Mahmoud Omid

List of Publications by Citations

139 papers	4,881 citations	42 h-index	64 g-index
152 ext. papers	5,791 ext. citations	4.4 avg, IF	6.18 L-index

#	Paper	IF	Citations
139	Effect of spray drying conditions and feed composition on the physical properties of black mulberry juice powder. *Food and Bioproducts Processing*, **2012**, 90, 667-675	4.9	272
138	Green supplier selection using fuzzy group decision making methods: A case study from the agri-food industry. *Computers and Operations Research*, **2018**, 89, 337-347	4.6	249
137	Economical analysis and relation between energy inputs and yield of greenhouse cucumber production in Iran. *Applied Energy*, **2010**, 87, 191-196	10.7	189
136	A review of macroalgae production, with potential applications in biofuels and bioenergy. *Renewable and Sustainable Energy Reviews*, **2016**, 54, 473-481	16.2	150
135	Modeling of energy consumption and GHG (greenhouse gas) emissions in wheat production in Esfahan province of Iran using artificial neural networks. *Energy*, **2013**, 52, 333-338	7.9	125
134	Environmental impact assessment of tomato and cucumber cultivation in greenhouses using life cycle assessment and adaptive neuro-fuzzy inference system. *Journal of Cleaner Production*, **2014**, 73, 183-192	10.3	116
133	A comparative study on energy use and cost analysis of potato production under different farming technologies in Hamadan province of Iran. *Energy*, **2010**, 35, 2927-2933	7.9	102
132	Potential of radial basis function based support vector regression for global solar radiation prediction. *Renewable and Sustainable Energy Reviews*, **2014**, 39, 1005-1011	16.2	101
131	Energy and economic analysis of greenhouse strawberry production in Tehran province of Iran. *Energy Conversion and Management*, **2011**, 52, 1020-1025	10.6	101
130	Energy use pattern and benchmarking of selected greenhouses in Iran using data envelopment analysis. *Energy Conversion and Management*, **2011**, 52, 153-162	10.6	101
129	Application of ANFIS to predict crop yield based on different energy inputs. *Measurement: Journal of the International Measurement Confederation*, **2012**, 45, 1406-1413	4.6	100
128	Energy use patterns and econometric models of major greenhouse vegetable productions in Iran. *Energy*, **2011**, 36, 220-225	7.9	98
127	Estimating volume and mass of citrus fruits by image processing technique. *Journal of Food Engineering*, **2010**, 100, 315-321	6	91
126	Reduction of CO2 emission by improving energy use efficiency of greenhouse cucumber production using DEA approach. *Energy*, **2013**, 55, 676-682	7.9	90
125	Freshness assessment of gilthead sea bream (Sparus aurata) by machine vision based on gill and eye color changes. *Journal of Food Engineering*, **2013**, 119, 277-287	6	81
124	Applying data envelopment analysis approach to improve energy efficiency and reduce GHG (greenhouse gas) emission of wheat production. *Energy*, **2013**, 58, 588-593	7.9	77
123	Energy inputoutput analysis and application of artificial neural networks for predicting greenhouse basil production. *Energy*, **2012**, 37, 171-176	7.9	76

122	A critical review on intelligent and active packaging in the food industry: Research and development. *Food Research International*, **2021**, 141, 110113	7	67
121	Development of an intelligent system based on ANFIS for predicting wheat grain yield on the basis of energy inputs. *Information Processing in Agriculture*, **2014**, 1, 14-22	4.2	63
120	Comparing data mining classifiers for grading raisins based on visual features. *Computers and Electronics in Agriculture*, **2012**, 84, 124-131	6.5	60
119	Measuring productive efficiency of horticultural greenhouses in Iran: A data envelopment analysis approach. *Expert Systems With Applications*, **2012**, 39, 1040-1045	7.8	59
118	Modeling Drying Kinetics of Pistachio Nuts with Multilayer Feed-Forward Neural Network. *Drying Technology*, **2009**, 27, 1069-1077	2.6	59
