Tanmay Basak

List of Publications by Year
in descending order

232 papers	7,688 citations	71004 43 h-index	84171 75 g-index
233 all docs	233 docs citations	233 times ranked	3866 citing authors

#	Article	IF	Citations
1	Microwave food processingâ€"A review. Food Research International, 2013, 52, 243-261.	2.9	683
2	A review on the susceptor assisted microwave processing of materials. Energy, 2016, 97, 306-338.	4.5	282
3	Effects of thermal boundary conditions on natural convection flows within a square cavity. International Journal of Heat and Mass Transfer, 2006, 49, 4525-4535.	2.5	275
4	Natural convection in a square cavity filled with a porous medium: Effects of various thermal boundary conditions. International Journal of Heat and Mass Transfer, 2006, 49, 1430-1441.	2.5	266
5	Microwave material processingâ€"a review. AICHE Journal, 2012, 58, 330-363.	1.8	238
6	Studies on natural convection within enclosures of various (non-square) shapes â€" A review. International Journal of Heat and Mass Transfer, 2017, 106, 356-406.	2.5	177
7	Heatline analysis on natural convection for nanofluids confined within square cavities with various thermal boundary conditions. International Journal of Heat and Mass Transfer, 2012, 55, 5526-5543.	2.5	175
8	Finite element analysis of natural convection flows in a square cavity with non-uniformly heated wall(s). International Journal of Engineering Science, 2005, 43, 668-680.	2.7	144
9	Analysis of mixed convection flows within a square cavity with uniform and non-uniform heating of bottom wall. International Journal of Thermal Sciences, 2009, 48, 891-912.	2.6	124
10	Heat flow analysis for natural convection within trapezoidal enclosures based on heatline concept. International Journal of Heat and Mass Transfer, 2009, 52, 2471-2483.	2.5	117
11	Experimental and theoretical investigation on microwave melting of metals. Journal of Materials Processing Technology, 2011, 211, 482-487.	3.1	113
12	Analysis of microwave sintering of ceramics. AICHE Journal, 1998, 44, 2302-2311.	1.8	110
13	Role of â€˜Bejanâ€™s heatlinesâ€™ in heat flow visualization and optimal thermal mixing for differentially heated square enclosures. International Journal of Heat and Mass Transfer, 2008, 51, 3486-3503.	2.5	99
14	Steady natural convection flows in a square cavity with linearly heated side wall(s). International Journal of Heat and Mass Transfer, 2007, 50, 766-775.	2.5	92
15	Steady natural convection flow in a square cavity filled with a porous medium for linearly heated side wall(s). International Journal of Heat and Mass Transfer, 2007, 50, 1892-1901.	2.5	90
16	Influence of internal convection during microwave thawing of cylinders. AICHE Journal, 2001, 47, 835-850.	1.8	86
17	Analysis of microwave thawing of slabs with effective heat capacity method. AICHE Journal, 1997, 43, 1662-1674.	1.8	85
18	Natural convection flows in a trapezoidal enclosure with uniform and non-uniform heating of bottom wall. International Journal of Heat and Mass Transfer, 2008, 51, 747-756.	2.5	85

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19	Entropy generation vs energy efficiency for natural convection based energy flow in enclosures and various applications: A review. Renewable and Sustainable Energy Reviews, 2017, 80, 1412-1457.	8.2	77
20	Microwave heating characteristics of graphite based powder mixtures. International Communications in Heat and Mass Transfer, 2013, 48, 22-27.	2.9	74
21	Entropy generation due to natural convection in discretely heated porous square cavities. Energy, 2011, 36, 5065-5080.	4.5	73
22	Role of length scales on microwave thawing dynamics in 2D cylinders. International Journal of Heat and Mass Transfer, 2002, 45, 4543-4559.	2.5	69
23	Finite element analysis of natural convection flow in a isosceles triangular enclosure due to uniform and non-uniform heating at the side walls. International Journal of Heat and Mass Transfer, 2008, 51, 4496-4505.	2.5	67
