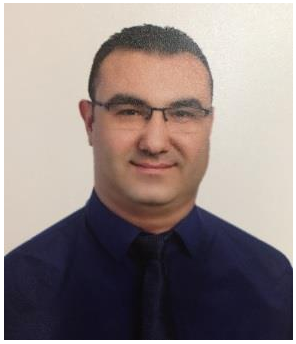

Professor Dr. Kemal POLAT

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h-index value in Web of Science (WOS): 34

h-index value in Scopus: 35

h-index value in Google Scholar: 40

Google Scholar: https://scholar.google.com/citations?hl=en&user=-dQKV68AAAAJ&view_op=list_works&sortby=pubdate

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Web of Science Researcher ID: R-5692-2019

In Google scholar, he ranks 26th in the world in the field of "biomedical signal processing" with the citation of 7050.

EDUCATION

BSc: Selcuk University, Konya, Turkey, Electrical and Electronics Engineering, 2002.

MSc: Selcuk University, Konya, Turkey, Electrical and Electronics Engineering, 2004.

MSc project: Going to Medical Diagnosis by Using Artificial Immune Recognition Systems (AIRS) with Feature Selectıon (FS).

Ph.D.: Selcuk University, Konya, Turkey, Electrical and Electronics Engineering, 2008.

Doctoral thesis: The investigation of the effect of data pre-processing techniques to classification accuracy in the classification of biomedical signals.

Post-Doctoral: The University of Houston, Department of Electrical and Computer Engineering, Houston, Texas, USA, 2015-2016, Neuroscience, Title of The Research: Information Selection, Binding, and Transfer in Visual Memory

PROFESSIONAL EXPERIENCE

Professor Dr. : (July 2019- Continuing)

Associate Professor Dr. : (February 2014: June2019)

Department of Electrical and Electronics Engineering, Bolu Abant İzzet Baysal University, Gölköy, Bolu, TURKEY

Assistant Professor Dr. : (September 2011: February 2014)

Department of Electrical and Electronics Engineering, Abant İzzet Baysal University, Gölköy, Bolu, TURKEY

Assistant Professor Dr. : (December 2010: September 2011)

Department of Electrical and Electronics Engineering, Bartın University, Campus, Bartın, TURKEY

Research Assistant Dr. : (April 2005- December 2010)

Department of Electrical and Electronics Engineering, Selcuk University, Campus, Konya, TURKEY

Lecturer: (During November 2002- April 2005)

Vocational High School of Seydisehir, Selcuk University, Seydisehir, Konya, TURKEY

ACADEMIC PREPARATION

Postdoc in Electrical and Computer Engineering, University of Houston, Department of Electrical and Computer Engineering, Houston, Texas, USA, 2015-2016

Ph.D. in Electrical and Electronics Engineering, Selcuk University, Department of Electrical and Electronics Engineering, Konya, Turkey, November 2008

Name of Dissertation: The investigation of the effect of data pre-processing techniques to classification accuracy in the classification of biomedical signals

M.S. in Electrical and Electronics Engineering, Selcuk University, Department of Electrical and Electronics Engineering, Konya, Turkey, October 2004

Thesis: Going to Medical Diagnosis by Using Artificial Immune Recognition Systems (AIRS) with Feature Selectıon (FS)

B.S. in Electrical and Electronics Engineering, Selcuk University, Department of Electrical and Electronics Engineering, Konya, Turkey, June 2002

Project: Ultrasonic Distance Measurement System via PIC Microcontroller

CURRENT RESEARCH INTERESTS and Keywords

Biomedical

Biomedical signal processing

ECG and PPG signal measurements

Cuffless Blood Pressure Estimation

Sleep

Sleep staging problem solving

Machine to Machine Communication

Biomedical image processing

Neuroscience

Memory modeling

Cloud computing,

Brain-computer interfaces

Human-machine systems

Wireless Communication systems

Internet of Things

Embedded Systems

Machine learning

Pattern recognition

Deep Learning

Image Processing

Speech analysis

Engineering applications

EEG signal analysis

Deep learning

Communication systems

Biomedical image processing

Electronic

PROFESSIONAL ACTIVITIES

Editorial Activities

1. The Associate Editor of Information Sciences (SCI), Elsevier
2. The associate editor of Measurement- Sensors Journal at Elsevier
3. The Associate Editor of IEEE Access
4. The Associate Editor of Frontiers in Signal Processing, www.frontiersin.org
5. The member of the editorial board of "**Applied Soft Computing**" SCI- (Impact Factor: 4.5), Elsevier.
6. The member of the editorial board of "Neural Computing and Applications," **SCI-E**, (Impact Factor: 4.231), Springer.
7. The guest editor in the special issue of "**Soft Computing Methods for Remote and Mobile Healthcare Applications (SCMRMHA)**" for Applied Soft Computing Journal

