

# A H Khater

## List of Publications by Year in descending order

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53  
papers

779  
citations

687363

13  
h-index

526287

27  
g-index

53  
all docs

53  
docs citations

53  
times ranked

331  
citing authors

#	ARTICLE	IF	CITATIONS
1	Variational method for the nonlinear dynamics of an elliptic magnetic stagnation line. European Physical Journal D, 2006, 39, 237-245.	1.3	120
2	Nonlinear Dispersive Rayleigh-Taylor Instabilities in Magnetohydrodynamic Flows. Physica Scripta, 2001, 64, 533-547.	2.5	87
3	Nonlinear Dispersive Instabilities in Kelvin-Helmholtz Magnetohydrodynamic Flows. Physica Scripta, 2003, 67, 340-349.	2.5	85
4	Bäcklund Transformations and Exact Solutions for Alfvén Solitons in a Relativistic Electron-Positron Plasma. Physica Scripta, 1998, 58, 545-548.	2.5	76
5	Solitary and freak waves in a dusty plasma with negative ions. Physics of Plasmas, 2011, 18, .	1.9	33
6	Bäcklund transformations: exact solutions for the KdV and the Calogero-Degasperis-Fokas mKdV equations. Mathematical Methods in the Applied Sciences, 1998, 21, 719-731.	2.3	30
7	Exact Solutions with Jacobi Elliptic Functions of Two Nonlinear Models for Ion-Acoustic Plasma Waves. Journal of the Physical Society of Japan, 2005, 74, 1431-1435.	1.6	26
8	Bäcklund transformations and Painlevé analysis: Exact soliton solutions for the unstable nonlinear Schrödinger equation modeling electron beam plasma. Physics of Plasmas, 1998, 5, 395-400.	1.9	24
9	Bäcklund transformations, a simple transformation and exact solutions for dust-acoustic solitary waves in dusty plasma consisting of cold dust particles and two-temperature isothermal ions. Physics of Plasmas, 1999, 6, 4542-4547.	1.9	23
10	Numerical solutions of integral and integro-differential equations using Legendre polynomials. Numerical Algorithms, 2007, 46, 195-218.	1.9	20
11	Travelling And Periodic Wave Solutions Of Some Nonlinear Wave Equations. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 389-396.	1.5	17
12	Bäcklund transformations and Painlevé analysis: Exact solutions for the nonlinear isothermal magnetostatic atmospheres. Physics of Plasmas, 1997, 4, 2853-2863.	1.9	15
13	Numerical solutions of some nonlinear evolution equations by Chebyshev spectral collocation methods. International Journal of Computer Mathematics, 2007, 84, 305-316.	1.8	13
14	Effects of rotation on Rayleigh-Taylor instabilities of an accelerating, compressible, perfectly conducting plane layer. Astrophysics and Space Science, 1984, 106, 245-255.	1.4	12
15	The Painlevé property and coordinate transformations. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1989, 104, 123-129.	0.2	12
16	Equilibrium properties and exact solutions for two-dimensional nonlinear force-free magnetic fields with mass flow. Physics of Plasmas, 2005, 12, 052902.	1.9	11
17	Applications of elliptic functions to ion-acoustic plasma waves. European Physical Journal D, 2008, 50, 177-184.	1.3	11
18	Analytical solutions of the rayleigh flow problem for a highly rarefied gas of a homogeneous system of charged particles. Astrophysics and Space Science, 1988, 146, 157-162.	1.4	10