117	Development of an android app to estimate chlorophyll content of corn leaves based on contact imaging. *Computers and Electronics in Agriculture*, **2015**, 116, 211-220	6.5	56
116	Analysis of texture-based features for predicting mechanical properties of horticultural products by laser light backscattering imaging. *Computers and Electronics in Agriculture*, **2013**, 98, 34-45	6.5	56
115	Prognostication of environmental indices in potato production using artificial neural networks. *Journal of Cleaner Production*, **2013**, 52, 402-409	10.3	56
114	Evaluating banana ripening status from measuring dielectric properties. *Journal of Food Engineering*, **2011**, 105, 625-631	6	56
113	Principles and Applications of Light Backscattering Imaging in Quality Evaluation of Agro-food Products: a Review. *Food and Bioprocess Technology*, **2012**, 5, 1465-1485	5.1	55
112	Design of an expert system for sorting pistachio nuts through decision tree and fuzzy logic classifier. *Expert Systems With Applications*, **2011**, 38, 4339-4347	7.8	55
111	An expert egg grading system based on machine vision and artificial intelligence techniques. *Journal of Food Engineering*, **2013**, 118, 70-77	6	54
110	Development of pistachio sorting system using principal component analysis (PCA) assisted artificial neural network (ANN) of impact acoustics. *Expert Systems With Applications*, **2010**, 37, 7205-7212	7.8	53
109	Design of fuzzy logic control system incorporating human expert knowledge for combine harvester. *Expert Systems With Applications*, **2010**, 37, 7080-7085	7.8	52
108	ANN based simulation and experimental verification of analytical four- and five-parameters models of PV modules. *Simulation Modelling Practice and Theory*, **2013**, 34, 86-98	3.9	51
107	Energy use efficiency in greenhouse tomato production in Iran. *Energy*, **2011**, 36, 6714-6719	7.9	51
106	A comparative study between fuzzy linear regression and support vector regression for global solar radiation prediction in Iran. *Solar Energy*, **2014**, 109, 135-143	6.8	50
105	An intelligent approach for cooling radiator fault diagnosis based on infrared thermal image processing technique. *Applied Thermal Engineering*, **2015**, 87, 434-443	5.8	48

104	Criteria definition and approaches in green supplier selection – a case study for raw material and packaging of food industry. *Production and Manufacturing Research*, **2015**, 3, 149-168	3.3	47
103	Application of artificial neural networks for prediction of output energy and GHG emissions in potato production in Iran. *Agricultural Systems*, **2014**, 123, 120-127	6.1	47
102	Prediction of potato yield based on energy inputs using multi-layer adaptive neuro-fuzzy inference system. *Measurement: Journal of the International Measurement Confederation*, **2014**, 47, 521-530	4.6	44
101	On the study of energy use and GHG (greenhouse gas) emissions in greenhouse cucumber production in Yazd province. *Energy*, **2013**, 59, 63-71	7.9	43
100	Classifier fusion of vibration and acoustic signals for fault diagnosis and classification of planetary gears based on Dempster–Shafer evidence theory. *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, **2014**, 228, 21-32	1.5	43
99	Modeling Effective Moisture Diffusivity of Orange Slice (Thompson Cv.). *International Journal of Food Properties*, **2010**, 13, 32-40	3	43
98	An intelligent system for sorting pistachio nut varieties. *Expert Systems With Applications*, **2009**, 36, 11528-11535	7.8	42
97	Detection of poultry egg freshness by dielectric spectroscopy and machine learning techniques. *LWT - Food Science and Technology*, **2015**, 62, 1034-1042	5.4	41
96	Sensitivity analysis of energy inputs in crop production using artificial neural networks. *Journal of Cleaner Production*, **2018**, 197, 992-998	10.3	40
95	Optimization of energy consumption for rose production in Iran. *Energy for Sustainable Development*, **2012**, 16, 236-241	5.4	40