8. The member of the editorial board of TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, **SCI-E**, (Impact Factor: 0.578)
9. The member of the editorial board of Computational and Mathematical Methods in Medicine (SCI-E), Hindawi
10. The member of the editorial board of International Journal of Computer Science and Artificial Intelligence, http://www.academicpub.org/ijcsai/EditorialBoard.aspx
11. The member of the editorial board of ANNALS OF FUZZY SETS, FUZZY LOGIC AND FUZZY SYSTEMS, https://www.mililink.com/journals_eb.php?id=63
12. The member of the editorial board of Medical Imaging and Radiology, http://www.hoajonline.com/medimagingradiol/editorialboard
13. The member of the editorial board of Mathematical Problems in Engineering (SCI-E), Hindawi
14. The International Association of Engineers (IAENG) member
15. The member of the editorial board of "International Journal of Engineering and Applied Sciences (IJEAS)"
16. The member of the editorial board of "Artificial Intelligence Research."
17. The member of the editorial board of "World Journal of Methodology."
18. The member of the editorial board of "World Journal of Respirology."
19. The member of the editorial board of "World Research Journal of Pattern Recognition."

Review Activities in journals and conferences in signal processing, machine learning, and biomedical engineering

1. Pattern Recognition Letters
2. Biomedical Signal Processing and Control
3. Information Sciences
4. Artificial Intelligence in Medicine
5. Computational Statistics & Data Analysis
6. Soft Computing
7. Applied Soft Computing
8. Expert Systems
9. Talanta (Elsevier)
10. IEEE Transactions on Evolutionary Computation
11. IEEE Transactions on Biomedical Engineering
12. IET SIGNAL PROCESSING
13. Digital Signal Processing
14. Computers in Biology and Medicine
15. Journal of Medical Systems

16. Scientific Research and Essays
17. Journal of the Franklin Institute
18. Computer Methods and Programs in Biomedicine
19. BMC Medical Informatics and Decision Making
20. IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics
21. Medical Engineering and Physics

Awards

Dr. Kemal Polat has been supported by The Department of Science Fellowships and Grant Programs **(TÜBİTAK) - 2219** International Post-Doctoral Research Fellowship Program in 2015 and successfully completed the program.

Patents:

My new patent is patented by the US patent office in 2021.

"**Letter and number recognition system using EEG-fNIRS for speech impaired people**" is patented by the **US patent** office in 2021.

https://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=%22King+Abdulaziz+University%22.ASNM.&s2=2021$.PD.&OS=AN/%22King+Abdulaziz+University%22+AND+ISD/2021&RS=AN/%22King+Abdulaziz+University%22+AND+ISD/2021