24	Analysis of resonances during microwave thawing of slabs. International Journal of Heat and Mass Transfer, 2003, 46, 4279-4301.	2.5	64
25	Finite element analysis of natural convection in a triangular enclosure: Effects of various thermal boundary conditions. Chemical Engineering Science, 2007, 62, 2623-2640.	1.9	63
26	Analysis of mixed convection in a lid-driven porous square cavity with linearly heated side wall(s). International Journal of Heat and Mass Transfer, 2010, 53, 1819-1840.	2.5	63
27	Effects of Thermal Boundary Conditions on Entropy Generation during Natural Convection. Numerical Heat Transfer; Part A: Applications, 2011, 59, 372-402.	1.2	63
28	Analysis of entropy generation during natural convection in porous right-angled triangular cavities with various thermal boundary conditions. International Journal of Heat and Mass Transfer, 2012, 55, 4521-4535.	2.5	61
29	Microwave driven convection in a rotating cylindrical cavity: A numerical study. Journal of Food Engineering, 2007, 79, 1269-1279.	2.7	58
30	Mixed convection and role of multiple solutions in lid-driven trapezoidal enclosures. International Journal of Heat and Mass Transfer, 2013, 63, 366-388.	2.5	58
31	A fixed-grid finite element based enthalpy formulation for generalized phase change problems: role of superficial mushy region. International Journal of Heat and Mass Transfer, 2002, 45, 4881-4898.	2.5	56
32	Analysis of mixed convection flows within a square cavity with linearly heated side wall(s). International Journal of Heat and Mass Transfer, 2009, 52, 2224-2242.	2.5	56
33	Visualization of heat flow due to natural convection within triangular cavities using Bejanâ€™s heatline concept. International Journal of Heat and Mass Transfer, 2009, 52, 2824-2833.	2.5	54
34	Analysis of heatlines for natural convection within porous trapezoidal enclosures: Effect of uniform and non-uniform heating of bottom wall. International Journal of Heat and Mass Transfer, 2010, 53, 5947-5961.	2.5	54
35	Entropy generation vs energy flow due to natural convection in a trapezoidal cavity with isothermal and non-isothermal hot bottom wall. Energy, 2012, 37, 514-532.	4.5	54
36	Susceptor-Assisted Enhanced Microwave Processing of Ceramics - A Review. Critical Reviews in Solid State and Materials Sciences, 2017, 42, 433-469.	6.8	54

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37	Role of resonances on microwave heating of oil-water emulsions. AICHE Journal, 2004, 50, 2659-2675.	1.8	53
38	Finite element based heatline approach to study mixed convection in a porous square cavity with various wall thermal boundary conditions. International Journal of Heat and Mass Transfer, 2011, 54, 1706-1727.	2.5	49
39	Natural convection flows in porous trapezoidal enclosures with various inclination angles. International Journal of Heat and Mass Transfer, 2009, 52, 4612-4623.	2.5	48
40	Bejanâ€™s heatline analysis of natural convection in right-angled triangular enclosures: Effects of aspect-ratio and thermal boundary conditions. International Journal of Thermal Sciences, 2010, 49, 1576-1592.	2.6	48
41	Entropy Generation During Natural Convection in a Porous Cavity: Effect of Thermal Boundary Conditions. Numerical Heat Transfer; Part A: Applications, 2012, 62, 336-364.	1.2	48
42	Finite element simulation of natural convection flow in a trapezoidal enclosure filled with porous medium due to uniform and non-uniform heating. International Journal of Heat and Mass Transfer, 2009, 52, 70-78.	2.5	44
43	Visualization of Heat Transport during Natural Convection Within Porous Triangular Cavities via Heatline Approach. Numerical Heat Transfer; Part A: Applications, 2010, 57, 431-452.	1.2	44
44	Role of various moving walls on energy transfer rates via heat flow visualization during mixed convection in square cavities. Energy, 2015, 82, 1-22.	4.5	44
45	Effects of Nonuniformly Heated Wall(S) on a Natural-Convection Flow in a Square Cavity Filled With a Porous Medium. Numerical Heat Transfer; Part A: Applications, 2007, 51, 959-978.	1.2	43
