Richard Kerner

List of Publications by Year
in descending order

73 papers	1,429 citations	516710 16 h-index	330143 37 g-index
75 all docs	75 docs citations	75 times ranked	409 citing authors

#	ARTICLE	IF	CITATIONS
1	Covariant spacetime formalism for applications to thermo-hyperelasticity. Acta Mechanica, 2022, 233, 2309-2334.	2.1	2
2	Space-Time Thermo-Mechanics for a Material Continuum. Lecture Notes in Computer Science, 2021, , 219-226.	1.3	0
3	Internal quark symmetries and colour SU(3) entangled with Z3-graded Lorentz algebra. Nuclear Physics B, 2021, 972, 115529.	2.5	5
4	Algebras with Ternary Composition Law Combining $\mathrm{Z_2}$ and $\mathrm{Z_3}$ Gradings. Springer Proceedings in Mathematics and Statistics, 2020, , 13-45.	0.2	4
5	The Quantum Nature of Lorentz Invariance. Universe, 2019, 5, 1.	2.5	13
6	Z3-graded colour Dirac equations for quarks, confinement and generalized Lorentz symmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 233-237.	4.1	7
7	Towards a Z 3-graded approach to quarks' symmetries. Journal of Physics: Conference Series, 2019, 1416, 012016.	0.4	1
8	Ternary Z2 and Z3 Graded Algebras and Generalized Color Dynamics. STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health, 2018, , 311-357.	0.0	2
9	Ternary generalization of Pauli's principle and the Z 6-graded algebras. Physics of Atomic Nuclei, 2017, 80, 529-541.	0.4	8
10	Hamilton–Jacobi approach to cosmology with nonlinear sigma model. International Journal of Geometric Methods in Modern Physics, 2016, 13, 1640004.	2.0	0
11	Incremental constitutive models for elastoplastic materials undergoing finite deformations by using a four-dimensional formalism. International Journal of Engineering Science, 2016, 106, 199-219.	5.0	5
12	Viscoelasticity behavior for finite deformations, using a consistent hypoelastic model based on Rivlin materials. Continuum Mechanics and Thermodynamics, 2016, 28, 1741-1758.	2.2	6
13	Ternary generalization of Heisenberg's algebra. Journal of Physics: Conference Series, 2015, 624, 012021.	0.4	0
14	Ternary Z_3-graded generalization of Heisenberg's algebra. Journal of Physics: Conference Series, 2015, 597, 012049.	0.4	1
15	Discrete Groups and Internal Symmetries of Icosahedral Viral Capsids. Computational and Mathematical Biophysics, 2014, 2, .	1.1	0
16	Invariance and Symmetries of Cubic and Ternary Algebras. Springer Proceedings in Mathematics and Statistics, 2014, , 617-637.	0.2	1
17	A Z3 generalization of Pauli's principle, quark algebra and the Lorentz invariance. , 2012, , .		1
18	INTERNAL SYMMETRY GROUPS OF CUBIC ALGEBRAS. International Journal of Geometric Methods in Modern Physics, 2012, 09, 1261007.	2.0	16

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19	Spacetime Symmetries and Z_3-graded Quark Algebra. Journal of Physics: Conference Series, 2012, 343, 012056.	0.4	3
20	APPROXIMATE GRAVITATIONAL WAVES VIA DEFORMATIONS OF EMBEDDINGS. International Journal of Modern Physics A, 2009, 24, 1465-1472.	1.5	1
21	Gravitational waves as deformations of embedded Einstein spaces. Classical and Quantum Gravity, 2009, 26, 235007.	4.0	0
22	Classification and Evolutionary Trends of Icosahedral Viral Capsids. Computational and Mathematical Methods in Medicine, 2008, 9, 175-181.	1.3	8
23	TERNARY AND NON-ASSOCIATIVE STRUCTURES. International Journal of Geometric Methods in Modern Physics, 2008, 05, 1265-1294.	2.0	18
24	Compositional trends in glass transition temperatures in inorganic network glasses. Journal of Non-Crystalline Solids, 2007, 353, 1221-1225.	3.1	1
25	Born-Infeld inspired bosonic action in a noncommutative geometry. Physical Review D, 2004, 70, .	4.7	4
26	A model of immiscibility in $(SiO2)1 − x(Na2O)x$glass based on spinodal decomposition. Philosophical Magazine, 2004, 84, 565-578.	1.6	2
27	Hypersymmetry. , 2004, , 197-197.		0
28	Non-Abelian generalization of Born-Infeld theory inspired by noncommutative geometry. Physical Review D, 2003, 68, .	4.7	13
29	STOCHASTIC DESCRIPTION OF AGGLOMERATION AND GROWTH PROCESSES IN GLASSES. International Journal of Modern Physics B, 2002, 16, 1987-1994.	2.0	1
30	The Dalton-Maxwell-Pauling Recipe for Window Glass. , 2002, , 171-187.		0
31	Stochastic Matrix and Self-Organization in Glasses. , 2001, , 177-187.		2
32	Stochastic matrix description of the glass transition. Journal of Physics Condensed Matter, 2000, 12, 1641-1648.	1.8	23
33	Classical Glueballs in Non-Abelian Born-Infeld Theory. Physical Review Letters, 2000, 84, 5955-5958.	7.8	42
34	Non-commutative Extensions of Classical Theories in Physics. , 2000, , 130-157.		0
35	On certain realizations of the q-deformed exterior differential calculus. Reports on Mathematical Physics, 1999, 43, 179-194.	0.8	17
36	Convariant q-Differential Calculus and its Deformations at qN = 1. Letters in Mathematical Physics, 1998, 45, 161-176.	1.1	11

