# Olusegun Ilegbusi

List of Publications by Year
in descending order



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|---|---|---|---|
| 32 papers | 382 citations | 933447 10 h-index | 794594 19 g-index |
| 32 all docs | 32 docs citations | 32 times ranked | 346 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A computational model of upper airway respiratory function with muscular coupling. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 675-687. | 1.6 | 1 |
| 2 | Segmentation and Pore Structure Estimation in SEM Images of Tissue Engineering Scaffolds Using Genetic Algorithm. Annals of Biomedical Engineering, 2021, 49, 1033-1045. | 2.5 | 6 |
| 3 | Dynamics of cough and particulate behaviour in the human airway. Mathematical and Computer Modelling of Dynamical Systems, 2021, 27, 222-245. | 2.2 | 2 |
| 4 | Chemical modification of impregnated SnO2-In2O3 nanocomposites due to interaction of sensor components. Journal of Alloys and Compounds, 2021, 883, 160817. | 5.5 | 16 |
| 5 | Comments on the article â€œCalculation of the electric potential and surface oxygen ion density for planar and spherical metal oxide grains by numerical solution of the Poisson equation coupled with Boltzmann and Fermi-Dirac statisticsâ€•(Sensors and Actuators B: Chemical, 293 (2019) 31â€“40). Sensors and Actuators B: Chemical, 2020, 302, 126986. | 7.8 | 1 |
| 6 | Effect of Mold Geometry on Pore Size in Freeze-Cast Chitosan-Alginate Scaffolds for Tissue Engineering. Annals of Biomedical Engineering, 2020, 48, 1090-1102. | 2.5 | 15 |
| 7 | Structure and gas-sensing properties of SnO2-In2O3 nanocomposites synthesized by impregnation method. Sensors and Actuators B: Chemical, 2020, 320, 128406. | 7.8 | 21 |
| 8 | Modeling of sensor properties for reducing gases and charge distribution in nanostructured oxides: A comparison of theory with experimental data. Sensors and Actuators B: Chemical, 2019, 287, 218-224. | 7.8 | 14 |
| 9 | Peculiarities of molecule photodissociation under influence of ultrashort electromagnetic pulses: Nonlinear dependence of probability on pulse duration. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 371, 76-80. | 3.9 | 3 |
| 10 | Effect of interaction between components of In2O3-CeO2 and SnO2-CeO2 nanocomposites on structure and sensing properties. Sensors and Actuators B: Chemical, 2019, 279, 22-30. | 7.8 | 30 |
| 11 | Effect of gravity on subject-specific human lung deformation. Mathematical and Computer Modelling of Dynamical Systems, 2018, 24, 87-101. | 2.2 | 6 |
| 12 | Computational Modelling of Cough Function and Airway Penetrant Behavior in Patients with Disorders of Laryngeal Function. Laryngoscope Investigative Otolaryngology, 2017, 2, 23-29. | 1.5 | 4 |
| 13 | The mechanisms of sensory phenomena in binary metal-oxide nanocomposites. Sensors and Actuators B: Chemical, 2017, 240, 613-624. | 7.8 | 49 |
| 14 | Absorption of Ultrashort Electromagnetic Pulses by ITO Nanoparticles. Journal of Physical Chemistry C, 2017, 121, 28581-28586. | 3.1 | 4 |
| 15 | Mathematical modelling of tongue deformation during swallow in patients with head and neck cancer. Mathematical and Computer Modelling of Dynamical Systems, 2016, 22, 569-583. | 2.2 | 2 |
| 16 | A Biomechanical Model of Human Lung Deformation Utilizing Patient-Specific Elastic Property. Journal of Cancer Therapy, 2016, 07, 402-415. | 0.4 | 10 |
| 17 | Modelling evaporation and chemical reaction in a multi-component droplet from spray pyrolysis synthesis of mixed metal-oxide nanocomposite films. International Journal of Mathematical Modelling and Numerical Optimisation, 2015, 6, 141. | 0.2 | 2 |
| 18 | Analytic Intermodel Consistent Modeling of Volumetric Human Lung Dynamics. Journal of Biomechanical Engineering, 2015, 137, 101005. | 1.3 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Effect of composition and temperature on conductive and sensing properties of CeO2+In2O3 nanocomposite films. Sensors and Actuators B: Chemical, 2015, 209, 562-569. | 7.8 | 35 |
| 20 | Effect of Composition and Morphology on Sensor Properties of Aerosol Deposited Nanostructured ZnO+In<SUB>2</SUB> O<SUB>3</SUB> Films. Materials Sciences and Applications, 2015, 06, 220-227. | 0.4 | 1 |
| 21 | Patient-specific model of lung deformation using spatially dependent constitutive parameters. Mathematical and Computer Modelling of Dynamical Systems, 2014, 20, 546-556. | 2.2 | 8 |
| 22 | Synthesis and Conductometric Property of Sol-Gel-Derived ZnO/PVP Nano Hybrid Films. Journal of Materials Engineering and Performance, 2013, 22, 911-915. | 2.5 | 10 |
| 23 | Modeling of aerosol spray characteristics for synthesis of sensor thin film from solution. Applied Mathematical Modelling, 2013, 37, 6389-6399. | 4.2 | 9 |
| 24 | Conductivity and sensing properties of In2O3+ZnO mixed nanostructured films: Effect of composition and temperature. Sensors and Actuators B: Chemical, 2013, 187, 514-521. | 7.8 | 41 |
| 25 | Characterization of Metal Oxide Sensor Thin Films Deposited by Spray Pyrolysis. , 2013, , . | | 3 |
| 26 | Modeling Airflow Using Subject-Specific 4DCT-Based Deformable Volumetric Lung Models. International Journal of Biomedical Imaging, 2012, 2012, 1-10. | 3.9 | 9 |
| 27 | Effect of composition on sensing properties of SnO2+In2O3 mixed nanostructured films. Sensors and Actuators B: Chemical, 2012, 169, 32-38. | 7.8 | 55 |
| 28 | Experimental Study of Thermal and Flame Front Characteristics in Combustion Synthesis of Porous Ni-Ti Intermetallic Material. Journal of Materials Engineering and Performance, 2012, 21, 1193-1198. | 2.5 | 3 |
| 29 | Modeling Reaction Front Propagation and Porosity in Pressure-Assisted Combustion Synthesis of Porous NiTi Intermetallics. Journal of Materials Engineering and Performance, 2012, 21, 298-307. | 2.5 | 6 |
| 30 | Computational fluid dynamics modeling of airflow inside lungs using heterogenous anisotropic lung tissue elastic properties. Studies in Health Technology and Informatics, 2012, 173, 205-11. | 0.3 | 0 |
| 31 | Biocompatibility and Conductometric Property of Sol-Gel Derived ZnO/PVP Nanocomposite Biosensor Film. Journal of Bionic Engineering, 2010, 7, S30-S35. | 5.0 | 13 |
| 32 | Synthesis and Characterisation Of Solâ€“gel Derived Nanostructured Composite of ZnO/PVP Thin Films. Surface Engineering, 2004, 20, 373-378. | 2.2 | 0 |