

Irena Cosic

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

1,388
citations

361413

20
h-index

477307

29
g-index

73
all docs

73
docs citations

73
times ranked

1118
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Wavelet transform feature extraction from human PPG, ECG, and EEG signal responses to ELF PEMF exposures: A pilot study. , 2008, 18, 861-874. | | 183 |
| 2 | The Resonant Recognition Model of Macromolecular Bioactivity. , 1997, , . | | 80 |
| 3 | Protein sequence comparison based on the wavelet transform approach. Protein Engineering, Design and Selection, 2002, 15, 193-203. | 2.1 | 64 |
| 4 | Cross-correlation of EEG frequency bands and heart rate variability for sleep apnoea classification. Medical and Biological Engineering and Computing, 2010, 48, 1261-1269. | 2.8 | 48 |
| 5 | Time-frequency analysis of normal and abnormal biological signals. Biomedical Signal Processing and Control, 2006, 1, 33-43. | 5.7 | 42 |
| 6 | Developing a Wireless Implantable Body Sensor Network in MICS Band. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 567-576. | 3.2 | 41 |
| 7 | In vitro inhibition of the actions of basic FGF by a novel 16 amino acid peptide. Molecular and Cellular Biochemistry, 1994, 130, 1-9. | 3.1 | 39 |
| 8 | Biological Effects of a De Novo Designed Myxoma Virus Peptide Analogue: Evaluation of Cytotoxicity on Tumor Cells. PLoS ONE, 2011, 6, e24809. | 2.5 | 38 |
| 9 | Improved performance of the electromagnetic fuel injector solenoid actuator using a modelling approach. International Journal of Applied Electromagnetics and Mechanics, 2008, 27, 251-273. | 0.6 | 37 |
| 10 | Prediction of 'hot spots' in SV40 enhancer and relation with experimental data. FEBS Journal, 1987, 170, 247-252. | 0.2 | 35 |
| 11 | The resonant recognition model (RRM) predicts amino acid residues in highly conserved regions of the hormone prolactin (PRL). Biophysical Chemistry, 2000, 84, 149-157. | 2.8 | 35 |
| 12 | RRM Prediction of Erythrocyte Band3 Protein as Alternative Receptor for SARS-CoV-2 Virus. Applied Sciences (Switzerland), 2020, 10, 4053. | 2.5 | 35 |
| 13 | Virtual Spectroscopy for Fun and Profit. Nature Biotechnology, 1995, 13, 236-238. | 17.5 | 30 |
| 14 | Bioactive peptide design using the Resonant Recognition Model. Nonlinear Biomedical Physics, 2007, 1, 7. | 1.5 | 30 |
| 15 | Advances in Methods for Therapeutic Peptide Discovery, Design and Development. Current Pharmaceutical Biotechnology, 2011, 12, 1117-1127. | 1.6 | 30 |
| 16 | Resonant recognition model and protein topography. Model studies with myoglobin, hemoglobin and lysozyme. FEBS Journal, 1991, 198, 113-119. | 0.2 | 29 |
| 17 | The Possibility of Soliton/Exciton Transfer in Proteins. Journal of Theoretical Biology, 1997, 184, 331-338. | 1.7 | 29 |
| 18 | A Mobile Phone Based Intelligent Telemonitoring Platform. , 2006, , . | | 28 |

