drug Targets	-
Molecular Pharmaceutics & Organic Process Research	2329-9053
Pharmaceutica Analytica Acta	2153-2435
Pharmaceutical Care & Health Systems	2376-0419
Pharmaceutical Microbiology	-
Pharmaceutical Regulatory Affairs: Open Access	2167-7689
Pharmaceutical Sciences & Emerging Drugs	-
Pharmaceutics & Drug Delivery Research	2325-9604
Pharmacoeconomics: Open Access	-
Pharmacogenomics and Pharmacoproteomics	2153-0645
Pharmacognosy & Natural Products	-
Pharmacokinetics & Experimental Therapeutics	-
Pharmacological Reports	-
Pharmacovigilance	2329-6887
Research & Reviews: Journal of Hospital and Clinical Pharmacy	-
Research & Reviews: Journal of Pharmaceutical Analysis	2320-0812
Research & Reviews: Journal of Pharmaceutical Quality Assurance	-
Research & Reviews: Journal of Pharmaceutics and Nanotechnology	2347-7857
Research & Reviews: Journal of Pharmacognosy and Phytochemistry	2321-6182
Research & Reviews: Journal of Pharmacy and Pharmaceutical Sciences	2320-1215
Virology & Antiviral Research	2324-8955

Physics

Astrophysics & Aerospace Technology	2329-6542
Research & Reviews: Journal of Pure and Applied Physics	2320-2459
Vortex Science and Technology	2090-8369

Social & Political Sciences

Anthropology	2332-0915
Arts and Social Sciences Journal	2151-6200
Civil & Legal Sciences	2169-0170
Forensic Anthropology	-
Global Media Journal	1550-7521
Intellectual Property Rights: Open Access	2375-4516
Mass Communication & Journalism	2165-7912
Political Science & Public Affairs	2332-0761
Research & Reviews: Journal of Educational Studies	-
Research & Reviews: Journal of Social Sciences	-
Socialomics	2167-0358
Sociology & Criminology	2375-4435

Veterinary Sciences

Animal Nutrition	-
Primatology	2167-6801
Research & Reviews: Journal of Veterinary Sciences	-
Research & Reviews: Journal of Zoological Sciences	2321-6190
Veterinary Science & Medical Diagnosis	2325-9590
Veterinary Science & Technology	2157-7579

Impact Factors* (IF)

Journal Name	Pubmed Short Name	Impact Factor
Biological Systems: Open Access	Biol Syst Open Access	0.76
Journal of Biotechnology & Biomaterials	J Biotechnol Biomater	1.94
Journal of Psychology & Psychotherapy	J Psychol Psychother	1.3
Advanced Techniques in Biology & Medicine	Adv Tech Biol Med	1.08
AIDS & Clinical Research	J AIDS Clin Res	2.7
Autism Open Access	Autism Open Access	3.52
Biochemistry & Physiology: Open Access	Biochem Physiol	1.03
Diversity Equality in Health & Care	Divers Equal Health Care	2.49
Drug Designing: Open Access	Drug Des	6
Fungal Genomics & Biology	Fungal Genom Biol	1.15
International Journal of Genomic Medicine	Int J Genomic Med	0.67
Journal of Addiction Research & Therapy	J Addict Res Ther	2.86
Journal of Alzheimers Disease & Parkinsonism	J Alzheimers Dis Parkinsonism	1.18
Journal of Fertilization: In Vitro	JFIV Reprod Med Genet	1
Journal of Genetic Syndromes & Gene therapy	J Genet Syndr Gene Ther	2.34
Journal of Microbial & Biochemical Technology	J Microb Biochem Technol	2.5
Journal of Nursing & Care	J Nurs Care	1.6
Journal of Osteoporosis and Physical Activity	J Osteopor Phys Act	0.66
Journal of Yoga & Physical Therapy	J Yoga Phys Ther	1.17
Molecular Biology	Mol Biol	1.85
Neurology & Neurophysiology	J Neurol Neurophysiol	0.77
Primary health care	Prim Health Care	1
Quality in Primary Care	Qual Prim Care	3.88
Tissue Science & Engineering	J Tissue Sci Eng	2.72
Biochemistry & Analytical Biochemistry	Biochem Anal Biochem	2.6
Molecular and Genetic Medicine	J Mol Genet Med	2.89
Advancements in Genetic Engineering	Adv Genet Eng	1
Enzyme Engineering	Enz Eng	2.3
Depression and Anxiety	J Depress Anxiety	1
Human Genetics & Embryology	Human Genet Embryol	1.2
Current Synthetic and Systems Biology	Curr Synthetic Sys Biol	0.8
Hereditary Genetics: Current Research	Hereditary Genet	1.2
International Journal of Emergency Mental Health and Human Resilience	Int J Emerg Ment Health	6.5
Spine	J Spine	1.9
Cloning & Transgenesis	Clon Transgen	1.5
Journal of Medical Microbiology & Diagnosis	J Med Microb Diagn	1.9
Biosensors Journal	Biosens J	0.33
Defense Management	J Def Manag	0.5
Review of Public Administration and Management	Review Pub Administration Manag	0.2
Single cell biology	Single Cell Biol	1
Gerontology & Geriatric Research	J Gerontol Geriatr Res	1
Neuroinfectious Diseases	J Neuroinfect Dis	2.4
Cell Science & Therapy	J Cell Sci Ther	1.37
Molecular Biomarkers & Diagnosis	J Mol Biomark Diagn	2.1
Brain Disorders & Therapy	Brain Disord Ther	1.6
Clinical Case Reports	J Clin Case Rep	1.2
Gene Technology	Gene Technol	0.83
Socialomics	J Socialomics	2.3
Journal of Trauma and Treatment	J Trauma Treat	0.6
Translational Biomedicine	Transl Biomed	1.06
Journal of Neurology and Neuroscience	J Neurol Neurosci	0.88
Research & Reviews: Journal of Botanical Sciences	J Bot Sci	0.33
Journal of Psychiatry	J Psychiatry	2.32
Anaplastology	Anaplastology	0.73
Tropical Medicine & Surgery	Trop Med Surg	0.4
Orthopedic & Muscular System: Current Research	Orthop Muscular Syst	0.32
Pediatrics & Therapeutics	Pediat Therapeut	1.32
Sports Medicine & Doping Studies	J Sports Med Doping Stud	1.45
Journal of Oral Hygiene & Health	J Oral Hyg Health	0.52
Emergency Medicine	Emerg Med (Los Angel)	0.875
Journal of Transplantation Technologies & Research	J Transplant Technol Res	1.39
Journal of Hypertension: Open Access	J Hypertens (Los Angel)	0.92
International Journal of Waste Resources	Int J Waste Resour	1.95
Surgery: Current research	Surgery Curr Re	0.587
Oral Health and Dental Management	Oral Health Dent Manag	1.23
International Journal of Advancement technology	Int J Adv Tech	5.08
Translational Medicine	Transl Med (Sunnyvale)	1.312
Air and Water Borne Diseases	Air Water Borne Diseases	0.6
Journal of Coastal Zone Management	J Coast Zone Manag	0.54
Biology and Medicine	Biol Med (Aligarh)	3.07
Journal of Bioterrorism and Biodefense	J Bioterror Biodef	0.38
Journal of Tropical Diseases & Public Health	J Trop Dis	0.83
Journal of Surgery	Journal of Surgery [Jurnalul de chirurgie]	0.08
Nephrology & Therapeutics	J Nephrol Ther	0.318
Journal of Fundamentals of Renewable Energy and Applications	J Fundam Renewable Energy Appl	1.41
Advances in Pharmacoepidemiology & Drug Safety	Adv Pharmacoepidemiol Drug Saf	1.37
Bioanalysis & Biomedicine	J Bioanal Biomed	1.67
Biochemistry & Pharmacology: Open Access	Biochem Pharmacol (Los Angel)	2.09
Bioequivalence & Bioavailability	J Bioequiv Availab	1.88
Biomolecular Research & Therapeutics	J Biomol Res Ther	1.67
Cardiovascular Pharmacology: Open Access	Cardiol Pharmacol	1.77
Clinical & Experimental Pharmacology	Clin Exp Pharmacol	1.83
Clinical Pharmacology & Biopharmaceutics	Clin Pharmacol Biopharm	1.69
Data Mining in Genomics & Proteomics	J Data Mining Genomics Proteomics	2
Drug Metabolism & Toxicology	J Drug Metab Toxicol	1.37
Ergonomics	J Ergonomics	1.38
Glycomics & Lipidomics	J Glycomics Lipidomics	1.82
Health & Medical Informatics	J Health Med Inform	1.98
Metabolomics: Open Access	Metabolomics (Los Angel)	3.03
Nanomedicine & Biotherapeutic Discovery	J Nanomedine Biotherapeutic Discov	2.69
OMICS Journal of Radiology	OMICS J Radiol	0.54
Pharmaceutica Analytica Acta	Pharm Anal Acta	1.83
Pharmaceutical Regulatory Affairs: Open Access	Pharm Regul Aff	1.88
Pharmacogenomics & Pharmacoproteomics	J Pharmacogenomics Pharmacoproteomics	1.69
Pharmacovigilance	J Pharmacovigil	2.65
Phylogenetics & Evolutionary Biology	J Phylogenetics Evol Biol	2.76
Proteomics & Bioinformatics	J Proteomics Bioinform	2.55
Advances in Automobile Engineering	Adv Automob Eng	1.750
Advances in Robotics & Automation	Adv Robot Autom	0.813
Arts and Social Sciences Journal	Arts Social Sci J	1.231
Bioceramics Developments and Applications	Bioceram Dev Appl	0.958
Business & Financial Affairs	J Bus & Fin Aff	2.000
Generalized Lie Theory and Applications	J Generalized Lie Theory Appl	1.750
Irrigation & Drainage Systems Engineering	Irrigat Drainage Sys Eng	4.286
Industrial Engineering & Management	Ind Eng Manage	0.474
Aeronautics & Aerospace Engineering	J Aeronaut Aerospace Eng	1.407
Applied & Computational Mathematics	J Appl Computat Math	0.581
Architectural Engineering Technology	J Archit Eng Tech	1.071
Accounting & Marketing	J Account Mark	0.500
Aquaculture Research & Development	J Aquac Res Development	1.272
Bioengineering & Biomedical Science	J Bioeng Biomed Sci	1.235
Biometrics & Biostatistics	J Biomet Biostat	1.272
Biosensors & Bioelectronics	J Biosens Bioelectron	2.137
Civil & Environmental Engineering	J Civil Environ Eng	1.294
Cytology & Histology	J Cytol Histol	0.569
Civil & Legal Sciences	J Civil Legal Sci	0.286
Ecosystem & Ecography	J Ecosyst Ecogr	1.806
Electrical & Electronic Systems	J Elec Electron Syst	0.533
Earth Science & Climatic Change	J Earth Sci Clim Change	2.082
Geography & Natural Disasters	J Geogr Nat Disast	0.800
Hotel & Business Management	J Hotel Bus Manage	1.600
Information Technology & Software Engineering	J Inform Tech Soft Engg	2.789
Molecular Imaging & Dynamics	J Mol Imaging Dynam	2.091

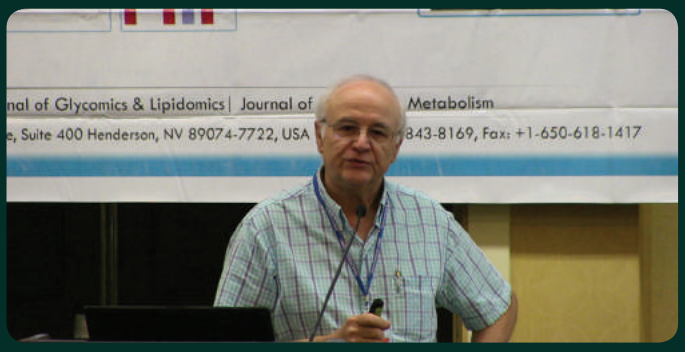
Earth Science & Climatic Change	J Earth Sci Clim Change	2.082
Geography & Natural Disasters	J Geogr Nat Disast	0.800
Hotel & Business Management	J Hotel Bus Manage	1.600
Information Technology & Software Engineering	J Inform Tech Soft Engg	2.789
Molecular Imaging & Dynamics	J Mol Imaging Dynam	2.091
Petroleum & Environmental Engineering	J Pet Environ Biotechnol	2.839
Stock & Forex Trading	J Stock Forex Trad	0.300
Textile Science & Engineering	J Textile Sci Eng	0.667
Tourism & Hospitality	J Tourism Hospit	1.190
Telecommunications System & Management	J Telecommun Syst Manage	0.800
Physical Mathematics	J Phys Math	4.500
Nanomedicine & Nanotechnology	J Nanomed Nanotechnol	4.68
Arabian Journal of Business and Management Review	Arab J Bus Manage Rev	1.42
Research and Reviews: Journal of Engineering and Technology	Engineering and Technology	0.14
Journal of Material Sciences & Engineering	J Material Sci Eng	1.31
Journal of Mass Communication & Journalism	J Mass Communicat Journalism	0.62
Journal of Powder Metallurgy & Mining	J Powder Metall Min	0.71
Journal of Applied Mechanical Engineering	J Appl Mech Eng	1.65
Archives of Clinical Microbiology		0.35
Dentistry	Dentistry	1.22
Journal of Diabetes & Metabolism	J Diabetes Metab	1.77
Otolaryngology: Current Research	Otolaryngol (Sunnyvale)	0.22
Journal of Metabolic Syndrome	J Metabolic Synd	1.27
Journal of Primatology	J Primatol	0.53
Journal of Thyroid Disorders & Therapy	Thyroid Disorders Ther	0.43
Jounal of Novel Physiotherapies	J Nov Physiother	1.24
Journal of Stem Cell Research & Therapy	J Stem Cell Res Ther	2.78
Anatomy & Physiology: Current Research	Anat Physiol	1
Pancreatic Disorders & Therapy	Pancreat Disord Ther	0.54
Journal of Cancer Science & Therapy	J Cancer Sci Ther	4.203
Journal of Biomedical Sciences		0.2
Journal of Nutritional Disorders & Therapy	J Nutr Disord Ther	1.46
Medical & Surgical Urology	Med Surg Urol	0.3
Journal of Biochips & Tissue Chips	J Biochip Tissue Chip	1.7
Journal of Liver	J Liver	0.08
Journal of Family Medicine and Medical Research	Fam Med Med Sci Res	0.78
Gynecology & Obstetrics	Gynecol Obstet (Sunnyvale)	0.52
Journal of Integrative Oncology	J Integr Oncol	1.67
Journal of Neonatal Biology	J Neonatal Biol	0.55
Journal of Glycobiology	J Glycobiology	0.8
Journal of Blood & Lymph	J Blood Lymph	0.12
Journal of Arthritis	J Arthritis	1.87
Journal of Membrane Science & Technology	J Membra Sci Technol	1.18
Medicinal Chemistry	Med Chem (Los Angeles)	2.64
Journal of Physical Chemistry & Biophysics	J Phys Chem Biophys	0.75
Organic Chemistry: Current Research	Organic Chem Curr Res	1.94
Journal of Bioprocessing & Biotechniques	J Bioprocess Biotech	1.74
Journal of Environmental & Analytical Toxicology	J Environ Anal Toxicol	2.58
Journal of Chemical Engineering & Process Technology	J Chem Eng Process Technol	1.21
Journal of Computer Science & Systems Biology	J Comput Sci Syst Biol	1.62
Journal of Analytical & Bioanalytical Techniques	J Anal Bioanal Tech	2.16
Journal of Plant Biochemistry & Physiology	J Plant Biochem Physiol	2.28
Journal of Chromatography & Separation Techniques	J Chromatogr Sep Tech	1.78
Journal of Thermodynamics & Catalysis		0.91
Community Medicine & Health Education	J Community Med Health Educ	1.27
Epidemiology: Open Access	Epidemiology (Sunnyvale)	1.35
Obesity & Weight Loss Therapy	J Obes Weight Loss Ther	0.94