Patent number: **Patent #: US011016567**

PUBLICATIONS

Peer-Reviewed Journals (SCI and SCI-E) Papers
Totally: 110

112	SCI	Onur Karaman, Adi Alhudhaif, **Kemal Polat**, Development of smart camera systems based on artificial intelligence network for social distance detection to fight against COVID-19, Applied Soft Computing, Volume 110, 2021, 107610, ISSN 1568-4946, https://doi.org/10.1016/j.asoc.2021.107610.
111	SCI	Rachna Mehta, Karan Aggarwal, Deepika Koundal, Adi Alhudhaif, **Kemal Polat**, Markov features based DTCWS algorithm for online image forgery detection using ensemble classifier in the pandemic, Expert Systems with Applications, 185, 2021, 115630, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.115630.
110	SCI	Adi Alhudhaif, **Kemal Polat**, and et al. Automated Covid-19 Detection in Chest X-ray Images using Fine-Tuned Deep Learning Architectures, Expert Systems, Article in Press, 2021 (Special issue)
109	SCI	Hatem Sindi, Majid Nour, Muhyaddin Rawa, Şaban Öztürk, **Kemal Polat**, A novel hybrid deep learning approach including combination of 1D power signals and 2D signal images for power quality disturbance classification, Expert Systems with Applications, Volume 174, 2021, 114785, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.114785.
108	SCI	Akın Özdemir**, Kemal Polat**, Adi Alhudhaif, Classification of imbalanced hyperspectral images using SMOTE-based deep learning methods, Expert Systems with Applications, Volume 178, 2021, 114986, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.114986.
107	SCI	Onur Karaman, Hakan Çakın, Adi Alhudhaif, **Kemal Polat**, Robust automated Parkinson disease detection based on voice signals with transfer learning, Expert Systems with Applications, Volume 178, 2021, 115013, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.115013.
106	SCI	Hatem Sindi, Majid Nour, Muhyaddin Rawa, Şaban Öztürk, **Kemal Polat**, An adaptive deep learning framework to classify unknown composite power quality event using known single power quality events, Expert Systems with Applications, Volume 178, 2021, 115023, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.115023
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104	SCI	Sachin Taran, Varun Bajaj, G.R. Sinha, **Kemal Polat**, Detection of sleep apnea events using electroencephalogram signals, Applied Acoustics, Volume 181, 2021, 108137, ISSN 0003-682X, https://doi.org/10.1016/j.apacoust.2021.108137
103	SCI	Hariharan Muthusamy, Sindhu Ravindran, Sazali Yaacob**, Kemal Polat**, An Improved Elephant Herding Optimization using Sine-Cosine Mechanism and Opposition based Learning for Global Optimization Problems, Expert Systems with Applications, 2021, 114607, https://doi.org/10.1016/j.eswa.2021.114607.

102	SCI	Laxmikant Tiwari, Rohit Raja, Vineet Awasthi, Rohit Miri, G.R. Sinha, Monagi H. Alkinani, **Kemal Polat,** Detection of lung nodule and cancer using novel Mask-3 FCM and TWEDLNN algorithms, Measurement, Volume 172, 2021, 108882, https://doi.org/10.1016/j.measurement.2020.108882.
101	SCI	Hatem Sindi, Majid Nour, Muhyaddin Rawa, Şaban Öztürk, **Kemal Polat**, Random fully connected layered 1D CNN for solving the Z-bus loss allocation problem, Measurement, Volume 171, 2021, 108794, https://doi.org/10.1016/j.measurement.2020.108794.
100	SCI	Majid Nour, Hatem Sindi, Ehab Abozinadah, Şaban Öztürk, **Kemal Polat**, A healthcare evaluation system based on automated weighted indicators with cross-indicators based learning approach in terms of energy management and cybersecurity, International Journal of Medical Informatics, Volume 144, 2020, 104300, https://doi.org/10.1016/j.ijmedinf.2020.104300.
99	SCI	Majid Nour, Zafer Cömert, **Kemal Polat**, A Novel Medical Diagnosis model for COVID-19 infection detection based on Deep Features and Bayesian Optimization, Applied Soft Computing, Volume 97, Part A, 2020, 106580, https://doi.org/10.1016/j.asoc.2020.106580.
98	SCIE	**Kemal Polat**, Majid Nour, Epileptic Seizure Detection Based on New Hybrid Models with Electroencephalogram Signals, IRBM, 41(6), 331-353, 2020.
97	SCI	Wafaa Alsaggaf, Zafer Comert, Majid Nour, **Kemal Polat**, Hani Brdesee, Mesut Toğaçar, Predicting fetal hypoxia using common spatial pattern and machine learning from cardiotocography signals, Applied Acoustics, 168, 2020.
96	SCIE	Enas Khairullah, Murat Arican, **Kemal Polat**, Brain-computer interface speller system design from electroencephalogram signals with channel selection algorithms, Medical Hypotheses, 141, 2020, 109690
95	SCIE	MK Uçar, M Nour, H Sindi, **K Polat**, The Effect of Training and Testing Process on Machine Learning in Biomedical Datasets, Mathematical Problems in Engineering, 2020
94	SCI	A. S. Ashour, M. K. A. Nour, **K. Polat**, Y. Guo, W. Alsaggaf and A. El-Attar, "A Novel Framework of Two Successive Feature Selection Levels Using Weight-Based Procedure for Voice-Loss Detection in Parkinson's Disease," in IEEE Access, vol. 8, pp. 76193-76203, 2020, doi: 10.1109/ACCESS.2020.2989032.
93	SCIE	N Daldal, M Nour, **K Polat**, The Methods toward Improving Communication Performance in Transparent Radio Frequency Signals, Mathematical Problems in Engineering, 2020
92	SCIE	Ahmed S. Alghamdi, **Kemal Polat**, Abdullah Alghoson, Abdulrahman A. Alshdadi, Ahmed A. Abd El-Latif, A Novel Blood Pressure Estimation method based on the classification of oscillometric waveforms using machine-learning methods, Applied Acoustics, 2020, 164, July 2020, 107279
91	SCIE	Ahmed S. Alghamdi, **Kemal Polat**, Abdullah Alghoson, Abdulrahman A. Alshdadi, Ahmed A. Abd El-Latif, Gaussian process regression (GPR) Based Non-Invasive Continuous Blood Pressure Prediction method from Cuff Oscillometric signals, Applied Acoustics, 2020, 164, July 2020, 107256.
90	SCIE	Nihat Daldal, Majid Nour, **Kemal Polat**, A novel demodulation structure for quadrate modulation signals using the segmentary neural network modelling, Applied Acoustics, Volume 164, 2020,