46	Heatline based thermal management for natural convection within right-angled porous triangular enclosures with various thermal conditions of walls. Energy, 2011, 36, 4879-4896.	4.5	43
47	A comprehensive analysis on the effect of shape on the microwave heating dynamics of food materials. Innovative Food Science and Emerging Technologies, 2017, 39, 247-266.	2.7	41
48	Analysis of entropy generation for distributed heating in processing of materials by thermal convection. International Journal of Heat and Mass Transfer, 2011, 54, 2578-2594.	2.5	40
49	Entropy Generation Minimization Versus Thermal Mixing Due to Natural Convection in Differentially and Discretely Heated Square Cavities. Numerical Heat Transfer; Part A: Applications, 2010, 58, 475-504.	1.2	39
50	Natural convection flow simulation for various angles in a trapezoidal enclosure with linearly heated side wall(s). International Journal of Heat and Mass Transfer, 2009, 52, 4413-4425.	2.5	38
51	Role of entropy generation on thermal management due to thermal convection in porous trapezoidal enclosures with isothermal and non-isothermal heating of wall. International Journal of Heat and Mass Transfer, 2013, 67, 810-828.	2.5	38
52	Finite element simulations of natural convection flow in an isosceles triangular enclosure filled with a porous medium: Effects of various thermal boundary conditions. International Journal of Heat and Mass Transfer, 2008, 51, 2733-2741.	2.5	37
53	Role of entropy generation on thermal management during natural convection in porous square cavities with distributed heat sources. Chemical Engineering Science, 2011, 66, 2124-2140.	1.9	37
54	Modeling of enzyme production kinetics. Applied Microbiology and Biotechnology, 2007, 73, 991-1007.	1.7	36

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55	Thermal performance of a multi-block heat exchanger designed on the basis of Bejanâ€™s constructal theory. International Journal of Heat and Mass Transfer, 2008, 51, 3582-3594.	2.5	36
56	The law of life: The bridge between Physics and Biology. Physics of Life Reviews, 2011, 8, 249-252.	1.5	36
57	A Peclet number based analysis of mixed convection for lid-driven porous square cavities with various heating of bottom wall. International Communications in Heat and Mass Transfer, 2012, 39, 657-664.	2.9	36
58	Role of ceramic supports on microwave heating of materials. Journal of Applied Physics, 2005, 97, 083537.	1.1	35
59	On the analysis of microwave power and heating characteristics for food processing: Asymptotes and resonances. Food Research International, 2006, 39, 1046-1057.	2.9	35
60	Bejan's Heatlines and Numerical Visualization of Heat Flow and Thermal Mixing in Various Differentially Heated Porous Square Cavities. Numerical Heat Transfer; Part A: Applications, 2009, 55, 487-516.	1.2	35
61	Finite element simulation of natural convection within porous trapezoidal enclosures for various inclination angles: Effect of various wall heating. International Journal of Heat and Mass Transfer, 2009, 52, 4135-4150.	2.5	34
62	Heat flow visualization for natural convection in rhombic enclosures due to isothermal and non-isothermal heating at the bottom wall. International Journal of Heat and Mass Transfer, 2012, 55, 1325-1342.	2.5	34
63	Numerical Simulations for the Analysis of Entropy Generation During Natural Convection in Porous Rhombic Enclosures. Numerical Heat Transfer; Part A: Applications, 2013, 63, 257-284.	1.2	33
64	Heatlines and thermal management analysis for natural convection within inclined porous square cavities. International Journal of Heat and Mass Transfer, 2015, 87, 583-597.	2.5	33
65	Effect of ceramic supports on microwave processing of porous food samples. International Journal of Heat and Mass Transfer, 2006, 49, 4325-4339.	2.5	32