Pain & Relief	J Pain Relief	1.14
Palliative Care & Medicine	J Palliat Care Med	0.88
Steroids & Hormonal Science	J Steroids Horm Sci	0.65
Gastrointestinal & Digestive System	J Gastrointest Dig Syst	0.43
Hair: Therapy & Transplantation		0.6
Andrology	Andrology (Los Angel)	1.16
Endocrinology & Metabolic Syndrome	Endocrinol Metab Syndr	1.12
Internal Medicine		2.48
Sleep Disorders & Therapy	J Sleep Disord Ther	0.5
Nuclear Medicine & Radiation Therapy	J Nucl Med Radiat Ther	0.88
Alternative & Integrative Medicine	Altern Integr Med	1.11
Pulmonary & Respiratory Medicine	J Pulm Respir Med	1.01
Occupational Medicine Health Affairs	Occup Med Health Aff	0.85
Reproductive System & Sexual Disorders	Reprod Syst Sex Disord	1.25
Medical Diagnostic Methods		0.29
Blood Disorders & Transfusion	J Blood Disord Transfus	0.5
General Medicine	Gen Med (Los Angel)	0.86
Bioenergetics: Open Access	Bioenergetics	3.1
Chemotherapy: Open Access	Chemotherapy (Los Angel)	1.8
Clinical & Experimental Pathology	J Clin Exp Pathol	1.54
Carcinogenesis & Mutagenesis	J Carcinog Mutagen	1.9
Clinical Research & Bioethics	J Clinic Res Bioeth	0.95
Vaccines & Vaccination	J Vaccines Vaccin	1.8
Immunome Research	Immunome Res	7.1
Clinical & Experimental Ophthalmology	J Clin Exp Ophthalmol	1.11
Clinical & Experimental Dermotology Research	J Clin Exp Dermatol Res	0.5
Clinical & Experimental Cardiology	J Clin Exp Cardiolog	1.33
Clinical Microbiology: Open Access	Clin Microbiol	0.7
Anesthesia & Clinical research	J Anesth Clin Res	0.7
Mycobacterial Diseases	Mycobact Dis	0.9
Clinical Toxicology	J Clin Toxicol	1.39
Clinical Trials & Research	J Clin Trials	1.33
Antivirals & Antiretrovirals	J Antivir Antiretrovir	1.27
Fermentation Technology	Ferment Technol	3.44
Clinical & Cellular immunology	J Clin Cell Immunol	2.019
Allergy & Therapy	J Allergy Ther	0.762
Bacteriology & Parasitology	J Bacteriol Parasitol	2.025
Rheumatology: Current Research	Rheumatology (Sunnyvale)	1.522
Virology & Mycology	Virol Mycol	0.69
Clinics in Mother and Child Health	Clinics Mother Child Health	0.432
Womens Health Care	J Womens Health Care	0.79
Marine Science: Research & Development	J Marine Sci Res Dev	0.45
Plant Pathology & Microbiology	J Plant Pathol Microbiol	1.75
Geology & Geophysics	J Geol Geophys	0.91
FisheriesSciences	J Fisheries Sci	0.51
Fisheries and Aquaculture Journal	Fish Aquac J	0.69
Bioremediation & Biodegradation	J Bioremediat Biodegrad	2.1
Advances in Crop Science and Technology	Adv Crop Sci Tech	0.39
Journal of Remote Sensing & GIS	J Geophys Remote Sens	0.77
Biofertilizers & Biopesticides	J Biofertil Biopestic.	1.19
Hydrology: Current Research	Hydrol Current Res	1.12
Probiotics & Health	J Prob Health	0.69
Veterinary Science & Technology	J Veterinar Sci Technolo	2.5
Medicinal & Aromatic Plants	Med Aromat Plants	2.02
Forest Research	Forest Res	1.69
International Journal of Sensor Networks and Data Communications	Sensor Netw Data Commun	1.66
Innovative Energy Policies	Innov Energ Policies	0.88
Biodiversity & Endangered Species	J Biodivers Endanger Species	0.25
Biosafety	Biosafety	0.49
Agrotechnology	Agrotechnol	0.69
Journal of Traditional Medicine and Clinical Naturopathy	J Tradition Med Clin Naturopth	0.49
Nutrition & Food Sciences	J Nutr Food Sci	1.14
Entomology, Ornithology & Herpetology	Entomol Ornithol Herpetol	1.26

Impact Factor Calculation:

Impact Factor was established by dividing the number of articles published in 2012 and 2013 with the number of times they are cited in 2014 based on Google search and the Scholar Citation Index database. If 'X' is the total number of articles published in 2012 and 2013, and 'Y' is the number of times these articles were cited in indexed journals during 2014 than, impact factor = Y/X







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

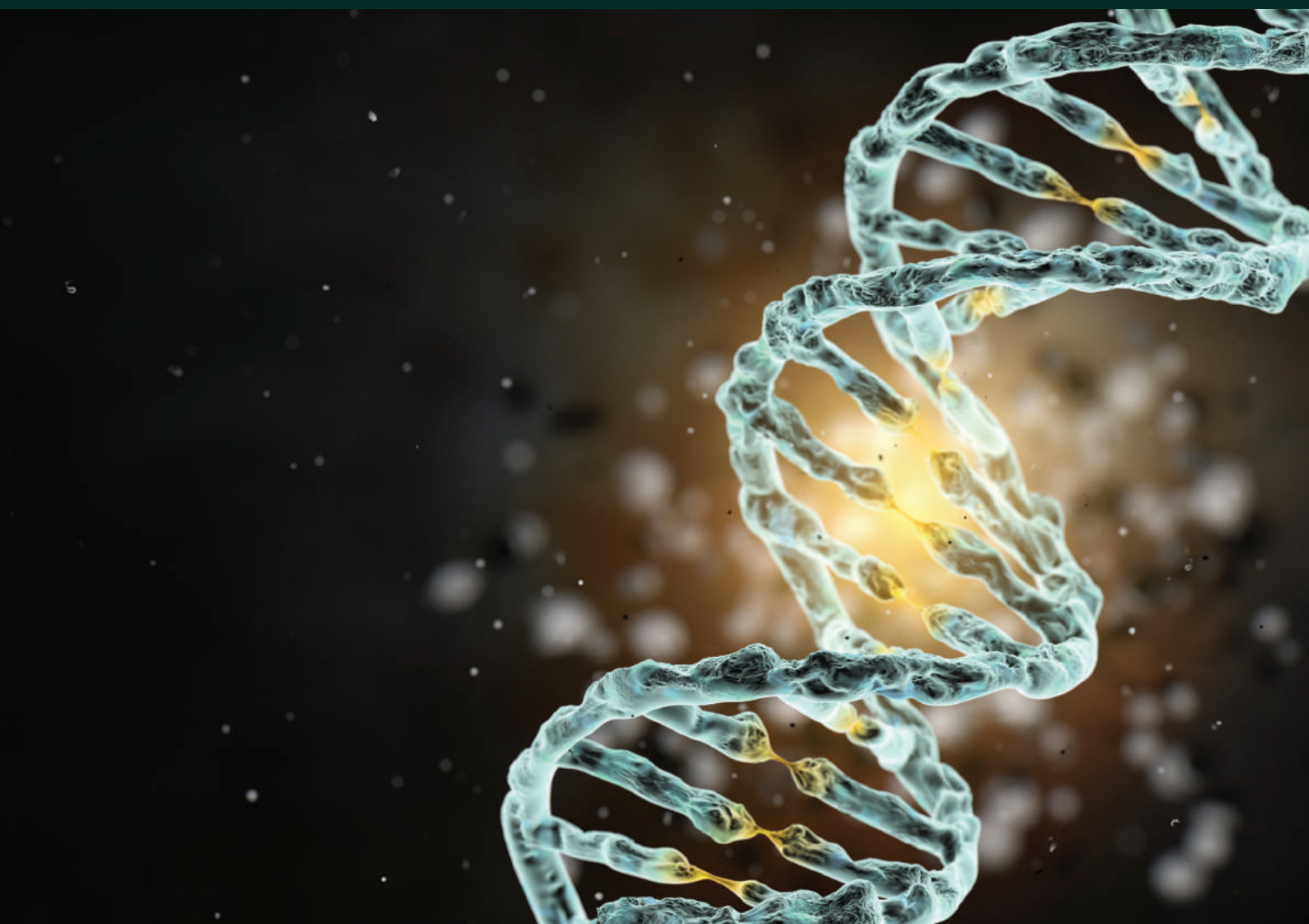
Supporting Journals

Supporting Journals

Journal of Nanomedicine & Nanotechnology
www.omicsonline.org/nanomedicine-nanotechnology.php

Journal of Nanomedicine & Biotherapeutic Discovery
www.omicsonline.org/nanomedicine-biotherapeutic-discovery.php

Journal of Nanomaterials & Molecular Nanotechnology
www.scitechnol.com/nanomaterials-molecular-nanotechnology.php



Meet Inspiring Speakers and Experts at our 3000+ Global Events Every year on Medical, Pharma, Engineering, Science, Technology, Business and 40 Varient fields

AGRI, FOOD & AQUA

18th Global Summit on
Food & Beverages
Oct 02-04, 2017 Chicago, USA

8th International Conference on
Fisheries & Aquaculture
Oct 02-04, 2017 Toronto, Canada

9th Global Food Safety Conference
Dec 04-06, 2017 Atlanta, USA

20th Global Food Processing & Technology Summit
Dec 11-13 , 2017 Philadelphia, USA

7th European Food Safety & Standards Conference
Sep 25-26, 2017 Vienna, Austria

10th International Conference on
Agriculture & Horticulture
Oct 02-04, 2017 London, UK

7th International Conference on
Aquaculture & Fisheries
Oct 19-21, 2017 Madrid, Spain

19th International Conference on
Food Processing & Technology
Oct 23-25, 2017 Paris, France

2nd International Conference on
Food Microbiology
Nov 09-11, 2017 Madrid, Spain

World Aqua Congress
Oct 23-24, 2017 Dubai, UAE

5th International Food Safety, Quality & Policy Conference
Nov 27-28, 2017 Dubai, UAE

ALTERNATIVE HEALTHCARE

13th International Conference on
Connective Tissue Diseases, Systemic Conditions, Treatment & Therapies
Sep 27-28, 2017 Chicago, USA

8th International Conference on
Traditional & Alternative Medicine
Sep 04-06, 2017 Paris, France

8th International Conference and Exhibition on
Natural & Alternative Medicine
Sep 25-27, 2017 Dubai, UAE

23rd International Conference on
Herbal and Alternative Remedies for Diabetes and Endocrine Disorders
Nov 02-04, 2017 Thailand, Bangkok

BIOCHEMISTRY

10th International Conference and Exhibition on
Metabolomics & Systems Biology
Oct 16-17, 2017 Baltimore, USA

3rd International Conference on
Genetic and Protein Engineering
Nov 08-09, 2017 Las Vegas, USA

9th International Conference on
Structural Biology
Sep 18-19, 2017 Zurich, Switzerland

9th International Conference and Expo on
Proteomics
Oct 23-25, 2017 Paris, France

9th International Conference on
Bioinformatics
Oct 23-24, 2017 Paris, France

3rd International Conference on
Lipid Science & Technology
Dec 11-12, 2017 Madrid, Spain

3rd International Conference on
Transcriptomics
Oct 30- Nov 01, 2017 Thailand, Bangkok

CARDIOLOGY

21st International Conference on
Clinical & Experimental Cardiology
Nov 06-07, 2017 Las Vegas, USA

2nd International Conference on
Hypertension & Healthcare
Sep 11-13, 2017 Amsterdam, Netherlands

2nd International Conference on
Echocardiography
Sep 11-12, 2017 Amsterdam, Netherlands

20th European Cardiology Conference
Oct 16-18, 2017 Budapest, Hungery

22nd World Cardiology Conference
Dec 11-12, 2017 Madrid, Spain

16th World Cardiology Congress
December 08-10, 2017 Dubai, UAE

3rd Global Summit on
Heart Diseases
Nov 02-04, 2017 Thailand, Bangkok

CHEMICAL ENGINEERING

7th International Congress and Expo on
Biofuels & Bioenergy
Oct 02-04, 2017 Toronto, Canada

3rd International Conference on
Chemical Engineering
Oct 02-04, 2017 Chicago, USA

7th International Conference and Exhibition on
Biopolymers and Bioplastics
Oct 19-21, 2017 San Francisco, USA

7th World Congress on
Petrochemistry and Chemical Engineering
Nov13-15, 2017 Atlanta, USA

2nd World Biodiesel Congress & Expo
Dec 04-05, 2017 Atlanta, USA

6th International Congress and Expo on
Biofuels, Bioenergy & Bioeconomy
Dec 04-06, 2017 Sao Paulo, Brazil

6th World Congress on **Biofuels and Bioenergy**
Sep 05-06, 2017 London, UK

6th World Congress on **Biopolymers**
Sep 07-09, 2017 Paris, France

2nd Euro Global Summit and Expo on **Biomass**
Sep 21-22, 2017 Madrid, Spain

International Conference on
Renewable Energy and Resources
Oct 05-07, 2017 Kuala Lumpur, Malaysia

CHEMISTRY

3rd World Chemistry Conference
Sep 11-12, 2017 Dallas, USA

5th International Conference on
Current Trends in Mass Spectrometry
Sep 25-27, 2017 Atlanta, USA

9th International Conference and Exhibition on
Analytical & Bioanalytical Techniques
Sep 28-29, 2017 Atlanta, USA

2nd International Conference on
Clinical Chemistry and Laboratory Medicine
Sep 28-29, 2017 Atlanta, USA

4th International Conference on
Past and Present Research Systems of Green Chemistry
Oct 16-18, 2017 Atlanta, USA

7th International Conference on
Medicinal Chemistry & Computer Aided Drug Designing
Nov 02-04, 2017 San Antonio, USA

2nd International Conference on
Nuclear Chemistry
Nov 06-07, 2017 Las Vegas, USA

2nd International Conference and Exhibition on
Polymer Chemistry
Nov 06-08, 2017 Las Vegas, USA

5th International Conference and Exhibition on
Pain Research & Management
Sep 04-05, 2017 London, UK

5th Global Chemistry Congress
Sep 04-06, 2017 London, UK

International Conference on
Physical and Theoretical Chemistry
Sep 18-19, 2017 Dublin, Ireland

2nd International Conference on
Pharmaceutical Chemistry
Oct 02-04, 2017 Barcelona, Spain

5th International Conference and Expo on
Separation Techniques
Oct 23-25, 2017 Paris, France

10th Annual Chemistry Congress
Oct 18-19, 2017 Osaka, Japan

6th Global Congress on
Mass Spectrometry
Oct 18-19, 2017 Osaka, Japan

7th Global Mass Spectrometry Congress
Dec 14-16, 2017 Dubai, UAE

COMPUTER SCIENCE

5th International Conference on
Big Data Analysis
Sep 07-08, 2017 Toronto, Canada

DENTISTRY

24th World Congress on
Dentistry and Oral Health
Sep 01-02, 2017 London, UK

24th Euro Congress on
Dental & Oral Health
Oct 19-20, 2017 Budapest, Hungery

3rd International Conference on
Sports Medicine and Fitness
Sep 21-23, 2017 Barcelona, Spain

International Conference on
Dentistry & Dental Marketing
Oct 05-06, 2017 Las Vegas, USA

29th Annual World Congress on
Dental Medicine & Dentistry
Oct 16-18, 2017 NewYork, USA

37th Global Summit on
Dental Surgeons & Dental Materials
Nov 02-04, 2017 San Antonio, USA

38th Annual Congress on
World Dentistry
Nov 06-08, 2017 San Antonio, USA

Meet Inspiring Speakers and Experts at our 3000+ Global Events Every year on Medical, Pharma, Engineering, Science, Technology, Business and 40 Varient fields

26th American Dental Congress
Dec 04-06, 2017 Atlanta, USA

39th World Dental Congress Summit
Dec 04-06, 2017 Sao Paulo, Brazil

30th Global Experts Meet on
Advanced Dentistry and Oral Health
Sep 21-22, 2017 Macau, Hong Kong

31st Annual Conference on
Dental Practice Management and Marketing
Sep 21-22, 2017 Macau, Hong Kong

37th Asia Pacific Dental and Oral Care Congress
Nov 20-22, 2017 Australia, Melbourne

9th Clinical Dermatology Congress
Oct 16-18, 2017 NewYork, USA

2nd International Conference on
Psoriasis and Skin Specialists Meeting
Sep 20- 21, 2017 Philadelphia, USA

12th Global Dermatologists Annual Meeting
Sep 01-02, 2017 London, UK

13th International Conference and Exhibition on
Cosmetic Dermatology and Hair care
Oct 26-27, 2017 Paris, France

23rd Asia Pacific Dermatology Conference
Oct 26-28, 2017 Osaka, Japan

International Conference on **Pigmentary Disorders** Sep 11-12, 2017 Dubai, UAE

17th World Dermatology Conference
Sep 11-12, 2017 Dubai, UAE

DIABETES AND ENDOCRINOLOGY

9th Annual Congress on
Endocrine Disorders and Therapies
Sep 11-12, 2017 Dallas, USA

International Conference on **Diabetes**
Sep 20-22, 2017 Denever, USA

International Conference on
Diabetes, Metabolism & Obesity
Nov15-17, 2017 Las Vegas, USA

International Conference on
Diabetes and Endocrinology
Dec 06-08, 2017 Atlanta, USA

21th International Conference on **Diabetes**
Oct 05-06, 2017 London, UK

International Conference on
Endocrinology and Diabetes Summit
Sep 13-14, 2017 Singapore

2nd International Conference on
Herbal and Alternative Remedies for Diabetes and Endocrine Disorders
Nov 02-04, 2017 Thailand, Bangkok

25th Global Diabetes and Medicare Expo
Dec 11-12, 2017 Dubai, UAE

ENVIRONMENTAL SCIENCES

International Conference on **Ecology and Ecosystems** Sep 18-20, 2017 Toronto, Canada

