# Emre CEVIK

Associate Professor



#### PERSONAL DATA

Nationality | Turkish

Date of Birth | December 18, 1986

Faculty | Institute for Research and Medical Consultations - Current

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#### LANGUAGE PROFICIENCY

Language	Read	Write	Speak
English	Fluent	Fluent	Fluent
Turkish	Native	Native	Native

### **ACADEMIC QUALIFICATIONS**

Date	Academic Degree	Place of Issue	Address
2016	Ph.D. (Biotechnology)	Istanbul University	Istanbul, Turkey
2012	M.Sc. (Genetics and Bioengineering)	Fatih University	Istanbul, Turkey
2009	B.Sc. (Chemistry)	Fatih University	Istanbul, Turkey

# PHD, MASTER OR FELLOWSHIP RESEARCH TITLE: (ACADEMIC HONORS OR DISTINCTIONS)

PhD	<u>Thesis Title:</u> Designing and Comparison of Electrochemical Biosensors for Detection of Prostate Cancer
MSc	<u>Thesis Title:</u> An Amperometric Biosensor Based on Modified Nanoparticles with an Electron Transfer Mediator for the Determination of Phenol Derivatives

# PROFESSIONAL RECORD: (BEGINNING WITH THE MOST RECENT)

Job Rank	Place and Address of Work		Date
Assoc. Prof.	Imam Abdulrahman Bin Faisal University	Dammam/KS A	2021 - Today
Assist. Prof.	Imam Abdulrahman Bin Faisal University	Dammam/KS A	2017 - 2021
General Manager	EMC Technology, Medical, Chemical & Consulting LTD	Istanbul/Turk ey	2016 - 2017
Researcher	Lund University	Lund/Sweden	2013-2014
Res. Assist.	Istanbul University (Formerly: Fatih University)	Istanbul/Turk ey	2010 - 2016

### **SELECTED AWARDS**

Date	Agency	Title	Place of Issue
2016	Newton Fund – Royal Accademy of Engineerging	Leaders in Innovation Fellowship	United Kingdom
2015	Turkey's Ministry of Science, Industry and Technology	The Development of Screen Printed Electrodes for Electrochemical Applications	Istanbul, Turkey

### **AREA OF INTEREST**

1	Electrochemistry
2	Batteries
3	Energy storage
4	Supercapacitors
5	Bio-photovoltaic fuel cells
6	Electrode designing and construction
7	Biosensors
8	Bioelectronics
9	

# RESEARCH PROJECTS ONGOING AND COMPLETED

				Funding	
#	Research Title	Role	Budget	Agency	Date
1	Rechargeable Hydrogen Gas Batteries for Grid Storage	Co-Principle Investigator	7.500.000 SAR	Ministry of Education – (RDO)	2019 – 2022 completed
2	Construction of Novel Photo- Bioelectrochemical fuel Cells for Electricity Production by Harvesting Light Energy	Co-Investigator	300.000 SAR	King Fahad University of Minerals and Petroleum	2020 – 2022 complet ed
3	Direct electricity production by harvesting solar energy; Fabrication of novel high efficiency photo-anodes assembled photo- bioelectrochemical fuel cells	Principle Investigator	200.000 SAR	DSR	2020 – 2022 complet ed
4	The production of novel Hydrophobic/hydrophilic redox-active sulfonated solid/gel polymers as cost- effective electrolytes for flexible supercapacitor and lithium-sulfur battery	Co-Investigator	200.000 SAR	DSR	2020 – 2022 complet ed
5	Design and Construction of Novel Photo- Bioelectrochemical fuel Cells: Conversion of Light Energy in to Electricity	Co-Investigator	200.000 SAR	DSR	2019 – 2021 completed
6	Laboratory Scale In-Situ Petroleum Hydrocarbon Bioremediation by using Geotextile filter, Bacteria and Nutrients	Researcher	200.000 SAR	DSR-IAU	2019 – 2021 completed
7	Identification of MLO genes related with powdery-mildew disease and development of disease resistant barley by using CRISPR-Cas9 system	Researcher	199.000 SAR	DSR-IAU	2019 – 2021 complet ed
8	Development of an Electrochemical Glucose Biosensor for Diabetes Patients: Fast and Reliable Detection From Saliva	Principle Investigator	115.500 SAR	DSR-IAU	2018 – 2020 complet ed
9	Development of Biosensor Systems For Early Detection Of Cancer Biomarkers" project supported by Deanship of scientific research	Co-Investigator	200.000 SAR	DSR-IAU	2018 – 2020 completed
10	The Development of Screen-Printed Electrodes for Electrochemical Applications	Principle Investigator	50.000 USD	Turkey's Ministry of Science, Industry and Technology	2015 – 2016 completed

# **SCIENTIFIC ACHIEVEMENTS**

# **Patents and Applications**

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Title	Publisher
	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	method for charging polymer- reinforced capacitor	United States Patent #20230290581
2	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	supercapacitor having flexible electrode unit	United States Patent #20230268138
3	Asiri, Sarah Mousa Maadi (Dammam, SA) Cevik, Emre (Dammam, SA) Bozkurt, Ayhan (Dammam, SA)	molybdenum doped carbon nanotube and graphene nanocomposite electrodes	United States Patent #20230268137
1	Cevik, Emre (Dammam, SA) Bozkurt, Ayhan (Dammam, SA)	method for making a nanocomposite electrode and supercapacitor	United States Patent #20230253166
5	Cevik, Emre (Dammam, SA) Bozkurt, Ayhan (Dammam, SA)	nanocomposite electrodes and method of preparation thereof	United States Patent #11682531
Ó	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	flexible energy storage device with redox-active polymer hydrogel electrolyte	United States Patent #11664174
7	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	method for storing energy in a hydrogel supercapacitor	United States Patent #11749468
3	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	method for storing energy in a hydrogel supercapacitor	United States Patent #20230061053
)	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	flexible energy storage device with redox-active polymer hydrogel electrolyte	United States Patent #20230021238
10	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	gel electrolyte capacitor	United States Patent #11551880
1	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA) Anil, Seyda Tugba Günday (Dammam, SA)	flexible energy storage device based on gylcerol gel electrolyte	United States Patent #20220328257
12	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	gel electrolyte capacitor	United States Patent, #20220223355A1