		107251.
89	SCIE	Ahmet Hayrettin Yüzer, Harun Sümbül, Majid Nour, **Kemal Polat**, A different sleep apnea classification system with neural network based on the acceleration signals, Applied Acoustics, Volume 163, 2020, 107225.
88	SCIE	Ahmed A. Abd El-Latif, Bassem Abd-El-Atty, Sherif Elseuofi, Hany S. Khalifa, Ahmed S. Alghamdi, **Kemal Polat**, Mohamed Amin, Secret images transfer in cloud system based on investigating quantum walks in steganography approaches, Physica A: Statistical Mechanics and its Applications, Volume 541, 2020, 123687.
87	SCIE	Nihat Daldal, Zafer Cömert, **Kemal Polat**, Automatic determination of digital modulation types with different noises using Convolutional Neural Network based on time–frequency information, Applied Soft Computing, Volume 86, 2020, 105834.
86	SCIE	Majid Nour, **Kemal Polat**, Automatic Classification of Hypertension Type based on personal features by machine learning algorithms, Volume 2020, 2020, 1-13.
85	SCIE	Ahmed Refaat Hawas, Yanhui Guo, Chunlai Du, **Kemal Polat**, Amira S. Ashour, OCE-NGC: A neutrosophic graph cut algorithm using optimized clustering estimation algorithm for dermoscopic skin lesion segmentation, Applied Soft Computing, Volume 86, 2020, 105931
84	SCIE	Ümit ŞENTÜRK,, **Kemal Polat**, İbrahim YÜCEDAĞ, Turkish Journal of Electrical Engineering & Computer Sciences (TUBITAK), (2019) 27: 3259 – 3281.
83	SCIE	Hasan Hüseyin Çevik, Mehmet Çunkaş, **Kemal Polat**, A new multistage short-term wind power forecast model using decomposition and artificial intelligence methods, Physica A: Statistical Mechanics and its Applications, Volume 534, 2019, 122177.
82	SCIE	Daldal, N., Yıldırım, Ö. & **Kemal Polat**, Deep long short-term memory networks-based automatic recognition of six different digital modulation types under varying noise conditions. Neural Comput & Applic, 31, 1967–1981 (2019).
81	SCI	Murat Arican, **Kemal Polat**, Pairwise and variance based signal compression algorithm (PVBSC) in the P300 based speller systems using EEG signals, Computer Methods and Programs in Biomedicine, Volume 176, 2019, Pages 149-157.
80	SCIE	R Sindhu, Ruzelita Ngadiran, Yasmin Mohd Yacob, Nik Adilah Hanin Zahri, M Hariharan, **Kemal Polat**, Mathematical Problems in Engineering, Volume 2019, 2019, 1-18.
79	SCIE	Nihat Daldal, **Kemal Polat**, Yanhui Guo, Classification of multi-carrier digital modulation signals using NCM clustering based feature-weighting method, Computers in Industry, 109, 2019, 45-58.
78	SCIE	AS Ashour, Y Guo, E Kucukkulahli, P Erdogmus, **Kemal Polat**, A hybrid dermoscopy images segmentation approach based on neutrosophic clustering and histogram estimation, Applied Soft Computing, 69, 426-434, 2018
77	SCIE	**Kemal Polat** ,Similarity-based attribute weighting methods via clustering algorithms in the classification of imbalanced medical datasets, Neural Computing and Applications, 30 (3), 987–1013, 2018

