

# Irving Israel Ruiz-López

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,437  
citations

331670

21  
h-index

361022

35  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1440  
citing authors

#	ARTICLE	IF	CITATIONS
1	Automated method for the determination of the band gap energy of pure and mixed powder samples using diffuse reflectance spectroscopy. <i>Heliyon</i> , 2019, 5, e01505.	3.2	143
2	Antimicrobial Activity of Ginger ( <i>Zingiber Officinale</i> ) and Its Application in Food Products. <i>Food Reviews International</i> , 2019, 35, 407-426.	8.4	94
3	Effect of solvent composition and its interaction with ultrasonic energy on the ultrasound-assisted extraction of phenolic compounds from Mango peels ( <i>Mangifera indica</i> L.). <i>Food and Bioproducts Processing</i> , 2020, 122, 41-54.	3.6	78
4	Analytical solution for food-drying kinetics considering shrinkage and variable diffusivity. <i>Journal of Food Engineering</i> , 2007, 79, 208-216.	5.2	76
5	Development of extruded snacks using taro ( <i>Colocasia esculenta</i> ) and nixtamalized maize ( <i>Zea mays</i> ) flour blends. <i>LWT - Food Science and Technology</i> , 2011, 44, 673-680.	5.2	69
6	Moisture and temperature evolution during food drying: effect of variable properties. <i>Journal of Food Engineering</i> , 2004, 63, 117-124.	5.2	66
7	Analytical model for variable moisture diffusivity estimation and drying simulation of shrinkable food products. <i>Journal of Food Engineering</i> , 2012, 108, 427-435.	5.2	59
8	Drying of shrinkable food products: Appraisal of deformation behavior and moisture diffusivity estimation under isotropic shrinkage. <i>Journal of Food Engineering</i> , 2015, 144, 138-147.	5.2	43
9	Evaluation of physical and chemical properties of carrots dried by Refractance Window drying. <i>Drying Technology</i> , 2016, 34, 1414-1422.	3.1	43
10	A Potential Application of Mango ( <i>Mangifera indica</i> L. cv Manila) Peel Powder to Increase the Total Phenolic Compounds and Antioxidant Capacity of Edible Films and Coatings. <i>Food and Bioprocess Technology</i> , 2019, 12, 1584-1592.	4.7	43
11	Effect of Osmotic Dehydration on Air-Drying Characteristics of Chayote. <i>Drying Technology</i> , 2010, 28, 1201-1212.	3.1	34
12	Modeling of kinetics, equilibrium and distribution data of osmotically dehydrated carambola ( <i>Averrhoa carambola</i> L.) in sugar solutions. <i>Journal of Food Engineering</i> , 2011, 104, 218-226.	5.2	32
13	Mass transfer modeling of equilibrium and dynamic periods during osmotic dehydration of radish in NaCl solutions. <i>Food and Bioproducts Processing</i> , 2013, 91, 216-224.	3.6	32
14	Mass Transfer Modeling During Osmotic Dehydration of Hexahedral Pineapple Slices in Limited Volume Solutions. <i>Food and Bioprocess Technology</i> , 2010, 3, 427-433.	4.7	31
15	Modeling heat and mass transfer during drying of green coffee beans using prolate spheroidal geometry. <i>Journal of Food Engineering</i> , 2008, 86, 1-9.	5.2	28
16	Modeling and simulation of heat and mass transfer during drying of solids with hemispherical shell geometry. <i>Computers and Chemical Engineering</i> , 2011, 35, 191-199.	3.8	27
17	Robust MIMO PID controllers tuning based on complex/real ratio of the characteristic matrix eigenvalues. <i>Chemical Engineering Science</i> , 2006, 61, 4332-4340.	3.8	25
18	Effect of UV-C light on <i>Lactobacillus rhamnosus</i> , <i>Salmonella Typhimurium</i> , and <i>Saccharomyces cerevisiae</i> kinetics in inoculated coconut water: Survival and residual effect. <i>Journal of Food Engineering</i> , 2018, 223, 255-261.	5.2	23

