Robert Milson

List of Publications by Year
in descending order

55 papers	2,588 citations	257450 24 h-index	189892 50 g-index
56 all docs	56 docs citations	56 times ranked	706 citing authors

#	Article	IF	Citations
1	Complete classification of rational solutions of A2-PainlevÃ© systems. Advances in Mathematics, 2021, 385, 107770.	1.1	2
2	Ladder Operators and Rational Extensions. , 2021, , 121-130.		1
3	Spectral Theory of Exceptional Hermite Polynomials. Operator Theory: Advances and Applications, 2021, , 173-196.	0.2	2
4	Corrigendum on the proof of completeness for exceptional Hermite polynomials. Journal of Approximation Theory, 2020, 253, 105350.	0.8	4
5	The Adelic Grassmannian and Exceptional Hermite Polynomials. Mathematical Physics Analysis and Geometry, 2020, 23, 1.	1.0	3
6	Cyclic Maya diagrams and rational solutions of higher order PainlevÃ© systems. Studies in Applied Mathematics, 2020, 144, 357-385.	2.4	13
7	Exceptional Orthogonal Polynomials and Rational Solutions to PainlevÃ© Equations. Tutorials, Schools, and Workshops in the Mathematical Sciences, 2020, , 335-386.	0.3	3
8	A Bochner type characterization theorem for exceptional orthogonal polynomials. Journal of Mathematical Analysis and Applications, 2019, 472, 584-626.	1.0	37
9	Shape invariance and equivalence relations for pseudo-Wronskians of Laguerre and Jacobi polynomials. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 345201.	2.1	12
10	Durfee Rectangles and Pseudoâ€Wronskian Equivalences for Hermite Polynomials. Studies in Applied Mathematics, 2018, 141, 596-625.	2.4	18
11	Recurrence relations for exceptional Hermite polynomials. Journal of Approximation Theory, 2016, 204, 1-16.	0.8	39
12	The spectral analysis of three families of exceptional Laguerre polynomials. Journal of Approximation Theory, 2016, 202, 5-41.	0.8	18
13	Zeros of exceptional Hermite polynomials. Journal of Approximation Theory, 2015, 200, 28-39.	0.8	31
14	Point equivalence of second-order ODEs: Maximal invariant classification order. Journal of Symbolic Computation, 2015, 67, 16-41.	0.8	5
15	Rational extensions of the quantum harmonic oscillator and exceptional Hermite polynomials. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 015203.	2.1	119
16	Extended Krein-Adler theorem for the translationally shape invariant potentials. Journal of Mathematical Physics, 2014, 55, .	1.1	33
17	A Conjecture on Exceptional Orthogonal Polynomials. Foundations of Computational Mathematics, 2013, 13, 615-666.	2.5	42
18	Asymptotic and interlacing properties of zeros of exceptional Jacobi and Laguerre polynomials. Journal of Mathematical Analysis and Applications, 2013, 399, 480-495.	1.0	47

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19	Invariant classification of vacuum pp-waves. Journal of Mathematical Physics, 2013, 54, 022502.	1.1	3
20	Three-dimensional spacetimes of maximal order. Classical and Quantum Gravity, 2013, 30, 095004.	4.0	11
21	Vacuum Kundt waves. Classical and Quantum Gravity, 2013, 30, 055010.	4.0	8
22	Vacuum plane waves: Cartan invariants and physical interpretation. Classical and Quantum Gravity, 2012, 29, 235023.	4.0	5
23	Two-step Darboux transformations and exceptional Laguerre polynomials. Journal of Mathematical Analysis and Applications, 2012, 387, 410-418.	1.0	95
24	Exceptional orthogonal polynomials and the Darboux transformation. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 434016.	2.1	103
25	An extension of Bochnerâ€™s problem: Exceptional invariant subspaces. Journal of Approximation Theory, 2010, 162, 987-1006.	0.8	160
26	THE CURVATURE HOMOGENEITY BOUND FOR LORENTZIAN FOUR-MANIFOLDS. International Journal of Geometric Methods in Modern Physics, 2009, 06, 99-127.	2.0	13
27	An extended class of orthogonal polynomials defined by a Sturmâ€“Liouville problem. Journal of Mathematical Analysis and Applications, 2009, 359, 352-367.	1.0	243
28	On Projective Equivalence of Univariate Polynomial Subspaces. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2009, , .	0.5	1
29	The type N Karlhede bound is sharp. Classical and Quantum Gravity, 2008, 25, 012001.	4.0	13
30	Bianchi identities in higher dimensions. Classical and Quantum Gravity, 2007, 24, 1691-1691.	4.0	30
31	Quasi-exact solvability in a general polynomial setting. Inverse Problems, 2007, 23, 1915-1942.	2.0	14
32	Structure theorems for linear and non-linear differential operators admitting invariant polynomial subspaces. Discrete and Continuous Dynamical Systems, 2007, 18, 85-106.	0.9	9
33	Quasi-exact solvability beyond the sl(2) algebraization. Physics of Atomic Nuclei, 2007, 70, 520-528.	0.4	13
34	ALIGNMENT AND ALGEBRAICALLY SPECIAL TENSORS IN LORENTZIAN GEOMETRY. International Journal of Geometric Methods in Modern Physics, 2005, 02, 41-61.	2.0	97
35	VSIi spaceâ€“times and the Ïµ-property. Journal of Mathematical Physics, 2005, 46, 063501.	1.1	9
36	Quasi-exact solvability and the direct approach to invariant subspaces. Journal of Physics A, 2005, 38, 2005-2019.	1.6	26

