CzesÅ‚aw Rudowicz

List of Publications by Year
in descending order

204	5,277	101543 36	114465 63
papers	citations	h-index	g-index

210	210	210	1446
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transformation relations for the conventional Okqand normalised O'kqStevens operator equivalents with k=1 to 6 and -kâ©½qâ©½k. Journal of Physics C: Solid State Physics, 1985, 18, 1415-1430.	1.5	298
2	SPIN-HAMILTONIAN FORMALISMS IN ELECTRON MAGNETIC RESONANCE (EMR) AND RELATED SPECTROSCOPIES. Applied Spectroscopy Reviews, 2001, 36, 11-63.	6.7	224
3	On standardization of the spin Hamiltonian and the ligand field Hamiltonian for orthorhombic symmetry. Journal of Chemical Physics, 1985, 83, 5192-5197.	3.0	188
4	Gyromagnetic factors and zero-field splitting oft23terms ofCr3+clusters with trigonal symmetry:Al2O3,CsMgCl3, andCsMgBr3. Physical Review B, 1992, 46, 8974-8977.	3.2	188
5	Crystal field and microscopic spin Hamiltonians approach including spinâ€“spin and spinâ€“other-orbit interactions for d2 and d8 ions at low symmetry C3 symmetry sites: V3+ in Al2O3. Journal of Physics and Chemistry of Solids, 2003, 64, 1419-1428.	4.0	166
6	The generalization of the extended Stevens operators to higher ranks and spins, and a systematic review of the tables of the tensor operators and their matrix elements. Journal of Physics Condensed Matter, 2004, 16, 5825-5847.	1.8	137
7	Microscopic study of Cr2+ ion in the quasi-2D mixed system Rb2MnxCr1â^'xCl4. Journal of Magnetism and Magnetic Materials, 1992, 111, 153-163.	2.3	135
8	Ligand field analysis of the 3dN ions at orthorhombic or higher symmetry sites. Computers & Chemistry, 1992, 16, 207-216.	1.2	130
9	On standardization and algebraic symmetry of the ligand field Hamiltonian for rare earth ions at monoclinic symmetry sites. Journal of Chemical Physics, 1986, 84, 5045-5058.	3.0	129
10	On the derivation of the superposition-model formulae using the transformation relations for the Stevens operators. Journal of Physics C: Solid State Physics, 1987, 20, 6033-6037.	1.5	122
11	Can the low symmetry crystal (ligand) field parameters be considered compatible and reliable?. Journal of Luminescence, 2004, 110, 39-64.	3.1	102
12	The effect of disorder in the local lattice distortions on the EPR and optical spectroscopy parameters for a new Cr3+ defect center in Cr3+:Mg2+:LiNbO3. Physica B: Condensed Matter, 2002, 318, 188-197.	2.7	101
13	Disentangling intricate web of interrelated notions at the interface between the physical (crystal) Tj ETQq1 1 0.784314 rgBT /Overloc 28-63.	18.8	93
14	Microscopic spin Hamiltonian approaches for 3d8 and 3d2 ions in a trigonal crystal field - perturbation theory methods versus complete diagonalization methods. Journal of Physics Condensed Matter, 2002, 14, 5619-5636.	1.8	86
15	Can the electron magnetic resonance (EMR) techniques measure the crystal (ligand) field parameters?. Physica B: Condensed Matter, 2001, 300, 1-26.	2.7	75
16	Microscopic spin-Hamiltonian parameters and crystal field energy levels for the low C3 symmetry Ni2+ centre in LiNbO3 crystals. Physica B: Condensed Matter, 2004, 348, 151-159.	2.7	71
17	Algebraic symmetry and determination of the â€œImaginaryâ€•crystal-field parameters from optical spectra of fn-ions. Tetragonal symmetry. Chemical Physics, 1985, 97, 43-50.	1.9	66
18	Noetherâ€™s theorem and conserved quantities for the crystal- and ligand-field Hamiltonians invariant under continuous rotational symmetry. Physical Review B, 2003, 67, .	3.2	63

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19	Intrinsically incompatible crystal (ligand) field parameter sets for transition ions at orthorhombic and lower symmetry sites in crystals and their implications. Physica B: Condensed Matter, 2010, 405, 113-132.	2.7	63