13	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	redox-mediated poly (vinylphosphonic acid) useful in capacitors	United States Patent #11328877
14	Bozkurt, Ayhan (Dammam, SA) Cevik, Emre (Dammam, SA)	supercapacitor based on polymer electrolyte containing mo (iv) doped hydrogel	United States Patent #20210119254

# Number of total patent applications ongoing: 7

#### **Published Refereed Scientific Research**

(In Chronological Order Beginning with the Most Recent)

(III C	n Chronological Order Beginning with the Most Recent)				
#	Name of Investigator(s)	Research Title	Publisher and Date of Publication /DOI		
102	Xin Xiao, Zewen Zhang, Yecun Wu, Jinwei Xu, Xin Gao, Rong Xu, Wenxiao Huang, Yusheng Ye, Solomon T Oyakhire, Pu Zhang, Baoliang Chen, <u>Emre</u> <u>Cevik</u> , Sarah M Asiri, Ayhan Bozkurt, Khalil Amine, Yi Cui	Ultrahigh-loading Manganese-based Electrode for Aqueous Battery via Polymorph Tuning	Advanced Materials 2023, 35, 2211555		
101	Emre Cevik, Talal F. Qahtan, Sarah M. Asiri, and Ayhan Bozkurt	Synthesis of Zn Intercalated Zn–V@Mo–V Nanorods- based Cathodes for Prolonged Cyclic Stability of Rechargeable Aqueous Zinc-Ion Batteries	ACS Applied Nano Materials 2023, 6, 9, 7745–7753		
100	Fatimah Alahmari, Seyda T. Gunday, Arfa Iqbal, Sarah M. Asiri, Ayhan Bozkurt, Talal F. Qahtan, <u>Emre Cevik</u>	Synthesis of Zn doped CrV spinel oxide nanostructures for flexible supercapacitor and hydrogen evolution reaction	Int. J. Hydrogen Energy 2023, 06, 199		
99	Syed Shaheen Shah, Md. Abdul Aziz, Emre Cevik, Muhammad Ali, Seyda T. Gunday, Ayhan Bozkurt, Zain H. Yamani	Sulfur nano-confinement in hierarchically porous jute derived activated carbon towards high-performance supercapacitor: Experimental and theoretical insights	Journal of Energy storage 2023, 105944		
98	Seyda T. Gunday, Emre Cevik, Sarah Asiri, Arfa Iqbal, Atheel Almofleh, Ameerah N. Alqarni, Ismail Anil, Omar Alagha, Ayhan Bozkurt	Synthesis of Boron-Doped Non-Flammable Anhydrous Electrolytes for Flexible Quasi-Solid-State Supercapacitor Applications	ACS Energy & Fuels 2023,		
97	Arfa Iqbal, <u>E<b>mre Cevik</b></u> , Ayhan Bozkurt, Ayyaz Mustafa, Sarah Asiri, Omar Alagha, Talal F Qahtan	Tailored multifunctional molybdenum-iron nanosheets for enhanced membrane filtration and excellent electrocatalytic performance for hydrogen evolution reaction	Journal of Cleaner Production 421, 2023, 138486		
96	Afzal Husain Khan, Hamidi Abdul Aziz, Puganeshwary Palaniandy, Mu Naushad, <u>Emre</u> <u>Cevik</u> , Sasan Zahmatkesh	Pharmaceutical residues in the ecosystem: Antibiotic resistance, health impacts, and removal techniques	Chemosphere 2023, 339, 139647		