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19	Analytical solution of simultaneous heat and mass transfer equations during food drying. Journal of Food Engineering, 2014, 142, 39-45.	5.2	22
20	Production, chemical, physical and technological properties of antioxidant dietary fiber from pineapple pomace and effect as ingredient in sausages. CYTA - Journal of Food, 2018, 16, 831-839.	1.9	22
21	Mathematical modeling and simulation of batch drying of foods in fixed beds with airflow reversal. Journal of Food Engineering, 2008, 89, 310-318.	5.2	21
22	Statistical Indices for the Selection of Food Sorption Isotherm Models. Drying Technology, 2009, 27, 726-738.	3.1	21
23	Mass transfer modeling in osmotic dehydration: Equilibrium characteristics and process dynamics under variable solution concentration and convective boundary. Food and Bioproducts Processing, 2016, 97, 88-99.	3.6	21
24	Analysis of mass transfer equations during solid-liquid extraction and its application for vanilla extraction kinetics modeling. Journal of Food Engineering, 2017, 192, 36-44.	5.2	21
25	Effect of shape change and initial geometry on water diffusivity estimation during drying of gel model systems. Journal of Food Engineering, 2018, 216, 52-64.	5.2	21
26	Inhibition of Salmonella Typhimurium growth in coconut (Cocos nucifera L.) water by hurdle technology. Food Control, 2018, 92, 312-318.	5.5	19
27	Ultraviolet-C light effect on physicochemical, bioactive, microbiological, and sensorial characteristics of carrot ( <i>Daucus carota</i> ) beverages. Food Science and Technology International, 2016, 22, 536-546.	2.2	18
28	A method to estimate anisotropic diffusion coefficients for cylindrical solids: Application to the drying of carrot. Journal of Food Engineering, 2014, 125, 24-33.	5.2	17
29	Mathematical Modeling Used to Evaluate the Effect of UV-C Light Treatment on Microorganisms in Liquid Foods. Food Engineering Reviews, 2020, 12, 290-308.	5.9	17
30	Mathematical Simulation of the Effective Diffusivity of Water during Drying of Papaya. Drying Technology, 2007, 25, 1633-1638.	3.1	16
31	Analysis of mass transfer and morphometric characteristics of white mushroom ( <i>Agaricus bisporus</i> ) pilei during osmotic dehydration. Journal of Food Engineering, 2019, 240, 120-132.	5.2	16
32	Antioxidant fortification of yogurt with red cactus pear peel and its mucilage. CYTA - Journal of Food, 2019, 17, 824-833.	1.9	16
33	Drying modeling in products undergoing simultaneous size reduction and shape change: Appraisal of deformation effect on water diffusivity. Journal of Food Engineering, 2015, 164, 30-39.	5.2	14
34	Chemical, physical and sensory properties of Vienna sausages formulated with a starfruit dietary fiber concentrate. Journal of Food Science and Technology, 2018, 55, 3303-3313.	2.8	14
35	Optimization of a coconut oil extraction process with supercritical CO <sub>2</sub> considering economical and thermal variables. Journal of Supercritical Fluids, 2021, 170, 105160.	3.2	14
36	A design method for robust and quadratic optimal MIMO linear controllers. Chemical Engineering Science, 2010, 65, 3431-3438.	3.8	12

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37	Mass transfer analysis of bioactive compounds in apple wedges impregnated with beetroot juice: A 3D modelling approach. <i>Journal of Food Engineering</i> , 2020, 282, 110003.	5.2	12
38	Tuning of multivariate PID controllers based on characteristic matrix eigenvalues, Lyapunov functions and robustness criteria. <i>Chemical Engineering Science</i> , 2005, 60, 897-905.	3.8	11
39	Significant improvement of <i>Geobacillus thermoleovorans</i> CCR11 thermoalkalophilic lipase production using Response Surface Methodology. <i>New Biotechnology</i> , 2011, 28, 761-766.	4.4	11
40	Effect of osmotic dehydration on the physical and chemical properties of Mexican ginger ( <i>Zingiber</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.9	10
41	Mass transfer and morphometric characteristics of fresh and osmodehydrated white mushroom pilei during convective drying. <i>Journal of Food Engineering</i> , 2019, 262, 181-188.	5.2	10
42	Improved expression and immobilization of <i>Geobacillus thermoleovorans</i> CCR11 thermostable recombinant lipase. <i>Biotechnology and Applied Biochemistry</i> , 2017, 64, 62-69.	3.1	9
43	Mass transfer modeling of the antioxidant extraction of roselle flower ( <i>Hibiscus sabdariffa</i> ). <i>Journal of Food Science and Technology</i> , 2019, 56, 1008-1015.	2.8	9
44	Design of multiloop PI controllers based on quadratic optimal approach. <i>ISA Transactions</i> , 2017, 70, 338-347.	5.7	9
45	Antioxidant and functional properties of a high dietary fibre powder from carambola ( <i>Carica papaya</i> ) pomace. <i>International Journal of Food Science and Technology</i> , 2014, 49, 2101-2110.	2.7	7
46	Thermosonicated whey protein concentrate blends on quality attributes of reduced fat Panela cheese. <i>Ultrasonics Sonochemistry</i> , 2021, 76, 105621.	8.2	7
47	Study of oil uptake during deep-fat frying of Taro ( <i>Colocasia esculenta</i> ) chips. <i>CYTA - Journal of Food</i> , 2015, , 1-6.	1.9	6
48	Effect of natural extracts addition on antioxidant, color and sensory properties of avocado ( <i>Persea</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2623-2634.	3.2	6
49	Kinetic mechanism of CO oxidation on gold catalyst supported on TiSBA-15 previously treated in a hydrogen atmosphere. <i>Chemical Engineering Journal</i> , 2021, 405, 126644.	12.7	6
50	The impact of convective drying on the color, phenolic content and antioxidant capacity of noni ( <i>Morinda citrifolia</i> L.). <i>Food Science and Technology</i> , 2016, 36, 583-590.	1.7	5
51	Sorption of BTEX on a nanoporous composite of SBA-15 and a calcined hydrotalcite. <i>Nano Convergence</i> , 2018, 5, 21.	12.1	5
52	Analysis of ultrasound-assisted convective heating/cooling process: Development and application of a Nusselt equation. <i>Ultrasonics Sonochemistry</i> , 2021, 74, 105575.	8.2	5
53	Effect of extraction conditions on the antioxidant compounds from habanero pepper ( <i>Capsicum</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2022, 46, .	2.0	5
54	The role of coupled water and solute diffusion and product shrinkage during osmotic dehydration. <i>Journal of Food Engineering</i> , 2022, 331, 111121.	5.2	5