3rd Annual Congress on
Pollution and Global Warming
Oct 16-18, 2017 Atlanta, USA

4th International Conference on **GreenEnergy & Expo** Nov 06-08, 2017 Las Vegas, USA

5th International Conference on
Recycling: Reduce, Reuse and Recycle
Nov 06-08, 2017 Las Vegas, USA

3rd International Conference on
Green Energy and Expo
Sep 28-29, 2017 Milan, Italy

2nd International Conference on
Pollution Control and Sustainable Environment
Oct 10-11, 2017 London, UK

4th World Conference on
Climate Change
Oct 19-21, 2017 Madrid, Spain

2nd World Congress on
Climate Change and Global Warming
Oct 16-17, 2017 Dubai, UAE

EEE & ENGINEERING

International Conference on
Agricultural Engineering
Sep 11-12, 2017 San Antonio, USA

8th International Conference and Exhibition on
Biosensors and Bioelectronics Biosensors & Bioelectronics
Sep 27-28, 2017 Chicago, USA

2nd World Summit on
Bioengineering
Sep 27-28, 2017 Chicago, USA

5th International Conference and Exhibition on
Mechanical & Aerospace Engineering
Oct 02-04, 2017 Las Vegas, USA

4th World Congress and Exhibition on
Construction and Steel Structure
Oct 16-18, 2017 Atlanta, USA

7th International Conference on
Nuclear Engineering
Oct 16-18, 2017 Atlanta, USA

International Conference on **Applied Energy**
Oct 23-24, 2017 Orlando USA

6th International Conference on
Biostatistics & Bioinformatics
Nov13-14, 2017 Atlanta, USA

4th International Conference on
BigData Analysis and Data Mining
Sep 07-08, 2017 Paris, France

4th International conference and Expo on
Computer Graphics & Animation
Sep 25-26, 2017 Milan, Italy

3rd International Conference and Exhibition on
Automobile Engineering
Sep 28-29, 2017 Milan, Italy

2nd Global Summit on **Fluid Dynamics & Aerodynamics** Oct 19-20, 2017 Madrid, Spain

International Conference on
Mechatronics, Automation and Intelligent Materials Oct 23-25, 2017 Paris, France

International Conference on **Steel Structures**
Sep 11-12, 2017 Singapore

International Conference on
Smart Grid Technologies
Sep 11-12, 2017 Singapore

Geotechnical and Water Resource Engineering Summit
Sep 18-19, 2017 Macau, Hong Kong

3rd World Congress on
Robotics and Artificial Intelligence
Oct 23-24, 2017 Osaka, Japan

GASTROENTEROLOGY

International Conference on
Pancreatic Disorders and Treatment
Sep 13-14, 2017 Dallas, USA

2nd International Conference on
Hepatology & Gastroenterology
Nov 13-14, 2017 Las Vegas, USA

12th Euro-Global Gastroenterology Conference
Sep 11-12, 2017 Paris, France

2nd International Conference on
Digestive Diseases
Oct 16-17, 2017 London, UK

10th International Conference on
Gastroenterology
Oct 30- Nov 01, 2017 Bangkok, Thailand

GENETICS & MOLECULAR BIOLOGY

3rd Annual Genomics and Toxicogenomics Conference
Sep 27-28, 2017 Chicago, USA

Annual Summit on
Cell Signaling and Cancer Therapy
Sep 27-28, 2017 Chicago, USA

Annual Summit on
Cell Therapy
Sep 27-28, 2017 Chicago, USA

13th World Biotechnology Congress
Oct 19-20, 2017 NewYork, USA

2nd World Biotechnology Congress
Dec 04-05, 2017 Sao Paulo, Brazil

13th International Conference on
Human Genetics
Sep 14-15, 2017 Edinburgh, Scotland

9th Annual Conference on
Stem Cell and Regenerative Medicine
Sep 25-26, 2017 Milan, Italy

17th EuroBiotechnology Congress
Sep 25-27, 2017 Milan, Italy

7th International Conference on
Tissue Engineering and Regenerative Medicine
Oct 02-04, 2017 Barcelona, Spain

8th International Conference on
Tissue Science and Regenarative Medicine
Sep 11-12, 2017 Singapore

10th International Convention on
Stem Cell and Biobanking
Oct 23-24, 2017 Osaka, Japan

GEOLOGY & EARTH SCIENCE

3rd World Congress on
GIS and Remote Sensing
Sept 20-21, 2017 Charlotte, USA

2nd International Convention on
Geophysics and Geo technics
Nov 08-09, 2017 Las Vegas, USA

2nd International Convention on
Geosciences and Remote Sensing
Nov 08-09, 2017 Las Vegas, USA

Annual Congress on
Soil Sciences
Dec 04-05, 2017 Madrid, Spain

6th International Conference on
Earth Science and Climate change
Sep 18-19, 2017 Macau, Hong Kong

5th International Conference on
Oceanography and Marine Biology
Oct 16-17, 2017 Seoul, South Korea

Meet Inspiring Speakers and Experts at our 3000+ Global Events Every year on Medical, Pharma, Engineering, Science, Technology, Business and 40 Varient fields

HEALTHCARE MANAGEMENT

3rd International Conference on
Wound Care, Tissue Repair & Regenerative Medicine
Sep 11-12, 2017 Dallas, USA

13th International Conference on
Health & Medical Sociology
Sep 25-26, 2017 Atlanta, USA

2nd International Conference on
Environmental Health & Safety
Sep 07-08, 2017 Paris, France

2nd International Conference on
General Practice & General Medicine
Sep 18-20, 2017 Zurich, Switzerland

6th International Conference on
Epidemiology & Public Health
Oct 23-25, 2017 Paris, France

2nd International Conference on
Health & Hospital Management
Nov 06-07, 2017 Vienna, Austria

International Conference on
Medical Education
Nov 06-08, 2017 Vienna, Austria

12th World Congress on
Healthcare and Medical Tourism
Oct 16-17, 2017 Dubai, UAE

IMMUNOLOGY

3rd Antibodies and Bio Therapeutics Congress
Nov 08-09, 2017 Las Vegas, USA

5th International conference on
HIV/AIDS, STDS & STIS
Nov 13-14, 2017 Las Vegas, USA

9th World Congress and Expo on
Immunology
Nov 02-03, 2017 Atlanta, USA

3rd International Conference on
Immunity, Inflammation and Immunotherapies
Nov 02-03, 2017 Atlanta, USA

4th International Conference on
Parasitology
Sep 01-02, 2017 Prague, Czech Republic

2nd International Conference on
Autoimmunity
Nov 09-10, 2017 Madrid, Spain

World Immunology Congress
Dec 14-15, 2017 Dubai, UAE

INFECTIOUS DISEASES

9th Euro-Global Conference on **Infectious Diseases** Sep 07-09, 2017 Paris, France

13th World Congress on
Infection Prevention and Control
Oct 26-27, 2017 Milano, Italy

2nd International Conference on **Infection Control**
Sep 25-26, 2017 Chicago, USA

3rd Annual Congress on
Rare Diseases and Orphan Drugs
Oct 30-Nov 01, 2017 San Antonio, USA

3rd International conference on
Flu & Emerging Infectious Diseases
Nov 06-07, 2017 Las Vegas, USA

6th Annual Bacteriology and Parasitology Meeting
Sep 13-14, 2017 Singapore

7th Asia Pacific STD and Infectious Diseases Congress
Oct 23-25, 2017 Osaka, Japan

MATERIALS SCIENCE

3rd International Conference on
Polymer Science and Engineering
Oct 02-04, 2017 Chicago, USA

2nd International Conference on
Applied Crystallography
Oct 16-18, 2017 Chicago, USA

13th International Conference and Exhibition on
Materials Science and Engineering
Nov13-15, 2017 Las Vegas, USA

14th International Conference on
Functional Energy Materials
Dec 06-07, 2017 Atlanta, USA

11th International Conference on
Advanced Materials and Processing
Sep 06-07 2017 Edinburgh, Scotland

12th Annual Congress on
Materials Science and Nanotechnology
Sep 25-26, 2017 Dubai, UAE

International Conference on
Advanced Materials and Nanotechnology
Oct 26-28, 2017 Osaka, Japan

MICROBIOLOGY

2nd International conference on
Environmental & Soil Microbiology
Sep 18-20, 2017 Toronto, Canada

7th International Conference on
Clinical Microbiology
Sep 25-26, 2017 Chicago, USA

2nd International conference on
Human Papillomavirus
Nov13-14, 2017 Las Vegas, USA

2nd International Congress on
Mycology
Sep 25-26, 2017 Chicago, USA

International Conference on
Infectious Diseases & Diagnostic Microbiology
Sep 13-14, 2017 Dallas, USA

3rd World Congress on
Beneficial Microbes: Food, Pharma, Aqua & Beverages Industry
Sep 18-20, 2017 Houston, USA

World Summit on
Microbial & Biochemical Technologies
Sep 18-20, 2017 Houston, USA

Global Veterinary Microbiology Summit & Expo
Oct 02-04, 2017 Las Vegas, USA

11th World Summit on
Medical Microbiology
Oct 02-04, 2017 Las Vegas, USA

World Summit on
Nosocomial and Healthcare Associated Infections
Oct 02-04, 2017 Las Vegas, USA

6th Annual Conference on
Microbiology
Oct 16-17, 2017 Baltimore, USA

11th World Congress on
Virology
Oct 16-17, 2017 Baltimore, USA

World Yeast Congress
Dec 06-07, 2017 Sao Paulo, Brazil

46th World Congress on Microbiology
Sep 18-19, 2017 Dublin, Ireland

6th Clinical Microbiology Conference
Oct 26-27, 2017 Paris, France

4th World Congress and Expo on
Applied Microbiology
Nov 09-11, 2017 Madrid, Spain

2nd International Conference and Summit on
Industrial and Pharmaceutical Microbiology
Oct 23-25, 2017 Osaka, Japan

10th International Congress on
Clinical Virology
Dec 04-05, 2017 Dubai, UAE

Annual Congress on
Microbes and Infection
Dec 04-05, 2017 Dubai, UAE

NANOTECHNOLOGY

22th International Conference and Expo on
Nanoscience and Molecular Nanotechnology
Nov 13-14, 2017 Vienna, Austria

International Conference on
Nano Science and Technology
Sep 18-19, 2017 Orlando, USA

19th International Conference on
Nanotek and Expo
Nov13-15, 2017 Atlanta, USA

17th Nanotechnology products and Summit
Nov13-15, 2017 Atlanta, USA

15th World Medical Nanotechnology Congress & Expo
Oct 18-19, 2017 Osaka, Japan

3rd Biomedical Engineering and Expo
Nov 07-08, 2017 Barcelona, Spain

NEPHROLOGY

16th European Nephrology Conference
Oct 02-04, 2017 Barcelona, Spain

17th World Nephrology Conference
Oct 18-19, 2017 Dubai, UAE

NEUROSCIENCE

3rd International Conference on
Parkinson's Disease & Movement Disorders
Sep 25-26, 2017 Chicago, USA

3rd International Conference on
Spinal Surgery
Oct 16-17, 2017 Chicago, USA

8th International Conference and Exhibition on
Addiction Research & Therapy
Nov 13-15, 2017 Las Vegas, USA

3rd International Conference on
Central Nervous System Disorders
Sep 25-27, 2017 Vienna, Austria

16th International Conference on
Neuro Cognitive Disorders
Oct 10-11, 2017 London, UK

9th International Conference on
Alzheimer's Disease & Dementia
Oct 16-18, 2017 Madrid, Spain

6th International Conference on
Brain Disorders and Therapeutics
Nov 06-08, 2017 Madrid, Spain

Meet Inspiring Speakers and Experts at our 3000+ Global Events Every year on Medical, Pharma, Engineering, Science, Technology, Business and 40 Varient fields

18th Global Neurologists Annual Meeting on
Neurology and Neuro Surgery
Nov 16-17, 2017 Vienna, Austria

15th International Conference on
Neuroscience
Oct 16-17, 2017 Osaka, Japan

13th Global Neurologists Annual Meeting on
Neurology and Neuro Surgery
Nov 27-28, 2017 Dubai, UAE

NURSING

32nd International Conference on
Family Nursing and Healthcare
Sep 11-13, 2017 San Antonio, USA

34th Clinical Nursing & Nurse Education Conference
Sep 20-21, 2017 charlotte, USA

3rd International Conference on
Reproductive Health
Oct 05-06, 2017 Chicago, USA

11th Global Healthcare and Fitness Summit
Oct 16-18, 2017 San Francisco, USA

46th Global Nursing and Healthcare Conference
Dec 06-07, 2017 Sao Paulo, Brazil

35th Global Nursing Care and Education Conference
Sep 25-27, 2017 Atlanta, USA

40th International Conference on
Nursing & Healthcare
Oct 16-18, 2017 NewYork, USA

37th World Nursing Education Conference
Sept 01-03, 2017 Prague, Czech Republic

28th International Conference on
Pediatric Nursing and Healthcare
Sep 04-05, 2017 Edinburgh, Scotland

35th Critical Care nursing & Nurse Practitioners Conference
Sep 28-29, 2017 Milan, Italy

4th International Conference on **Gynecology & Obstetrics** Oct 02-04, 2017 Barcelona, Spain

13th International Conference on
Midwifery and Women's Health
Oct 02-04, 2017 London, UK

41st Euro Nursing & Medicare Summit
Oct 26-28, 2017 Paris, France

International Conference on
Oncology Nursing and Cancer Care
Sep 13-14, 2017 Singapore

23rd World Nurse Practitioners Conference
Sep 28-29 2017 Dubai, UAE

27th Surgical Nursing & Nurse Education Conference Oct 16-17, 2017 Dubai, UAE

Asia-Pacific Nursing and Medicare Summit
Oct 05-07, 2017 Kuala Lumpur, Malaysia

World Congress on
Nursing Pharmacology and Nursing Education
Nov 20-21, 2017 Melbourne, Australia

NUTRITION & OBESITY

16th International conference and Exhibition on
Obesity & Weight Management
Nov16-17, 2017 Atlanta, USA

17th World Fitness Expo
Nov 16-17, 2017 Atlanta, USA

15th World Congress on
Nutrition and Food Chemistry
Sep 18-20, 2017 Zurich, Switzerland

13th Euro Obesity and Endocrinology Congress
Sep 21-23, 2017 Madrid, Spain

6th International Conference and Exhibition on
Probiotics, Functional and Baby Foods
Oct 02-03, 2017 London, UK

15th Global Obesity Meeting
Oct 23-24, 2017 Dubai, UAE

18th Global Dieticians & Nutritionists Annual Meeting
Oct 02-03, 2017 Kuala Lumpur, Malaysia

16th Obesity Medicine Conference
Oct 30- Nov 01, 2017 Thailand, Bangkok

ONCOLOGY & CANCER

25th World Congress on
Cancer Therapy
Oct 18-20, 2017 Baltimore, USA

10th Annual World Congress on
Biomarkers & Clinical Research
Oct 18-20, 2017 Chicago, USA

5th International Conference on
Medical Imaging and Radiology
Oct 19-20, 2017 NewYork, USA

15th World Oncologists Annual Conference
Oct 19-20, 2017 NewYork, USA

World Medical and Clinical Oncology Congress
Nov13-15 , 2017 Las Vegas, USA

5th World Congress on
Breast Cancer
Oct 16-18, 2017 San Francisco, USA

9th International Conference on
Hematology and Hematological Oncology
Nov 08-09, 2017, Las Vegas, USA

2nd International conference on
Medical Imaging and Radiology
Sep 11-12, 2017 London, UK

11th International Conference on
Hematologic Oncology
Oct 05-06, 2017 London, UK

25th World Cancer Conference
Oct 19-21, 2017 Madrid, Spain

International Conference on
Epigenetics
Nov 06-07, 2017 Madrid, Spain

9th International Conference on
Biomarkers
Oct 16-17, 2017 Osaka, Japan

14th Asia Pacific Oncologists Annual Meeting
Oct 26-28, 2017 Osaka, Japan

World Cancer Convention
Nov 27-28, 2017 Dubai, UAE

International Conference on **Cancer Diagnostics**
Nov 27-28, 2017 Dubai, UAE

International Conference on **Epigenetic Research**
Oct 26-28, 2017 Osaka, Japan

OPHTHALMOLOGY

20th World Ophthalmology Summit
Dec 04-05, 2017 Sao Paulo, Brazil

5th International conference and Expo on
Optometry and Vision Science
Sep 11-12, 2017 Paris, France

16th International Conference on
Clinical & Experimental Ophthalmology
Sep 18-20, 2017 Zurich, Switzerland

18th European Ophthalmology Congress
Dec 07-09, 2017 Madrid, Spain

2nd World Ophthalmology Conference
Oct 23-25, 2017 Osaka, Japan

17th Global Ophthalmology and Glaucoma Conference
Nov 27-28, 2017 Dubai ,UAE

PALLIATIVE CARE

8th International Conference on
Geriatric Medicine & Gerontological Nursing
Oct 30-Nov 01, 2017 San Antonio, USA