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95	Emre Cevik, M.A. Gondal, Noha Qahtani, M. Hassan	Quantum dots decorated photoanodes in bioelectrochemical fuel cells: Enhanced electricity generation using green algae	Bioengineering 2023, 120, 2242–2252
94	Emre Cevik, Ayhan Bozkurt, Seyda Tugba Gunday, Talal F. Qahtan, Qasim A. Drmosh, Khaled A. Elsayed, Sultan Akhtar, Ayyaz Mustafa	Synthesis of NiO/Fe2VO4 nano-hybrid structures via sonication induced approach for electrochemical energy storage in non-aqueous medium	Journal of Energy Storage 2023, 107873
93	Abdullah A Manda, Khaled A Elsayed, Shamsuddeen A Haladu, <u>Emre Cevik</u> , Mansur B Ibrahim, QA Drmosh	Catalytic activity of cellulose acetate butyrate/TiO2-Au nanocomposite film prepared by laser ablation for 2-nitrophenol reduction	Journal of Polymers and the Environment 2023, pages 1-12
92	Abbad Al Baroot, Khaled A Elsayed, Firdos Alam Khan, Shamsuddeen A Haladu, Filiz Ercan, Emre Çevik, QA Drmosh, MA Almessiere	Anticancer activity of Au/CNT nanocomposite fabricated by nanosecond pulsed laser ablation method on colon and cervical cancer	Micromachines 2023, 14, 1455
91	Muidh Alheshibri, Khaled A Elsayed, Firdos Alam Khan, Shamsuddeen A Haladu, Filiz Ercan, Emre Cevik, QA Drmosh, TS Kayed, MA Almessiere	Tuning the morphology of Au/ZnO nanocomposite using pulsed laser ablation for anticancer applications	Arabian Journal for Science and Engineering 2023, Pages 1-12
90	Tahani M. Alfareed, Atheel Almofleh, Sarah M. Asiri, Jwaher M. AlGhamdi, <u>Emre</u> <u>Cevik</u>	Molybdenum-cobalt micro-nano interface assisted ultrasensitive and selective non-enzymatic glucose biosensor	Microchemical Journal Volume 191, 2023, 108923
89	Ameerah N. Alqarni, <u>E<b>mre</b></u> <u>Cevik</u>	Fabrication of Bismuth-doped Co–Ni spinel ferrite electrodes for enhanced cyclic performance in asymmetric supercapacitors	Journal of Physics and Chemistry of Solids Volume 177, 2023, 111288
88	Abbad Al Baroot, Khaled A Elsayed, Abdullah A Manda, Shamsuddeen A Haladu, Saminu Musa Magami, <u>Emre Çevik</u> , QA Drmosh	Efficient catalytic reduction of 2-nitrophenol using cellulose acetate butyrate/CuO nanocomposite prepared by laser ablation technique	Journal of Polymers and the Environment 2023, Pages 1-12
87	Khaled A Elsayed, KH Mahmoud, Shamsuddeen A Haladu, Saminu Musa Magami, Abdullah A Manda, TS Kayed, AbbadAl Baroot, Mohd Yusuf Khan, <u>Emre Cevik</u> , QA Drmosh, A Elhassan	Thermal, dielectric and optical studies on cellulose acetate butyrate-gold nanocomposite films prepared by laser ablation	Journal of Materials Research and Technology 2023, Volume 23, Pages 419-437
86	Khaled A Elsayed, KH Mahmoud, Shamsuddeen A Haladu, Saminu Musa Magami, Abdullah A Manda, TS Kayed, AbbadAl Baroot, Mohd Yusuf Khan, Emre Cevik, QA Drmosh, A Elhassan	One-pot synthesis of SnO2 nanoparticles decorated multi- walled carbon nanotubes using pulsed laser ablation for photocatalytic applications	Optics and Laser Technology Volume 157, January 2023, 108734
85	Emre Cevik, Seyda Tugba Gunday, Ayhan Bozkurt, Arfa	Scalable, Quasi-Solid-State Bio-polymer Hydrogel Electrolytes for High-Performance Supercapacitor	ACS Sustainable Chem. Eng. 2022, 10, 33, 10839–

	Iqbal, Sarah M. Asiri, Ameerah N. Alqarni, Atheel Almofleh	Applications	10848
84	Arfa Iqbal, Muhammad Irfan Jalees, Muhammad Umar Farooq, <b>Emre Cevik</b> , Ayhan Bozkurt	Superfast adsorption and high-performance tailored membrane filtration by engineered Fe-Ni-Co nanocomposite for simultaneous removal of surface water pollutants	Colloids and Surfaces A: Physicochemical and Engineering Aspects Volume 652, 5 November 2022, 129751
83	M. Alheshibri, K. Elsayed, S. Haladu, S. M. Magami, A. Al Baroot, İ. Ercan, F. Ercan, A. A. Manda, <b>E. Çevik</b> , T.S. Kayed, A. A. Alsaneab, A. M. Alotaibi, A.L.Al-Otaibibi	Synthesis of Ag nanoparticles-decorated on CNTs/TiO2 nanocomposite as efficient photocatalysts via nanosecond pulsed laser ablation	Optics and Laser Technology doi.org/10.1016/j.optlastec.202 2.108.443
82	Muhammad Hassan, Mohammed A. Gondal, <u>Emre</u> <u>Cevik</u> , and Ayhan Bozkurt	Synthesis of a Molybdate-Chelated Biodegradable Gel Electrolyte for High Energy Density Supercapacitors	ACS Appl. Energy Mater. 2022, 5, 6, 6833–6846
81	Arfa Iqbal, <u>E Cevik</u> , Ayhan Bozkurt, Sarah M. Asiri, Omar Alagha, Talal F. Qahtan, Muhammad Irfan Jalees, Muhammad Umar Farooq	Ultrahigh adsorption by regenerable iron-cobalt core-shell nanospheres and their synergetic effect on nanohybrid membranes for removal of malachite green dye	Journal of Environmental Chemical Engineering Volume 10, Issue 3, June 2022, 107968
80	A Iqbal, <b>E Cevik</b> , O Alagha, A Bozkurt	Highly robust multilayer nanosheets with ultra-efficient batch adsorption and gravity-driven filtration capability for dye removal	Journal of Industrial and Engineering Chemistry 109, 287-295
79	E Cevik, SM MAsiri, TF Qahtan, Ayhan Bozkurt	Fabrication of high mechanical stability electrodes and bio-electrolytes for high-performance supercapacitor application	Journal of Alloys and Compounds, doi.org/10.1016/j.jallcom.2022. 165230
78	Ameerah N. Alqarni, <u>E. Cevik</u> , M.A. Gondald, M.A. Almessiere, A. Baykal, A. Bozkurt, Y.Slimani, M.Hassan, A. Iqbal, Sarah A. Alotaibi	Synthesis and design of vanadium intercalated spinal ferrite (Co0.5Ni0.5VxFe1.6-xO4) electrodes for high current supercapacitor applications	Journal of Energy Storage Volume 51, July 2022, 104357
77	M. S. Manzar, T. Ahmad, N. Ullah, P. V. Chellam, J. John, M. Zubair, R. J. Brandão, L. Meili, O. Alagha, <u>E. Cevik</u>	recyclable steel dust: Isotherm, Kinetics and	Colloids and Surfaces A: Physicochemical and Engineering Aspects Volume 645, 20 July 2022, 128828
76	M. S. Manzar, T. Ahmad, N. Ullah, P. V. Chellam, J. John, M. Zubair, R. J. Brandão, L. Meili, O. Alagha, <u>E. Cevik</u>	Tetracycline by NaOH-modified steel dust: Kinetic and	Separation and Purification Technology 287, 15 April 2022, 120559
75	C Yaman, I Anil, O Alagha, NI Blaisi, AB Yaman, A Qureshi, <u>E</u> <u>Cevik</u>	Toluene Bioremediation by Using Geotextile-Layered Permeable Reactive Barriers (PRBs)	Processes 9, 906
74	<u>E Cevik</u> , B Karaman, ST Gunday, AyhanBozkurt	Graft copolymer electrolytes for electrochemical double layer electrochemical capacitor applications	Synthetic Metals 278, 116814