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37	Stochastic matrix description of glass transition in ternary chalcogenide systems. Journal of Non-Crystalline Solids, 1998, 231, 111-119.	3.1	26
38	Shadow of noncommutativity. Journal of Mathematical Physics, 1998, 39, 730-738.	1.1	15
39	The Principle of Self-Similarity and Its Applications to the Description of Noncrystalline Matter. , 1998, , 323-337.		3
40	The cubic chessboard. Classical and Quantum Gravity, 1997, 14, A203-A225.	4.0	96
41	The structure of lithium silicon sulphide glass systems. Journal of Physics Condensed Matter, 1997, 9, 2551-2562.	1.8	6
42	Hypersymmetry: A Z3-graded generalization of supersymmetry. Journal of Mathematical Physics, 1997, 38, 1650-1669.	1.1	109
43	On the glass transition temperature in covalent glasses. Journal of Non-Crystalline Solids, 1997, 210, 298-305.	3.1	63
44	Universal ZN-graded differential calculus. Journal of Geometry and Physics, 1997, 23, 235-246.	1.4	7
45	A model of glass transition in binary and ternary glasses. Journal of Molecular Liquids, 1997, 71, 175-186.	4.9	4
46	Z 3-Graded exterior differential calculus and gauge theories of higher order. Letters in Mathematical Physics, 1996, 36, 441-454.	1.1	30
47	Two simple rules for covalent binary glasses. Physica B: Condensed Matter, 1995, 215, 267-272.	2.7	25
48	Structural properties of alkaliâ€"borate glasses derived from a theoretical model. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 72, 535-550.	0.6	11
49	Model of rings in the amorphous SiO2. Journal of Non-Crystalline Solids, 1995, 182, 9-21.	3.1	16
50	Nucleation and growth of fullerenes. Computational Materials Science, 1994, 2, 500-508.	3.0	10
51	A theoretical model of formation of covalent binary glasses. I. General setting. Journal of Non-Crystalline Solids, 1994, 176, 271-279.	3.1	24
52	A theoretical model of formation of covalent binary glasses. II. Structure of B2S3-nLi2S systems. Journal of Non-Crystalline Solids, 1994, 176, 280-287.	3.1	4
53	Dynamique de la croissance de rÃ©seaux bi-dimensionnels. Journal De Physique, I, 1994, 4, 1491-1511.	1.2	2
54	Graded non-commutative geometries. Journal of Geometry and Physics, 1993, 11, 325-335.	1.4	3

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55	Z3-Grading and Ternary Algebraic Structures. , 1993, , 373-387.		5
56	Z3 â€graded algebras and the cubic root of the supersymmetry translations. Journal of Mathematical Physics, 1992, 33, 403-411.	1.1	100
57	Noncommutative differential geometry of matrix algebras. Journal of Mathematical Physics, 1990, 31, 316-322.	1.1	199
58	Noncommutative differential geometry and new models of gauge theory. Journal of Mathematical Physics, 1990, 31, 323-330.	1.1	146
59	Nucleation and amorphous and crystalline growth: A dynamical model in two dimensions. Physical Review B, 1988, 37, 3881-3893.	3.2	25
60	Cosmology and Kaluza-Klein theories. , 1987, , 150-174.		1
61	Topological Origin of the Surface Singularities in Glasses. Materials Research Society Symposia Proceedings, 1985, 61, 39.	0.1	0
62	Geometrical approach to the glass transition problem. Journal of Non-Crystalline Solids, 1985, 71, 19-27.	3.1	5
63	Graded gauge theory. Communications in Mathematical Physics, 1983, 91, 213-234.	2.2	15
64	Remarks on the curved-space description of amorphous solids. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1983, 47, 151-162.	0.6	11
65	Multiple fiber bundles and gauge theories of higher order. Journal of Mathematical Physics, 1983, 24, 356-360.	1.1	11
66	Graded gauge theories over supersymmetric space. Journal of Mathematical Physics, 1983, 24, 361-368.	1.1	5
67	Phenomenological Lagrangian for the amorphous solid state. Physical Review B, 1983, 28, 5756-5761.	3.2	11
68	Cosmology without singularity and nonlinear gravitational Lagrangians. General Relativity and Gravitation, 1982, 14, 453-469.	2.0	204
69	Magnetic monopole in the massless limit. Physical Review D, 1981, 24, 2336-2337.	4.7	0
70	Covariant objects and invariant equations on fiber bundles. Journal of Mathematical Physics, 1980, 21, 2553.	1.1	7
71	Energy levels of the magnetic monopole in the Prasad-Sommerfield limit. Physical Review D, 1979, 19, 1243-1247.	4.7	5
72	Deformations of the embedded Einstein spaces. General Relativity and Gravitation, 1978, 9, 257-270.	2.0	5

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73	On the unicity of the 't Hooft's magnetic monopole. Letters in Mathematical Physics, 1977, 2, 49-53.	1.1	2