20	On the standardization of crystal-field parameters and the multiple correlated fitting technique: Applications to rare-earth compounds. Physica B: Condensed Matter, 2000, 291, 327-338.	2.7	60
21	Theoretical investigations of the microscopic spin Hamiltonian parameters including the spinâ€“spin and spinâ€“other-orbit interactions for Ni2+(3d8) ions in trigonal crystal fields. Journal of Physics Condensed Matter, 2004, 16, 3481-3494.	1.8	60
22	Superposition model analysis of the zero-field splitting parameters of Fe3+ doped in TlInS2 crystal â€“ Low symmetry aspects. Optical Materials, 2010, 32, 1161-1169.	3.6	59
23	Modeling zero-field splitting parameters for dopant Mn2+ and Fe3+ ions in anatase TiO2 crystal using superposition model analysis. Chemical Physics Letters, 2012, 524, 49-55.	2.6	55
24	Effect of Monoclinic Symmetry on the EPR Spectra of Gd³⁺â€Doped Hydrated Single Crystals of Rareâ€Earth Trichlorides. Physica Status Solidi (B): Basic Research, 1988, 147, 677-684.	1.5	51
25	Transformation relations for the conventional Okq and normalised O'kq Stevens operator equivalents with k = 1 to 6 and -k leq q leq k. Journal of Physics C: Solid State Physics, 1985, 18, 3837-3837.	1.5	50
26	Ground and excited state absorption of Ni2+ ions in MgAl2O4: Crystal field analysis. Journal of Alloys and Compounds, 2007, 432, 61-68.	5.5	48
27	On the relations between the zero-field splitting parameters in the extended Stevens operator notation and the conventional ones used in EMR for orthorhombic and lower symmetry. Journal of Physics Condensed Matter, 2000, 12, L417-L423.	1.8	47
28	Comprehensive approach to the zero-field splitting ofS6-state ions:Mn2+andFe3+in fluoroperovskites. Physical Review B, 1992, 45, 9736-9748.	3.2	43
29	Superposition model and crystal-field analysis of the4A2anda2E states of Cr3+ions at C3sites in LiNbO3. Journal of Physics Condensed Matter, 1993, 5, 6221-6230.	1.8	43
30	The extended version of the computer package CST for conversions, standardization and transformations of the spin Hamiltonian and the crystal-field Hamiltonian. Computers & Chemistry, 2002, 26, 149-157.	1.2	43
31	Crystal field analysis of the energy level structure of Cs2NaAlF6:Cr3+. Journal of Physics Condensed Matter, 2006, 18, 5221-5234.	1.8	42
32	Orthorhombic standardization of spin-Hamiltonian parameters for transition-metal centres in various crystals. Journal of Physics Condensed Matter, 1999, 11, 273-287.	1.8	41
33	Alternative zero-field splitting (ZFS) parameter sets and standardization for Mn2+ ions in various hosts exhibiting orthorhombic site symmetry. Journal of Physics and Chemistry of Solids, 2009, 70, 827-833.	4.0	41
34	Crystal field analysis for 3d4 and 3d6 ions with an orbital singlet ground state at orthorhombic and tetragonal symmetry sites. Journal of Physics and Chemistry of Solids, 1992, 53, 1227-1236.	4.0	40
35	Crystal field analysis of the 3dN ions at low symmetry sites including the â€˜â€˜imaginaryâ€™â€™ terms. Computers in Physics, 1994, 8, 583.	0.5	39
36	Diagonalization of second-rank crystal field terms for 3dN and 4fN ions at triclinic or monoclinic symmetry sites â€“ case study: Cr4+ in Li2MgSiO4 and Nd3+ in Î²-BaB2O4. Optical Materials, 2008, 31, 391-400.	3.6	39

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37	Experimental and Theoretical Investigation of Spinâ€Hamiltonian Parameters for the Low Symmetry Fe³⁺ Centre in LiNbO₃. Physica Status Solidi (B): Basic Research, 1994, 185, 409-415.	1.5	37
38	Monoclinic Spin Hamiltonian Analysis of EPR Spectra of Mn²⁺ in BiVO₄ Single Crystals. Physica Status Solidi (B): Basic Research, 1996, 198, 839-851.	1.5	37
39	Modeling local distortions around ions doped into crystal using superposition model analysis of the zero-field splitting parameters. Solid State Communications, 2010, 150, 1077-1081.	1.9	37