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|----|--|-----|-----------|
| 19 | Adaptive neuro-fuzzy inference system employing wavelet coefficients for detection of alterations in sleep EEG activity during hypopnoea episodes. , 2010, 20, 678-691. | | 28 |
| 20 | Enhancer binding proteins predicted by informational spectrum method. Biochemical and Biophysical Research Communications, 1986, 141, 831-838. | 2.1 | 27 |
| 21 | Investigation of the applicability of dielectric relaxation properties of amino acid solutions within the resonant recognition model. IEEE Transactions on Nanobioscience, 2003, 2, 63-69. | 3.3 | 26 |
| 22 | Correlation of sleep EEG frequency bands and heart rate variability. , 2009, 2009, 5014-7. | | 26 |
| 23 | Alterations of human electroencephalographic activity caused by multiple extremely low frequency magnetic field exposures. Medical and Biological Engineering and Computing, 2009, 47, 1063-1073. | 2.8 | 25 |
| 24 | Is it possible to predict electromagnetic resonances in proteins, DNA and RNA?. EPJ Nonlinear Biomedical Physics, 2015, 3, . | 0.8 | 24 |
| 25 | The effect of electromagnetic radiation (550 â€“ 850 nm) on L-Lactate dehydrogenase kinetics. International Journal of Radiation Biology, 2007, 83, 221-230. | 1.8 | 23 |
| 26 | â€“Hot spotâ€™ amino acid distribution in Ha-ras oncogene product p21: Relationship to guanine binding site. Journal of Molecular Recognition, 1991, 4, 57-62. | 2.1 | 21 |
| 27 | Prediction of Tubulin Resonant Frequencies Using the Resonant Recognition Model (RRM). IEEE Transactions on Nanobioscience, 2015, 14, 491-496. | 3.3 | 20 |
| 28 | Biological Effects of Electromagnetic Radiation. , 0, , . | | 19 |
| 29 | Analysis of human PPG, ECG and EEG signals by eigenvector methods. , 2010, 20, 956-963. | | 19 |
| 30 | AR Spectral Analysis Technique for Human PPG, ECG and EEG Signals. Journal of Medical Systems, 2008, 32, 201-206. | 3.6 | 17 |
| 31 | Investigation of cytotoxicity of negative control peptides versus bioactive peptides on skin cancer and normal cells: a comparative study. Future Medicinal Chemistry, 2012, 4, 1553-1565. | 2.3 | 16 |
| 32 | Environmental Light and Its Relationship with Electromagnetic Resonances of Biomolecular Interactions, as Predicted by the Resonant Recognition Model. International Journal of Environmental Research and Public Health, 2016, 13, 647. | 2.6 | 16 |
| 33 | Studies on protein-DNA interactions using the resonant recognition model. Application to repressors and transforming proteins. FEBS Journal, 1992, 205, 613-619. | 0.2 | 15 |
| 34 | Automated ELF magnetic field stimulation of the human EEG activity. Integrated Computer-Aided Engineering, 2006, 13, 313-328. | 4.6 | 15 |
| 35 | An investigation on dielectric properties of major constituents of grape must using electrochemical impedance spectroscopy. European Food Research and Technology, 2009, 229, 887-897. | 3.3 | 14 |
| 36 | A mobile web grid based physiological signal monitoring system. , 2008, , . | | 12 |

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|----|---|-----|-----------|
| 37 | EEG inter/intra-hemispheric coherence and asymmetric responses to visual stimulations. Medical and Biological Engineering and Computing, 2009, 47, 1023-1034. | 2.8 | 12 |
| 38 | A bioactive peptide analogue for myxoma virus protein with a targeted cytotoxicity for human skin cancer in vitro. Journal of Biomedical Science, 2012, 19, 65. | 7.0 | 12 |
| 39 | Analysis of Tumor Necrosis Factor Function Using the Resonant Recognition Model. Cell Biochemistry and Biophysics, 2016, 74, 175-180. | 1.8 | 12 |
| 40 | Analysis of sleep EEG activity during hypopnoea episodes by least squares support vector machine employing AR coefficients. Expert Systems With Applications, 2010, 37, 4463-4467. | 7.6 | 11 |
| 41 | Low intensity microwave radiation as modulator of the L-lactate dehydrogenase activity. Medical and Biological Engineering and Computing, 2011, 49, 793-799. | 2.8 | 11 |
| 42 | 3-layer implantable microstrip antenna optimised for retinal prosthesis system in MICS band. , 2011, , . | | 10 |
| 43 | A fast Critical Arrhythmic ECG waveform identification method using cross-correlation and multiple template matching. , 2010, 2010, 1922-5. | | 9 |
| 44 | A mobile phone based intelligent scoring approach for assessment of critical illness. , 2008, , . | | 8 |
| 45 | A blind equalization algorithm for biological signals transmission. , 2012, 22, 114-123. | | 8 |
| 46 | A Time-Frequency Approach for the Analysis of Normal and Arrhythmia Cardiac Signals. , 2006, Suppl, 6509-12. | | 6 |
| 47 | Alterations in Sleep EEG Activity During the Hypopnoea Episodes. Journal of Medical Systems, 2010, 34, 485-491. | 3.6 | 6 |
| 48 | The treatment of crigler-najjar syndrome by blue light as explained by resonant recognition model. EPJ Nonlinear Biomedical Physics, 2016, 4, . | 0.8 | 6 |
| 49 | The use of ionisation constants of amino acids for protein signal analysis within the resonant recognition model-application to proteases. Molecular Simulation, 2002, 28, 853-863. | 2.0 | 5 |
| 50 | Development of a conductive photoresist with a mixture of SU-8 and HCl doped polyaniline. , 2005, , . | | 5 |
| 51 | Eigenvector Methods for Analysis of Human PPG, ECG and EEG Signals. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3304-7. | 0.5 | 5 |
| 52 | Computational analysis of DNA photolyases using digital signal processing methods. Molecular Simulation, 2006, 32, 1195-1203. | 2.0 | 4 |
| 53 | Preliminary evaluation of electroencephalographic entrainment using thalamocortical modelling. Expert Systems, 2009, 26, 320-338. | 4.5 | 4 |
| 54 | A computationally light-weight real-time classification method to identify different ECG signals. , 2011, , . | | 4 |