73	E Cevik, ST Gunday, A Iqbal, S	Synthesis of hierarchical multilayer N-doped	journal of energy storage
	Akhtar, A Bozkurt	Mo2C@MoO3 nanostructure for high-performance supercapacitor application	2022, 46, 103824
72	A Almofleh, <u>E Cevik</u> , A Bozkurt	The development of novel cost-effective bio-electrolyte with glycerol host for carbon based flexible supercapacitor applications	International journal of energy storage, 2022; 46(4): 5189-5199
71	Seyda Tugba Gunday, Talal Qahtan, <u>Emre Cevik</u> , Ismail Anil, Omar Alagha, Ayhan Bozkurt	Highly Flexible and Tailorable Cobalt-Doped Cross- Linked Polyacrylamide-Based Electrolytes for Use in High-Performance Supercapacitors	Chemistry–An Asian Journal
70	M. Abdullah Almessiere, Y.A. Slimani, M. Hassan, M. A. Gondal, <u>E. Cevik</u> , Abdulhadi Baykal	Investigation of Hard/Soft CoFe2O4/NiSc0.03Fe1.97O4 Nanocomposite for Energy Storage Applications	2021, 16, 1438 International Journal of Energy Research 2021; 45(11): 16691– 16708
69	M. Hassan,M.A. Gondal, <u>E. Cevik</u> , M.A. Dastageer, R.A. Moqbel, T.F. Qahtan, A. Bozkurt, U. Baig, N. Al Abass	Laser Assisted Anchoring of Cadmium Sulfide Nanospheres into Tungsten Oxide Nanosheets for Enhanced Photocatalytic and Electrochemical Energy Storage Applications	Colloids and Surfaces A: Physicochemical and Engineering Aspects
68	TF Qahtan, <u>E Cevik</u> , MA Gondal, A Bozkurt	Synthesis of manganese (IV) oxide at activated carbon on reduced graphene oxide sheets via laser irradiation technique for organic binder-free electrodes in flexible supercapacitors	Ceramics International 2020, 47, 7416-7424
67	SS Shar, <u>E Cevik</u> , A Bozkurt, C Yaman, Z Almutari, TS Kayed	Molybdate incorporated poly(acrylic acid) electrolytes for use in quasi-solid state carbon based supercapacitors:  Redox-active polychelates	Electrochimica Acta 2020, 354, 136770
66	M Hassan, MA Gondal, <u>E</u> <u>Cevik</u> , TF Qahtan, A Bozkurt, MA Dastageer	High Performance Pliable Supercapacitor Fabricated Using Activated Carbon Nanospheres Intercalated into Boron Nitride Nanoplates by Pulsed Laser Ablation technique	Arabian Journal of Chemistry Volume 13, Issue 8, August 2020, Pages 6696-6707
65	S Khan, H Tombuloglu, S E Hassanein, S Rehman, A Bozkurt, <u>E Cevik</u> , S Abdel- Ghany, G Nabi, A Ali, H Sabit	Coronavirus diseases 2019: Current biological situation and potential therapeutic perspective	European Journal of Pharmacology Volume 886, 5 November 2020, 173447
64	ST Gunday, <u>E Cevik</u> , I Anil, O Alagha, H Sabit, A Bozkurt	Symmetric Supercapacitor Application of Anhydrous Gel Electrolytes Comprising Doped Tetrazole Terminated Flexible Spacers	Macromolecular Research volume 28, pages1074– 1081(2020)
63	E Cevik, A Bozkurt	Redox active polymer metal chelates for use in flexible symmetrical supercapacitors: Cobalt-containing poly(acrylic acid) polymer electrolytes	Journal of Energy Chemistry Volume 55, April 2021, Pages 145-153