7th International Conference on
Geriatrics & Gerontological Nursing
Sep 04-05, 2017 Edinburgh, Scotland

PATHOLOGY

2nd International Conference on
Internal Medicine
Sep 13-14, 2017 Dallas, USA

7th International Conference on
Predictive, Preventive and Personalized Medicine & Molecular Diagnostics
Oct 5-6, 2017 Chicago, USA

6th Experts Meeting on
Medical Case Reports
Oct 16-18, 2017 San Francisco, USA

2nd International conference on
Digital Pathology
Nov 02-03, 2017 San Antonio, USA

5th European Conference on
Clinical and Medical Case Reports
Sep 07-08, 2017 Paris, France

PEDIATRICS

2nd World Congress Pediatric Oncology & Pediatric Medicine
Oct 05-06, 2017 Las Vegas, USA

3rd Annual Summit on
Pediatric Cardiology & Pulmonology
Sep 25-26, 2017 Chicago, USA

11th World Congress on
General Pediatrics & Adolosent medicine
Sep 25-26, 2017 Chicago, USA

2nd Annual Congress on
Infancy, Child Nutrition & Development (ICND)
Oct 19-21, 2017 Atlanta,USA

5th Annual Conference on
Translational Medicine
Nov15-16, 2017 Las Vegas, USA

16th European Pediatrics Conference
Sep 01-03, 2017 Prague, Czech Republic

2nd International Conference on
Pediatric Neurology
Sep 01-02, 2017 Prague, Czech Republic

20th International Conference on
Neonatology and Perinatology
Dec 04-06, 2017 Madrid, Spain

10th World Pediatric Congress
Sep 28-29 2017 Dubai, UAE

PHARMACEUTICAL SCIENCES

2nd International Pharmacy Conference
Sep 01-02, 2017 Las Vegas, USA

Meet Inspiring Speakers and Experts at our 3000+ Global Events Every year on Medical, Pharma, Engineering, Science, Technology, Business and 40 Varient fields

4th International Conference on
Clinical Trials
Sep 11-13, 2017 San Antonio, USA

World Congress on
Biotherapeutics and Bioanalytical Techniques
Sep 11-12, 2017 Dallas, USA

6th International Conference on
Forensic Research & Technology
Sep 18-20, 2017 Houston, USA

6th International Summit on
GMP, GCP & Quality Control
Sep 25-26, 2017 Chicago, USA

7th International Conference and Exhibition on
Pharmaceutical Regulatory Affairs and IPR
Sep 25-26, 2017 Chicago, USA

10th Pharmacovigilanace Congress
Sep 21-22, 2017 Charlotte, USA

10th International Conference and Exhibition on
Biologics and Biosimilars
Oct 16-17, 2017 Baltimore, USA

11th World Drug Delivery Summit
Oct 16-18, 2017 NewYork, USA

5th International Conference on
Clinical Pharmacy
Oct 23-24, 2017 Orlando, USA

9th World Congress on
Pharmacology
Sep 04-06, 2017 Paris, France

3rd International Conference on
Advanced Clinical Research and Clinical Trials
Sep 20-21, 2017 Dublin, Ireland

8th Annual Pharmaceutical Analysis Conference Sep 25-26, 2017 Vienna, Austria

International Conference on
Biotech Pharmaceuticals
Oct 23-25, 2017 Paris, France

3rd International Conference and Expo on
Drug Discovery & Designing
Sep 25-27, 2017 Vienna, Austria

European Biopharma Congress
Nov 16-17, 2017 Vienna, Austria

3rd Global Summits on
Herbal & Traditional Medicine
Oct 18-20, 2017 Osaka, Japan

12th Annual Pharma Middle East Congress
Sep 25-27, 2017 Dubai, UAE

9th Annual Congress on
Drug Formulation & Drug Design
Oct 19-21, 2017 Seoul, South Korea

10th International Conference on
Neuropharmacology and Neuropharmaceuticals
Oct 23-24, 2017 Dubai, UAE

3rd World Congress on **Medicinal Plants and Natural Products Research**
Oct 02-04, 2017 Kuala Lumpur, Malaysia

6th Global Congress on **Mass Spectrometry**
Oct 18-19, 2017 Osaka, Japan

17th International Conference on
Nanomedicine and Nanotechnology in Health Care
Nov 23-24, 2017 Melbourne, Australia

10th International Conferences on
Immunopharmacology and Immunotoxicology
Nov 20-21, 2017 Melbourne, Australia

PHYSICAL THERAPY & REHABILITATION

5th International Conference and Exhibition on
Physical Medicine and Rehabilitation
Sep 11-12, 2017 Antonio, USA

6th International Conference on **Physiotherapy**
Nov 27-28, 2017 Dubai, UAE

PHYSICS

3rd International Conference on
Theoretical and Condensed Matter Physics
Oct 19-21, 2017 NewYork, USA

2nd International Conference on
Astrophysics and Particle Physics
Oct 30-Nov1, 2017 San Antonio, USA

8th International Conference and Exhibition on
Lasers, Optics & Photonics
Nov 02-04, 2017 San Antonio, USA

2nd International Conference on
Atomic and Nuclear Physics
Nov 8-9, 2017 Las Vegas, USA

2nd International Conference on
Quantum Physics and Quantum Technology
Sep 25-26, 2017 Milan, Italy

International Conference on
High Energy Physics
Dec 11-12, 2017 Madrid, Spain

PSYCHIATRY

23rd International Conference on
Adolescent Medicine & Child Psychology
Sep 28-29, 2017 Milan, Italy

2nd Experts Meeting on
Forensic Psychology and Criminology
Oct 02-03, 2017 London, UK

24th International Conference on
Psychiatry & Psychosomatic Medicine
Oct 02-04, 2017 London, UK

25th World Summit on
Psychology, Psychiatry & Psychotherapy
Oct 19-20, 2017 San Francisco, USA

5th International Conference on
Counseling Psychology
Oct 16-17, 2017 Osaka, Japan

International Conference on
Psychiatry and Mental Health
Nov 20-21, 2017 Melbourne, Australia

10th World Psychiatrists Meet
Dec 07-08, 2017 Dubai, UAE

RESPIRATORY

5th International Conference and Exhibition on
Lung and Respiratory Care
Oct 19-20, 2017 San Francisco, USA

SURGERY

2nd International Conference on
Anesthesia and Analgesia
Sep 07-08, 2017 London, UK

6th International Conference and Exhibition on
Surgery Sep 07-09, 2017 London, UK

2nd International Conference on
Ear, Nose and Throat Disorders
Oct 16-18, 2017 Madrid, Spain

4th International Conference and Exhibition on
Rhinology and Otology
Oct 18-20, 2017 Dubai, UAE

TOXICOLOGY

3rd Annual Genomics and Toxicogenomics Conference
Sep 27-28, 2017 Chicago, USA

12th International Conference on
Environmental Toxicology and Ecological Risk Assessment
Oct 19-20, 2017 Atlanta,USA

11th International Congress on
Toxicology and Risk Management
Oct 10-12, 2017 London, UK

International Conference on
Occupational Toxicology and Industrial Health
Oct 16-17, 2017 Dubai, UAE

VACCINES

18th Global Summit and Expo on
Vaccines & Vaccination
Sep 18-19, 2017 Houston, USA

19th World Congress on
Vaccines, Therapeutics for Infectious and Emerging Diseases
Oct 02-03, 2017 Chicago, USA

27th Asia Pacific Vaccines & Vaccination Conference
Oct 05-07, 2017 Kuala Lumpur, Malaysia

29th Global Vaccines & Vaccination Summit And Expo
Nov 30-Dec 1, 2017 Dubai, UAE

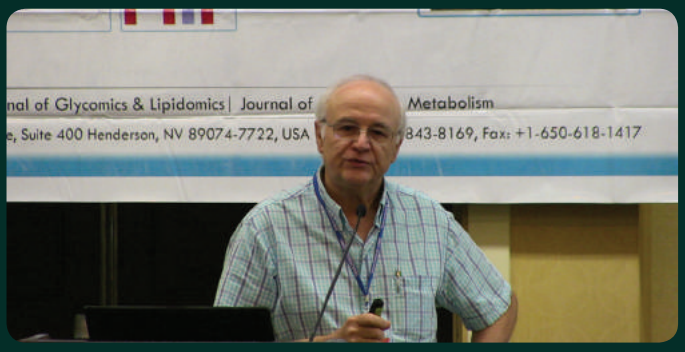
VETERINARY

8th International Conference on
Animal Health and Veterinary Medicine
Oct 02-04, 2017 Toronto, Canada

9th Global Veterinary Summit
Nov15-16, 2017 Las Vegas, USA

7th International Veterinary Congress
Sep 04-06, 2017 Paris, France







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Keynote Forum

Day 1

Oliver G Schmidt, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-013

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Oliver G Schmidt[1,2]

[1]*IFW Dresden, Germany*

[2]*Technical University Chemnitz, Germany*

Microtubular NEMS: from concepts to applications

Nanomembranes are thin, flexible, transferable and can be shaped into 3D microtubular nanomembrane architectures. This makes them attractive for a broad range of applications and scientific research fields ranging from novel hybrid heterostructure devices to ultra-compact 3D systems both on and off the chip. If nanomembranes are differentially strained they deform themselves and roll-up into microtubular structures upon release from their mother substrate. Rolled-up nanomembranes can be exploited to rigorously compact electronic circuitry and energy storage units. They can also serve as ideal platform to study novel photonic and plasmonic phenomena. As rolled-up microtubes can be easily tuned into the size range of single cells, they are perfectly suited to study single cell behavior in ultra-sensitive yet fully integrative lab-in-a-tube systems. As off-chip components, they address exciting environmental and biomedical applications such as biomimetic regenerative cuff implants or powerful self-propelling micro-autonomous systems. If magnetic tubes or helices are combined with spermatozoa, such hybrid micro-bio-robotic motors offer new perspectives towards paradigm shifting reproduction technologies.

Biography

Oliver G Schmidt is a Director at the Leibniz Institute for Solid State and Materials Research Dresden, Germany, and holds a full Professorship for Material Systems for Nanoelectronics at the Chemnitz University of Technology, Germany. His scientific activities are focused on nano- and micro-materials and bridge across interdisciplinary research fields, ranging from nanoelectronics and microrobotics to energy storage devices and biomedical applications. He has received several awards: the Otto-Hahn Medal from the Max-Planck-Society in 2000, the Philip-Morris Research Award in 2002 and the Carus-Medal from the German Academy of Natural Scientists Leopoldina in 2005. In 2010, he was awarded the Guinness World Record® for the smallest man-made jet engine and in 2011 he became Honorary Professor at Fudan Shanghai University. He received the International Dresden Barkhausen Award 2013, and since 2014 is the Chair of a new center for "Materials, Architectures and Integration of Nanomembranes (MAIN)". He has published more than 600 papers in peer-reviewed journals and has given more than 250 invited talks worldwide.

o.schmidt@ifw-dresden.de

Arturs Medvids, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-013

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Arturs Medvids

Riga Technical University, Latvia

A three-stage mechanism of ZnO nanoparticles formation at the surface of ZnO crystal by laser radiation

A three-stage mechanism of ZnO nanoparticles formation at the surface of ZnO crystal by the forth harmonic of Nd:YAG laser radiation is proposed. The first stage is intensive generation and concentration of Zn interstitials at the irradiated surface of ZnO crystal by the laser. The second stage is agglomeration of Zn interstitials to Zn nanoparticles with the size depending on the number and intensity of laser pulses. The third stage is transformation of the Zn nanoparticles into ZnO nanoparticles due to oxidation of Zn nanoparticles in atmospheric environment using the same laser radiation. An evidence of Zn phase formation in ZnO crystal is appearance of 70 cm-1 band in Raman spectra after irradiation by the first and the second laser pulse. A new broad band at 561 cm-1 in Raman spectra is observed after irradiation by 5 laser pulses. The intensity of the band increases with the number of laser pulses and at the same time the intensity of the 70 cm-1 band decreases until it disappears. The nature of the band is connected with oxidation of Zn nanoparticles. It is the third stage of ZnO nanoparticles formation. Comparison analysis of the proposed laser method with the conventional methods of nanoparticles formation in semiconductors will be carried out.

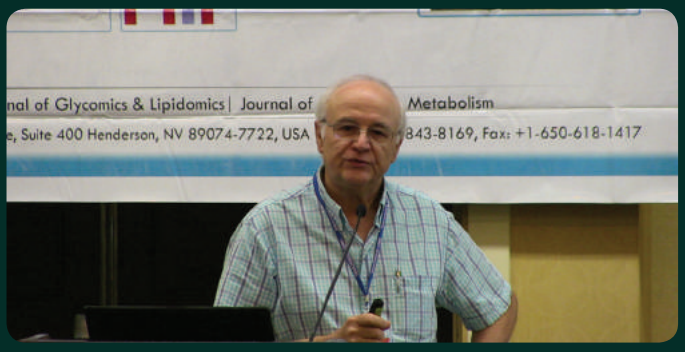
Biography

Arturs Medvids obtained the degree Dr. Habil. Phys., specializing in Solid State Physics at Latvian University, Riga. He has been the Head of Laboratory of Semiconductor Physics at Riga Technical University since 1989. He was a Professor at the Institute of Technical Physics of Riga Technical University since 1995. In 2001, he worked in Japan as an Invited Professor in Shizuoka University. He was awarded the title of Honourable Guest Professor of Shizuoka University, Japan, in 2009, 2014 and 2016. He has published more than 560 scientific publications which includes papers, conference proceedings, books and patents.

medvids@latnet.lv

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Plenary Session

Day 1

Nano Congress 2017

Andriy Kovalenko, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Andriy Kovalenko[1,2]

[1]National Institute for Nanotechnology, Canada

[2]University of Alberta, Canada

Molecular theory of solvation for supramolecular nanostructures and nanomaterials

In recent two decades, molecular theory of solvation for nanostructures in both aqueous and non-aqueous solutions, a.k.a. three-dimensional reference interaction site model (3D-RISM) with the Kovalenko-Hirata (KH) closure relation, was systematically developed and applied to a variety of compounds, supramolecules, and biomolecules in a number of solvents, solvent mixtures, electrolyte and non-electrolyte solutions. From the first principles of statistical mechanics, 3D-RISM-KH theory predicts the solvation structure and thermodynamics of nanochemical and biomolecular systems, including their analytical long-range asymptotics. It yields improved accuracy, efficiency, and applicability by coupling models and methods at different space and time scales to provide fundamental understanding and prediction for nanomaterials and biomolecules. The method has been coupled with quantum chemistry, molecular dynamics, and dissipative particle dynamics. Examples include helical rosette nanotubes with tunable stability and hierarchy, water promoted inversion of supramolecular chirality, formation and stability of self-assembling supramolecular structures of organic rosette nanotubes with ordered shells of inner and outer water, and highly accurate & efficient dissipative particle dynamics of polymer chains with coarse-grained effective pair potential obtained from DRISM-KH theory. Recent applications of 3D-RISM-KH consist in multiscale coupling of quantum chemistry, molecular solvation theory, multi-time step molecular dynamics, and dissipative particle dynamics. Calculations show the dependence of the polymerization degree on organic solvents properties and temperature/pressure change. Aggregation of kaolinite platelets due to face-to-face, edge-to-face, and edge-to-edge interactions and temperature/pressure strongly affect bioadsorption on clays and flocculation of clay nanoparticles in aqueous and non-aqueous solutions with polymers. Multi-Time-Step Molecular Dynamics coupled with 3D-RISM-KH molecular solvation theory and Generalized Solvation Force Extrapolation (MTS-MD/3D-RISM-KH/GSFE) provides quasidynamics description of biomolecules. Validation included folding of miniprotein in solution from fully extended to equilibrated state in 60 ns, which provides acceleration by two orders of magnitude time scale as compared to 4-9 μs protein folding in experiment.

Biography

Andriy Kovalenko is Senior Research Officer at the National Institute for Nanotechnology since 2003, and Adjunct Professor in the Department of Mechanical Engineering at the University of Alberta, Edmonton, Canada. He earned his PhD degree (1993) in Theoretical and Mathematical Physics from Lviv State University, Bogolyubov's Institute. He has been developing methodology and software implementation of statistical-mechanical, molecular theory of solvation, coupling it with electronic structure theories, molecular simulations, and docking protocols in a platform of predictive multiscale theory & modeling of chemical, supramolecular, and biomolecular systems constituting new advances towards a general framework of multiscale methods.

Andriy.Kovalenko@nrc-cnrc.gc.ca

Yoshitaka Fujimoto, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Yoshitaka Fujimoto

Tokyo Institute of Technology, Japan

Strain induced effects of hexagonal boron nitride atomic layers: a first-principles density-functional investigation

Since experimental realization of a graphene sheet, two-dimensional atomic-layer sheets have received much attention from the viewpoint of nanoscience and nanotechnology. Among them, hexagonal boron nitride (h-BN) atomic-layer sheets are also expected to be an important material since they possess several superior properties similar to a graphene. In the aspect of the electronic structures, both two materials exhibit considerably different features; graphene is a zero-gap material, whereas h-BN monolayer is a wide-gap material. One of the effective ways to tune electronic properties of nanomaterials is to apply strains to them. For example, the band gaps and the impurity states of h-BN monolayers are tunable by applying strains. In this talk, I will report strain effects on the stabilities and the electronic properties of h-BN atomic layers using first-principles density-functional calculations. I demonstrate the possible methods to tune the band gaps and the ionization energies of the impurity induced states in h-BN atomic layers. We also discuss the relationship among applied strains, band gaps and the impurity-related states of h-BN atomistic layers.