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|----|---|------|-----------|
| 55 | Influence of Tuning Element Relief Patches on Pain as Analyzed by the Resonant Recognition Model. IEEE Transactions on Nanobioscience, 2017, 16, 822-827. | 3.3 | 4 |
| 56 | Sleep Onset Process as an Altered State of Consciousness. The Frontiers Collection, 2011, , 157-185. | 0.2 | 4 |
| 57 | Ataxin active site determination using spectral distribution of electron ion interaction potentials of amino acids. Medical and Biological Engineering and Computing, 2010, 48, 303-309. | 2.8 | 3 |
| 58 | Review of studies on modulating enzyme activity by low intensity electromagnetic radiation. , 2010, 2010, 835-8. | | 3 |
| 59 | Protein active sites are defined as resonant spots in protein 3D structure. , 1992, , . | | 2 |
| 60 | Personal, Non-Invasive Dosimetry for Radio-Frequency Human Exposure Assessment. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2319-22. | 0.5 | 2 |
| 61 | Brain and heart interaction during sleep in the healthy and sleep apnoea. , 2010, , . | | 2 |
| 62 | Possibility to interfere with malaria parasite activity using specific electromagnetic frequencies. EPJ Nonlinear Biomedical Physics, 2015, 3, . | 0.8 | 2 |
| 63 | Explanation of Osteoblastic Differentiation of Stem Cells by Photo Biomodulation Using the Resonant Recognition Model. Applied Sciences (Switzerland), 2019, 9, 1979. | 2.5 | 2 |
| 64 | Analysis of Proteinâ€“Receptor Interactions on an Example of Leptinâ€“Leptin Receptor Interaction Using the Resonant Recognition Model. Applied Sciences (Switzerland), 2019, 9, 5169. | 2.5 | 2 |
| 65 | Cancer Related BRCA-1 and BRCA-2 Mutations as Analysed by the Resonant Recognition Model. Journal of Advances in Molecular Biology, 2017, 1, . | 0.2 | 2 |
| 66 | Evaluation of the RRM model using dehydrogenase protein as example. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 341-346. | 0.4 | 1 |
| 67 | Adaptive transmit diversity with orthogonal space-time block coding for telemedicine application. , 2006, Suppl, 6517-20. | | 1 |
| 68 | Alterations in Sleep Electroencephalography and Heart Rate Variability During the Obstructive Sleep Apnoea and Hypopnoea. , 0, , . | | 1 |
| 69 | A new approach to revealing functional residues from analysis of protein primary structure. , 2009, 2009, 4731-4. | | 1 |
| 70 | Is virtual spectroscopy real?. Nature Biotechnology, 1995, 13, 306-306. | 17.5 | 0 |
| 71 | Prediction of protein active and/or binding site using time-frequency analysis: Application to ras oncogene proteins. , 2012, , . | | 0 |
| 72 | Macromolecular Resonances. Studies in Rhythm Engineering, 2021, , 1-35. | 0.2 | 0 |