62	SA Ghany, S Raslan, H Tombuloglu, A Shamseddin, <u>E</u> <u>Cevik</u> , OA Said et al;	Vorinostat-loaded titanium oxide nanoparticles (anatase) induce G2/M cell cycle arrest in breast cancer cells via PALB2 upregulation	3 Biotech Volume 10, Article number: 407 (2020)
61	M Tekin, <u>E Cevik</u> , S Sayin, HB Yildiz		International Journal of Hydrogen Energy Volume 45, Issue 38, 31 July 2020, Pages 19869-19879
60	Emre Cevik, Huseyin Tombuloglu, Ismail Anıl, Mehmet Senel, Hussein Sabit, Sayed AbdulAzeez, J Francis Borgio, Mohammad Barghouthi	Choricystis sp. and investigation of the boron to enhance the electrogenic activity	International Journal of Hydrogen Energy Volume 45, Issue 19, 3 April 2020, Pages 11330-11340
59	<u>E Cevik</u> , A Bozkurt	supercapacitors energized by redox mediated hydrogels	International Journal of Energy Research DOI:10.1002/er.5199
58	E Cevik, ST Gunday, I Anil, O Alagha, A Bozkurt	6	International Journal of Energy Research DOI:10.1002/er.5097
57	ST Gunday, <u>E Cevik</u> , I Anil, O Alagha, A Bozkurt	High-temperature symmetric supercapacitor applications of anhydrous gel electrolytes including doped triazole terminated flexible spacers	Journal of Molecular Liquids Volume 301, 1 March 2020, 112400
56	S Abdel-Ghany, M Mahfouz, N Ashraf, H Sabit, <u>E Cevik</u> , M ElZawahri	cens	Inorganic And Nano- Metal Chemistry DOI:10.1080/24701556.2020.1 728553
55	MA Abd-Elhakeem, OM Abdel-Haseb, SE Abdel- Ghany, <u>E Cevik</u> , H Sabit	Doxorubicin loaded on chitosan-protamine nanoparticles triggers apoptosis via downregulating Bcl-2 in breast cancer cells	Journal of Drug Delivery Science and Technology Volume 55, February 2020, 101423
54	E Cevik, A Bozkurt, M Dirican, X Zhang	High performance flexible supercapacitors including redox active molybdate incorporated Poly(vinylphosphonic acid) hydrogels	International Journal of Hydrogen Energy Volume 45, Issue 3, 13 January 2020, Pages 2186-2194

53	Yusuf O Ibrahim, MA Gondal, A Alaswad, RA Moqbel, M Hassan, <u>E Cevik</u> , TF Qahtan, MA Dastageer, A Bozkurt	Laser-induced anchoring of WO3 nanoparticles on reduced graphene oxide sheets for photocatalytic water decontamination and energy storage	Ceramics International Volume 46, Issue 1, January 2020, Pages 444- 451
52	H Sabit, <u>E Cevik,</u> H Tombuloglu	Colorectal cancer: The epigenetic role of microbiome	World J Clin Cases. 2019 Nov 26; 7(22): 3683–3697
51	S Asiri, <u>E Çevik</u> , H Sabit, A Bozkurt	Alginate-Guided Size and Morphology Controlled Synthesis of MnO2 Nanoflakes	Soft Materials DOI:10.1080/1539445X.201 9.1672192
50	ST Gunday, <u>E Cevik</u> , A Yusuf, A Bozkurt	Synthesis, characterization and supercapacitor application of ionic liquid incorporated nanocomposites based on SPSU/Silicon dioxide	Journal of Physics and Chemistry of Solids Volume 137, February 2020, 109209
49	<u>E Cevik,</u> ST Gunday, S Akhtar, ZH Yamani, A Bozkurt	Sulfonated hollow silica spheres as electrolyte store/release agent: High performance supercapacitor application	Energy Technology DOI:10.1002/ente.20190051
48	E Cevik, ST Gunday, S Akhtar, A Bozkurt	A comparative study of various polyelectrolyte/nanocomposite electrode combinations in symmetric supercapacitors	International Journal of Hydrogen Energy Volume 44, Issue 31, 21 June 2019, Pages 16099- 16109
47	G Tombuloglu, H Tombuloglu, <u>E Cevik</u> , H Sabit	Genome-wide identification of lysin-motif receptor-like kinase (LysM-RLK) gene family in Brachypodium distachyon and docking analysis of chitin/LYK binding	Physiological and Molecular Plant Pathology Volume 106, April 2019, Pages 217-225
46	H Sabit, <u>E Cevik</u> , H Tombuloglu, K Farag, OAM Said, SE Abdel- Ghany et al;	miRNA Profiling in MCF-7 Breast Cancer Cells:  Seeking a New Biomarker	J Biomedical Sci Volume 8, Pages: 2-5 2019
45	ST Gunday, <u>E Cevik</u> , A Yusuf, A Bozkurt	Fabrication of Al2O3/IL-Based Nanocomposite Polymer Electrolytes for Supercapacitor Application	Chemistry Select DOI: 10.1002/slct.201900030
44	E Cevik, A Bozkurt, M Hassan, MA Gondal, TF Qahtan	Redox-Mediated Poly(2-acrylamido-2-methyl-1- propanesulfonic acid)/Ammonium Molybdate Hydrogels for Highly Effective Flexible Supercapacitors	ChemElectroChem, Volume:6, 2876-2882, 2019