94	Modeling Solar Energy Potential in a Tehran Province Using Artificial Neural Networks. *International Journal of Green Energy*, **2013**, 10, 427-441	3	39
93	Energy efficiency and econometric analysis of broiler production farms. *Energy*, **2011**, 36, 6536-6541	7.9	39
92	Color image segmentation with genetic algorithm in a raisin sorting system based on machine vision in variable conditions. *Expert Systems With Applications*, **2011**, 38, 3671-3678	7.8	39
91	Prediction of Energy and Exergy of Carrot Cubes in a Fluidized Bed Dryer by Artificial Neural Networks. *Drying Technology*, **2011**, 29, 295-307	2.6	39
90	Prediction of red plum juice permeate flux during membrane processing with ANN optimized using RSM. *Computers and Electronics in Agriculture*, **2014**, 102, 1-9	6.5	36
89	Meat quality evaluation based on computer vision technique: A review. *Meat Science*, **2019**, 156, 183-195	6.4	35
88	Effect of process conditions and carrier concentration for improving drying yield and other quality attributes of spray dried black mulberry (Morus nigra) juice. *International Journal of Food Engineering*, **2012**, 8,	1.9	35
87	A comparative study of dried apple using hot air, intermittent and continuous microwave: evaluation of kinetic parameters and physicochemical quality attributes. *Food Science and Nutrition*, **2015**, 3, 519-26	3.2	34

86	Determination of efficient and inefficient greenhouse cucumber producers using Data Envelopment Analysis approach, a case study: Jiroft city in Iran. *Journal of Cleaner Production*, **2014**, 79, 108-115	10.3	33
85	Land Suitability Evaluation Using Fuzzy Continuous Classification (A Case Study: Ziaran Region). *Modern Applied Science*, **2010**, 4,	1.3	32
84	A novel artificial neural networks assisted segmentation algorithm for discriminating almond nut and shell from background and shadow. *Computers and Electronics in Agriculture*, **2014**, 105, 34-43	6.5	30
83	Digital Mapping of Soil Classes Using Decision Tree and Auxiliary Data in the Ardakan Region, Iran. *Arid Land Research and Management*, **2014**, 28, 147-168	1.8	30
82	Feature-level fusion based on wavelet transform and artificial neural network for fault diagnosis of planetary gearbox using acoustic and vibration signals. *Insight: Non-Destructive Testing and Condition Monitoring*, **2013**, 55, 323-330	1.3	30
81	Green Supplier Selection Criteria: From a Literature Review to a Flexible Framework for Determination of Suitable Criteria. *Ecoproduction*, **2014**, 79-99	0.5	28
80	Techno-economic comparison of three biodiesel production scenarios enhanced by glycerol supercritical water reforming process. *International Journal of Hydrogen Energy*, **2019**, 44, 17845-17862	6.7	27
79	Comparison of fuzzy and on/off controllers for winter season indoor climate management in a model poultry house. *Computers and Electronics in Agriculture*, **2015**, 110, 187-195	6.5	25
78	Egg volume prediction using machine vision technique based on pappus theorem and artificial neural network. *Journal of Food Science and Technology*, **2015**, 52, 3065-71	3.3	25
77	Determining quality of caviar from Caspian Sea based on Raman spectroscopy and using artificial neural networks. *Talanta*, **2013**, 111, 98-104	6.2	25
76	Prediction of the Physicochemical Properties of Spray-Dried Black Mulberry (Morus nigra) Juice using Artificial Neural Networks. *Food and Bioprocess Technology*, **2013**, 6, 585-590	5.1	24
75	Optimization of intermittent microwave-convective drying using response surface methodology. *Food Science and Nutrition*, **2015**, 3, 331-41	3.2	24
74	Determination of Tangerine Volume Using Image Processing Methods. *International Journal of Food Properties*, **2010**, 13, 760-770	3	24
73	Field coupling to nonuniform and uniform transmission lines. *IEEE Transactions on Electromagnetic Compatibility*, **1997**, 39, 201-211	2	23
72	Intelligent fault diagnosis of cooling radiator based on deep learning analysis of infrared thermal images. *Applied Thermal Engineering*, **2019**, 163, 114410	5.8	22