76	SCIE	MK Uçar, MR Bozkurt, C Bilgin, **Kemal Polat** Automatic sleep staging in obstructive sleep apnea patients using photoplethysmography, heart rate variability signal and machine learning techniques, Neural Computing and Applications, 29 (8), 1-16, 2018
75	SCIE	M Hariharan, R Sindhu, Vikneswaran Vijean, Haniza Yazid, Thiyagar Nadarajaw, Sazali Yaacob, **Kemal Polat**, Improved binary dragonfly optimization algorithm and wavelet packet based non-linear features for infant cry classification, Computer methods and programs in biomedicine, 155, 39-51, 2018
74	SCIE	**Kemal Polat**, Hariharan Muthusamy, Rajendra Acharya, Yanhui Guo, Guest editorial: New trends in data pre-processing methods for signal and image classification, Neural Computing and Applications, 28 (10), 2839-2841, 2017
73	SCIE	SS Kumar, HH Inbarani, AT Azar, **Kemal Polat**, Covering-based rough set classification system, Neural Computing and Applications, 28 (10), 2879-2888, 2017
72	SCIE	MK Uçar, MR Bozkurt, C Bilgin, **Kemal Polat**, Automatic detection of respiratory arrests in OSA patients using PPG and machine learning techniques, Neural Computing and Applications, 28 (10), 2931-2945, 2017
71	SCIE	J Ganesan, HH Inbarani, AT Azar, **Kemal Polat**, Tolerance rough set firefly-based quick reduct, Neural Computing and Applications, 28 (10), 2995-3008, 2017
70	SCIE	Y Guo, R Xia, A Şengür, **Kemal Polat**, A novel image segmentation approach based on neutrosophic c-means clustering and indeterminacy filtering, Neural Computing and Applications, 28 (10), 3009-3019, 2017
69	SCIE	CK Yogesh, M Hariharan, R Yuvaraj, R Ngadiran, S Yaacob, **Kemal Polat**, Bispectral features and mean shift clustering for stress and emotion recognition from natural speech, Computers & Electrical Engineering, 62, 676-691, 2017
68	SCIE	CK Yogesh, M Hariharan, R Ngadiran, AH Adom, S Yaacob, **Kemal Polat**, Hybrid BBO_PSO and higher order spectral features for emotion and stress recognition from natural speech, Applied Soft Computing, 56, 217-232, 2017
67	SCIE	Y Akbulut, A Şengür, Y Guo, **Kemal Polat**, KNCM: Kernel neutrosophic c-means clustering, Applied Soft Computing, 52, 714-724, 2017
66	SCIE	CK Yogesh, M Hariharan, Ruzelita Ngadiran, Abdul Hamid Adom, Sazali Yaacob, Chawki Berkai, **Kemal Polat**, A new hybrid PSO assisted biogeography-based optimization for emotion and stress recognition from speech signal, Expert Systems with Applications, 69, 149-158, 2017
65	SCIE	E Küçükkülahlı, P Erdoğmuş, **Kemal Polat**, Histogram-based automatic segmentation of images, Neural Computing and Applications, 27 (5), 1445-1450, 2016
64	SCIE	AR KAVSAOĞLU, **Kemal Polat**, MR Bozkurt, An innovative peak detection algorithm for photoplethysmography signals: an adaptive segmentation method, Turkish Journal of Electrical Engineering & Computer Sciences, 24 (3), 1782-1796, 2016
63	SCIE	Y Unal, **Kemal Polat**, HE Kocer, Classification of vertebral column disorders and lumbar discs disease using attribute weighting algorithm with mean shift clustering, Measurement, 77, 278-291, 2016