43	E Cevik, ST Günday, A Yusuf, MA Almessiere, A Bozkurt	Boron-incorporated Sulfonated polysulfone/polyphosphoric acid electrolytes for supercapacitor application	Soft Materials DOI:10.1080/1539445X.2 019.1588132
42	B Karaman, <u>E Çevik</u> , A Bozkurt Novel flexible Li-doped PEO/copolymer electrolytes for supercapacitor application		Ionics DOI:10.1007/s11581-019- 02854
41	ST Gunday, <u>E Cevik</u> , A Yusuf, A Bozkurt	Nanocomposites composed of sulfonated polysulfone/hexagonal boron nitride/ionic liquid for supercapacitor applications	Journal of Energy Storage 21, 672-679 - 2019
40	E Cevik, A Cerit, H Tombuloglu, H Sabit, HB Yildiz	Electrochemical Glucose Biosensors: Whole Cell Microbial and Enzymatic Determination based on 10- (4H-Dithieno[3,2-b:2',3'-d]pyrrol-4-yl)decan-1-amine Interfaced Glassy Carbon	Analytical Letters, doi.org/10.1080/00032719.20 18.1521828
39	<u>E Cevik,</u> BB Carbas, M Senel, Y HB	E Cevik, BB Carbas, M Construction Of Conducting Polymer/Cytochrome	
38	<u>E Cevik,</u> M Buyukharman, HB Yildiz	Construction of Efficient Bio-Electrochemical Devices; An Improved Electricity Production from Cyanobacterium (Leptolyngbia sp.) Based on $\pi$ -Conjugated Conducting Polymers/Gold	Biotechnology and bioengineering, DOI:10.1002/bit.26885
37	E Cevik	High Sensitive Detection of Prostate Specific Antigen by Using Ferrocene Cored Asymmetric PAMAM Dendrimer Interface Screen Printed Electrodes	Electroanalysis doi.org/10.1002/elan.201800 440
36	E Cevik, M Titiz, M Senel	Light-dependent photocurrent generation: Novel electrochemical communication between biofilm and electrode by ferrocene cored Poly(amidoamine) dendrimers	Electrochimica Acta Volume 291, 20 November 2018, Pages 41-48
35	E Cevik, A Cerit, N Gazel, HB Yildiz	Construction of An Amperometric Cholesterol Biosensor Based on DTP(aryl)aniline Conducting Polymer Bound Cholesterol Oxidase	Electroanalysis doi.org/10.1002/elan.201800 248
34	A Güner, <u>E Cevik,</u> M Şenel, L Alpsoy	An electrochemical immunosensor for sensitive detection of Escherichia coli O157: H7 by using chitosan, MWCNT, polypyrrole with gold nanoparticles hybrid sensing platform	Food chemistry Volume 229, 358-365, 2017

33	M Dervisevic, E Dervisevic, M Senel, <u>E Cevik</u> , HB Yildiz, P Camurlu	Construction of ferrocene modified conducting polymer based amperometric urea biosensor	Enzyme and Microbial Technology Volume102, 53-59, 2017
	M Dervisevic, E Dervisevic, <u>E</u> <u>Cevik</u> , M Senel	Novel electrochemical xanthine biosensor based on chitosan–polypyrrole–gold nanoparticles hybrid bionanocomposite platform	Journal of food and drug analysis Volume 25 (3), 510-519, 2017
31	M Dervisevic, E Dervisevic, M Senel, <u>E Cevik</u> , FM Abasiyanik	Novel amperometric xanthine biosensors based on REGO-NP (Pt, Pd, and Au) bionanocomposite film	Food Analytical Methods 10 (5), 1252-1263, 2017
30	M Dervisevic, M Senel, <u>E Cevik</u>	Novel impedimetric dopamine biosensor based on boronic acid functional polythiophene modified electrodes	Materials Science and Engineering: C Volume 72, 641-649, 2017
29	<u>E Çevik</u> , Ö Bahar, M Şenel, MF Abasıyanık	Construction of novel electrochemical immunosensor for detection of prostate specific antigen using ferrocene-PAMAM dendrimers	Biosensors and Bioelectronics Volume 86, 1074-1079, 2016
28	M Dervisevic, <u>E Çevik</u> , M Şenel, C Nergiz, MF Abasiyanik		
27	M Dervisevic, E Dervisevic, H Azak, <u>E Cevik</u> , M Şenel, HB Yildiz	Novel amperometric xanthine biosensor based on xanthine oxidase immobilized on electrochemically polymerized 10-[4H-dithieno(3,2-b:2',3'-d)pyrrole-4-yl	Sensors and Actuators B: Chemical Volume 225, 181-187, 2016
26	E Çevik, M Dervisevic, AR Gavba, KC Yanik-Yildirim, MF Abasiyanik,	Amperometric Monooxygenase Biosensor for the Detection of Aromatic Hydrocarbons	Sensor Letters Volume 14 (3), 234-240, 2016
25	M Dervisevic, <u>E Çevik</u> , Z Durmuş, M Şenel	Electrochemical sensing platforms based on the different carbon derivative incorporated interface	Materials Science and Engineering: C Volume 58, 790-798, 2016
24	M Senel, A Durmus, Z Durmus, M Dervisevic, E Custiuc, <u>E Cevik</u>	Electrochemical biosensor based on REGO/Fe3O4 bionanocomposite interface for xanthine detection in fish sample	Food Control Volume 57, 402-410, 2015
	M Dervisevic, E Custiuc, <u>E</u> <u>Cevik</u> , M Şenel	Construction of novel xanthine biosensor by using polymeric mediator/MWCNT nanocomposite layer for fish freshness detection	Food chemistry Volume 181, 277-283, 2015
22	M Dervisevic, <u>E Çevik,</u> M Şenel	Development of glucose biosensor based on reconstitution of glucose oxidase onto polymeric redox mediator coated pencil graphite electrodes	Enzyme and microbial technology Volume 68, 69-76, 2015