40	Energy levels and crystal-field parameters for Pr3+ and Nd3+ ions in rare earth (RE) tellurium oxides RE2Te4O11 revisited â€“ Ascent/descent in symmetry method applied for triclinic site symmetry. Optical Materials, 2011, 33, 1147-1161.	3.6	37
41	Cr3+ centres in LiNbO3: Experimental and theoretical investigation of spin hamiltonian parameters. Solid State Communications, 1993, 87, 245-249.	1.9	36
42	Crystal Field Energy Levels and State Vectors for the 3dN Ions at Orthorhombic or Higher Symmetry Sites. Journal of Computational Physics, 1993, 109, 150-152.	3.8	35
43	Reanalysis of energy levels and crystal field parameters for Er3+ and Tm3+ ions at C2 symmetry sites in hexahydrated trichloride crystalsâ€"Intricate aspects of multiple solutions for monoclinic symmetry. Physica B: Condensed Matter, 2010, 405, 1927-1940.	2.7	34
44	Modeling techniques for analysis and interpretation of electron magnetic resonance (EMR) data for transition ions at low symmetry sites in crystalsâ€"A primer for experimentalists. Physica B: Condensed Matter, 2009, 404, 3582-3593.	2.7	33
45	Forms of crystal field Hamiltonians â€“ A critical review. Optical Materials, 2011, 33, 1557-1561.	3.6	32
46	Correlations between orthorhombic crystal field parameters for rare-earth (fn) and transition-metal (dn) ions in crystals: REBa2Cu3O7-x, RE2F14B, RE-garnets, RE:LaF3and MnF2. Molecular Physics, 1991, 74, 1159-1170.	1.7	31
47	Physics behind the magnetic hysteresis loopâ€"a survey of misconceptions in magnetism literature. Journal of Magnetism and Magnetic Materials, 2003, 260, 250-260.	2.3	30
48	Modeling local structure using crystal field and spin Hamiltonian parameters: the tetragonal FeK3+â€“OI2âˆ’defect center in KTaO3crystal. Journal of Physics Condensed Matter, 2009, 21, 455402.	1.8	30
49	EPR Study of Low Symmetry Mn²⁺ Centers in LiNbO₃. Superposition Model and Crystal Field Analysis of the Zeroâ€Field Splitting Parameters. Physica Status Solidi (B): Basic Research, 1994, 185, 417-428.	1.5	28
50	Crystal-field analysis for RE3+ ions in laser materials: III. Energy levels for Nd3+ and Er3+ ions in LaAlO3, YAlO3, and LaGaO3 single crystals â€“ Combined approach to low symmetry crystal field parameters. Chemical Physics, 2012, 400, 29-38.	1.9	28
51	New field-induced single ion magnets based on prolate Er(<scp>iii</scp>) and Yb(<scp>iii</scp>) ions: tuning the energy barrier<i>U</i>_{eff}by the choice of counterions within an N₃-tridentate Schiff-base scaffold. Inorganic Chemistry Frontiers, 2018, 5, 605-618.	6.0	27
52	Algebraic symmetry and determination of the â€œimaginaryâ€•crystal field parameters from optical spectra of fn-ions. Hexagonal and trigonal symmetry. Chemical Physics, 1986, 102, 437-443.	1.9	26
53	Reanalysis of crystal-field parameters forNd3+ions inNd2BaCuO5andNd2BaZnO5based on standardization, multiple correlated fitting technique, and dataset closeness. Physical Review B, 2007, 76, .	3.2	26
54	A lidar study of the atmospheric entrainment zone and mixed layer over Hong Kong. Atmospheric Research, 2004, 69, 147-163.	4.1	25

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55	Clarification of the confusion concerning the crystal-field quantities vs the zero-field splitting quantities in magnetism studies: Part IIâ€"Survey of literature dealing with model studies of spin systems. Physica B: Condensed Matter, 2008, 403, 2312-2330.	2.7	25
56	Terminological confusions and problems at the interface between the crystal field Hamiltonians and the zero-field splitting Hamiltoniansâ€"Survey of the CF=ZFS confusion in recent literature. Physica B: Condensed Matter, 2014, 451, 134-150.	2.7	25
57	Analysis of the net charge-compensation contribution in the fine structure of EPR defect centers:Cr3+,Fe3+, andGd3+inA2MX4-,AMX3-, andMX2-type crystals. Physical Review B, 1988, 37, 27-34.	3.2	24