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55	Drying of Food Products Shaped as Longitudinal Sections of Solid and Annular Cylinders: Modeling and Simulation. <i>Drying Technology</i> , 2013, 31, 1148-1159.	3.1	4
56	Point set registration for reduced geometry mismatch during estimation of mass transfer properties in osmotic dehydration of complex-shaped foods. <i>Drying Technology</i> , 2020, 38, 506-517.	3.1	4
57	Thermodynamic and mathematical analysis of modified Luikov's equations for simultaneous heat and mass transfer. <i>International Communications in Heat and Mass Transfer</i> , 2021, 120, 105003.	5.6	4
58	Effect of ultraviolet-C light and mild thermal treatment on the storage life of orange juice. <i>Czech Journal of Food Sciences</i> , 2021, 39, 106-112.	1.2	3
59	Emulation of evolutionary selection as the growth mechanism of supported layered double hydroxide frameworks. <i>Applied Clay Science</i> , 2021, 210, 106159.	5.2	3
60	Sequential synthesis of PID controllers based on LQR method. <i>Revista Mexicana De Ingeniera Quimica</i> , 2019, 19, 913-928.	0.4	3
61	EFFECT OF AIRFLOW REVERSAL ON PACKED-BED DRYING OF CARROTS. <i>Journal of Food Process Engineering</i> , 2009, 33, 684.	2.9	2
62	Comments on "The variable nature of Biot numbers in food drying" by S.A. Giner, R.M.T. Irigoyen, S. Cicuttn, and C. Fiorentini [ <i>Journal of Food Engineering</i> 101 (2010) 214-222]. <i>Journal of Food Engineering</i> , 2011, 106, 355-356.	5.2	2
63	Analysis of open-loop and controlled closed-loop behavior of the Cholette's bioreactor under different operating conditions. <i>ISA Transactions</i> , 2020, 101, 147-159.	5.72	2
64	Water diffusivity estimation in air-dried complex-shaped foods by the method of slopes: Application to oblate spheroid geometry. <i>Computers and Electronics in Agriculture</i> , 2021, 181, 105949.	7.7	2
65	A sequential method to estimate equilibrium Point and diffusion coefficients of bioactive compounds during solid-liquid extraction. <i>Food and Bioproducts Processing</i> , 2019, 116, 219-226.	3.6	1
66	A reactor engineering approach to describe bacterial inactivation during continuous UV-C light processing. <i>Innovative Food Science and Emerging Technologies</i> , 2021, 74, 102853.	5.6	1
67	Comments on Response to "Comments on "The variable nature of Biot numbers in food drying" by S.A. Giner, R.M. Torrez Irigoyen, S.R. Cicuttn, and C. Fiorentini [ <i>Journal of Food Engineering</i> 101 (2010) 214-222]", by Ruiz-Lpez, I.I. and Garca-Alvarado, M.A. [ <i>Journal of Food Engineering</i> 106 (2011), 355-356]. <i>J. Food Eng.</i> 113, 362-363., <i>Journal of Food Engineering</i> , 2013, 115, 424-425.	5.2	0