Irma Chacn

List of Publications by Year in Descending Order

51 papers	460 citations	14 h-index	19 g-index
61 ext. papers	538 ext. citations	2.2 avg, IF	4.19 L-index

#	Paper	IF	Citations
51	Energy Spectra of Ensemble of Nonlinear Capillary Waves on a Fluid. *Journal of Marine Science and Engineering*, **2021**, 9, 1422	2.4	
50	Dispersive focusing in fractional Kortewegde Vries-type equations. *Journal of Physics A: Mathematical and Theoretical*, **2020**, 53, 345703	2	0
49	Resonance Enhancement by Suitably Chosen Frequency Detuning. *Mathematics*, **2020**, 8, 450	2.3	0
48	Formation of the Dynamic Energy Cascades in Quartic and Quintic Generalized KdV Equations. *Symmetry*, **2020**, 12, 1254	2.7	0
47	Modular Hopf equation. *Applied Mathematics Letters*, **2019**, 97, 1-5	3.5	
46	Drifting breathers and FermiPastaUlam paradox for water waves. *Wave Motion*, **2019**, 90, 168-174	1.8	3
45	Extended criterion for the modulation instability. *New Journal of Physics*, **2019**, 21, 033029	2.9	4
44	Constructive Study of Modulational Instability in Higher Order Korteweg-de Vries Equations. *Fluids*, **2019**, 4, 54	1.6	3
43	Conditions for modulation instability in higher order Kortewegde Vries equations. *Applied Mathematics Letters*, **2019**, 88, 28-32	3.5	9
42	Single evolution equation in a light-matter pairing system. *Journal of Physics A: Mathematical and Theoretical*, **2018**, 51, 125201	2	0
41	Direct dynamical energy cascade in the modified KdV equation. *Physica D: Nonlinear Phenomena*, **2015**, 297, 76-87	3.3	6
40	Energy spectrum of the ensemble of weakly nonlinear gravity-capillary waves on a fluid surface. *Journal of Experimental and Theoretical Physics*, **2014**, 119, 359-365	1	4
39	Observation of the inverse energy cascade in the modified Korteweg-de Vries equation. *Europhysics Letters*, **2014**, 107, 14001	1.6	5
38	Universal power law for the energy spectrum of breaking Riemann waves. *JETP Letters*, **2013**, 98, 237-241	1.2	8
37	Time scales and structures of wave interaction exemplified with water waves. *Europhysics Letters*, **2013**, 102, 44005	1.6	11
36	A Constructive Method for Computing Generalized Manley-Rowe Constants of Motion. *Communications in Computational Physics*, **2013**, 14, 1094-1102	2.4	0
35	Fourier spectrum and shape evolution of an internal Riemann wave of moderate amplitude. *Nonlinear Processes in Geophysics*, **2013**, 20, 571-580	2.9	4

34	Energy transport in weakly nonlinear wave systems with narrow frequency band excitation. *Physical Review E*, **2012**, 86, 041129	2.4	9
33	Energy spectra of 2D gravity and capillary waves with narrow frequency band excitation. *Europhysics Letters*, **2012**, 97, 30004	1.6	11
32	Resonance Clustering in Wave Turbulent Regimes: Integrable Dynamics. *Communications in Computational Physics*, **2011**, 10, 1211-1240	2.4	17
31	Dynamical cascade generation as a basic mechanism of Benjamin-Feir instability. *Europhysics Letters* , **2011**, 95, 30003	1.6	11
30	Nonlinear Resonance Analysis: Theory, Computation, Applications **2010**,		35
29	Dynamics of nonlinear resonances in Hamiltonian systems. *Europhysics Letters*, **2009**, 85, 14004	1.6	13
28	Effect of the dynamical phases on the nonlinear amplitudesaevolution. *Europhysics Letters*, **2009**, 85, 34002	1.6	19
27	Discrete wave turbulence. *Europhysics Letters*, **2009**, 87, 44001	1.6	24
26	Nonlinear resonances of water waves. *Discrete and Continuous Dynamical Systems - Series B*, **2009**, 12, 607-621	1.3	7
25	Resonant interactions of nonlinear water waves in a finite basin. *Physical Review E*, **2008**, 78, 016304	2.4	17
24	Cluster dynamics of planetary waves. *Europhysics Letters*, **2008**, 83, 50012	1.6	19
23	Symbolic Computation for Nonlinear Wave Resonances **2008**, 95-126		6
22	Model of intraseasonal oscillations in earthвs atmosphere. *Physical Review Letters*, **2007**, 98, 198501	7.4	36
21	Laminated wave turbulence: Generic algorithms iii. *Physica A: Statistical Mechanics and Its Applications*, **2007**, 380, 66-74	3.3	15
20	Cluster formation in mesoscopic systems. *Physica A: Statistical Mechanics and Its Applications*, **2007**, 385, 527-542	3.3	11
19	Exact and quasiresonances in discrete water wave turbulence. *Physical Review Letters*, **2007**, 98, 214502	7.4	20
18	Quantifier Elimination for Approximate Factorization of Linear Partial Differential Operators. *Lecture Notes in Computer Science*, **2007**, 106-115	0.9	
17	LAMINATED WAVE TURBULENCE: GENERIC ALGORITHMS I. *International Journal of Modern Physics C*, **2006**, 17, 1579-1596	1.1	16

16	Model of laminated wave turbulence. *JETP Letters*, **2006**, 83, 283-287	1.2	19
15	A hierarchy of generalized invariants for linear partial differential operators. *Theoretical and Mathematical Physics(Russian Federation)*, **2006**, 147, 839-846	0.7	3
14	Fast Computation Algorithm for Discrete Resonances among Gravity Waves. *Journal of Low Temperature Physics*, **2006**, 145, 287-295	1.3	4
13	 *Theoretical and Mathematical Physics*, **2006**, 147, 470-478	0.2	
12	Constructively Factoring Linear Partial Differential Operators in Two Variables. *Theoretical and Mathematical Physics(Russian Federation)*, **2005**, 145, 1511-1524	0.7	7
11	 *Theoretical and Mathematical Physics*, **2005**, 145, 165-180	0.2	1
10	Weakly nonlinear theory of finite-size effects in resonators. *Physical Review Letters*, **1994**, 72, 2013-2016	7.4	29
9	Clipping A new investigation method for PDES in compact domains. *Theoretical and Mathematical Physics(Russian Federation)*, **1994**, 99, 675-680	0.7	4
8	Nonlinear interactions of spherical Rossby modes. *Dynamics of Atmospheres and Oceans*, **1993**, 18, 235-252	1.9	18
7	On properties of weakly nonlinear wave interactions in resonators. *Physica D: Nonlinear Phenomena* , **1991**, 54, 125-134	3.3	14
6	Partitioning of ensembles of weakly interacting dispersing waves in resonators into disjoint classes. *Physica D: Nonlinear Phenomena*, **1990**, 46, 43-56	3.3	18
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