58	Spin Hamiltonian and structural disorder analysis for two high temperature Cr3+ defect centers in Î±-LiIO3 crystalsâ€"low symmetry effects. Journal of Physics and Chemistry of Solids, 2003, 64, 887-896.	4.0	24
59	Clarification of the confusion concerning the crystal-field quantities vs. the zero-field splitting quantities in magnetism studies: Part Iâ€"Survey of literature dealing with specific compounds. Physica B: Condensed Matter, 2008, 403, 1882-1897.	2.7	24
60	Analysis of low symmetry aspects revealed by the zero-field splitting parameters and the crystal field parameters for Cr3+ ions doped into yttrium aluminum borate YAl3(BO3)4 crystal. Optical Materials, 2014, 36, 1342-1349.	3.6	24
61	Low symmetry aspects inherent in electron magnetic resonance (EMR) data for transition ions at triclinic and monoclinic symmetry sites: EMR of Fe3+ and Gd3+ in monoclinic zirconia revisited. Physica B: Condensed Matter, 2008, 403, 2349-2366.	2.7	23
62	Crystal-field analysis for RE3+ ions in laser materials: I. Absorption spectra and energy levels calculations for Nd3+ and Pr3+ ions in ABCO4 crystals. Chemical Physics, 2011, 383, 68-82.	1.9	23
63	Crystal field levels and zero-field splitting parameters of Cr2+ in the mixed system Rb2MnxCr1â^'xCl4. Physica B: Condensed Matter, 1993, 191, 323-333.	2.7	22
64	Comparative analysis of the microscopic spin-Hamiltonian expressions used for the non-Kramers Fe2+(3d6) ions with spin S=2 in reduced rubredoxin, desulforedoxin, and related systems. Physica B: Condensed Matter, 2003, 337, 204-220.	2.7	22
65	Alternative crystal field parameters for rare-earth ions obtained from various techniques. Journal of Alloys and Compounds, 2009, 467, 98-105.	5.5	22
66	The calculation of zero-field splitting parameters for Fe3+ ions doped in rutile TiO2 crystal by superposition model analysis. Chemical Physics, 2012, 402, 83-90.	1.9	22
67	Energy levels and crystal field parameters for Nd3+ ions in BaY2F8, LiKYF5, and K2YF5 single crystals. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 87, 46-60.	3.9	22
68	Zeeman and zero-field splitting of 3d4 and 3d6 ions with orbital singlet ground state at orthorhombic and tetragonal symmetry sites. Journal of Physics and Chemistry of Solids, 1994, 55, 745-757.	4.0	20
69	Computer package for microscopic spin Hamiltonian analysis of the 3d4 and 3d6 (spin S = 2) ions at orthorhombic and tetragonal symmetry sites. Computers & Chemistry, 1997, 21, 45-50.	1.2	20
70	Monoclinic and orthorhombic standardization of spin-Hamiltonian parameters for rare-earth centers in various crystals. Physica B: Condensed Matter, 2000, 279, 302-318.	2.7	20
71	Trends in the crystal (ligand) field parameters and the associated conserved quantities for trivalent rare-earth ions at S4 symmetry sites in LiYF4. Journal of Alloys and Compounds, 2004, 385, 238-251.	5.5	20
72	Comparative analysis of crystal-field parameters for rare-earth ions at monoclinic sites in AB(WO4)2crystals: I. Tm3+in KGd(WO4)2and KLu(WO4)2, and Ho3+and Er3+ions in KGd(WO4)2. Journal of Physics Condensed Matter, 2010, 22, 045501.	1.8	20

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73	Revealing the consequences and errors of substance arising from the inverse confusion between the crystal (ligand) field quantities and the zero-field splitting ones. Physica B: Condensed Matter, 2015, 456, 330-338.	2.7	20
74	On the EPR of 3d4 and 3d6 ions at high magnetic fields. Physica B: Condensed Matter, 1989, 155, 336-339.	2.7	19
75	Correlation of spectroscopic properties and substitutional sites of Cr3+ in aluminosilicates: I. Kyanite. Physics and Chemistry of Minerals, 1994, 21, 526.	0.8	19