Biography

Yoshitaka Fujimoto received his PhD degree in Engineering from Osaka University, Japan. After receiving his PhD, he worked at the University of Tokyo and the University of Tsukuba. He joined Department of Physics, Tokyo Institute of Technology as an Assistant Professor. He has published more than 50 technical papers in peer-reviewed journals, reviews, book, book chapters, etc., and has served as referee of many international journals, organizations and committees in conferences.

fujimoto@stat.phys.titech.ac.jp

Notes:

Dominique Ausserré, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Dominique Ausserré[1,2]

[1]Molecular Landscape, Biophotonic Horizons Group - CNRS, France

[2]Le Mans University, France

Introducing backside absorbing layer microscopy (BALM)

BALM is a new wide field optical microscopy which is remarkably suited for nano enginnering. Most of the time, nano-objects have to be fixed on surfaces in order to be localized, handled, or used in combination with some environmental control. BALM is a surface imaging technique which combines extreme (say SPR-like) sensitivity with full optical resolution. Moreover, its implementation is confined in the half-space located below the sample, so that the upper half-space remains free for implementing environmental tools such as a fluidic cell, spectroscopic tools such as Raman analysis, local measuring tools such as electrical and SPM probes or local fields of any type. At last, it is a real time technique, hence offering large possibilities for kinetic studies. Thanks to a close collaboration with Vincent Dreycke, Stephane Campidelli and Renaud Cornut in the LICSEN group of CEA Saclay, the power of the technique in the study of 2D materials was recently demonstrated. The aim of this talk is to forecast the next coming BALM applications, supported by preliminary results obtained with various kinds of nanoparticles, sensor chips and solid liquid interfaces. The first principles of the technique will also be exposed.

Biography

Dominique Ausserré completed his PhD in Collège de France, Paris. He has been a Visiting Scientist in IBM, San Jose. He started a soft matter lab in Institut Curie, Paris, and then moved to Le Mans University in 1991. He is a Research Director in CNRS, France, and worked in the fields of optics, polymer and statistical physics, material science, capillarity and surface physical chemistry, now moving towards biology and healthcare oriented technological developments. He invented self-assembled nano-composite materials made of nanoparticles and diblock copolymers, self-assembled polar lamellar materials named ferrochemicals, and the surface-enhanced ellipsometric contrast (SEEC) technique and backside absorbing layer microscopy (BALM) optical techniques. He was Co-founder of two startups : Nanoraptor and Watch Live.

ausserre@univ-lemans.fr

Notes:

Phuong Mai Dinh, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Phuong Mai Dinh

University of Paul Sabatier, France

Dynamical treatment of dissipation in finite quantum electronic systems

The quantum description of dissipative mechanisms in finite quantum systems is a long standing question in physics. It was originally addressed in nuclear physics, in particular a few decades ago, with the development of classical and semiclassical approaches but without no convincing fully quantum one. Therefore, many dynamical scenarios (where quantum effects still play a role in spite of dissipative trends) cannot be treated. Meanwhile, a strong experimental motivation, now in the case of nanostructures and molecules irradiated by intense lasers, has shown up. This motivated an increasing number of theoretical investigations, mostly on the basis of the well developed Time Dependent Density Functional Theory (TDDFT) provides a robust effective mean field description of many low energy dynamical scenarios. Still, these TDDFT approaches fail to account for dissipative effects leading to the (observed) electronic pattern. There is thus a crucial need for a formal and practical route to account for dissipative/thermalization features on top of quantum mean field. We propose here a formalism allowing to describe the collisional correlations responsible for thermalization effects in finite quantum electronic systems. The approach is built as a stochastic extension of TDDFT. Dynamical correlations are treated in time-dependent perturbation theory and stochastic loss of coherence is assumed at some time intervals. This theory was formulated long ago for density matrices but never applied in practical cases because of its computational involvement. With a recent reformulation of the theory, applications are now conceivable and first tests have been successfully led in a simplifed 1D model.

Biography

Phuong Mai Dinh received her PhD in 2002 in High Energy Nuclear Physics (Institute for Theoretical Physics in Saclay, France), and has been recruited in 2003 at the Laboratory for Theoretical Physics of Toulouse. She now works on the theory of multi-electronic systems (clusters, molecules) excited by intense electromagnetic fields (lasers, charged projectiles), within time-dependent density functional theory (TDDFT) and beyond. She is a Developer of the TDDFT code "TELEMAN". She has published 59 referred articles including 3 reviews and 3 book chapters, and has written 3 books. She is a Junior Member of the Institut Universitaire de France since 2012.

dinh@irsamc.ups-tlse.fr

Notes:

Hyung Ho Park, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Hyung Ho Park

Yonsei University, Korea

Mesoporous thermoelectric oxides

Mesoporous oxides have a structure containing nano-sized pores of 2~50 nm and are prepared by sol-gel procedure using evaporation induced self assembly. The pore size, pore distribution (regular/irregular, open/close), and pore shape can be controlled according to the synthetic process, especially with surfactant molar ratio. The existence of pores in the material grants distinctive properties such as decreased thermal conductivity from increasing phonon scattering. Therefore mesoporous oxides can be used in many applications such as thermal insulators, thermoelectrics, gas sensors, and so on. The efficiency of a thermoelectric is determined by its dimensionless figure of merit, $Z = S^2\sigma/\kappa$ where S, σ, and κ are the Seebeck coefficient, electrical conductivity, and thermal conductivity, respectively. According to this equation, good thermoelectric material should possess large power factor ($PF = S^2\sigma$) and low thermal conductivity. When introducing the pore structure, thermal conductivity can be greatly decreased but also with electrical conductivity due to electron scattering by pore structure. So, in the case of mesoporous structure adoption to thermoelectric materials, a minimum reduction in electrical conductivity while maximizing thermal isolation effect is a key issue for an enhancement in the thermoelectric property. In this presentation, various experimental approaches including a control of pore structure and introductions of dopants and nano-materials to enhance the thermoelectric property are discussed. Through the approaches, we tried to control the thermal conductivity and electrical conductivity of mesoporous oxides individually to maximize the thermoelectric property.

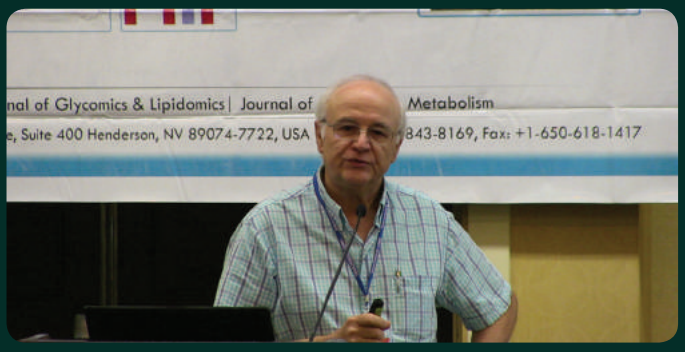
Biography

Hyung Ho Park is a Professor in the Materials Science & Engineering Department of Yonsei University in Korea since 1995. His research focuses on the preparation, characterization, and application of various functional thin films including nano-particle preparation, nano-hybridization, and nanostructure formation. Nano-hybrid thin films are prepared by the incorporation of nano-particles or *in situ* one-pot synthesis. Nanostructure formation involves nano-particle distribution in TCO and organic conductors and the control of nano-pore size and distribution in mesoporous thin films. He has published more than 380 SCI(E) papers in reputed journals and has been serving as an Editorial Board Member of more than 5 journals.

hhpark@yonsei.ac.kr

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Scientific Tracks & Abstracts

Day 1

Nano Congress 2017

Major Sessions:

Day 1 August 31, 2017

Nano Biomaterials | Nano Materials Synthesis and Characterisation | Nano Applications | Molecular Nano Technology | Nano Science and Technology | Nanotech for Energy and Environment | Nano Computational Modeling

Session Chair
Hyung-Ho Park
Yonsei University, South Korea

Session Co-Chair
Dinh Phuong Mai
University Paul Sabatier, France

Session Introduction

Title: **A Study on the Characteristics of Ni-Cr-Mn-Y-Dy Thin Film Resistors Using High Entropy Method**
Ying Chieh Lee, National Pingtung University of Science and Technology, Taiwan

Title: **EHDA Technologies for the Next Generation**
Zeeshan Ahmad, University Leicester, UK

Title: **Preparation of acrylic silicon oxide nanoparticles as a binder in leather finishing**
Ola Mohamed, National Research Center, Egypt

Ying-Chieh Lee et al., J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

A study on the characteristics of Ni-Cr-Mn-Y-Dy thin film resistors using high entropy method

Ying-Chieh Lee and **Wei-Ru Chen**
National Pingtung University of Science & Technology, Taiwan

Ni-Cr-Mn-Y-Dy resistive thin films were prepared on glass and Al2O3 substrates by DC magnetron co-sputtering from targets of Ni-Cr-Mn-Y casting alloy and Dy metals. Electrical properties and microstructures of Ni-Cr-Mn-Y-Dy films under different proportion of elements and annealing temperatures were investigated. The phase evolution, microstructural and composition of Ni-Cr-Mn-Y-Dy resistive films were characterized by X-ray diffraction (XRD), scanning electron microscopy (SEM), transmission electron microscopy (TEM) and Auger electron spectroscopy (AES). When the annealing temperature was set to 350°C, the Ni-Cr-Mn-Y-Dy films with an amorphous structure was observed. It is found that the resistivity of Ni-Cr-Mn-Y films was increased with increasing of Dy content. The Ni-Cr-Mn-Y films with 33.2% Dy addition annealed at 300°C which exhibited the resistivity of 1600 μΩ-cm with -8.2 ppm/°C of temperature coefficient of resistance (TCR).

Biography

Ying-Chieh Lee has completed his PhD from Departmant of Materials and Science and Engineering, National Chung-Hsin University. He is Dean of Office Research and Development, National Ping Tung University of Science and Technology. He has published more than 60 papers in reputed journals.

YCLee@mail.npust.edu.tw

Notes:

Zeeshan Ahmad, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

EHDA technologies for the next generation

Zeeshan Ahmad
University Leicester, UK

This talk will focus on the emergence, rapid growth and future development of electrohydrodynamic technologies (EHDA). These technologies arise from the impact of electrical stresses on liquid media flow and the talk will show how initial simple experiments have been transformed to yield very complex nano and micro structures as biomedical materials and biomaterials, covering aspects of drug delivery and biomedical engineering devices. The talk will demonstrate structure diversity and future potential for such technologies and details for current challenges will be shown. Furthermore, the talk will also discuss recent collaborative developments between industry and academia to take these ideas and concepts forward.

Biography

Zeeshan Ahmad is a Professor of Pharmaceutics & Drug Delivery at De Montfort University (The Leicester School of Pharmacy). He is a Royal Society Industry Fellow (working closely with BlueFrog Design) and also leads the EPSRC EHDA Network (a highly interdisciplinary initiative involving industry and academia). He obtained his first and Doctoral degrees from Queen Mary (University of London). He has broad research interests in medical materials, their engineering and ultimate applications for healthcare (interfacing at chemistry, biology, physics and biomedical engineering). Specifically, these include various modes of drug dosage form manufacturing (smart nanoparticles and microparticles, bubbles, fibrous materials, printed constructs and transdermal/skin contact systems), tissue engineering (scaffolds and cell guidance), medical device coatings (orthopaedic implants) and biomedical material synthesis (polymers and bioceramics). He also has a very keen interest in novel fabrication routes (EHDA, microfluidic and emulsion methods) to address healthcare challenges. He has published extensively in the field and his research has been supported by The Royal Society, EU, Leverhulme Trust, EPSRC and numerous industrial partners (from large Pharma to SME's).

zahmad@dmu.ac.uk

Notes:

Ola A Mohamed et al., J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Preparation of acrylic silicon oxide nanoparticles as a binder in leather finishing

Ola A Mohamed, Hamed S Mohamady and **Rasha Z Attia**
National Research Center, Egypt

Leather industry is one of the most pollutant industries in the world. It produces all types of environmental pollution especially in finishing step which uses organic hazards solvents. In order to minimize the environmental impact in leather industry, water-based recipes are proposed in leather finishing. The application of an acrylic emulsion as a top coat system provides an excellent balance of safety, performance and commerciality in comparison with other coats. Acrylic resin nanosize latex whose colloidal particle size is about 23 nm with solids content of about 25% was prepared by copolymerization of MMA and 2-EHA at different monomer ratios via micro emulsion polymerization technique. The best prepared copolymer so, it was modified with different ratios of silicon dioxide nanoparticles (1-5%), then studied the properties of the modified acrylic films and applied onto leather. The physical, chemical, mechanical and thermal properties of coated leather before and after silicon dioxide nanoparticles application were evaluated and discussed.

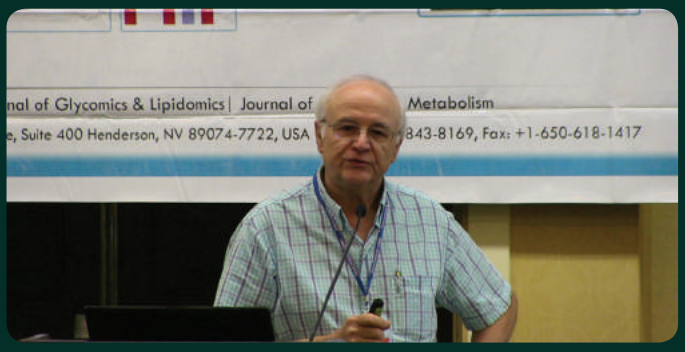
Biography

Ola Mohamed get PhD in Ain shamas university 2000, Associate Prof. in 2006 , Full Prof. in 2011. Her fields of Interest; Leather technology, Leather coating to improve its mechanical and physical properties. Using Nano technology in leather finishing, Recycling leather solid wastes and Recovery of chrome from tannery waste water using different nano- materials and techniques. Participate in many national and international conferences. PI for many international projects through scientific cooperation as France and China. Get and give many Training course and scientific Presentations.

olaashraf2000@yahoo.com

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Keynote Forum

Day 2

A I Archakov, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-013

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



A I Archakov

Institute of Biomedical Chemistry, Russia

AFM physicochemical properties and activity of single protein molecules of CYP 102A1 (BM3)

Atomic force microscopy (AFM) is a nanotechnological multifunctional molecular platform for measuring of physicochemical and functional properties of single proteins molecules. AFM was used for visualization of oligomeric state, activity, elasticity and electron transfer of single molecules of CYP 102A1 (BM3). It was shown that BM3 in water solution exists as monomer and different oligomers by use of sharp and super sharp AFM probes. Functional activity of single monomers and oligomers of BM3 was measured by AFM as well. The BM3 height fluctuations amplitude (HFA) during catalytic cycle is much larger than the HFA of the enzyme molecules in the resting state. It was found that an average HFA of dimers P450 BM3 during catalytic cycle increased up to 5.0±2Å•s^{-1} that was 2.5 times larger than a HFA of P450 BM3 in the resting state. It was obtained that the HFA of immobilized on mica cytochrome P450 BM3 depends on temperature, and 22˚C is a peak of this temperature profile. Mass spectrometry (MS) measurements were used to obtain a time course of a hydroxylation product of lauric acid oxidation during the enzymatic reaction of P450 BM3 in two cases: when enzyme was solubilized in the volume and when it was immobilized on the mica chip. In both cases the number of enzyme molecules was ≈10^{10}, and the kinetics was linear during the first 10 minutes. It was shown that in the case of solubilized enzyme $k_{cat}=10^{-3}$ s^{-1}, and in the case of immobilized enzyme $k_{cat}=0.4•10^{-3}$ s^{-1} that was 2.5 times less than the first one. The purpose of our work was to find a relationship between enzyme HFA and its catalytic activity. Therefore, AFM data was analyzed together with MS data and the following equation was obtained: $k_{cat}= \beta• (\exp(\Delta A/ A0)^{-1}$, where k_{cat} – is a catalytic rate constant (s^{-1}); β is a proportionality factor (s^{-1}); ΔA = Δ Ā – A0 (Å), where Ā and A0 are the average amplitudes of P450 BM3 height oscillations in the active and resting states, respectively. The value $\beta = 5•10^{-6}$ s^{-1} was calculated from time dependence of reaction curves measured by AFM and MS. Elasticity of single protein was measured based on deformation of this protein under AFM probes with various radii of curvature. Young's modulus of BM3 molecules depends on AFM modes. Based on the obtained data, the following conclusions may be made: the enzyme catalytic activity of single molecules can be measured as a HFA of BM3 oscillation during catalytic cycle.