66	Finite element simulations on heat flow visualization and entropy generation during natural convection in inclined square cavities. International Communications in Heat and Mass Transfer, 2014, 51, 1-8.	2.9	32
67	Sensitivity of heatfunction boundary conditions on invariance of Bejanâ€™s heatlines for natural convection in enclosures with various wall heatings. International Journal of Heat and Mass Transfer, 2015, 89, 1342-1368.	2.5	32
68	Role of metallic and ceramic supports on enhanced microwave heating processes. Chemical Engineering Science, 2005, 60, 2661-2677.	1.9	31
69	Analysis of thermal management during natural convection within porous tilted square cavities via heatline and entropy generation. International Journal of Mechanical Sciences, 2016, 115-116, 596-615.	3.6	30
70	A theoretical analysis on the effect of containers on the microwave heating of materials. International Communications in Heat and Mass Transfer, 2017, 82, 145-153.	2.9	30
71	A generalized analysis on material invariant characteristics for microwave heating of slabs. Chemical Engineering Science, 2005, 60, 5480-5498.	1.9	29
72	A theoretical analysis on microwave heating of food slabs attached with ceramic plates: Role of distributed microwave incidence. Food Research International, 2006, 39, 932-944.	2.9	29

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73	A novel closed-form analysis on asymptotes and resonances of microwave power. Chemical Engineering Science, 2006, 61, 6273-6301.	1.9	29
74	A comprehensive heatline based approach for natural convection flows in trapezoidal enclosures: Effect of various walls heating. International Journal of Thermal Sciences, 2011, 50, 1385-1404.	2.6	29
75	Experimental and numerical study on microwave heating of nanofluids. International Journal of Thermal Sciences, 2012, 59, 45-57.	2.6	29
76	Analysis of heatlines during natural convection within porous square enclosures: Effects of thermal aspect ratio and thermal boundary conditions. International Journal of Heat and Mass Transfer, 2013, 59, 206-218.	2.5	28
77	Role of distributed/discrete solar heaters during natural convection in the square and triangular cavities: CFD and heatline simulations. Solar Energy, 2016, 135, 130-153.	2.9	28
78	Bejan's heatlines and numerical visualization of convective heat flow in differentially heated enclosures with concave/convex side walls. Energy, 2014, 64, 69-94.	4.5	27
79	Entropy generation based approach on natural convection in enclosures with concave/convex side walls. International Journal of Heat and Mass Transfer, 2015, 82, 213-235.	2.5	27
80	Numerical study of mixed convection within porous square cavities using Bejanâ€™s heatlines: Effects of thermal aspect ratio and thermal boundary conditions. International Journal of Heat and Mass Transfer, 2012, 55, 5436-5448.	2.5	26
81	Analysis of heatlines and entropy generation during free convection within trapezoidal cavities. International Communications in Heat and Mass Transfer, 2013, 45, 32-40.	2.9	26
82	Analysis of thermal efficiency via analysis of heat flow and entropy generation during natural convection within porous trapezoidal cavities. International Journal of Heat and Mass Transfer, 2014, 77, 98-113.	2.5	26
83	Analysis of Entropy Generation for Mixed Convection in a Square Cavity for Various Thermal Boundary Conditions. Numerical Heat Transfer; Part A: Applications, 2015, 68, 44-74.	1.2	26
84	Natural convection and flow simulation in differentially heated isosceles triangular enclosures filled with porous medium. Chemical Engineering Science, 2008, 63, 3328-3340.	1.9	25
85	Visualization of heat transport due to natural convection for hot materials confined within two entrapped porous triangular cavities via heatline concept. International Journal of Heat and Mass Transfer, 2010, 53, 2100-2112.	2.5	25
86	A comprehensive theoretical analysis for the effect of microwave heating on the progress of a first order endothermic reaction. Chemical Engineering Science, 2011, 66, 5832-5851.	1.9	25