76	Characteristics of the Magnetically Ordered High-SpinS=2 Fe2+Ion Systems Potentially Suitable for High-Magnetic-Field and High-Frequency EMR Studies. Journal of the Physical Society of Japan, 2003, 72, 61-83.	1.6	19
77	Crystal-field energy level analysis for Nd3+ions at the low symmetry C1site in [Nd(hfa)4(H2O)](N(C2H5)4) single crystals. Journal of Physics Condensed Matter, 2008, 20, 385205.	1.8	19
78	Lowâ€temperature magnetism of some alkali metal uranates(V) and alkaline earth neptunates(IV). Examples for ferrimagnetism in mixed actinide oxides. Journal of Chemical Physics, 1983, 78, 5764-5771.	3.0	18
79	Relations between arbitrary symmetry spin-hamiltonian parameters Bkq and bkq in Various Axis Systems. Journal of Magnetic Resonance, 1985, 63, 95-106.	0.5	18
80	Net charge compensation contribution in the fine structure of EPR defect centres. Application to M3+ â^' VM (cation vacancy) and M3+ â^' X+ (M = Cr, Fe, Gd; X = Li, Na) centres in A2MF4 and A2MCl4. Solid State Communications, 1988, 65, 631-635.	1.9	18
81	Correlation of spectroscopic properties and substitutional sites of Cr3+ in aluminosilicates: II. Andalusite and sillimanite. Physics and Chemistry of Minerals, 1994, 21, 532.	0.8	18
82	On the non-standard rhombic spin Hamiltonian parameters derived from MÃ¶ssbauer spectroscopy and magnetism-related measurements. Journal of Magnetism and Magnetic Materials, 2001, 231, 146-156.	2.3	18
83	Crystal-field analysis for RE3+ ions in laser materials: II. Absorption spectra and energy levels calculations for Nd3+ ions doped into SrLaGa3O7 and BaLaGa3O7 crystals and Tm3+ ions in SrGdGa3O7. Chemical Physics, 2011, 387, 69-78.	1.9	18
84	Model calculation of the spectroscopic properties for Cr 3+ in kyanite. Journal of Luminescence, 1994, 60-61, 108-111.	3.1	16
85	Crystal field parameters for Yb3+ ions at orthorhombic centers in garnetsâ€"Revisited. Journal of Luminescence, 2011, 131, 2690-2696.	3.1	16
86	Correlation of EMR and optical spectroscopy data for Cr3+ and Mn2+ ions doped into yttrium aluminum borate YAl3(BO3)4 crystal â€" Extracting low symmetry aspects. Optical Materials, 2015, 46, 254-259.	3.6	16
87	Spectroscopic and magnetic studies of erbium(III)-TEMPO complex as a potential single-molecule magnet: Interplay of the crystal-field and exchange coupling effects. Chemical Physics Letters, 2016, 662, 163-168.	2.6	16
88	Origin of the Ground Kramers Doublets for Co2+(3d7) Ions with the Effective Spin 3/2 Versus the Fictitious â€˜Spinâ€™ Â½. Applied Magnetic Resonance, 2019, 50, 797-808.	1.2	16
89	Effects of a nontrigonal crystal field on spectroscopic properties ofFe2+ions in yttrium iron garnet: Si(Ge). Physical Review B, 1980, 21, 4967-4975.	3.2	15
90	Low symmetry aspects in spectroscopic and magnetic susceptibility studies of Tb3+(4f8) in TbAlO3. Journal of Rare Earths, 2009, 27, 627-632.	4.8	15

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91	Optical Spectra and Energy Levels Analysis of the 4f^{<i>N</i>} Ions Doped into Ba₂YCl₇. Journal of Physical Chemistry A, 2012, 116, 10574-10588.	2.5	15
92	The High-Resolution 4fâ€“5d Absorption Spectrum of Divalent Dysprosium (Dy²⁺) in Strontium Chloride Host SrCl₂: Fine Structure and Zero-Phonon Transitions Revealed. Journal of Physical Chemistry A, 2018, 122, 923-928.	2.5	15
93	Superposition model in electron magnetic resonance spectroscopy â€“ a primer for experimentalists with illustrative applications and literature database. Applied Spectroscopy Reviews, 2019, 54, 673-718.	6.7	15
94	Crystal field and superposition model analysis for high-spin Fe2+and Fe4+ions in YBa2(Cu1-xFex)3O7-delta. Superconductor Science and Technology, 1991, 4, 535-543.	3.5	14
95	Crystal field and EPR analysis for 5D (3d4 and 3d6) ions at tetragonal sites: Applications to Fe2+ ions in minerals and Cr2+ impurities in semiconductors. Journal of Physics and Chemistry of Solids, 1996, 57, 1191-1199.	4.0	14