62	SCIE	AR Kavsaoğlu, **Kemal Polat**, M Hariharan, Non-invasive prediction of hemoglobin level using machine learning techniques with the PPG signal's characteristics features, Applied Soft Computing, 37, 983-991, 2015
61	SCIE	Y Unal, **Kemal Polat**, HE Kocer, M Hariharan, Detection of abnormalities in lumbar discs from clinical lumbar MRI with hybrid models, Applied Soft Computing, 33, 65-76, 2015
60	SCIE	H Muthusamy, **Kemal Polat**, S Yaacob, Particle swarm optimization based feature enhancement and feature selection for improved emotion recognition in speech and glottal signals, PloS one, 10 (3), e0120344, 2015
59	SCIE	H Muthusamy, **Kemal Polat**, S Yaacob, Improved emotion recognition using gaussian mixture model and extreme learning machine in speech and glottal signals, Mathematical Problems in Engineering, 2015
58	SCIE	AR Kavsaoğlu, **Kemal Polat**, MR Bozkurt, A novel feature ranking algorithm for biometric recognition with PPG signals, Computers in biology and medicine, 49, 1-14, 2014
57	SCIE	Y Unal, **Kemal Polat**, HE Kocer, Pairwise FCM based feature weighting for improved classification of vertebral column disorders, Computers in biology and medicine, 46, 61-70, 2014
56	SCIE	M Hariharan, **Kemal Polat**, R Sindhu, A new hybrid intelligent system for accurate detection of Parkinson's disease, Computer methods and programs in biomedicine, 113 (3), 904-913, 2014
55	SCIE	M Hariharan, **Kemal Polat**, S Yaacob, A new feature constituting approach to detection of vocal fold pathology, International Journal of Systems Science, 45 (8), 1622-1634, 2014
54	SCIE	M Hariharan, **Kemal Polat**, R Sindhu, S Yaacob, A hybrid expert system approach for telemonitoring of vocal fold pathology, Applied Soft Computing, 13 (10), 4148-4161, 2013
53	SCIE	**Kemal Polat**, Data weighting method on the basis of binary encoded output to solve multi-class pattern classification problems, Expert Systems with Applications, 40 (11), 4637-4647, 2013
52	SCIE	**Kemal Polat**, SS Durduran, Usage of output-dependent data scaling in modeling and prediction of air pollution daily concentration values (PM10) in the city of Konya, Neural computing and Applications, 21 (8), 2153-2162, 2012
51	SCIE	**Kemal Polat**, SS Durduran, Automatic determination of traffic accidents based on KMC-based attribute weighting, Neural Computing and Applications, 21 (6), 1271-1279, 2012
50	SCIE	**Kemal Polat**, V Kirmaci, A novel data preprocessing method for the modeling and prediction of freeze-drying behavior of apples: Multiple output–dependent data scaling (MODDS), Drying technology, 30 (2), 185-196, 2012
49	SCIE	**Kemal Polat**, Classification of Parkinson's disease using feature weighting method on the basis of fuzzy C-means clustering, International Journal of Systems Science, vol. 43, no. 4, pp. 597–609, 2012.
48	SCIE	**Kemal Polat**, Application of attribute weighting method based on clustering centers to discrimination of linearly non-separable medical datasets, Journal of Medical Systems, vol. 36, no. 4, pp. 2657–2673, 2012.
47	SCIE	**Kemal Polat**, V Kırmacı, Determining of gas type in counter flow vortex tube using pairwise fisher score attribute reduction method, International Journal of refrigeration, 34 (6), 1372-1386, 2011.