87	Visualization of Heat Transport during Natural Convection in a Tilted Square Cavity: Effect of Isothermal and Nonisothermal Heating. Numerical Heat Transfer; Part A: Applications, 2012, 61, 417-441.	1.2	25
88	Heatlines: Modeling, visualization, mixing and thermal management. Progress in Energy and Combustion Science, 2018, 64, 157-218.	15.8	25
89	Theoretical analysis on microwave heating of oilâ€“water emulsions supported on ceramic, metallic or composite plates. International Journal of Heat and Mass Transfer, 2008, 51, 6136-6156.	2.5	24
90	Natural convection in a non-Darcy anisotropic porous cavity with a finite heat source at the bottom wall. International Journal of Thermal Sciences, 2009, 48, 1279-1293.	2.6	24

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91	Heatline analysis of heat recovery and thermal transport in materials confined within triangular cavities. International Journal of Heat and Mass Transfer, 2010, 53, 3615-3628.	2.5	24
92	Role of the importance of â€˜Forchheimer termâ€™ for visualization of natural convection in porous enclosures of various shapes. International Journal of Heat and Mass Transfer, 2016, 97, 1044-1068.	2.5	24
93	Influence of ceramic supports on microwave heating for composite dielectric food slabs. AICHE Journal, 2006, 52, 1995-2007.	1.8	23
94	Natural convection in a heat generating hydrodynamically and thermally anisotropic non-Darcy porous medium. International Journal of Heat and Mass Transfer, 2008, 51, 4691-4703.	2.5	23
95	Role of metallic and composite (ceramicâ€“metallic) supports on microwave heating of porous dielectrics. International Journal of Heat and Mass Transfer, 2007, 50, 3072-3089.	2.5	22
96	Heatline approach for visualization of heat flow and efficient thermal mixing with discrete heat sources. International Journal of Heat and Mass Transfer, 2010, 53, 3241-3261.	2.5	22
97	A complete heatline analysis on mixed convection within a square cavity: Effects of thermal boundary conditions via thermal aspect ratio. International Journal of Thermal Sciences, 2012, 57, 98-111.	2.6	22
98	Analysis of natural convection via entropy generation approach in porous rhombic enclosures for various thermal aspect ratios. International Journal of Heat and Mass Transfer, 2013, 64, 224-244.	2.5	22
99	Role of entropy generation on thermal management during natural convection in tilted porous square cavities. Journal of the Taiwan Institute of Chemical Engineers, 2015, 50, 153-172.	2.7	22
100	Natural convection in rhombic enclosures with isothermally heated side or bottom wall: Entropy generation analysis. European Journal of Mechanics, B/Fluids, 2015, 54, 27-44.	1.2	22
101	Role of distributed/discrete solar heaters for the entropy generation studies in the square and triangular cavities during natural convection. Applied Thermal Engineering, 2017, 113, 1514-1535.	3.0	22
102	New closed form analysis of resonances in microwave power for material processing. AICHE Journal, 2006, 52, 3707-3721.	1.8	21
103	Heatline Analysis for Natural Convection within Porous Rhombic Cavities with Isothermal/Nonisothermal Hot Bottom Wall. Industrial & Engineering Chemistry Research, 2012, 51, 2113-2132.	1.8	21
104	Analysis of Convective Heat Flow Visualization within Porous Right Angled Triangular Enclosures with a Concave/Convex Hypotenuse. Numerical Heat Transfer; Part A: Applications, 2013, 64, 621-647.	1.2	21
105	Heatline based thermal management for natural convection in porous rhombic enclosures with isothermal hot side or bottom wall. Energy Conversion and Management, 2013, 67, 287-296.	4.4	21
106	Finite Element Simulation on Natural Convection Flow in a Triangular Enclosure Due to Uniform and Nonuniform Bottom Heating. Journal of Heat Transfer, 2008, 130, .	1.2	20
107	Heatline analysis of thermal mixing due to natural convection in discretely heated porous cavities filled with various fluids. Chemical Engineering Science, 2010, 65, 2132-2152.	1.9	20