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21	M Dervisevic, <u>E Cevik</u> , M Şenel	M Dervisevic, <u>E Cevik</u> , M Şenel Poly (GMA-co-VFc)/Fe3O4/cholesterol oxidase bionanocomposite based electrodes for amperometric cholesterol biosensor	
20	K Uzun, <u>E Çevik</u> , M Şenel, A Baykal	Reversible immobilization of invertase on Cu-chelated polyvinylimidazole-grafted iron oxide nanoparticles	Bioprocess and biosystems engineering Volume 36 (12), 1807-1816, 2013
19	<u>E Çevik,</u> M Şenel, A Baykal, MF Abasıyanık	Poly (glycidylmethacrylate-co-vinyl ferrocene)-grafted iron oxide nanoparticles as an electron transfer mediator for amperometric phenol detection	Current Applied Physics Volume 13 (8), 1611-1619, 2013
18	M Şenel, M Dervisevic, <u>E</u> <u>Cevik</u>	A novel amperometric glucose biosensor based on reconstitution of glucose oxidase on thiophene-3-boronic acid polymer layer	Current Applied Physics Volume 13 (7), 1199-1204, 2013
17	M Şenel, C Nergiz, M Dervisevic, <u>E Çevik</u>	Development of amperometric glucose biosensor based on reconstitution of glucose oxidase on polymeric 3-aminophenyl boronic acid monolayer	Electroanalysis volume 25 (5), 1194-1200, 2013
16	E Cevik, M Şenel, A Baykal  Potentiometric urea biosensor based on poly (glycidylmethacrylate)-grafted iron oxide nanoparticles		Current Applied Physics Volume 13 (1), 280-286, 2013
15	M Şenel, C Nergiz, <u>E Çevik</u>	Novel reagentless glucose biosensor based on ferrocene cored asymmetric PAMAM dendrimers	Sensors and Actuators B: Chemical Volume 176, 299-306, 2013
14	E Çevik, M Şenel, A Baykal, MF Abasıyanık	A novel amperometric phenol biosensor based on immobilized HRP on poly (glycidylmethacrylate)-grafted iron oxide nanoparticles for the determination of phenol derivatives	Sensors and Actuators B: Chemical Volume 173, 396-405, 2012
13	M Şenel, <u>E Çevik</u>	A novel amperometric hydrogen peroxide biosensor based on pyrrole-PAMAM dendrimer modified gold electrode	Current Applied Physics Volume 12 (4), 1158-1165, 2012

12	E Çevik, M Şenel, MF Abasıyanık	An amperometric urea biosensor based on covalent immobilization of urease on copolymer of glycidyl methacrylate and vinylferrocene	Journal of Solid State Electrochemistry Volume 16 (1), 367-373, 2012
11	<u>E Çevik</u> , M Şenel, A Baykal, MF Abasiyanik	An amperometric biosensor based on modified nanoparticles with an electron transfer mediator for the determination of phenol derivatives	Current Opinion in Biotechnology Volume 22 (1), 6, 2011
10	I Bozgeyik, M Şenel, <u>E Çevik</u> , MF Abasıyanık	A novel thin film amperometric urea biosensor based on urease-immobilized on poly (N-glycidylpyrrole-co-pyrrole) İ Bozgeyik, M Şenel, E Çevik, MF Abasıyanık  Current Applied Physics 11 (4), 1083-1088	Current Applied Physics Volume 11 (4), 1083- 1088, 2011
9	A Baykal	Development of an amperometric hydrogen peroxide biosensor based on the immobilization of horseradish peroxidase onto nickel ferrite nanoparticle-chitosan composite	Nano-Micro Letters Volume 3 (2), 91-98, 2011
8		A novel amperometric galactose biosensor based on galactose oxidase-poly (N-glycidylpyrrole-co-pyrrole)	Synthetic metals Volume 161 (5-6), 440-444, 2011
7	M Şenel, <u>E Çevik</u> , MF Abasıyanık, A Bozkurt	Entrapment of urease in poly (1-vinyl imidazole)/poly (2-acrylamido-2-methyl-1-propanesulfonic acid) network	Journal of Applied Polymer Science 119 Volume (4), 1931-1939, 2011
6	K Uzun, <u>E Çevik</u> , M Şenel	Invertase immobilization on a metal chelated triazole-functionalized Eupergit® C	American Journal of Chemistry Volume 1 (1), 16-21, 2011
5	M Şenel, <u>E Çevik</u> , F Abasıyanık	A Novel Amperometric Hydrogen Peroxide Biosensor Based on Catalase Immobilization on Poly(glycidyl methacrylate-co-vinylferrocene)	Anal. Bioanal. Electrochem., Vol. 3, No. 1, 2011, 14-25
		I.	1410

4	E Çevik, M Senel, MF Abasiyanik	Immobilization of urease on copper chelated EC-Tri beads and reversible adsorption	African Journal of Biotechnology Volume 10 (34), 6590-6597, 2011
3	Sözeri, A Baykal, MF Abasıyanık,	Covalent immobilization of invertase on PAMAM- dendrimer modified superparamagnetic iron oxide nanoparticles	Journal of nanoparticle research Volume 12 (8), 3057-3067, 2010
2	E Cevik, M Şenel, MF Abasıyanık	Construction of biosensor for determination of galactose with galactose oxidase immobilized on polymeric mediator contains ferrocene	Current Applied Physics Volume 10 (5), 1313-1316, 2010
1	•	Amperometric hydrogen peroxide biosensor based on covalent immobilization of horseradish peroxidase on ferrocene containing polymeric mediator	Sensors and Actuators B: Chemical Volume 145 (1), 444-450, 2010

