

## Murat Baday

Casual - Non-Exempt, Adult Neurology

### Publications

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#### PUBLICATIONS

- **Screening/Diagnosing Sarcopenia with Machine Learning-Powered Risk Assessment: The SARCO X Study** *JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION*  
Kara, M., Ceran, Y., Analay, P., Aksakal, M., Durmus, M., Tiftik, T., Citir, B., Sener, F., Yilmaz, M., Coskun, E., Unlu, Z., Yildirim, P., Gurcay, et al  
2025; 26 (7): 105683
- **Screening/Diagnosing Sarcopenia With Machine Learning-Powered Risk Assessment: The SARCO X Study.** *Journal of the American Medical Directors Association*  
Kara, M., Ceran, Y., Analay, P., Aksakal, M. F., Durmuş, M. E., Tiftik, T., Çitir, B., Şener, F. E., Yılmaz, M. E., Coşkun, E., Ünlü, Z., Yıldırım, P., Gürçay, et al  
2025: 105683
- **ADVANCING FALL DETECTION UTILIZING SKELETAL JOINT IMAGE REPRESENTATION AND DEFORMABLE LAYERS** *IMAGE ANALYSIS & STEREOLOGY*  
Erguder, H., Uzun, T., Baday, M.  
2024; 43 (1): 97-107
- **High spatial and temporal resolution using upconversion nanoparticles and femtosecond pulsed laser in single particle tracking** *CURRENT APPLIED PHYSICS*  
Lee, J., Lee, H., Kang, M., Baday, M., Lee, S.  
2022; 44: 40-45
- **A DEEP LEARNING MODEL FOR AUTOMATED DETECTION AND COUNTING OF TUNNELING NANOTUBES AND CANCER CELLS IN MICROSCOPY IMAGES**  
Ceran, Y., Erguder, H., Ladner, K., Korenfeld, S., Deniz, K., Padmanabhan, S., Baday, M., Pengo, T., Lou, E., Patel, C.  
OXFORD UNIV PRESS INC.2022: 13
- **TNTdetect.AI: A Deep Learning Model for Automated Detection and Counting of Tunneling Nanotubes in Microscopy Images.** *Cancers*  
Ceran, Y., Erguder, H., Ladner, K., Korenfeld, S., Deniz, K., Padmanabhan, S., Wong, P., Baday, M., Pengo, T., Lou, E., Patel, C. B.  
2022; 14 (19)
- **Biomimetic Hydrogels in the Study of Cancer Mechanobiology: Overview, Biomedical Applications, and Future Perspectives.** *Gels (Basel, Switzerland)*  
Sahan, A. Z., Baday, M., Patel, C. B.  
2022; 8 (8)
- **SARcopenia Assessment in Hypertension: The SARAH Study.** *American journal of physical medicine & rehabilitation*  
Kara, M., Kara, O., Ceran, Y., Kaymak, B., Kaya, T. C., Citir, B. N., Durmus, M. E., Durmusoglu, E., Razaq, S., Dogan, Y., Shehab, D., Alkandari, S. A., Abdulsalam, et al  
2022
- **Electrophysiological Characterization of Glioma using a Biomimetic Spheroid Model**  
Kim, K., Tercan, S., Baday, M., Mahaney, K. B., Recht, L. D., Rajadas, J., Patel, C. B., IEEE  
IEEE.2021: 86-89
- **Isolation, Detection, and Quantification of Cancer Biomarkers in HPV-Associated Malignancies.** *Scientific reports*  
Inan, H., Wang, S., Inci, F., Baday, M., Zangar, R., Kesiraju, S., Anderson, K. S., Cunningham, B. T., Demirci, U.

2017; 7 (1): 3322

- **Photonic crystals: emerging biosensors and their promise for point-of-care applications.** *Chemical Society reviews*  
Inan, H., Poyraz, M., Inci, F., Lifson, M. A., Baday, M., Cunningham, B. T., Demirci, U.  
2017; 46 (2): 366-388
- **Probing the Heterogeneity of Protein Kinase Activation in Cells by Super-resolution Microscopy** *ACS NANO*  
Zhang, R., Fruhwirth, G. O., Coban, O., Barrett, J. E., Burgoyne, T., Lee, S. H., Simonson, P. D., Baday, M., Kholodenko, B. N., Futter, C. E., Ng, T., Selvin, P. R.  
2017; 11 (1): 249-257
- **Advances in biosensing strategies for HIV-1 detection, diagnosis, and therapeutic monitoring** *ADVANCED DRUG DELIVERY REVIEWS*  
Lifson, M. A., Ozen, M. O., Inci, F., Wang, S., Inan, H., Baday, M., Henrich, T. J., Demirci, U.  
2016; 103: 90-104
- **Integrating Cell Phone Imaging with Magnetic Levitation (i-LEV) for Label-Free Blood Analysis at the Point-of-Living.** *Small*  
Baday, M., Calamak, S., Durmus, N. G., Davis, R. W., Steinmetz, L. M., Demirci, U.  
2016; 12 (9): 1222-1229
- **Multitarget, quantitative nanoplasmonic electrical field-enhanced resonating device (NE2RD) for diagnostics.** *Proceedings of the National Academy of Sciences of the United States of America*  
Inci, F., Filippini, C., Baday, M., Ozen, M. O., Calamak, S., Durmus, N. G., Wang, S., Hanhauser, E., Hobbs, K. S., Juillard, F., Kuang, P. P., Vetter, M. L., Carocci, et al  
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- **Multitarget, quantitative nanoplasmonic electrical field-enhanced resonating device ((NERD)-R-2) for diagnostics** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Inci, F., Filippini, C., Baday, M., Ozen, M. O., Calamak, S., Durmus, N. G., Wang, S., Hanhauser, E., Hobbs, K. S., Juillard, F., Kuang, P. P., Vetter, M. L., Carocci, et al  
2015; 112 (32): E4354-E4363