71	Optimized forest degradation model (OFDM): an environmental decision support system for environmental impact assessment using an artificial neural network. *Journal of Environmental Planning and Management*, **2016**, 59, 222-244	2.8	21
70	Feasibility of using smart phones to estimate chlorophyll content in corn plants. *Photosynthetica*, **2017**, 55, 603-610	2.2	21
69	Developing a fuzzy clustering model for better energy use in farm management systems. *Renewable and Sustainable Energy Reviews*, **2015**, 48, 27-34	16.2	21

68	An automatic sorting system for unwashed eggs using deep learning. *Journal of Food Engineering*, **2020**, 283, 110036	6	21
67	Multispectral remote sensing for site-specific nitrogen fertilizer management. *Pesquisa Agropecuaria Brasileira*, **2013**, 48, 1394-1401	1.8	21
66	Egg Quality Prediction Using Dielectric and Visual Properties Based on Artificial Neural Network. *Food Analytical Methods*, **2015**, 8, 710-717	3.4	20
65	Optimizing layout of wind farm turbines using genetic algorithms in Tehran province, Iran. *International Journal of Energy and Environmental Engineering*, **2018**, 9, 399-411	4	20
64	Prediction of Physicochemical Properties of Raspberry Dried by Microwave-Assisted Fluidized Bed Dryer Using Artificial Neural Network. *Drying Technology*, **2014**, 32, 4-12	2.6	20
63	On-line separation and sorting of chicken portions using a robust vision-based intelligent modelling approach. *Biosystems Engineering*, **2018**, 167, 8-20	4.8	19
62	Greenhouse strawberry production in Iran, efficient or inefficient in energy. *Energy Efficiency*, **2012**, 5, 201-209	3	19
61	Optimization of Energy Consumption of Broiler Production Farms using Data Envelopment Analysis Approach. *Modern Applied Science*, **2011**, 5,	1.3	19
60	Study on material properties effect for maximization of thermoelectric power generation. *Renewable Energy*, **2019**, 138, 236-242	8.1	18
59	Study of different fouling mechanisms during membrane clarification of red plum juice. *International Journal of Food Science and Technology*, **2014**, 49, 58-64	3.8	17
58	Evaluating the potential of artificial neural network and neuro-fuzzy techniques for estimating antioxidant activity and anthocyanin content of sweet cherry during ripening by using image processing. *Journal of the Science of Food and Agriculture*, **2014**, 94, 95-101	4.3	17
57	STABILITY AND RHEOLOGY OF DISPERSIONS CONTAINING POLYSACCHARIDE, OLEIC ACID AND WHEY PROTEIN ISOLATE. *Journal of Texture Studies*, **2012**, 43, 63-76	3.6	16
56	A comparative study between parametric and artificial neural networks approaches for economical assessment of potato production in Iran. *Spanish Journal of Agricultural Research*, **2011**, 9, 661	1.1	16
55	Adulteration detection in olive oil using dielectric technique and data mining. *Sensing and Bio-Sensing Research*, **2016**, 11, 33-36	3.3	15
54	Evaluation of the fouling phenomenon in the membrane clarification of black mulberry juice. *International Journal of Food Science and Technology*, **2011**, 46, 1538-1544	3.8	15
53	Influence of tragacanth gum exudates from specie of Astragalus gossypinus on rheological and physical properties of whey protein isolate stabilised emulsions. *International Journal of Food Science and Technology*, **2011**, 46, 1636-1645	3.8	14
52	Regionalised life cycle assessment of pasta production in Iran: Damage to terrestrial ecosystems. *Journal of Cleaner Production*, **2017**, 159, 141-146	10.3	13
51	An Artificial Neural Network-Based Method to Identify Five Classes of Almond According to Visual Features. *Journal of Food Process Engineering*, **2016**, 39, 625-635	2.4	13

50	Evaluation of Intelligent Greenhouse Climate Control System, Based Fuzzy Logic in Relation to Conventional Systems **2009**,		13
49	Automated In Situ Seed Variety Identification via Deep Learning: A Case Study in Chickpea. *Plants*, **2021**, 10,	4.5	13