108	Analysis of energy management via entropy generation approach during natural convection in porous rhombic enclosures. Chemical Engineering Science, 2012, 79, 75-93.	1.9	20

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109	A generalized approach on microwave processing for the lateral and radial irradiations of various Groups of food materials. Innovative Food Science and Emerging Technologies, 2016, 33, 333-347.	2.7	20
110	Role of discrete heating on the efficient thermal management within porous square and triangular enclosures via heatline approach. International Journal of Heat and Mass Transfer, 2017, 112, 489-508.	2.5	20
111	Effect of Various Thermal Boundary Conditions on Natural Convection in a Trapezoidal Cavity with Linearly Heated Side Wall(s). Numerical Heat Transfer, Part B: Fundamentals, 2007, 52, 551-568.	0.6	19
112	Role of lateral and radial irradiations on efficient microwave processing of food cylinders. Chemical Engineering Science, 2007, 62, 3185-3196.	1.9	19
113	Analysis of distributed thermal management policy for energy-efficient processing of materials by natural convection. Energy, 2010, 35, 5093-5107.	4.5	19
114	Analysis of heat recovery and heat transfer within entrapped porous triangular cavities via heatline approach. International Journal of Heat and Mass Transfer, 2010, 53, 3655-3669.	2.5	19
115	Theoretical analysis on the role of annular metallic shapes for microwave processing of food dielectric cylinders with various irradiations. International Journal of Heat and Mass Transfer, 2011, 54, 242-259.	2.5	19
116	Analysis of Bejanâ€™s heatlines on visualization of heat flow and thermal mixing in tilted square cavities. International Journal of Heat and Mass Transfer, 2012, 55, 2965-2983.	2.5	19
117	A theoretical study on the use of microwaves in reducing energy consumption for an endothermic reaction: Role of metal coated bounding surface. Energy, 2013, 55, 278-294.	4.5	19
118	Generalized characterization of microwave power absorption for processing of circular shaped materials. Chemical Engineering Science, 2014, 118, 257-279.	1.9	19
119	Heat flow visualization during mixed convection within entrapped porous triangular cavities with moving horizontal walls via heatline analysis. International Journal of Heat and Mass Transfer, 2017, 108, 468-489.	2.5	19
120	A Complete Heatline Analysis on Visualization of Heat Flow and Thermal Mixing during Mixed Convection in a Square Cavity with Various Wall Heating. Industrial & Engineering Chemistry Research, 2011, 50, 7608-7630.	1.8	18
121	Analysis of Entropy Generation Minimization during Natural Convection in Trapezoidal Enclosures of Various Angles with Linearly Heated Side Wall(s). Industrial & Engineering Chemistry Research, 2012, 51, 4069-4089.	1.8	18
122	Analysis of Entropy Generation During Mixed Convection in Porous Square Cavities: Effect of Thermal Boundary Conditions. Numerical Heat Transfer; Part A: Applications, 2015, 68, 925-957.	1.2	18
123	Microwave Processing of Frozen and Packaged Food Materials: Experimental. , 2016, , .		18
124	Role of multiple discrete heaters to minimize entropy generation during natural convection in fluid filled square and triangular enclosures. International Journal of Heat and Mass Transfer, 2018, 127, 1290-1312.	2.5	18
125	Analysis of Microwave Propagation for Multilayered Material Processing:Â Lambert's Law versus Exact Solution. Industrial & Engineering Chemistry Research, 2004, 43, 7671-7675.	1.8	17
126	Role of various elliptical shapes for efficient microwave processing of materials. AICHE Journal, 2007, 53, 1399-1412.	1.8	17

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127	Analysis of Entropy Generation due to Natural Convection in Rhombic Enclosures. Industrial & Engineering Chemistry Research, 2011, 50, 13169-13189.	1.8	17