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37	The Darboux transformation and algebraic deformations of shape-invariant potentials. Journal of Physics A, 2004, 37, 1789-1804.	1.6	44
38	Supersymmetry and algebraic Darboux transformations. Journal of Physics A, 2004, 37, 10065-10078.	1.6	42
39	Reply to comment on ÂThe Darboux transformation and algebraic deformations of shape-invariant potentialsÂ. Journal of Physics A, 2004, 37, 8405-8406.	1.6	0
40	Classification of the Weyl tensor in higher dimensions. Classical and Quantum Gravity, 2004, 21, L35-L41.	4.0	203
41	Bianchi identities in higher dimensions. Classical and Quantum Gravity, 2004, 21, 2873-2897.	4.0	80
42	Killing tensors as irreducible representations of the general linear group. Comptes Rendus Mathematique, 2004, 339, 621-624.	0.3	24
43	Vanishing scalar invariant spacetimes in higher dimensions. Classical and Quantum Gravity, 2004, 21, 5519-5542.	4.0	104
44	Reflection quotients in Riemannian geometry. A geometric converse to Chevalleyâ€™s theorem. Proceedings of the American Mathematical Society, 2004, 132, 2825-2831.	0.8	0
45	Gravitational waves from axisymmetrically oscillating neutron stars in general relativistic simulations. Physical Review D, 2003, 68, .	4.7	44
46	All spacetimes with vanishing curvature invariants. Classical and Quantum Gravity, 2002, 19, 6213-6236.	4.0	104
47	Spectral Residues of Secondâ€order Differential Equations: A New Method for Summation Identities and Inversion Formulas. Studies in Applied Mathematics, 2001, 107, 337-366.	2.4	1
48	Invariant Modules and the Reduction of Nonlinear Partial Differential Equations to Dynamical Systems. Advances in Mathematics, 2000, 156, 286-319.	1.1	37
49	Algebraic exact solvability of trigonometric-type Hamiltonians associated to root systems. Journal of Mathematical Physics, 1999, 40, 5004-5013.	1.1	0
50	Liouville Transformation and Exactly Solvable Schrodinger Equations. International Journal of Theoretical Physics, 1998, 37, 1735-1752.	1.2	33
51	Imprimitively Generated Lie-Algebraic Hamiltonians and Separation of Variables. Canadian Journal of Mathematics, 1998, 50, 1298-1322.	0.6	2
52	On the construction of quasiâ€exactly solvable SchrÃ¶dinger operators on homogeneous spaces. Journal of Mathematical Physics, 1995, 36, 6004-6027.	1.1	6
53	Representations of Finite-Dimensional Lie Algebras by First-Order Differential Operators. Some Local Results in the Transitive Case. Journal of the London Mathematical Society, 1995, 52, 285-302.	1.0	3
54	Human memory: An adaptive perspective.. Psychological Review, 1989, 96, 703-719.	3.8	526

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55	Exceptional Gegenbauer polynomials via isospectral deformation. Studies in Applied Mathematics, 0, , .	2.4	2