96	Electron magnetic resonance studies ofFe3+ions inBaTiO3: Implications of the misinterpretation of zero-field splitting terms and comparative data analysis. Physical Review B, 2006, 74, .	3.2	14
97	Modeling Spectroscopic Properties of Ni2+ Ions in the Haldane Gap System Y2BaNiO5. Applied Magnetic Resonance, 2013, 44, 899-915.	1.2	14
98	Textbook treatments of the hysteresis loop for ferromagnetsâ€"Survey of misconceptions and misinterpretations. American Journal of Physics, 2003, 71, 1080-1083.	0.7	13
99	Temperature dependence of the EPR lines in weakly doped LiNbO3:Ybâ€"possible evidence of Yb3+ ion pairs formation. Physica B: Condensed Matter, 2008, 403, 207-218.	2.7	13
100	Alternative crystal-field parameters for rare-earth ions obtained from various techniques: II. Reanalysis of spectroscopic data for Eu3+ and Er3+ ions in RE2BaXO5 (X=Co, Cu, Ni, Zn) high temperature superconductors and related systems. Journal of Alloys and Compounds, 2009, 467, 106-111.	5.5	13
101	Determination of Crystal-Field Energy Levels and Temperature Dependence of Magnetic Susceptibility for Dy³⁺ in [Dy₂Pd] Heterometallic Complex. Inorganic Chemistry, 2013, 52, 13199-13206.	4.0	13
102	Magnetostructural correlations for Fe 2+ ions at orthorhombic sites in FeCl 2 Â·4H 2 O and FeF 2 Â·4H 2 O crystals modeled by microscopic spin Hamiltonian approach. Journal of Magnetism and Magnetic Materials, 2016, 401, 1068-1077.	2.3	13
103	Computation of spin Hamiltonian parameters for 3 dnions at arbitrary symmetry within the lowest LS term approximation. Journal of Physics C: Solid State Physics, 1981, 14, 923-933.	1.5	12
104	Further EPR study of paramagnetic Cr3+ centers in KTiOPO4. Applied Magnetic Resonance, 1997, 12, 351-361.	1.2	12
105	Crystal field analysis within the approximation for 3d4 and 3d6 ions at sites with an axial type II symmetry. Journal of Physics and Chemistry of Solids, 1999, 60, 17-27.	4.0	12
106	Reanalysis of crystal field parameter datasets for rare-earth ions at low symmetry sites: Nd3+ in NdGaO3 and Pr3+ in PrGaO3. Journal of Alloys and Compounds, 2005, 389, 256-264.	5.5	12
107	Comprehensive analysis of crystal field parameter datasets for transition ions at low symmetry sites and extracting structural informationâ€"Application to Pr4+ in BaPrO3. Journal of Alloys and Compounds, 2008, 456, 16-26.	5.5	12
108	Truncated forms of the second-rank orthorhombic Hamiltonians used in magnetism and electron magnetic resonance (EMR) studies are invalidâ€"Why it went unnoticed for so long?. Journal of Magnetism and Magnetic Materials, 2009, 321, 2946-2955.	2.3	12

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109	Single magnetic 3dN adatoms on surfaces â€“ Proper outlook on compatibility of orthorhombic zero-field splitting parameters and their relationships with magnetic anisotropy quantities. Polyhedron, 2017, 127, 126-134.	2.2	12
110	Extension of Highâ€Resolution Optical Absorption Spectroscopy to Divalent Neodymium: Absorption Spectra of Nd²⁺ Ions in a SrCl₂ Host. Angewandte Chemie - International Edition, 2017, 56, 10721-10724.	13.8	12
111	Electron magnetic resonance data on high-spin Mn(III; S = 2) ions in porphyrinic and salen complexes modeled by microscopic spin Hamiltonian approach. Journal of Inorganic Biochemistry, 2017, 175, 36-46.	3.5	12
112	Crystal field levels and fine structure of the ground orbital state for high spin Fe2+ and Fe4+ ions in YBa2(Cu1â^’xFex)3O7â^’Î´. Journal of Physics and Chemistry of Solids, 1993, 54, 733-744.	4.0	11
113	Comparative analysis and identification of low-symmetry paramagnetic centers: Cr3+ in KTiOPO4. Applied Magnetic Resonance, 1999, 16, 457-472.	1.2	11
114	Temperature dependence of local structural changes around transition metal centers Cr3+ and Mn2+ in RAl3(BO3)4 crystals studied by EMR. Optical Materials, 2017, 73, 124-131.	3.6	11