128	Role of entropy generation during convective thermal processing in right-angled triangular enclosures with various wall heatings. Chemical Engineering Research and Design, 2012, 90, 1779-1799.	2.7	17
129	Heatline analysis on thermal management with conjugate natural convection in a square cavity. Chemical Engineering Science, 2013, 93, 67-90.	1.9	17
130	Analysis of Entropy Generation Due to Natural Convection in Tilted Square Cavities. Industrial & Engineering Chemistry Research, 2012, 51, 13300-13318.	1.8	16
131	Heat flow visualization analysis on natural convection in rhombic enclosures with isothermal hot side or bottom wall. European Journal of Mechanics, B/Fluids, 2013, 41, 29-45.	1.2	16
132	Analysis of entropy generation on mixed convection in square enclosures for various horizontal or vertical moving wall(s). International Communications in Heat and Mass Transfer, 2015, 68, 258-266.	2.9	16
133	Analysis of entropy generation during natural convection within entrapped porous triangular cavities during hot or cold fluid disposal. Numerical Heat Transfer; Part A: Applications, 2016, 69, 931-956.	1.2	16
134	Finite Element Simulations of Natural Convection in a Right-Angle Triangular Enclosure Filled with a Porous Medium: Effects of Various Thermal Boundary Conditions. Journal of Porous Media, 2007, 11, 159-178.	1.0	16
135	Role of metallic, ceramic and composite plates on microwave processing of composite dielectric materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 457, 261-274.	2.6	15
136	Analysis of pulsed microwave processing of polymer slabs supported with ceramic plates. Chemical Engineering Science, 2009, 64, 1488-1502.	1.9	15
137	Finite element simulations on heatline trajectories for mixed convection in porous square enclosures: Effects of various moving walls. European Journal of Mechanics, B/Fluids, 2016, 59, 140-160.	1.2	15
138	A novel concept on discrete samples for efficient microwave processing of materials. Chemical Engineering Science, 2008, 63, 3292-3308.	1.9	14
139	Heatlines based natural convection analysis in tilted isosceles triangular enclosures with linearly heated inclined walls: effect of various orientations. International Communications in Heat and Mass Transfer, 2013, 43, 39-45.	2.9	14
140	Role of Entropy Generation On Thermal Management During Natural Convection in a Tilted Square Cavity with Isothermal and Non-Isothermal Hot Walls. Numerical Heat Transfer; Part A: Applications, 2014, 66, 1243-1267.	1.2	14
141	Role of multiple solar heaters along the walls for the thermal management during natural convection in square and triangular cavities. Renewable Energy, 2018, 121, 205-229.	4.3	14
142	A model for heat transfer in a honey bee swarm. Chemical Engineering Science, 1996, 51, 387-400.	1.9	13
143	On multiple steady states for natural convection (low Prandtl number fluid) within porous square enclosures: Effect of nonuniformity of wall temperatures. International Journal of Heat and Mass Transfer, 2013, 59, 230-246.	2.5	13
144	Finite Element Simulation with Heatlines and Entropy Generation Minimization during Natural Convection within Porous Tilted Square Cavities. Industrial & Engineering Chemistry Research, 2013, 52, 8046-8061.	1.8	13

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145	Role of various concave/convex walls exposed to solar heating on entropy generation during natural convection within porous right angled triangular enclosures. Solar Energy, 2016, 137, 101-121.	2.9	13
146	Generalized scaling on forecasting heating patterns for microwave processing. AIChE Journal, 2008, 54, 56-73.	1.8	12
147	Theoretical analysis of efficient microwave processing of oilâ€“water emulsions attached with various ceramic plates. Food Research International, 2008, 41, 386-403.	2.9	12
148	Efficient microwave processing of oilâ€“water emulsion cylinders with lateral and radial irradiations. Food Research International, 2009, 42, 1337-1350.	2.9	12