Biography

A I Archakov is a Full Member of the Russian Academy of Sciences and Professor & Scientific Advisor at Institute of Biomedical Chemistry. He has organized scientific school to study molecular organization and functioning of oxygenase cytochrome P450-containing systems, molecular mechanisms of the structure and function of membranes and biological oxidation. He has guided the institute's members in developing a fundamentally new pharmaceutical composition "Phosphogliv" with antiviral activity for the treatment of liver diseases of various etiology. He is the pioneer in the development of proteomics in Russia. Currently, he is the International "Human Proteome" Project Coordinator in Russia. He is one of the Russia's top 100 scientists with Hirsch number 27. He is the author of more than 700 scientific works including about 482 scientific articles, 6 monographs, 30 patents and author's certificates. He was Scientific Advisor for 15 Doctors' and more than 60 PhD theses. He is the winner of three state prizes of the USSR, the RSFSR and of the Russian Federation, the Russian Federation Government Award, the Bach Prize of the USSR Academy, and the Order "For Merit to the Fatherland" (IV, III, II class).

inst@ibmc.msk.ru

Liqiu "Rick" Wang, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-013

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Liqiu "Rick" Wang

The University of Hong Kong, Hong Kong

Small is big: magic microfluidic droplets

Droplets of nanoliter and subnanoliter are useful in a wide range of applications, particularly when their size is uniform and controllable. Examples include biochemistry, biomedical engineering, food industry, pharmaceuticals, and material sciences. One example of their many fundamental medical applications is the therapeutic delivery system for delivering site-specific therapy to targeted organs in the body and as the carriers for newer therapeutic options. The size, the size distribution, the generation rate and the effective manipulation of droplets at a scale of nano, pico, femto and even atto liters are critical in all these applications. We make an overview of microfluidic droplet generation of either passive or active means and report a glass capillary microfluidic system for synthesizing precisely controlled monodisperse multiple emulsions and their applications in engineering materials, nanofluids, microfibers, embolic particles and colloidosome systems. Our review of passive approaches focuses on the characteristics and mechanisms of breakup modes of droplet generation occurring in microfluidic cross-flow, co-flow, flow-focusing, and step emulsification configurations. The review of active approaches covers the state-of-the-art techniques employing either external forces from electrical, magnetic and centrifugal fields or methods of modifying intrinsic properties of flows or fluids such as velocity, viscosity, interfacial tension, channel wettability, and fluid density, with a focus on their implementations and actuation mechanisms. Also included is the contrast among different approaches of either passive or active nature.

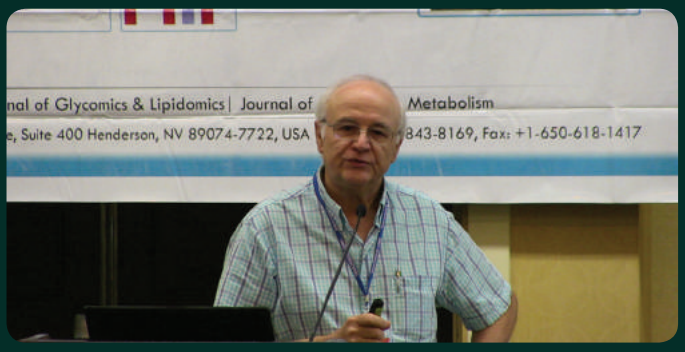
Biography

Liqiu "Rick" Wang received his PhD from University of Alberta (Canada) and is currently a Full Professor in the Department of Mechanical Engineering, the University of Hong Kong. He is also the Qianren Scholar (Zhejiang) and serves as the Director and the Chief Scientist for the Laboratory for Nanofluids and Thermal Engineering, Zhejiang Institute of Research and Innovation (HKU-ZIRI), the University of Hong Kong. He has over 30 years of university experience in thermal & power engineering, energy & environment, transport phenomena, materials, nanotechnology, biotechnology, and applied mathematics in Canada, China/Hong Kong, Singapore and the USA, and 2 years of industrial experience in thermal engineering and technology management. He has secured over 70 projects funded by diverse funding agencies and industries including the Research Grants Council of Hong Kong, the National Science Foundation of China and the Ministry of Science and Technology of China, totaling > US$ 15m (excluding US$ 2.2 billion for AMS project). He has published 10 books/monographs and 356 book chapters and technical articles, many of which have been widely used by researchers all over the world, and is ranked amongst the top 1% of most-cited scientists (ESI). He has also filed 22 patent applications and led an international team in developing a state-of-the-art thermal control system for the Alpha Magnetic Spectrometer (AMS) on the International Space Station.

lqwang@hku.hk

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Plenary Session

Day 2

Xochitl Dominguez Benetton, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Xochitl Dominguez Benetton

Flemish Institute for Technological Research, Belgium

Flexible and versatile nanoparticle synthesis platform by gas-diffusion electrocrystallization

Gas-diffusion electrocrystallization (GDEx) is a new electrochemical process that conveys the synthesis of crystalline nanomaterials with well controlled and narrowly distributed properties that relate to specific functionalities. GDEx is a one-pot rapid process involving a porous cathode, an aqueous electrolyte containing metal or metalloid ions, and an oxidant gas, in which colloidal dispersions of nanomaterials or solid nanoparticles are synthesized. The general principles and mechanism through which GDEx operates will be introduced. Cerium oxide nanoparticles with controlled crystallite sizes and compositions, which result in tunable oxygen sorption capacities and kinetics, have been synthesized using GDEx. These can be tailored for pro-oxidant or anti-oxidant applications of interest for electronic packaging, oxidative stress alleviation, or cancer therapy. GDEx has also been used to produce iron oxide nanoparticles in which the ratio of heamatite (Fe_2O_3) and magnetite (Fe_3O_4) can be tweaked, providing the possibility to regulate their magnetic susceptibility. These materials are studied for molecular diagnostics. Solid nanoparticles of herbertsmithite, have been obtained. These Cu/Zn-based nanoparticles may have applications in data storage, high-temperature superconductors and for so-called "quantum-entangled" batteries. Finally, when using manganese, compositions with birnessite and hausmannite — which may intercalate water and alkali metals — have been synthesized, providing promising materials for batteries electrodes or catalysts. GDEx is revealed as a new route to synthesize a wide range of nanoparticles, flexibly and with versatile control of composition, morphology, and physicochemical parameters, which in turn tailor specific functionalities.

Biography

Xochitl Dominguez Benetton completed her PhD at the Mexican Petroleum Institute. She started her early career as a Research Professor at the University of Yucatan, in Mexico, followed by Postdoctoral Research at the National Polytechnic Institute of Toulouse, in France. Currently, she is a Senior Scientist at the Flemish Institute for Technological Research where she has conducted research on Electrochemical Systems, leading to more than 40 papers in reputed journals, as well as 5 patents. She invented the process of gas-diffusion electrocrystallization, and is currently developing a wide-ranging library of functional nanomaterials.

xoch@vito.be

Kiminori Sato, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Kiminori Sato

Tokyo Gakugei University, Japan

Functional two-dinensional materials for energy and environment

Two-dimensional (2D) nanomaterials, as e.g., inorganic layered mineral, graphene, and metallic nanosheet, have been attracting increasing interest in the field of energy- and environment-related advanced materials owing to their unique properties on catalysis, adsorption, and electronic transport. It is known that the inorganic layered nanoparticles spontaneously organize into well-defined local structures through the mutual interactions of 2D nanosheets in the presence of water molecules. This spontaneous ordering of 2D nanosheets induced by water molecules, so-called self-assembly of 2D nanosheets, is found to produce the local molecular structures that is responsible for environmental functionalities Here, local molecular and electronic structures created by 2D nanosheets are explored for the purpose of enviromental application, as e.g., an improvement of Cs specific adsorption, enhancement of CO_2 adsorption, appearance of proton conductivity, and so on. The open spaces formed by 2D nanosheets with the sizes ranging from Ångstrom to nanometer are highlighted on the basis of the results of element-specific positron annihilation spectroscopy togther with molecular dynamic (MD) simulation.

Biography

Kiminori Sato has completed his PhD at Department of Applied Physics, The University of Tokyo and then Postdoctoral Studies at Institut für Theoretische und Angewandte Physik, Universität Stuttgart, Department of Physics, Washington State University, and National Institute of Advanced Industrial Science and Technology (AIST). He is now an Associate Professor of Department of Environmental Sciences, Tokyo Gakugei Univeristy.

sato-k@u-gakugei.ac.jp

Notes:

Darja Lisjak, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Darja Lisjak

Jozef Stefan Institute, Slovenia

Plate-like nanomagnets for new advanced materials

Functionality of materials can be enriched by the anisotropy. Crystalline and/or shape anisotropy of materials results in orientationally dependent physical properties. For example, a class of materials, named hexaferrites, shows uniaxial magnetic anisotropy due to their anisotropic crystal structure of magnetoplumbite type. Hexaferrites crystallize in the shape of thin hexagonal platelets with a magnetic easy in the direction of the c-crystal axis, i.e., perpendicular to the basal crystal plane. Consequently, a single hexaferrite platelet forms a nanomagnet, with a direction dependent response to an applied magnetic field. In order to exploit the platelets' specific magnetic properties they should be synthesized in wet and used in the form of stable suspensions. Subsequently, plate-like nanomagnets can be: (i) embedded in different matrices to form composites, (ii) assembled from the suspensions into higher structures, films or bulk materials, or (iii) hybridized with functional organic moieties; all resulting in new advanced materials. In this contribution we present our original approach for the synthesis of hexaferrite plate-like nanomagnets, including the possibilities for tuning different interparticle forces that allowed for the development of self-biased thick films, new magneto-optic composites and ferromagnetic suspensions. A specific role of the magnetocrystalline and shape anisotropy of these nanomagnets for the realization of the new advanced material will be elucidated and their potential applications will be presented.

Biography

Darja Lisjak completed her PhD in 1999 at Faculty of Chemistry and Chemical Technology of University of Ljubljana. She was at Jožef Stefan Institute for most of her research time, a Visiting Researcher at University of Pennsylvania and University of Trieste, and a Senior Researcher at Center of Excellence COBIK. She is now a Senior Researcher at Department for Materials Synthesis at Jožef Stefan Institute and an Associated Professor at Jožef Stefan International Postgraduate School. She published more than 85 scientific papers and was awarded, together with Prof. Alenka Mertelj, a Zois recognition for the development of ferromagnetic suspensions.

darja.lisjak@ijs.si

Notes:

Jwo-huei Jou, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Jwo-huei Jou

National Tsing Hua University, Taiwan (ROC)

Nano-structures enabling sunlight- and candlelight-style OLEDs

Nano structures enable organic light-emitting diode (OLED) devices to be fabricated with relatively high efficiency and brightness, opening up a new era for high quality displays and lighting. Along with the incorporation of nano-scale carrier-modulation-interlayer(s) in between emission layers containing sunlight emission complementary dyes, sunlight-style OLED can be obtained with color or color temperature mimicking that of the sun throughout the entire daytime. We are also able to fabricate blue hazard free, low color temperature candlelight-style OLED by employing candlelight complementary emitters, namely orange-red, yellow, green, and sky-blue. The resultant candlelight OLED, that exhibits a 1,900 K color temperature exactly like that of candles or oil lamps, is friendly to human eyes, physiologies, ecosystems, artifacts, and night-skies. Specifically, it is at least 10 times safer from retina protection perspective or 5 times better for melatonin to naturally occur after dusk, as comparing with the blue light-enriched white OLED, LED and CFL counterparts. We will hence present the device structure, physics and engineering behind the serendipity of the first sunlight-style OLED, how the nano-interlayer modulates the injection of carriers and their recombination, and why and how tremendous efforts have then after been moved to the development of a 'good light' that is blue hazard free, high in light-quality and energy-saving. The presentation will also cover global attention and development progress of the candlelight OLED.

Biography

Jwo-huei Jou completed his PhD in 1986 from University of Michigan, Ann Arbor, Michigan, USA, and worked as a Postdoctoral Visiting Scientist at IBM-Almden Research Center, San Jose, CA, USA from 1986 to 1988, before joining National Tsing Hua University. He has published more than 140 papers in reputed journals and been granted more than 60 patents from USA, China and Taiwan.

jjou@mx.nthu.edu.tw

Notes:

Fernando A Castro, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium



Fernando A Castro

National Physical Laboratory, UK

Undestanding complex thin films at the nanoscale

Numerous new technologies rely on understanding the key role of nanoscale properties in defining the performance of electronic and optoelectronic devices. This has required the development of new measurement techniques, that can probe different device properties at increasing spatial resolution. However, despite significant progress, existing nanoscale characterisation techniques normally can only measure either electrical or spectroscopic properties, but not both simultaneously. This makes correlation of structure and property very challenging. Additionally, high-resolution information is rarely obtained simultaneously in all three dimensions. For instance, scanning probe measurements allow high lateral resolution but are typically surface techniques, with poor information about the subsurface. In this presentation, we demonstrate a novel method that allows non-destructive, simultaneous measurements of topographical, electrical and optical microscopy at the nanoscale (<20 nm resolution) by combining tip-enhanced optical spectroscopy (photoluminescence and Raman) with photocurrent AFM. We demonstrate that this approach offers subsurface sensitivity that can be exploited to provide molecular information with nanoscale resolution in all three spatial dimensions. We apply this method to organic solar cells and show that we are able to correlate local nanoscale composition to photocurrent generation, including the direct identification of impurities within nanoscopic domains of operating solar cells. The multi-parameter measurement approach demonstrated here, allows to directly identify the impact of film nanostructure on optoelectronic function and avoids the challenge associated with post processing image registration, sample contamination or degradation when measurements are performed separately. We expect it will play a significant role in guiding the design of nanomaterial-based optoelectronic devices.

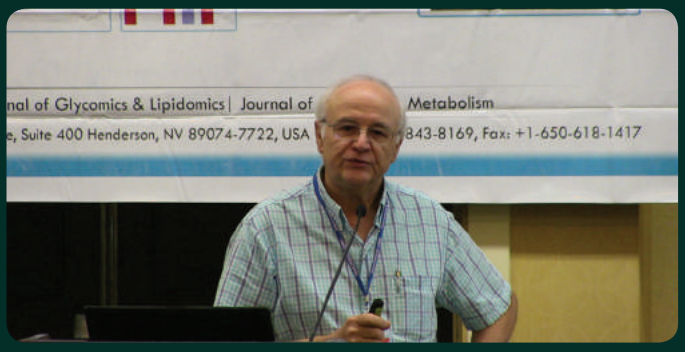
Biography

Fernando A Castro is the Knowledge Leader for the Engineering, Materials and Electrical Science Department at the UK's National Physical Laboratory. He also holds several international roles, such as Chair of TWA36 Organic Electronics of VAMAS, UK Expert within IEC TC119 - Printed Electronics, Associate Editor of the journal *Science and Technology of Advanced Materials*, Member of the Steering Committee of the European Energy Research Alliance – JP Photovoltaics. He has chaired large international conferences on Nanomaterials, Metrology and Photovoltaics, has delivered over 30 keynote/invited talks and has publised over 50 papers in high-quality peer-review journals.

fernando.castro@npl.co.uk

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Video Presentations

Day 2

Han-Yong Jeon, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

Proposed module of environmental degradability for PLA based green geosynthetics under considering limited index test conditions

Han-Yong Jeon
Inha University, South Korea

"Green" revolution is rapidly increasing in every construction site, especially between construction and societies' needs. Furthermore, although durability of geosynthetics should be emphasized for long-term service period, durability controlled mechanism could be required to fulfil the short-term degradability purpose for green geosynthetics. "Green Geosynthetics" are made of eco-environmental biodegradable polymeric resins or natural materials and they must maintain their needed performance such as durability, design strength, hydraulic property, etc., during service period in the application field. Then, after service period they should not be degraded in harmful state in the soil structures. The important concept of green geosynthetics is focused on their degradable behaviours of used resins and needed performance for engineering qualification with technical data of designing. In this study, technical availability of green geosynthetics was introduced and reviewed to be related to the quantitative analysis of biodegradability of green geosynthetics by conceptual consideration through its evaluation. Still now, there is no international test method to evaluate the biodegradability of green geosynthetics performance and only the geosynthetics performance test methods of ISO and ASTM International are applied for this purpose. However, it is not reasonable for green geosynthetics to adopt these test methods directly and new test methods should be introduced for green geosynthetics performance testing. In this study, the regulation of evaluation method of biodegradability for green geosynthetics between index and field tests is proposed by connection key factor to confirm the biodegradable behaviors for green geosynthetics.

