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Research Interests

Biophotonics, Biosensors, Neural Engineering, Bioelectromagnetics, Low Noise Measurement
Circuit Design, Computational Modelling, Software Development

Patents

- Somayeh Alimohammadi, Mohammad Imani, Mohammad Ali Kiani, Pezhman Sasanpour, “**Microsensor for a Cochlear Implant**”, US Patent App. 17/106,113
- Pezhman Sasanpour, Mitra Abedini, and Rahekeh Mohammadpour, “**Liquid Refractive Index Sensor based on Surface Plasmon Resonance in Optical Fibers**”, Iran,
- Pezhman Sasanpour, Mohammad Haghnegahdar, and Bizhan Rashidian, “**Sub 10um Movement Detection Using Optical Pick-Up Head of CD Drives**”, Iran.

Journal Papers

- F. Ejehi, R. Mohammadpour, E. Asadian, S. Fardindoost, P. Sasanpour, “Enhancement of self-powered humidity sensing of graphene oxide-based triboelectric nanogenerators by addition of graphene oxide nanoribbons”, (2021) *Microchimica Acta*, 188, 8, 1-13.
- S. Amiri, M. Abedini, S. Badiyan, M. Vaezjalali, O. Akhavan, P. Sasanpour, “Viral infected cells reveal distinct polarization behavior; a polarimetric microscopy analysis on HSV infected Vero and HeLa cells”, (2021) *Journal of Quantitative Spectroscopy and Radiative Transfer*, 262, 107484.
- M Vafaiee, R Mohammadpour, M Vossoughi, E Asadian, M Janahmadi, P. Sasanpour, “Carbon Nanotube Modified Microelectrode Array for Neural Interface”, (2021) *Frontiers in Bioengineering and Biotechnology* 8, 1465.
- ZR Gatabi, R Mohammadpour, JR Gatabi, M Mirhoseini, P Sasanpour, “A novel composite gold/gold nanoparticles/carbon nanotube electrode for frequency-stable micro-electrical impedance tomography”, (2020) *Journal of Materials Science: Materials in Electronics* 31, 10803–10810.
- M Arvand, N Arjmandi, M Shakibaie, S Jafarinejad, R Shahghadami, P. Sasanpour, “Colorimetric microfluidic paper-based sensor for determination of nitrite in drinking water with enhanced color development”, (2020) *Journal of Physics D: Applied Physics* 53 (35), 355403.
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- Hosseindokht, Z., Mohammadpour, R., Asadian, E., Paryavi, M., Rafii-Tabar, H., Sasanpour, P., “Low cost flexible pressure sensor using laser scribed GO/RGO periodic structure for electronic skin applications”, (2020) *Superlattices and Microstructures*, 140, art. no. 106470 .

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- Rafiefard, N., Irajizad, A., Esfandiari, A., Sasanpour, P., Fardindoost, S., Zou, Y., Haigh, S.J., Shokouh, S.H.H., “A graphene/TiS₃ heterojunction for resistive sensing of polar vapors at room temperature”, (2020) *Microchimica Acta*, 187 (2), art. no. 117 .
- S Jafarnejad, A Bigdeli, M Ghazi-Khansari, P Sasanpour, "Identification of Catecholamine Neurotransmitters Using a Fluorescent Electronic Tongue", (2020), *ACS chemical neuroscience* 11 (1), 25-33 (**Cover of Journal**).
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