48	Data Mining-Based Wavelength Selection for Monitoring Quality of Tomato Fruit by Backscattering and Multispectral Imaging. *International Journal of Food Properties*, **2015**, 18, 880-896	3	12
47	Optimization of rendering process of poultry by-products with batch cooker model monitored by electronic nose. *Journal of Environmental Management*, **2019**, 235, 194-201	7.9	11
46	Real-time color change monitoring of apple slices using image processing during intermittent microwave convective drying. *Food Science and Technology International*, **2016**, 22, 634-646	2.6	11
45	Design, development and evaluation of an online grading system for peeled pistachios equipped with machine vision technology and support vector machine. *Information Processing in Agriculture*, **2017**, 4, 333-341	4.2	11
44	Classification of peeled pistachio kernels using computer vision and color features. *Engineering in Agriculture, Environment and Food*, **2017**, 10, 259-265	1.7	10
43	Comparison of Some Chromatic, Mechanical and Chemical Properties of Banana Fruit at Different Stages of Ripeness. *Modern Applied Science*, **2010**, 4,	1.3	10
42	Modelling hydraulic jumps with artificial neural networks. *Water Management*, **2005**, 158, 65-70	1	10
41	Spatial and technological variability in the carbon footprint of durum wheat production in Iran. *International Journal of Life Cycle Assessment*, **2017**, 22, 1893-1900	4.6	9
40	Quality and shelf-life prediction of cauliflower under modified atmosphere packaging by using artificial neural networks and image processing. *Computers and Electronics in Agriculture*, **2019**, 163, 104861	6.5	9
39	Soil-line vegetation indices for corn nitrogen content prediction. *International Agrophysics*, **2012**, 26, 103-108	2	9
38	A GIS-MCDM-based road network planning for tourism development and management in Arasbaran forest, Iran. *Environmental Monitoring and Assessment*, **2019**, 191, 647	3.1	8
37	Estimation of sweet cherry antioxidant activity and anthocyanin content during ripening by artificial neural network‐assisted image processing technique. *International Journal of Food Science and Technology*, **2013**, 48, 735-741	3.8	8
36	Prediction of Rheological Properties of Multi-Component Dispersions by Using Artificial Neural Networks. *Journal of Dispersion Science and Technology*, **2014**, 35, 428-434	1.5	7
35	Green Supplier Selection in Edible oil Production by a Hybrid Model Using Delphi Method and Green Data Envelopment Analysis (GDEA). *Management and Production Engineering Review*, **2014**, 5, 3-8		7
34	Determination of Soil Organic Carbon Variability of Rainfed Crop Land in Semi-arid Region (Neural Network Approach). *Modern Applied Science*, **2010**, 4,	1.3	6
33	Assessing the Technical Efficiency in Potato Production in Iran. *International Journal of Green Energy*, **2012**, 9, 229-242	3	6

32	Fault diagnosis of tractor auxiliary gearbox using vibration analysis and random forest classifier. *Information Processing in Agriculture*, **2021**,	4.2	6
31	Integrated Assessment and Modeling of Agricultural Mechanization in Potato Production of Iran by Artificial Neural Networks. *Agricultural Research*, **2015**, 4, 283-302	1.4	5
30	Development of An Intelligent System to Determine Sour Cherry's Antioxidant Activity and Anthocyanin Content During Ripening. *International Journal of Food Properties*, **2014**, 17, 1169-1181	3	5
29	An intelligent model based on data mining and fuzzy logic for fault diagnosis of external gear hydraulic pumps. *Insight: Non-Destructive Testing and Condition Monitoring*, **2009**, 51, 594-600	1.3	5
28	Predicting areas with ecotourism capability using artificial neural networks and linear discriminant analysis (case study: Arasbaran Protected Area, Iran). *Environment, Development and Sustainability*, **2021**, 23, 8272-8287	4.5	5
27	Optimum Thermal Concentration of Solar Thermoelectric Generators (STEG) in Realistic Meteorological Condition. *Energies*, **2018**, 11, 2425	3.1	5