Biography

Han-Yong Jeon is a Geosynthetics/Technical Organic Materials Researcher and he was the 32nd President of Korean Fiber Society (2014~2015). He has published more than 794 papers in domestic and international conferences. He wrote 19 texts including '*Geosynthetics*' and also published 117 papers in domestic & international journals. He has awards of Marquis Who's Who - Science and Engineering in 2003~2016 and also, he got the 33rd Academy Award of Korean Fiber Society in 2006 and "Excellent Paper Award of 2012" by The Korean Federation of Science and Technology Societies.

hyjeon@inha.ac.kr

Notes:

Franco Palla, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-014

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Macro and micro biological systems as source of bioactive molecules useful for cultural assets conservation

Franco Palla
University of Palermo, Italy

In the last decade science and technology have provided protocols in defining innovative restoration strategies. In our laboratory bioactive molecules, isolated from plants or marine organisms, are characterized and applied in order to control the microbial colonization on historic-artistic manufacts. Similarly, these molecules are able to inhibit fungal and/or bacterial growth to acting like chemical biocides. Marine organisms also represent a source of cold-active enzymes (hydrolases) useful in biocleaning/bioremoval protocols, in order to remove protein or ester layers from the artwork surfaces. These represent valid alternatives to conventional strategies, free from negative impacts on human health and environment.

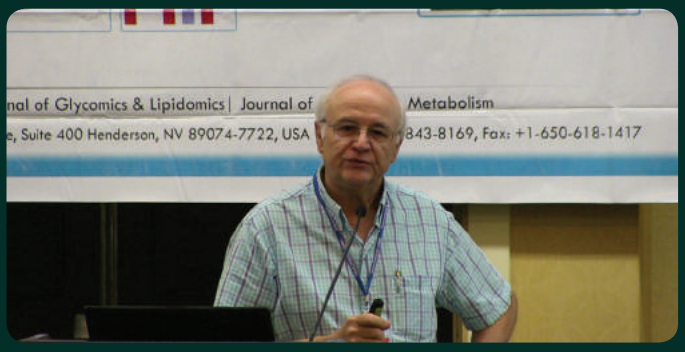
Biography

Franco Palla, is an Associate professor of Environmental and Applied Botanical Sciences at the University of Palermo, Italy. He is the Coordinator of Five-Year Degree in Conservation and Restoration of Cultural Heritage Scientific at University of Palermo. He is the Coordinator of UNIPA Research Unit at Italian Technology for Advanced Applications in Cultural Assets. He is the head of the research Laboratory of Biology and Biotechnology for Cultural Heritage (LabBBCH) at the Department of Biological, Chemical, Pharmaceutical Sciences and Technology (STEBICEF) of University of Palermo. Currently Prof. Palla is Scientific Consultant for Biological deterioration, in restoration projects regarding archaeological sites, works of art, historic-artistic manifacts. He is author and co-author of more than 200 publications in national and international scientific journals and congress proceedings, Editor of the book Biology and Biotechnology for Cultural Heritage (Springer) and Coordinator of Scientific - Organizing Committee and Chair in National and International Conference.

franco.palla@unipa.it

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Posters

Alexander Krivcov, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Minimization of electro-static forces in magnetic force microscopy for detection of single superparamagnetic iron oxide nanoparticles

Alexander Krivcov
University of Applied Sciences Kaiserslautern, Germany

Superparamagnetic nanoparticles (SPNs) are of increasing interest in biomedicine. The wide range of applications, from diagnostic (Magnetic Resonance Imaging, MRI) to cancer-cells treatment (hyperthermia), promises an intensive use possibility. However, detection and characterization of SPNs at single particle level especially in biological samples remains a challenge. Therefore, techniques which can provide spatial distribution and magnetic properties of single magnetic nanoparticles are highly desirable. Magnetic Force Microscopy (MFM) can be used to detect and spatially localize single SPNs. However, arising magnetic signal from nanoparticles could be disturbed and covered by other existing forces. One of the strongest disturbing forces is the electro-static behaviour of the probes. Due to the conductivity of the MFM measuring tip, both, magnetic and electro-static, forces are detected simultaneously. In this work different approaches to minimize the electro-static interaction between probe and tip are discussed. We showed the possibility to reduce the electro-static force by choosing substrates with higher conductivity. Furthermore the electro-static behaviour can be reduced using Electrostatic Force Microscopy (EFM) and Kelvin Probe Force Microscopy (KPFM) combined with MFM. Those approaches are investigated to select the magnetic force and therefore allow MFM to serve as an excellent detecting technique which makes it possible to localize single magnetic nanoparticles on substrates, embedded in polymers and injected in biomaterial.

Biography

Alexander Krivcov is pursuing PhD at the University of Applied Sciences Kaiserslautern on the topic “Characterisation of superparamagnetic nanoparticles for biomedical applications with Magnetic Force Microscopy (MFM)”.

Alexander_Krivcov@gmx.de

D Morshedi, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Using nanocarriers against synucleinopathies

D Morshedi
National Institute of Genetic Engineering and Biotechnology, Iran

α-Synuclein (α-Syn) is a protein present in the brains of a range of neurodegenerative disordered patients as plaque-like compact structures in the form of amyloid fibrils. There is a strong relationship between α-Syn amyloid fibrillation and the pathology of the neurodegenerative disorders such as Parkinson's disease. There is a serious effort to apply the compounds, known as small molecules, with inhibitory effects on the different steps of α-SN fibrillation and its related neurotoxicity. However, the small molecules can possess some problems like high hydrophobicity/low solubility in physiological fluids, instability, and difficulty in passing across blood brain barrier (BBB). In this respect, employing of nanocarriers has been pointed because of a lot of advantages i.e., biocompatibility, easy surface modification, low immunogenicity, protecting cargo against enzymatic degradation. In this regard, we used three different nanocarriers including serum albumin nanoparticles (SA- NPs), mesoporous silica nanoparticles (MS-NPs) and neutral charged nanoliposomes (NC-NLPs). We found that each kind of nanocarrier possess specific characters when applying for loading drugs or treating α-Syn or neuronal cells. SA-NPs with a moderate drug loading efficiency (DLE) for polyphenols, showed some inducing effect on α-Syn fibrillation when treating with bare SA-NPs. Although MS-NPs with similar DLE did not show inducing effect on α-Syn fibrillation, they had a small neurotoxicity effect. On the other hand, NC-NLPs had high DLE for polyphenols and also, they did not indicate any considerable induction on the α-Syn fibrillation or any neurotoxicity effects. It seems that NC-NLPs have more potential for using regarding synucleinopathies treating than the two other NPs.

Biography

Dina Morshedi is working as a Professor in National Institute of Genetic Engineering and Biotechnology since 2002. Research assistant in an Institute of Biochemistry and Biophysics (IBB). Tehran University since 2005-2009. Dina Morshedi active research areas are Study on different aspects of neurodegenerative diseases, especially Parkinson' including amyloid formation, cytotoxicity and pharmacognosy and Application of Nanofibrils.

morshedi@nigeb.ac.ir

Notes:

Xiaoling Lu, J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

Reduced graphene-oxide based in-line impedimetric biosensor for detecting prostate cancer specific antigen

Xiaoling Lu
University of Applied Sciences Kaiserslautern, Germany

Chemically exfoliated graphene-oxide (GO) is being exploited due to its similarity to graphene and tested out as an alternative to overcome the dilemma that graphene is facing towards wafer-scale and robust device preparation. In this work, we prepared GO thin-films in the manner of wafer scale by the spin-coat technique on the top of interdigitated electrodes (IDEs) with glass as substrates. The isolated GO thin-films are transformed into conductive rGO thin-films by thermal reduction. The residual -COOH groups on the surface of rGO thin film provide diverse possibilities of chemical functionalization to covalently immobilize the receptor molecules. An in-line impedimetric spectroscopy based rGO thin-films as transducer layers are tested out for label-free detection of Prostate Cancer Specific Antigen (PSA). This established biosensor exhibits ultra-sensitivity and announced sensing range because of the combination effect of tunable fermi level and fast charge/discharge behaviour of nanocapcitors. The pronounced PSA detection scale ranges from 33 fM to 330 nM at frequency 1000 Hz.

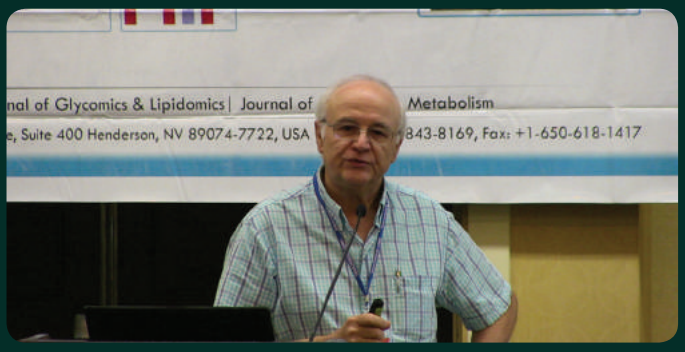
Biography

Xiaoling Lu is pursuing her PhD study at University of Applied Sciences Kaiserslautern, Germany. Her academic focus is about reduced graphene-oxide based opto-electronic biosensor platform for detecting prostate cancer biomarkers.

luxiao0@gmail.com

Notes:







19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Accepted Abstracts

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Turn-on fluorescent sensor for glucose detection using manganese dioxide–phenol formaldehyde resin nanocomposite

Asmerom Yohannes Ogbe
Huazhong University of Science and Technology, China

A turn-on fluorescent detection method based on manganese dioxide (MnO2)-phenol formaldehyde resin (PFR) nanocomposite has been successfully constructed for rapid and sensitive detection of glucose. In the presence of MnO2 nanosheets, the green fluorescence of PFR was quenched by fluorescence resonance energy transfer. Interestingly, PFR fluorescence can make a recovery by the addition of H2O2, which can reduce MnO2 to Mn2+. The detection limit of 20 nM was obtained for H2O2. Further, the glucose was detected based on the enzymatic conversion of glucose by glucose oxidase to generate H2O2. A low detection of 1.5 ⊠M glucose was achieved. Because of the non-auto fluorescent assays offered by PFR, the developed method has been applied to monitor glucose levels in human serum samples with satisfactory results. The developed turn-on fluorescent sensor might hold great promise in nanomedicine and bioanalysis.

zassmex21@yahoo.com

Electrically-driven optical antennas for novel light emission processes

Claire Deeb
Université Paris-Saclay, France

Gaps formed between metal surfaces control the coupling of localized plasmons, thus allowing gap-tuning targeted to exploit the enhanced optical fields for different applications. Classical electrodynamics fails to describe this coupling across sub-nm gaps, where quantum effects become important owing to non-local screening and spill-out of electrons. The advantages of narrow gap antennas have mostly been demonstrated for processes like SERS that are excited optically, but promising new phenomena appear when such antennas are fed by electric generators. However, the extreme difficulty of engineering and probing an electrically driven optical nanogap antenna has limited experimental investigations of physical concepts at stake in these conditions. The feasibility of structuring electron-fed antennas as nano-light sources has been recently demonstrated; however, this configuration remains very limited: too much power was lost as heat when operating the optical antenna, and the antenna operation time was limited by the structure lifetime to sustain a bias voltage for a few hours. The innovative structure that we suggest here will cope with all these limitations: ALD dielectric materials substitute the air gap to improve the antenna stability; a quantum efficiency of 10-1 is targeted owing to a significantly efficient antenna (2 orders of magnitude higher field enhancement). The resulting source will operate at room temperature and have a tunable spectral response (ranging from visible frequencies to THz regime) defined by the antenna geometry and the applied bias. Also, this source will be compact, Si-compatible, and will not request specific emitting materials (e.g. III-V semi-conductors) to operate.

claire.deeb@c2n.upsaclay.fr

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Heat exchangers technology and applications in heat exchanger engineering

Abdeen Mustafa Omer
Energy Research Institute, Nottingham, UK

Over the years, all parts of a commercial refrigerator, such as the compressor, heat exchangers, refrigerant, and packaging, have been improved considerably due to the extensive research and development efforts carried out by academia and industry. However, the achieved and anticipated improvement in conventional refrigeration technology is incremental since this technology is already nearing its fundamentals limit of energy efficiency and is described as 'magnetic refrigeration' which is an evolving cooling technology. The word 'green' designates more than a colour. It is a way of life, one that is becoming more and more common throughout the world. An interesting topic on 'sustainable technologies for a greener world' details about what each technology is and how it achieves green goals. Recently, conventional chillers using absorption technology consume energy for hot water generator but absorption chillers carry no energy saving. With the aim of providing a single point solution for this dual purpose application, a product is launched but can provide simultaneous chilling and heating using its vapour absorption technology with 40% saving in heating energy. Using energy efficiency and managing customer energy use have become an integral and valuable exercise. The reason for this is green technology helps to sustain life on earth. This not only applies to humans but to plants, animals and the rest of the ecosystem. Energy prices and consumption will always be on an upward trajectory. In fact, energy costs have steadily risen over last decade and are expected to carry on doing so as consumption grows. Refrigerants such as hydrochloroflurocarbons (HCFCs) are present in the ground source heat pump (GSHP) systems and can pose a threat to the environment through being toxic, flammable or having a high global warming potential. However, new types and blends of refrigerant with minimal negative impacts are being developed. A correctly fitted system will also greatly reduce the potential for leakage, which is why using a professional installer is highly recommended. Significant CO2 savings can be gained by displacing fossil fuels. Even compared to the most efficient gas or oil condensing boilers, a well-designed heat pump with COP of 3-4 will reduce emissions by 30-35%. Further carbon savings can be made if the electricity used to power the pump comes from a renewable energy source such as photovoltaic or a renewable electricity tariff. Also, measures can be taken to reduce the impact of pollution from using grid electricity generated through fossil fuel. For example, one can purchase dual tariff green electricity from a number of suppliers. However, even if ordinary grid electricity is used to run the compressor, the system will still produce less CO2 emissions than even the most efficient condensing gas or oil boiler with the same output. The term "vapour compression refrigeration" is somewhat of a misnomer, it would be more accurately described as 'vapour suction refrigeration'. Vapour compression is used to reclaim the refrigerant and is more aptly applied to heat pumps. Vapour compression refrigeration exploits the fact that the boiling temperature of a liquid is intimately tied to its pressure. Generally, when the pressure on a liquid is raised its boiling (and condensing) temperature rises, and vice-versa. This is known as the saturation pressure-temperature relationship.

abdeenomer2@yahoo.co.uk

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Nanostructure self-organization as cause of wavelike radiation embrittlement of the RPV steel

E Krasikov
National Research Centre "Kurchatov Institute", Russia

Influence of neutron irradiation on reactor pressure vessel (RPV) steel degradation are examined with reference to the possible reasons of the substantial experimental data scatter and furthermore – nonstandard (non-monotonic) and oscillatory embrittlement behavior. In our glance, this phenomenon may be explained by nanostructure evolution of steel during irradiation that results in self-organization appearance and presence of the wavelike recovering component in the embrittlement kinetics. We suppose that the main factor affecting steel anomalous embrittlement is fast neutron intensity (dose rate or flux), flux effect manifestation depends on state-of-the-art fluence level. At low fluencies radiation degradation has to exceed normative value, then approaches to normative meaning and finally became sub normative. In our opinion controversy in the estimation on neutron flux on radiation degradation impact may be explained by presence of the wavelike component in the embrittlement kinetics. Therefore flux effect manifestation depends on fluence level. Owing to nanostructure evolution at low fluencies, radiation degradation has to exceed normative value, then approaches to normative meaning and finally becomes sub normative. Paradoxically as a result of dose rate effect manifestation peripheral RPV's zones in some range of fluencies have to be damaged to a large extent than situated closely to core. We suppose that at some stages of irradiation, damaged metal have to be partially restored by irradiation i.e., neutron bombardment. Nascent during irradiation, nanostructure undergoes once or periodical evolution in a direction of both degradation and recovery of the initial properties. According to our hypothesis at some stage(s) of metal nanostructure degradation, neutron bombardment became recovering factor.

ekrasikov@mail.ru

Development of NO2 sensor by fungal-ZnFe2O4 at room temperature

Solleti Goutham[1], **Doriya Kruthi**[2], **Deverai Santhosh Kumar**[2] and **Kalagadda Venkateswara Rao**[1,3]
[1]JNT University Hyderabad, India
[2]Indian Institute of Technology Hyderabad, India
[3]Johns Hopkins University,USA

Hybrid nanomaterial (powdered fungi and ZnFe2O4) was developed and studied for gas sensing application, specifically for NO2 gas detection. In this study, powdered *Rhizopus* species W3 and $ZnFe_2O_4$ nano-powder were mixed at equal proportion to carryout sensing experiments. The conjugated material film was coated on the interdigitated electrodes (IDEs) by drop drying method, to determine the NO2 gas sensing characteristics. It was found that the response of these hybrid materials decrease resistance, thereby resembling the p-type semiconductor. The fungi W3 - $ZnFe_2O_4$ hybrid composite sensor showed better response, sensitivity, selectivity, stability and reproducibility at room temperature towards 30 ppm of NO2. N. Miura *et al*. reported in 2002 $ZnFe_2O_4$ showed good sensitivity for NO2 (436 ppm) at 700°C operating temperature. Therefore, in this present work effort was made to prepare novel hybrid material that is feasible, eco-friendly, flexible, cost-effective, low maintenance and light weight new device.

sgoutham@jntuh.ac.in

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Study of the mechanical alloyed Fe-Ni and its magnetic properties

