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### Research Articles

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1.

#### **Study the Effect of Nano SiO<sub>2</sub> Prepared from Rice Husk Ash on Compressive Strength of Reactive Powder Concrete**

Dang Thi Thanh Le, Vuong Dang Le Mai, Vu Viet Cuong, Hoang Anh Tuan

*Keywords: Nano-SiO<sub>2</sub>, rice husk ash, reactive powder concrete, compressive strength, water-to-cement ratio, mesoporous structure, cementitious materials*

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2.

#### **Tutorial on Continuously Observational Hidden Markov Model**

Loc Nguyen

*Keywords: Hidden Markov Model, Continuous Observations, Mixture Model, Probability Density Function, Statistical Modeling*

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3.

#### **Determination of Optimum Nativo SC 300 (Trifloxystrobin 100g/l + Tebuconazole 200g/l) Spray Frequency for Control of Rust (*Puccinia allii* Rudolphi) on Garlic in the Highlands of Bale, South Eastern Ethiopia**

Yonas Worku Mulat

*Keywords: Garlic, Puccinia allii, Fungicide, Trifloxystrobin, Tebuconazole, Crop Yield, Disease Control*

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4.

#### **Heart Rate Analysis and Monitoring of Patients from Offsite through Wireless Sensor Network**

Deepak Choudhary

*Keywords: Heart Rate Monitoring, Wireless Sensor Network, Remote Patient Monitoring, Zigbee Protocol, Medical Device Enhancement*

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**5.**

**Scrophularia atropatana extract reverses TP53 gene promoter hypermethylation and decreases survivin antiapoptotic gene expression in breast cancer cells**

Mehrdad Ghavifekr Fakhr, Behzad Baradaran, Majid Farshdousti Hagh, Dariush Shanehbandi, Jafar Majidi, Tohid Kazemi, Saeed Sadigh-Eteghad, Habib Zarredar, Elham Safarzadeh

*Keywords: Scrophularia atropatana, TP53, breast cancer, hypermethylation, survivin, apoptosis, epigenetics*

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**6.**

**The Comparison of Body Composition Bioelectrical Impedance Analysis Method of Primary School Students Who Do and Don't Do Exercise**

Recep Kurkcu

*Keywords: bioelectrical impedance analysis, primary school students, body composition, exercise, physical activity, BMI, childhood health*

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**7.**

**Chromogranin A (CgA) and N Terminal -proBNP (NT-proBNP) in Evaluation and Differentiation of Systolic and Diastolic Ischemic Heart Failure: Severity Related Study**

Basil O Saleh, Nada A Abdu Huseen, Hilal B Al-Saffar, William M Frankul

*Keywords: chromogranin A, NT-proBNP, ischemic heart failure, systolic dysfunction, diastolic dysfunction*