26	Modeling Thermal Conductivity of Iranian Flat Bread Using Artificial Neural Networks. *International Journal of Food Properties*, **2011**, 14, 708-720	3	4
25	Using nonparametric analysis (DEA) for measuring technical efficiency in poultry farms. *Brazilian Journal of Poultry Science*, **2011**, 13, 271-277	1.3	4
24	A New Mathematical Modeling of Banana Fruit and Comparison with Actual Values of Dimensional Properties. *Modern Applied Science*, **2010**, 4,	1.3	4
23	Using of Artificial Neural Networks for Evaluation Soil Water Content with Time Domain Reflectometry. *Modern Applied Science*, **2010**, 4,	1.3	4
22	Application of Artificial Neural Networks in Modeling Soil Solution Electrical Conductivity. *Soil Science*, **2010**, 175, 432-437	0.9	4
21	Determination of electric field intensity during microwave heating of selected vegetables and fruits. *Journal of Microwave Power and Electromagnetic Energy*, **2018**, 52, 276-286	1.4	4
20	Vibration-Based Fault Diagnosis of Hydraulic Pump of Tractor Steering System by Using Energy Technique. *Modern Applied Science*, **2009**, 3,	1.3	3
19	Fatigue Analysis of Connecting Rod of U650 Tractor in the Finite Element Code ANSYS. *Journal of Applied Sciences*, **2008**, 8, 4338-4345	0.3	3
18	Investigating Potential of Wind Energy in Mahshahr, Iran. *Wind Engineering*, **2015**, 39, 369-384	1.2	2
17	Remote monitoring and control of horticultural cool storage over the Internet. *Computer Applications in Engineering Education*, **2011**, 19, 136-145	1.6	2
16	Fault diagnosis of Massey Ferguson gearbox using Power Spectral Density **2008**,		2
15	Excitation of electromagnetic waves by delta function current sheets in the ionospheric plasma. *Radio Science*, **1994**, 29, 867-877	1.4	2

14	Regression modeling of field emissions in wheat production using a life cycle assessment (LCA) approach **2013**, 1,		2
13	Evaluation of microstrip Green function. *Electronics Letters*, **1997**, 33, 434	1.1	2
12	Machine Learning for the Estimation of Diameter Increment in Mixed and Uneven-Aged Forests. *Sustainability*, **2022**, 14, 3386	3.6	2
11	Estimating Some Physical Properties of Sour and Sweet Cherries Based on Combined Image Processing and AI Techniques. *International Journal of Food Engineering*, **2014**, 10, 403-415	1.9	1
10	Finite Element Simulation of Rough Rice Kernel (Oryza sativa L.) cv. Fajer Drying. *Chemical Product and Process Modeling*, **2008**, 3,	1.1	1
9	Modeling the kinetics of essential oil content and main constituents of mint (Mentha aquatica L.) leaves during thin-layer drying process using response surface methodology. *Journal of Food Processing and Preservation*, **2021**, 45, e15515	2.1	1
8	Dynamic and static object detection and tracking in an autonomous surface vehicle. *Ships and Offshore Structures*, **2020**, 15, 711-721	1.4	1
7	Enhancing thermophysical properties of phase change material via alumina and copper nanoparticles. *International Journal of Energy Research*, **2022**, 46, 6594-6612	4.5	1
6	A novel application of stand-alone photovoltaic system in agriculture: solar-powered Microner sprayer. *International Journal of Ambient Energy*, **2017**, 38, 69-76	2	0
5	Acoustic signal-based deep learning approach for smart sorting of pistachio nuts. *Postharvest Biology and Technology*, **2022**, 185, 111778	6.2	0
4	Modeling, Dynamic Analysis and Optimization of Budsan Truck Engine Mount. *Journal of Applied Sciences*, **2008**, 8, 2369-2377	0.3	0
3	Development and evaluation of an online grading system for pinto beans using machine vision and artificial neural network. *International Journal of Postharvest Technology and Innovation*, **2020**, 7, 1	0.3	0
2	Deep learning-based precision agriculture through weed recognition in sugar beet fields. *Sustainable Computing: Informatics and Systems*, **2022**, 35, 100759	3	0
1	Modelling hydraulic jumps with artificial neural networks. *Water Management*, **2005**, 158, 65-70	1	