Iman Farahbakhsh and **Marzieh Abbasi**
University of Applied Science and Technology, Iran

In this study, Fe50Ni50 alloy powders were synthesized by mechanical alloying process using planetary high-energy ball mill (Pulverisette 5, Fritsch) for milling times: 2, 5, 10, 30, 50, 70 h and for the weight ratio of balls to powder (BPR) 30:1, under argon atmosphere. The alloy formation and different physical properties were studied as a function of milling time, using X-ray diffraction (XRD) technique, field emission scanning electron microscopy (FESEM), transmission electron microscopy (TEM), vibration sample magnetometer (VSM) and Fourier transform infrared (FTIR) spectroscopy. Increase in milling time led to reduction in crystallite size (D) in the super paramagnetic phase, thus inducing a higher magnetization to about 120 emu g-1, which is significantly higher compared with the work of others. Also reduction in crystallite size led to lower coercivity. Optical studies showed that determined grain size based on hysteresis curve for 70 h of milling time is in the same order of radiation wavelength.

ifarahbakhsh@gmail.com

SWIR photo-detection enhanced by sub-wavelength structuration

Jean-Luc Pelouard
Universite Paris-Saclay, France

The extreme light confinement provided by sub-wavelength metal-dielectric structures pushes towards revisiting the design rules of the photo-detectors. Furthermore, introducing absorbing layers in optical nano-resonators demands a dedicated electromagnetic design. Developing together semiconducting heterostructures and optical nano-antennas opens the way for performance improvements and new functionalities, introducing very promising features such as ultra-thin absorbing layers and device area much smaller than its optical cross-section. High responsivity, high speed behavior, and carved optical response are among the expected properties of this new generation of photo-detectors. In this talk, I present a GMR InGaAs photo-detector dedicated for FPA applications as an illustration of this global design. I discuss the cross-linked properties of the optical and semiconductor structures. Experimental results show at λ=1.55 μm an EQE of 75% and a specific detectivity of 1013 cm. Hz.W-1.

jean-luc.pelouard@c2n.upsaclay.fr

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Estimating optimum properties using enumerated data for calcium carbonate/PP nano composites as bone analogue biocomposite

Jenan S Kashan
University of Technology, Iraq

This paper presents the modified polymer matrix bio-composite for bone analogue and replacement. The PP polymer is employed as polymeric matrix to give robust properties, particularly when it is used with nano ceramic filler. In this work, the nano calcium carbonate ($CaCO_3$) is proposed as a filler, and the optimum processing conditions for $CaCO_3$/PP nano composites represent the bone analogue biomaterials, using the enumerated data by MATLAB environment. The effects of the nano sized Al_2O_3 on the mechanical properties are also considered here. ESM using MATLAB program, provided an indication for optimum processing condition that prove the classical experiments' design. The results show the optimum mechanical properties and uniform distribution of the fillers.

jsk_jsk2012@yahoo.com

Effect of magnetic Ni-Pt nanorods rotating inside fibroblast NIH/3T3 cells

Loreto M Valenzuela, Valentina Frenkel, Graciela Bravo and **Daniel Hurtado**
Pontificia Universidad Catolica de Chile, Chile

Magnetic NanoRods (NR) have been used inside cells to deform cytoplasm and cellular membrane, and to generate cell death. Cell death has been studied as selective therapy against malign cells. However, the mechanism of action that leads to this kind of death remains unknown. To describe this mechanism, we analyzed cell membrane integrity after being treated with magnetic NRs that rotate at low frequency and NRs effect on cell proliferation rate. To do this, we fabricated Ni-Pt NRs by electrodeposition into porous alumina templates, being one of the first studies that analyze Pt particles of this size inside any kind of cells. We designed a low frequency Magnetic Field (MF) generation system with temperature control to allow NRs to rotate inside cells avoiding thermal stress. We incorporate NRs to fibroblast NIH/3T3 cell culture and after one-day MF was applied. Membrane integrity was identified by specific dye 20 minutes after treatment. We confirmed NR incorporation by a microscopy video of a single NR rotating inside a single cell and bouncing against its membrane. Membrane integrity damage was only found in cells treated simultaneously with NRs and MF, thus cell death mechanism is necrotic-like since apoptosis needs more time to occur. Proliferation inhibition was observed on cultures with NRs, indicating that particles alter cell cycle and needs to be functionalized to be biocompatible. This will allow us to understand the effect of NRs on cell death.

lvalenzr@ing.puc.cl

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Optical and magnetic properties of manganese doped gold clusters

S Rath, O Halder and **D K Swain**
Indian Institute of Technology Bhubaneswar, India

Clusters and cluster assembled nanomaterials are of strong research interest with a prospect of controlling the electronic and optical properties by their atomic arrangements. Gold clusters and their super structures with different atomicity have been pursued since decade due to the its wide applications in optics. Further, tunning the properties by doping in atomic cluster is a challenging area of research. This work demonstrates the doping of Mn and ligand mediated assembling of eight atoms gold clusters (Au8) into a local periodic nanostructure. The local structure has been analyzed using transmission electron microscopy, X-ray diffraction and small angle X-ray scattering measurements. It revealed a local periodicity as 1.47 nm in the assembled hexagonal+1 Au8 clusters. The observation of two opposite nature of the excitonic states in the circular dichroism spectra corroborates to the coupling of excitons in a fixed chirality. The magnetic properties of the sample have been analyzed extensively using theory and experiments. A strong ferromagnetic ordering has been observed from Mn doped Au8 due to spin-orbit interaction.

srath@iitbbs.ac.in

Experimental investigation of CNT nanofluid utilization to enhance air conditioning thermal performance

Seifelislam Gamaleldin[1], **Saud Ghani**[1] and **Muataz Hussien**[2]
1Qatar University College of Engineering, Qatar
2Qatar Energy and Environment Research Insititute, Qatar

The increased demand of energy in domestic applications nictitates the development of low power consumption air conditioning (AC) systems. AC systems consume up to 80% of buildings` energy during hot summer months. By replacing the conventional single pipe evaporator with a double pipe evaporator in heating ventilating and air conditioning (HVAC) systems, there is a great potential for an enhanced thermal performance. In this study, a homogeneous nanofluid of dispersed carbon nano tubes (CNT) was used as the secondary fluid in the double pipe evaporator of a 17 kW HVAC system. Three concentrations of CNT nanofluid of 0.025, 0.05, and 0.1 by weight percentage were circulated separately using a small 104 W pump connected to a 150 liters tank. The AC unit was placed in a 45 m3 balanced calorimeter of 2.24 kW heat load. Experimental results showed a promising reduction in the compressor work and an increase in the system coefficient of performance (COP). The collected data showed that system thermal performance depended on the evaporator, secondary fluid flow rate more than condenser secondary fluid flow rate. By increasing the concentration of CNT nanofluid, the compressor work was shown to decrease while the COP was shown to increase. In comparison with the standard rated AC unit, utilizing a double-pipe evaporator and a condenser with maximum nanofluid concentration resulted in a decrease of about 52% in the compressor work and a similar percentage of increase in the system COP. As a result of the enhanced heat transfer, the operating electrical current was reduced by 30% in comparison to the rated compressor current.

seif.mahmoud@qu.edu.qa

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Electrocatalytic behaviour of nanocomposites of carbon nanomaterials with monomeric and electropolymerized metallo-phthalocyanines on glassy carbon electrode

Stephen Nyoni[1,2], **Philani Mashazi**[1] and **Tebello Nyokong**[1]
[1]Chinhoyi University of Technology, Zimbabwe
[2]Rhodes University, South Africa

Thin films of MPcs on solid electrode surfaces have been fabricated by different pathways including adsorption, electropolymerization and click chemistry to name just a few. In this work, electrocatalytic platforms were fabricated using (i) adsorption of the nanomaterials and metallophthalocyanines (MPcs), and (ii) electropolymerisation of the metallophthalocyanines on a glassy carbon electrode (GCE). Polymerization is more reliable, often reproducible than adsorption and the thickness of the film can be controlled by the number of polymer cycles. The derivatives of MPcs have polymerizable groups on the substituents and we used X-ray photoelectron spectroscopy (XPS) to confirm the point of polymerization. We compared the electrocatalytic activities of the adsorbed and polymerized complexes. Techniques such as cyclic voltammetry (CV), chronoamperometry (CA), and rotating disk electrode (RDE) studies were used for electrochemical characterization of the prepared nanocomposites. The electrocatalytic activity of the polymerized MPc derivatives used was found to be superior when polymerization was done on top of multi walled carbon nanotubes (MWCNT) than bare glassy carbon electrode. Also, nanocomposites of metallophthalocyanines with quantum dots intercalated graphene nanosheets revealed better electrocatalysis.

nyonistephen@yahoo.com

Self-supported nanoarrays of binary transition metal sulphide (CoNi2S4) for asymmetric supercapacitor device

Swati J Patil
Chonnam National University, South Korea

The electrode material with nano-structured features is a key point in electrochemical application to enhance the electrochemical activities. Nowadays, more researchers are concentrated on the synthesis of hierarchical nano-structured architecture with smaller particle size employing different synthesis tools. Without the use of an additive binder, hydrothermal route was employed for the synthesis of self-assembled nanostructures of single (Ni3S2) and binary metal sulphides (NiCo2S4) with particle size near about 10 nm for assymmetric supercapacitor application. The prepared samples were used for structural and surface morphological studies using different characterization techniques and then electrochemical measurements were performed. Through the electrochemical measurements, a significant difference in the performances of both electrode materials was observed. Achieving the better electrochemical activities for CoNi2S4-μflower with 2098.95 F g-1 specific capacitance, the asymmetric supercapacitor designed with Ni3S2-nanorod is used as one of the electrodes. The designed hybrid asymmetric supercapacitor, based on Ni3S2-nanorod//CoNi2S4-μflower electrodes, exhibits a specific capacitance of 54.92 F g-1 at a scan rate of 5 mV s-1. The assembled asymmetric supercapacitor has an energy density of 6.6 Wh kg-1 while delivering a power density of 820 W kg-1. The capacitive retention of the initial capacitance remains desirable at 89.13% after 5000 CV cycles at a scan rate of 100 mV s-1. The present work manifests a vision for the fabrication of self-assembled, binder-free electrodes for high-performance hybrid supercapacitor application.

swatipatil39@gmail.com

J Nanomater Mol Nanotechnol 2017, 6:6
DOI: 10.4172/2324-8777-C1-015

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

Acousto-magneto-plasmonics: a platform for the next generation ultrafast nano-photonic devices

Vasily Temnov
Université du Maine, France

Acousto-magneto-plasmonics deals with experimental and theoretical investigations of interactions between the acoustic, magnetic and plasmonic transients in hybrid metal-ferromagnet multilayer structures excited by ultrashort laser pulses. The main focus is on understanding the novel aspects of acoustic dynamics in materials as well as the peculiarities in the nonlinear optical and magneto-optical response in nanoscaled structures. For example, the nonlinear optical detection is illustrated in details by probing the static magneto-optical second harmonic generation in gold-cobalt-silver trilayer structures in Kretschmann geometry. Furthermore, we show experimentally how the nonlinear reshaping of giant ultrashort acoustic pulses propagating in gold can be quantified by time-resolved plasmonic interferometry and how these ultrashort optical pulses dynamically modulate the optical nonlinearities. An effective medium approximation for the optical properties of hybrid multilayers enables the understanding of novel optical detection techniques. Exploring acousto-magneto-plasmonic functionalities at the nano-scale provide the experimental platform for designing the next-generation ultrafast nanophotonic devices. As the next step, functionalizing hybrid metal-ferromagnet multilayer structures with solid-state nano-scale light emitters will allow for detailed quantum-optical studies of magneto-plasmonic interactions at the nano-scale using nonlinear optical and quantum-optical techniques. From an even more fundamental perspective, combining graphene-based plasmonic nanostructures with optical metamaterials may shade light on the mysteries of topological plasmonics.

vasily.temnov@univ-lemans.fr

Magnetic hyperthermia: the considerable thesis for cancer

Zalak Bhut
V V P Engineering College, India

In the present article, overview of the implementation of nanotechnology in cancer treatment, using magnetic hyperthermia is presented. The revolution of human lifestyle has led to new diseases. There are still many diseases in this world which can't be diagnosed and have a cure for it. Cancer is one of them, and still it remains an unsolved mystery. The survival percentage of cancer patients is 35%. But the revolution of latest technology promises to fight cancer. Due to harmful secondary effects of radiotherapy, magnetic hyperthermia proves to be an accurate solution for cancer. Chemotherapy is being used for over a decade, and now it can be replaced by magnetic hyperthermia. Thus, nanotechnology acts as an effective weapon in this new era to fight the cancer disease.

zalakbhut002@gmail.com

19th Nano Congress for Next Generation

August 31- September 01, 2017 Brussels, Belgium

INDEX

A I Archakov	38
Alexander Krivcov	52
Andriy Kovalenko	26
Arturs Medvids	23
D Morshedi	53
Darja Lisjak	44
Dominique Ausserré	28
Fernando A Castro	46
Franco Palla	49
Han-Yong Jeon	48
Hyung Ho Park	30
Jwo-huei Jou	45
Kiminori Sato	43
Liqiu “Rick” Wang	39
Ola A Mohamed	35
Oliver G Schmidt	22
Phuong Mai Dinh	29
Xiaoling Lu	54
Xochitl Dominguez Benetton	42
Ying-Chieh Lee	33
Yoshitaka Fujimoto	27
Zeeshan Ahmad	34

Meet Inspiring Speakers and Experts at our 3000+ Global Events with 1000+ Conferences, 1000+ Symposiums and 1000+ Workshops on Medical, Pharma, Engineering, Science, Technology, Business and 700+ Open Access Journals

Conferences | Publishing | Global Networking | Research | Business

Exhibitions | Collaborations | Careers | International Memberships | Advertisements & Promotions

Conferences By Continent

USA & Americas

USA | Brazil | Canada | Mexico

Asia-Pacific

Australia | China | India | Japan | Malaysia | New Zealand | Philippines | Singapore | South Korea

Europe & Middle East

Austria | Denmark | Finland | France | Germany | Italy | Netherlands | Norway | Poland | South Africa | Spain | Switzerland | Turkey | UAE | UK | Ukraine

Medical & Clinical Journals and Conferences

- Alternative Healthcare
- Cardiology
- Dentistry
- Dermatology
- Diabetes & Endocrinology
- Gastroenterology
- Healthcare Management
- Hematology
- Infectious Diseases
- Medical Ethics
- Health Policies
- Neuroscience
- Nephrology
- Nursing
- Obesity
- Oncology & Cancer
- Ophthalmology
- Palliativecare
- Pathology
- Pediatrics
- Physical Therapy Rehabilitation
- Psychiatry
- Pulmonology
- Radiology
- Surgery
- Vaccines
- Reproductive Medicine &
- Women Healthcare

Journals and Conferences by Subject

- Agri, Food & Aqua
- Biochemistry
- Business & Management
- Chemical Engineering
- Chemistry
- EEE & Engineering
- Environmental Science
- Genetics & Molecular Biology
- Geology & Earth Science
- Immunology
- Materials Science
- Microbiology
- Nanotechnology
- Nutrition
- Petroleum
- Pharma Marketing & Industry
- Pharmaceutical Sciences
- Physics
- Veterinary

Contact us

Conference Series - America
One Commerce Center-1201, Orange St. #600
Wilmington, Zip 19899, Delaware, USA
P: +1-702-508-5200, F: +1-650-618-1417
E: america@conferenceseries.com

Conference Series - UK
Kemp House, 152 City Road
London EC1V 2NX, UK
Toll Free: +1-800-014-8923
E: europe@conferenceseries.com

Conference Series - Asia Pacific
6th Floor, North Block, Divyasree Building, Raidurg Hyderabad,
Telangana, INDIA-500032 P: +91-40-33432300
E: asia@conferenceseries.com

Toll Free

Australia - 1-800-651-097 | **France** - 0805-080048 | **Hyderabad** - 91-40-71279012

Hyderabad - 91-40-71279013 | **UK** - 0-800-014-8923

Los Angeles Downtown - 1-213-233-9462 | **USA/Canada** - 1-888-843-8169

Upcoming Nano Technology Conferences

2nd World Congress and Expo on
Graphene & 2D Materials
November 06-07, 2017 Frankfurt, Germany
graphene.conferenceseries.com/europe

22nd International Conference and Expo on
Nanoscience and Molecular Nanotechnology
November 06-08, 2017 Frankfurt, Germany
nanotechnology.conferenceseries.com

23rd International Conference on
Nanomaterials and Nanotechnology
March 15-16, 2018 London, UK
nanomaterials.conferenceseries.com

24th World Nano Conference
May 07-08, 2018 Rome, Italy
nano.conferenceseries.com

Bookmark your dates

25th Nano Congress for Next Generation

August 16-18, 2018 | Dublin, Ireland

E-mail: nanocongress@nanotechconferences.org; nanocongress@conferenceseries.net
Website: nanocongress.conferenceseries.com