149	Role of ceramic composites and microwave pulsing on efficient microwave processing of pork meat samples. Food Research International, 2011, 44, 2679-2697.	2.9	12
150	Heatlines for Visualization of Heat Transport for Natural Convection within Porous Trapezoidal Enclosures with Various Wall Heating. Numerical Heat Transfer; Part A: Applications, 2013, 63, 347-372.	1.2	12
151	Influence of various shapes of annular metallic support on microwave heating of 2D cylinders. Chemical Engineering Science, 2006, 61, 2023-2034.	1.9	11
152	Theoretical analysis on pulsed microwave heating of pork meat supported on ceramic plate. Meat Science, 2010, 86, 780-793.	2.7	11
153	Role of distributed heating on enhancement of thermal mixing for liquid food processing with heat flow visualization method. Innovative Food Science and Emerging Technologies, 2013, 18, 155-168.	2.7	11
154	Detailed Material-Invariant Analysis on Spatial Resonances of Power Absorption for Microwave-Assisted Material Processing with Distributed Sources. Industrial & Engineering Chemistry Research, 2007, 46, 750-760.	1.8	10
155	Role of microwave heating strategies in enhancing the progress of a firstâ€order endothermic reaction. AIChE Journal, 2013, 59, 656-670.	1.8	10
156	Analysis of average Nusselt numbers at various zones for heat flow visualizations during natural convection within enclosures (square vs triangular) involving discrete heaters. International Communications in Heat and Mass Transfer, 2016, 75, 303-310.	2.9	10
157	Analysis of entropy generation during natural convection in tilted triangular enclosures with various base angles. Numerical Heat Transfer; Part A: Applications, 2016, 69, 1332-1354.	1.2	10
158	Role of differential vs Rayleigh-BÃ©nard heating at curved walls for efficient processing via entropy generation approach. International Journal of Heat and Mass Transfer, 2018, 124, 390-413.	2.5	10
159	Heatlines visualization of convective heat flow during differential heating of porous enclosures with concave/convex side walls. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 1506-1538.	1.6	10
160	NON-DARCY BUOYANCY FLOW IN A SQUARE CAVITY FILLED WITH POROUS MEDIUM FOR VARIOUS TEMPERATURE DIFFERENCE ASPECT RATIOS. Journal of Porous Media, 2011, 14, 649-657.	1.0	10
161	Analysis of multiple steady states for natural convection of Newtonian fluids in a square enclosure. Physics of Fluids, 2021, 33, .	1.6	10
162	Analysis of Steady Convective Heating for Molten Materials Processing within Trapezoidal Enclosures. Industrial & Engineering Chemistry Research, 2008, 47, 8652-8666.	1.8	9

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163	Enhanced microwave processing of oil-water emulsions confined within ceramic and ceramic/metallic or composite plates. Chemical Engineering and Processing: Process Intensification, 2009, 48, 706-721.	1.8	9
164	Efficient processing of oilâ€“water emulsions confined within 2D cylinders with various microwave irradiations: Role of metallic annulus. Food Research International, 2010, 43, 148-166.	2.9	9
165	Heatlines vs energy flux vectors: Tools for heat flow visualization. International Communications in Heat and Mass Transfer, 2019, 108, 104265.	2.9	9
166	Role of reflective (metallic) support on microwave heating. AICHE Journal, 2005, 51, 1319-1329.	1.8	8
167	Onset of natural convection in a rotating fluid layer with non-uniform volumetric heat sources. International Journal of Thermal Sciences, 2008, 47, 730-741.	2.6	8
168	Analysis of heat recovery and thermal transport within entrapped fluid based on heatline approach. Chemical Engineering Science, 2009, 64, 1673-1686.	1.9	8
169	Numerical Simulations on Efficient Microwave Processing of Thermoplastics with Ceramic Composites. Numerical Heat Transfer; Part A: Applications, 2010, 57, 554-579.	1.2	8
170	Natural Convection in a Partially Heat Generating Rod Bundle Inside an Enclosure. Journal of Heat Transfer, 2010, 132, .	1.2	8
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