#	ARTICLE	IF	CITATIONS
19	Two-dimensional magnetohydrodynamic equilibria. <i>Astrophysics and Space Science</i> , 1988, 149, 217-223.	1.4	10
20	Two-dimensional force-free magnetic fields described by some nonlinear equations. <i>Physics of Plasmas</i> , 2010, 17, 122902.	1.9	10
21	Analytical solutions for some nonlinear two-dimensional magnetostatic equilibria. <i>Astrophysics and Space Science</i> , 1989, 162, 151-157.	1.4	9
22	On the Similarity Solutions of the Calogero–Degasperis–Fokas Modified KdV Equation via Symmetry Method. <i>Journal of the Physical Society of Japan</i> , 2003, 72, 2523-2529.	1.6	9
23	Exact solutions for axisymmetric ideal magnetized plasma steady state with incompressible poloidal flow. <i>Physics of Plasmas</i> , 2004, 11, 3015-3022.	1.9	9
24	Self-Dual Solutions for SU(2) and SU(3) Gauge Fields on Euclidean Space. <i>International Journal of Theoretical Physics</i> , 2004, 43, 151-159.	1.2	9
25	Linear and nonlinear stability analysis for two-dimensional ideal magnetohydrodynamics with incompressible flows. <i>Physics of Plasmas</i> , 2005, 12, 012316.	1.9	9
26	Exact solutions for axisymmetric nonlinear magnetohydrodynamic equilibria of aligned magnetic field and plasma flow with applications to astrophysics and plasma confinement devices. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	9
27	Exact equilibria for nonlinear cylindrical ideal magnetohydrodynamic plasma with steady incompressible flow and arbitrary cross sectional shape. <i>Physics of Plasmas</i> , 2009, 16, 122506.	1.9	9
28	Bäcklund transformations and Painlevé analysis: Exact soliton solutions for strongly rarefied relativistic cold plasma. <i>Physics of Plasmas</i> , 1997, 4, 3910-3922.	1.9	8
29	Variational principles and Lyapunov stability analysis for compressible cylindrical plasma flows with arbitrary cross-section. <i>Plasma Physics and Controlled Fusion</i> , 2003, 45, 265-274.	2.1	8
30	Painlevé Analysis and Nonlinear Periodic Solutions for Isothermal Magnetostatic Atmospheres. <i>Solar Physics</i> , 1998, 178, 285-315.	2.5	7
31	Exact Solutions for Self-Dual SU(2) and SU(3) Yang–Mills Fields. <i>International Journal of Theoretical Physics</i> , 2002, 41, 409-419.	1.2	6
32	Jacobi Elliptic Function Solutions of Three Coupled Nonlinear Physical Equations. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2005, 60, 237-244.	1.5	5
33	Nonlinear stability of axisymmetric ideal magnetohydrodynamic flows. <i>Journal of Plasma Physics</i> , 2003, 69, 339-362.	2.1	4
34	On the Similarity Solutions of the Inhomogeneous Nonlinear Diffusion Equation via Symmetry Method. <i>Journal of the Physical Society of Japan</i> , 2004, 73, 42-48.	1.6	4
35	Potential symmetry and invariant solutions of Fokker-Planck equation in cylindrical coordinates related to magnetic field diffusion in magnetohydrodynamics including the Hall current. <i>European Physical Journal B</i> , 2006, 50, 17-21.	1.5	4
36	Solving integral equations with logarithmic kernels by Chebyshev polynomials. <i>Numerical Algorithms</i> , 2008, 47, 81-93.	1.9	4

#	ARTICLE	IF	CITATIONS
37	Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Physics of Plasmas, 2008, 15, 122903.	1.9	4
38	A class of semi-analytical solutions for a rotating toroidal plasma. Astrophysics and Space Science, 1988, 145, 277-286.	1.4	3
39	Legendre solutions of integral equations with logarithmic kernels. International Journal of Computer Mathematics, 2008, 85, 53-63.	1.8	3
40	Rotating ideal magnetohydrodynamic flow in General relativity. Astrophysics and Space Science, 1989, 152, 215-222.	1.4	2
41	Rational reflection coefficients in inverse scattering for a Dirac system. Inverse Problems, 1999, 15, 241-251.	2.0	2
42	Exact solutions for two-dimensional nonlinear force-free magnetic fields. Proceedings of the International Astronomical Union, 2006, 2, 108.	0.0	2
43	Conservation Laws and Exact Solutions for some Nonlinear Partial Differential Equations. International Journal of Theoretical Physics, 2006, 45, 589-616.	1.2	2
44	Exact solutions to the Grad-Shafranov equation for magnetically confined plasmas. Proceedings of the International Astronomical Union, 2006, 2, 307.	0.0	1
45	Kelvin-Helmholtz instability in MHD flows. Proceedings of the International Astronomical Union, 2006, 2, 313.	0.0	1
46	New Representation of the Self-Duality and Exact Solutions for Yang-Mills Equations. International Journal of Theoretical Physics, 2006, 45, 1021-1028.	1.2	1
47	On the stationary vibrations of a rectangular plate subjected to stress prescribed partially at the circumference. International Journal of Mathematics and Mathematical Sciences, 1991, 14, 581-586.	0.7	0
48	Generation of sunspot and polar faculae butterflies using bipolar and quadripolar seed fields. Proceedings of the International Astronomical Union, 2006, 2, 9.	0.0	0
49	Kelvin-Helmholtz instability in magnetohydrodynamic flows. Proceedings of the International Astronomical Union, 2006, 2, 49.	0.0	0
50	Large Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Proceedings of the International Astronomical Union, 2006, 2, 89.	0.0	0
51	On general transformations and variational principles of three-dimensional incompressible gravitating flows in ideal MHD. Proceedings of the International Astronomical Union, 2006, 2, 136.	0.0	0
52	Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Proceedings of the International Astronomical Union, 2006, 2, 138.	0.0	0
53	On general transformations and variational Principles of an ideal three-dimensional compressible. Proceedings of the International Astronomical Union, 2006, 2, 304.	0.0	0