A H Khater

List of Publications by Year
in descending order

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	Solitary and freak waves in a dusty plasma with negative ions. Physics of Plasmas, 2011, 18, .	1.9	33
2	Two-dimensional force-free magnetic fields described by some nonlinear equations. Physics of Plasmas, 2010, 17, 122902.	1.9	10
3	Exact solutions for axisymmetric nonlinear magnetohydrodynamic equilibria of aligned magnetic field and plasma flow with applications to astrophysics and plasma confinement devices. Physics of Plasmas, 2009, 16, .	1.9	9
4	Exact equilibria for nonlinear cylindrical ideal magnetohydrodynamic plasma with steady incompressible flow and arbitrary cross sectional shape. Physics of Plasmas, 2009, 16, 122506.	1.9	9
5	Solving integral equations with logarithmic kernels by Chebyshev polynomials. Numerical Algorithms, 2008, 47, 81-93.	1.9	4
6	Applications of elliptic functions to ion-acoustic plasma waves. European Physical Journal D, 2008, 50, 177-184.	1.3	11
7	Legendre solutions of integral equations with logarithmic kernels. International Journal of Computer Mathematics, 2008, 85, 53-63.	1.8	3
8	Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Physics of Plasmas, 2008, 15, 122903.	1.9	4
9	Numerical solutions of some nonlinear evolution equations by Chebyshev spectral collocation methods. International Journal of Computer Mathematics, 2007, 84, 305-316.	1.8	13
10	Numerical solutions of integral and integro-differential equations using Legendre polynomials. Numerical Algorithms, 2007, 46, 195-218.	1.9	20
11	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
12	Exact solutions for two-dimensional nonlinear force-free magnetic fields. Proceedings of the International Astronomical Union, 2006, 2, 108.	0.0	2
13	Kelvin-Helmholtz instability in magnetohydrodynamic flows. Proceedings of the International Astronomical Union, 2006, 2, 49.	0.0	0
14	Large Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Proceedings of the International Astronomical Union, 2006, 2, 89.	0.0	0
15	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
16	Nonlinear periodic solutions for isothermal magnetostatic atmospheres. Proceedings of the International Astronomical Union, 2006, 2, 138.	0.0	0
17	On general transformations and variational Principles of an ideal three-dimensional compressible. Proceedings of the International Astronomical Union, 2006, 2, 304.	0.0	0
18	Exact solutions to the Grad-Shafranov equation for magnetically confined plasmas. Proceedings of the International Astronomical Union, 2006, 2, 307.	0.0	1

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19	Kelvin-Helmholtz instability in MHD flows. Proceedings of the International Astronomical Union, 2006, 2, 313.	0.0	1
20	Potential symmetry and invariant solutions of Fokker-Planck equation in cylindrical coordinates related to magnetic field diffusion in magnetohydrodynamics including the Hall current. European Physical Journal B, 2006, 50, 17-21.	1.5	4
21	Variational method for the nonlinear dynamics of an elliptic magnetic stagnation line. European Physical Journal D, 2006, 39, 237-245.	1.3	120
22	Conservation Laws and Exact Solutions for some Nonlinear Partial Differential Equations. International Journal of Theoretical Physics, 2006, 45, 589-616.	1.2	2
23	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
24	Jacobi Elliptic Function Solutions of Three Coupled Nonlinear Physical Equations. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2005, 60, 237-244.	1.5	5
25	Linear and nonlinear stability analysis for two-dimensional ideal magnetohydrodynamics with incompressible flows. Physics of Plasmas, 2005, 12, 012316.	1.9	9
26	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
27	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
28	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
29	Exact solutions for axisymmetric ideal magnetized plasma steady state with incompressible poloidal flow. Physics of Plasmas, 2004, 11, 3015-3022.	1.9	9
30	Self-Dual Solutions for SU(2) and SU(3) Gauge Fields on Euclidean Space. International Journal of Theoretical Physics, 2004, 43, 151-159.	1.2	9
31	On the Similarity Solutions of the Inhomogeneous Nonlinear Diffusion Equation via Symmetry Method. Journal of the Physical Society of Japan, 2004, 73, 42-48.	1.6	4
32	Nonlinear Dispersive Instabilities in Kelvin–Helmholtz Magnetohydrodynamic Flows. Physica Scripta, 2003, 67, 340-349.	2.5	85
33	Variational principles and Lyapunov stability analysis for compressible cylindrical plasma flows with arbitrary cross-section. Plasma Physics and Controlled Fusion, 2003, 45, 265-274.	2.1	8
34	Nonlinear stability of axisymmetric ideal magnetohydrodynamic flows. Journal of Plasma Physics, 2003, 69, 339-362.	2.1	4
35	On the Similarity Solutions of the Calogero–Degasperis–Fokas Modified KdV Equation via Symmetry Method. Journal of the Physical Society of Japan, 2003, 72, 2523-2529.	1.6	9
36	Exact Solutions for Self-Dual SU(2) and SU(3) Yang–Mills Fields. International Journal of Theoretical Physics, 2002, 41, 409-419.	1.2	6

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37	Nonlinear Dispersive Rayleighâ€"Taylor Instabilities in Magnetohydrodynamic Flows. Physica Scripta, 2001, 64, 533-547.	2.5	87
38	Rational reflection coefficients in inverse scattering for a Dirac system. Inverse Problems, 1999, 15, 241-251.	2.0	2
39	BÃ¤klund 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
40	PainlevÃ© Analysis and Nonlinear Periodic Solutions for Isothermal Magnetostatic Atmospheres. Solar Physics, 1998, 178, 285-315.	2.5	7
41	BÃ¤klund 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
42	BÃ¤klund transformations and PainlevÃ© analysis: Exact soliton solutions for the unstable nonlinear SchrÃ¶dinger equation modeling electron beam plasma. Physics of Plasmas, 1998, 5, 395-400.	1.9	24
43	BÃ¤klund Transformations and Exact Solutions for AlfvÃ©n Solitons in a Relativistic Electronâ€"Positron Plasma. Physica Scripta, 1998, 58, 545-548.	2.5	76
44	BÃ¤klund transformations and PainlevÃ© analysis: Exact solutions for the nonlinear isothermal magnetostatic atmospheres. Physics of Plasmas, 1997, 4, 2853-2863.	1.9	15
45	BÃ¤klund transformations and PainlevÃ© analysis: Exact soliton solutions for strongly rarefied relativistic cold plasma. Physics of Plasmas, 1997, 4, 3910-3922.	1.9	8
46	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
47	The PainlevÃ© 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
48	Rotating ideal magnetohydrodynamic flow in General relativity. Astrophysics and Space Science, 1989, 152, 215-222.	1.4	2
49	Analytical solutions for some nonlinear two-dimensional magnetostatic equilibria. Astrophysics and Space Science, 1989, 162, 151-157.	1.4	9
50	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
51	Two-dimensional magnetohydrodynamic equilibria. Astrophysics and Space Science, 1988, 149, 217-223.	1.4	10
52	A class of semi-analytical solutions for a rotating toroidal plasma. Astrophysics and Space Science, 1988, 145, 277-286.	1.4	3
53	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