# **Book / Book Chapters**

No	Title of Book	Authorss	Chapter Title	ISSN / DOI	Publisher
1	Industrial Applications of Nanomaterials	Bekir Yildiz, Emre Cevik, Buket Bezgin Carbas	Chapter 3 - Nanotechnology for biological photovoltaics; industrial applications of nanomaterials	https://doi.org/1 0.1016/B978-0- 12-815749- 7.00003-7	Elsevier / 2020
2	Nanomaterials Based Biosensors: Amperometric Phenol Detection	E Çevik, M Senel, MF Abasiyanik		978-3-659- 26596-9	LAP LAMBERT Academic Publishing / 2012
3	Nanotechnology	Mehmet Senel	Amperometric Biosensors Based on Metal Nanoparticles	1-62699-010-7	Studium Press LLC, U.S.A. / 2013

# Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Mustafa Buyukharman, E. Cevik and Huseyin Bekir Yildiz	Construction of Efficient Bio- Electrochemical Devices; An Improved Electricity Production from Cyanobacterium (Leptolyngbia sp.) Based on π-Conjugated Conducting Polymers/Gold Nanoparticles Composite Interfaces	Electrochemical Conference on Energy and the Environment (ECEE 2019): Bioelectrochemistry and Energy Storage (July 21-26, 2019)

2	Çevik, E.; Şenel, M.; Baykal, A.; Abasıyanık, M.F.	An amperometric biosensor based on modified nanoparticles with an electron transfer mediator for the determination of phenol derivatives.	Current Opinion in Biotechnology, 2011, 22, Supplement 1, Pages S64
3	Çevik, E.; Şenel, M.; Abasıyanık, M.F	Preparation and amperometric glucose detection of asymmetric Ferrocene-PAMAM dendrimers incorporated modified enzyme electrodes,,	5. International Bioengineering Congress, İzmir/Türkiye, Jun. 2010,
4	Uzun, K.; Çevik, E.; Şenel, M.; Sözeri, H.; M. Abasıyanık, M.F.; Baykal, A.; Toprtak, M.S.	Covalent Immobilization of Invertase on PAMAM-Dendrimer Modified Superparamagnetic Iron Oxide Nanoparticles	6.Nanoscience and Nanotechnology Congress, İzmir/Turkey, Jun. 2010,
5	Şenel, M.; Çevik, E.; Abasıyanık, M.F.	A novel amperometric glucose biosensor based on copolymer of pyrrole-PAMAM dendritic wedges,	5. International Bioengineering Congress, İzmir/Turkey, Jun. 2010, 5.
6	Çevik, E.; Şenel, M.; Abasıyanık, M.F.; Bozkurt, A.	Entrapment of Urease in Poly(1-vinyl imidazole)/Poly(2-acrylamido- 2-methyl-1-propanesulfonic acid) Network,	3. National Polymer Science and Technology Congress, Kocaeli/Turkey, May. 2010
7	Şenel, M.; Çevik, E.; Abasıyanık, M.F	Preparation of ferrocene- modified polypyrrole derivative and its application in glucose biosensor, ,	6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries, Antalya/Turkey, Mar. 2010
8	Şenel, M.; Çevik, E.; Abasıyanık, M.F	Amperometric hydrogen peroxide biosensor based on covalent immobilization of horseradish peroxidase on copolymer poly(glycidyl methacrylate-covinylferrocene),,	6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries, Antalya/ Turkey, Mar. 2010
9	Şenel, M.; Çevik, E.; Abasıyanık, M.F.	A novel amperometric urea biosensor based on copolymer of pyrrole-PAMAM dendritic wedges,	6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries, Antalya/ Turkey, Mar. 2010

10	Abasiyanik, M.F	Construction of a novel amperometric biosensor for determination of urea with polymeric electron transfer mediator,	National XVI. Biotechnology Congress, Antalya/Turkey, Dec. 2009
11	Coşkun A.; Çevik, E.; Şenel, M.; Abasıyanık, M.F.; Bozkurt A	Immobilization of urease in poly(1-vinyl imidazole)/poly(acrylic acid) network,	National XVI. Biotechnology Congress, Antalya/Turkey, Dec. 2009

### **TEACHING ACTIVITIES**

# Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)	Year
1	Engineering Drawing	ENGR 104	1 Lecture / 1 Lab	2015- 2016
2	Microbiology Laboratory	GBE 204	1 Lecture Lab	2014- 2016
3	Analytical Biochemistry Laboratory	GBE 205	1 Lecture Lab	2010- 2016

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)	Year
1	Smart Materials (Energy Storage)	MSNE 832	Lecture	2023
2	Smart Materials (Energy Storage)	MSNE 832	Laboratory	2022
3	Smart Materials (Energy Storage)	MSNE 832	Laboratory	2021
4	Smart Materials (Energy Storage)	MSNE 832	Laboratory	2020

# Certificates

#	Name	Date	Organization-City
1	Certificate of Summer Program	2022	IRMC - IAU
2	Journal Citation Report	2020	Clarivate Analytics/IAU - Dammam
3	Reaxys: Shortest path from chemistry questions to answer	2018	Elsevier/IAU - Dammam
4	Elsevier Publishing Campus	2017	Elsevier/IAU - Dammam
5	Leaders in Innovation	2016	Royal Academy of Engineering, London
6	Good Manufacturing Process (GMP)	2014	Chemists Association, Istanbul

# Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Computer & IT Solid works 3D drawing, Corel Draw, Origin, Chem Office, AutoCAD, Microsoft Office		
2	<ul> <li>Technical</li> <li>Battery - Supercapacitor fabrication</li> <li>Electochemical fuel cell fabrication</li> <li>Potentiostat / Galvanostat</li> <li>Scanning Electron Microscopy</li> <li>Electrochemical Battery Analyzer (Neware BS4000)</li> <li>Solar simulator</li> <li>Thermal Physical Evaporator</li> </ul>		
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ONCID	https://orcid.org/0000-0003-2075-7361		
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