115	Crystal-field energy levels for deep Fe centers at orthorhombic and higher symmetry sites in BaTiO_3. Journal of the Optical Society of America B: Optical Physics, 1995, 12, 544.	2.1	10
116	EPR Study of Cr3+ and Fe3+ Impurity Ions in Nominally Pure and Co2+-Doped YAlO3 Single Crystals. Applied Magnetic Resonance, 2009, 36, 371-380.	1.2	10
117	Alternative crystal-field parameters for rare-earth ions obtained from various techniques: III. Low symmetry aspects inherent in monoclinic parameters obtained by MÃ¶ssbauer spectroscopy for Tm3+ ions in Tm2BaXO5 (X=Co, Cu, Ni). Journal of Alloys and Compounds, 2010, 497, 32-37.	5.5	10
118	Systematization of crystal field parameters for trivalent rare-earth (RE3+) ions at orthorhombic sites in selected laser materialsâ€”standardization approach. Journal of Physics and Chemistry of Solids, 2013, 74, 751-758.	4.0	10
119	Effect of small in-plane anisotropy in the large-D phase systems based on Ni2+ (S=1) ions in Heisenberg antiferromagnetic chains. Physica B: Condensed Matter, 2014, 436, 193-199.	2.7	10
120	Spectroscopic determination of site symmetry and space group in lanthanide-doped crystals: Resolving intricate symmetry aspects for Î²-NaLnF 4. Polyhedron, 2016, 105, 42-48.	2.2	10
121	Crossing of low-lying electronic levels of high-spin ferrous ion in deoxyhemoglobin and deoxymyoglobin. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1977, 490, 301-310.	1.7	9
122	EPR study of Mn2+in ferroelastic BiVO4single crystal: Monoclinic spin hamiltonian parameters and their temperature dependence. Ferroelectrics, 1994, 156, 249-254.	0.6	9
123	Magnetic interactions in frustrated Mn3Fe4(VO4)6. Journal of Non-Crystalline Solids, 2009, 355, 1419-1426.	3.1	9
124	Spin-Hamiltonian analysis for high-spinFe2+andFe4+ions at orthorhombic sites inYBa2(Cu1â^’xFex)3O7â^’Î´and related oxides. Physical Review B, 1993, 47, 9001-9009.	3.2	8
125	COMPARE: A computer program for comparative analysis of EPR data for low-symmetry paramagnetic centers. Applied Magnetic Resonance, 1999, 16, 447-456.	1.2	8
126	Multifrequency EPR study of Cr3+ions in LiScGeO4. Journal of Physics Condensed Matter, 2000, 12, 4465-4473.	1.8	8

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127	Low-Symmetry Spin Hamiltonian and Crystal Field Tensors Analysis: Fe3+ in Natrolite. Journal of Magnetic Resonance, 2002, 155, 57-63.	2.1	8
128	Magnetization and High-Frequency EMR Measurements on the Lithium-Ion Battery Substance LiMn2O4. Japanese Journal of Applied Physics, 2005, 44, 7440-7444.	1.5	8
129	Theoretical interpretation of the zero-field splitting parameters for Fe3+ ions in wide-band gap semiconductor TlGaSe2 single crystal. Solid State Communications, 2010, 150, 1610-1613.	1.9	8
130	Alternative crystal field parameters for rare-earth ions obtained from various techniques: IV. Comparative analysis of crystal field parameters obtained from inelastic neutron scattering and related studies of RE ions (RE=Er3+, Ho3+, Nd3+, Pr3+) in REBa2Cu3O7â^ˆÎ´ high-Tc superconductors. Journal of Alloys and Compounds, 2012, 540, 279-289.	5.5	8
131	Modelling spectroscopic properties of NiSnCl6Â·6H2O as a probe for pressure calibration in high-magnetic field and high-frequency EMR measurements. Polyhedron, 2015, 102, 261-266.	2.2	8
132	Ground state of Ho atoms on Pt(111) metal surfaces: Implications for magnetism. Physical Review B, 2016, 93, .	3.2	8
133	Trends in Hamiltonian parameters determined by systematic analysis of f-d absorption spectra of divalent lanthanides in alkali-halides hosts and supported by first calculations of the Nd2+ electronic structure: I. SrCl2:Ln2+. Journal of Luminescence, 2018, 199, 116-125.	3.1	8
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