46	SCIE	**Kemal Polat**, V Kırmacı, Application of the output dependent feature scaling in modeling and prediction of performance of counter flow vortex tube having various nozzles numbers at different inlet pressures of air, oxygen, nitrogen and argon, international journal of refrigeration, 34 (6), 1387-1397
45	SCIE	**Kemal Polat**, SS Durduran, Subtractive clustering attribute weighting (SCAW) to discriminate the traffic accidents on Konya–Afyonkarahisar highway in Turkey with the help of GIS: A case study, Advances in Engineering Software, 42 (7), 491-500, 2011
44	SCIE	S Güneş, M Dursun, **Kemal Polat**, Ş Yosunkaya, Sleep spindles recognition system based on time and frequency domain features, Expert Systems with Applications, 38 (3), 2455-2461, 2011.
43	SCIE	S Güneş, **Kemal Polat**, Ş Yosunkaya, Efficient sleep stage recognition system based on EEG signal using k-means clustering based feature weighting, Expert Systems with Applications, 37 (12), 7922-7928, 2010
42	SCIE	S Güneş, **Kemal Polat**, Ş Yosunkaya, Multi-class f-score feature selection approach to classification of obstructive sleep apnea syndrome, Expert systems with applications, 37 (2), 998-1004, 2010
41	SCIE	**Kemal Polat**, S Güneş, A new feature selection method on classification of medical datasets: Kernel F-score feature selection, Expert Systems with Applications, 36 (7), 10367-10373, 2009
40	SCIE	**Kemal Polat**, S Güneş, A novel hybrid intelligent method based on C4. 5 decision tree classifier and one-against-all approach for multi-class classification problems, Expert Systems with Applications, 36 (2), 1587-1592, 2009
39	SCIE	**Kemal Polat**, S Kara, A Güven, S Güneş, Usage of class dependency based feature selection and fuzzy weighted pre-processing methods on classification of macular disease, Expert Systems with Applications, 36 (2), 2584-2591, 2009
38	SCIE	**Kemal Polat**, S Kara, A Güven, S Güneş, Comparison of different classifier algorithms for diagnosing macular and optic nerve diseases, Expert Systems, 26 (1), 22-34, 2009
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34	SCIE	**Kemal Polat**, S Kara, A Güven, S Güneş, Utilization of Discretization method on the diagnosis of optic nerve disease, Computer methods and programs in biomedicine 91 (3), 255-264, 2008
33	SCI	**Kemal Polat**, S Güneş, A novel data reduction method: distance based data reduction and its application to classification of epileptiform EEG signals, Applied Mathematics and Computation, 200 (1), 10-27, 2008
32	SCI	B Akdemir, S Kara, **Kemal Polat**, A Güven, S Güneş, Ensemble adaptive network-based fuzzy inference system with weighted arithmetical mean and application to diagnosis of optic nerve

		disease from visual-evoked potential signals, Artificial Intelligence in Medicine, 43 (2), 141-149, 2008
31	SCIE	**Kemal Polat**, Ş Yosunkaya, S Güneş, Comparison of different classifier algorithms on the automated detection of obstructive sleep apnea syndrome, Journal of Medical Systems, 32 (3), 243-250, 2008
30	SCIE	**Kemal Polat**, Salih Güneş, Artificial immune recognition system with fuzzy resource allocation mechanism classifier, principal component analysis and FFT method based new hybrid automated identification system for classification of EEG signals, Expert Systems with Applications, 34(3), 2039-2048, 2008
29	SCI	**Kemal Polat**, F Latifoğlu, S Kara, S Güneş, Usage of a novel, similarity-based weighting method to diagnose atherosclerosis from carotid artery Doppler signals, Medical & biological engineering & computing, 46 (4), 353-362, 2008
28	SCI	F Latifoğlu, **Kemal Polat**, S Kara, S Güneş, Medical diagnosis of atherosclerosis from Carotid Artery Doppler Signals using principal component analysis (PCA), k-NN based weighting pre-processing and Artificial Immune Recognition System (AIRS), Journal of Biomedical Informatics, 41 (1), 15-23, 2008
27	SCIE	A Güven, **Kemal Polat**, S Kara, S Güneş, The effect of generalized discriminate analysis (GDA) to the classification of optic nerve disease from VEP signals, Computers in Biology and medicine, 38 (1), 62-68, 2008
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41	Murat Arican, **Kemal Polat**, Comparison Of The Performances Of Selected Eeg Electrodes With Optimization Algorithms In P300 Based Speller Systems, 2019 Electric Electronics, Computer Science, Biomedical Engineerings' Meeting (EBBT), Istanbul, Turkey.
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PROJECTS

Project Name	**Supporter and Years**
BCI speller system design from EEG signals with channel selection algorithms	King Abdulaziz University, 2020-2021. Completed, **International Project**.
Cyber-Physical Security of Large Metropolitan Hospitals	King Abdulaziz University, 2020-2021. Completed, **International Project**.
New Deep learning models based emerging detection of the new Coronavirus-2019 from the chest images	King Abdulaziz University, 2020-2021. Completed, **International Project**.
Applications of Artificial Immune Systems on Medical Diagnosis	Selcuk University. BAP, 2005-2008, Completed
Automatic Sleep Apnea Diagnosis and Sleep Staging System	**TUBITAK**, 2008-2010, Completed
Letter and digit recognition system with Brain signals	AIBU, BAP, 2017-2018, Completed
Multi-channel biomedical measurement system design	AIBU, BAP, 2016-2017, Completed
Acquisition of PPG Signal by Arduino Embedded Systems and Determination of Heart Rate Ratio	AIBU, BAP, 2016-2017, Completed