

Pavel Karen

List of Publications by Year in descending order

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docs citations

126
times ranked

2305
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal evolution of the EuBaCo ₂ O _{5.5} crystal structure. Journal of Solid State Chemistry, 2022, 311, 123102.	1.4	3
2	Structural changes and valence-mixing transition in EuBaCo ₂ O ₅ . Journal of Solid State Chemistry, 2022, , 123367.	1.4	0
3	Synthesis and equilibrium oxygen nonstoichiometry of PrBaFe ₂ O ₅₊ . Journal of Solid State Chemistry, 2021, 299, 122147.	1.4	13
4	The Challenge to establish a definition. Chemistry International, 2021, 43, 38-39.	0.3	0
5	Oxygen nonstoichiometry in LnBaFe ₂ O ₅₊ across Ln = Nd, Sm, Gd. Journal of Solid State Chemistry, 2021, 301, 122297.	1.4	3
6	Suppression of the nuclear forward scattering signal in GdBaFe ₂ O ₅ and PrBaFe ₂ O ₅ . Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 416, 127652.	0.9	1
7	Defect chemistry and oxygen nonstoichiometry of CeBaFe ₂ O _{5.5} . Journal of Solid State Chemistry, 2021, 307, 122743.	1.4	0
8	Orbital occupancy evolution across spin- and charge-ordering transitions in YBaFe ₂ O ₅ . Journal of Solid State Chemistry, 2017, 252, 119-128.	1.4	6
9	An exceptional series of phase transitions in hydrophobic amino acids with linear side chains. IUCrJ, 2016, 3, 341-353.	1.0	29
10	Comprehensive definition of oxidation state (IUPAC Recommendations 2016). Pure and Applied Chemistry, 2016, 88, 831-839.	0.9	80
11	Oxidation State, A Long-Running Issue!. Angewandte Chemie - International Edition, 2015, 54, 4716-4726.	7.2	90
12	Twin Displacive Phase Transitions in Amino Acid Quasiracemates. Journal of Physical Chemistry B, 2015, 119, 4975-4984.	1.2	15
13	Toward a comprehensive definition of oxidation state (IUPAC Technical Report). Pure and Applied Chemistry, 2014, 86, 1017-1081.	0.9	80
14	Iron orbital occupancies upon valence mixing of charge-ordered GdBaFeIIIFeIII _{0.5} . Hyperfine Interactions, 2014, 226, 329-339.	0.2	3
15	Complex Magnetic Behavior in the PrSr ₃ (Fe _{1-x} Co _x) ₃ O ₁₀ (n = 3) Ruddlesden-Popper-Type Solid Solution with High Valent Cobalt and Iron. Chemistry of Materials, 2014, 26, 886-897.	3.2	11
16	Effect of chloride substitution on the order-disorder transition in NaBH ₄ and Na ₁₁ BD ₄ . Journal of Alloys and Compounds, 2014, 587, 374-379.	2.8	10
17	Temperature-induced phase transitions for amino acids with linear side chains. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C170-C170.	0.0	0
18	Intricate temperature-induced phase transitions for amino acid quasi-racemates. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s488-s488.	0.3	3

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19	Modeling hyperfine parameters observed from the charge-ordered to valence-mixed state of NdBaFe ₂ O ₅ . Journal of Physics Condensed Matter, 2012, 24, 376002.	0.7	3
20	NdBaFe ₂ O _{5+w} and steric effect of Nd on valence mixing and ordering of Fe. Journal of Solid State Chemistry, 2010, 183, 2703-2713.	1.4	9
21	Synthesis and characterization of color variants of nitrogen- and fluorine-substituted TiO ₂ . Journal of Materials Chemistry, 2009, 19, 471-477.	6.7	17
22	Electronic, Magnetic, and Structural Properties of Sr ₂ MnRuO ₆ and LaSrMnRuO ₆ Double Perovskites. Journal of the American Ceramic Society, 2008, 91, 1796-1806.	1.9	32
23	Most pressurized elements aren't simple cubic. Physics Today, 2008, 61, 10-10.	0.3	4
24	Damping of Antiferromagnetic Spin Waves by Valence Fluctuations in the Double Layer Perovskite $YBaFe_2O_{7-x}$. Physical Review Letters, 2007, 99, 037202.	1.9	6
25	: Valence mixing and charge ordering are two separate cooperative phenomena. Journal of Solid State Chemistry, 2007, 180, 148-157.	1.4	8
26	: Extent of charge ordering by Mössbauer spectroscopy and high-intensity high-resolution powder diffraction. Journal of Solid State Chemistry, 2007, 180, 138-147.	1.4	13
27	Electronic, magnetic and structural properties of A ₂ VMoO ₆ perovskites (A=Ca, Sr). Journal of Solid State Chemistry, 2006, 179, 2120-2125.	1.4	23
28	Nonstoichiometry in oxides and its control. Journal of Solid State Chemistry, 2006, 179, 3167-3183.	1.4	30
29	Crystal Structure of Stoichiometric YBa ₂ Fe ₃ O ₈ . ChemInform, 2006, 37, no.	0.1	0
30	Transport and magnetotransport properties across the two-step Verwey transition in BaGdFe ₂ O _{5+w} . Physical Review B, 2006, 73, .	1.1	7
31	YBaMnCoO ₅ : Neither Valence Mixed nor Charge Ordered.. ChemInform, 2005, 36, no.	0.1	0
32	Crystal Structure of Stoichiometric YBa ₂ Fe ₃ O ₈ . Inorganic Chemistry, 2005, 44, 8170-8172.	1.9	27
33	Verwey transition in a perovskite-type structure. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c396-c396.	0.3	0
34	Isovalent-substitution effect on the Verwey-type transition in the A-site-ordered double perovskite (Ba,Sr)RFe ₂ O ₅ . Physical Review B, 2004, 70, .	1.1	5
35	Pressure effects on the charge-ordering transition of BaYCo ₂ O _{5.0} . Physical Review B, 2004, 69, .	1.1	5
36	YBaMnCoO ₅ ; neither valence mixed nor charge ordered. Solid State Sciences, 2004, 6, 1195-1204.	1.5	22

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37	Exploring the Verwey-Type Transition in GdBaFe ₂ O ₅ +w Using ⁵⁷ Fe Mössbauer Spectroscopy. <i>Hyperfine Interactions</i> , 2004, 156/157, 321-325.	0.2	7
38	Valence mixing, separation and ordering in double-cell perovskite GdBaFe ₂ O ₅ +. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E267-E268.	1.0	2
39	Chemistry and thermodynamics of the twin charge-ordering transitions in RBaFe ₂ O ₅ +w series. <i>Journal of Solid State Chemistry</i> , 2004, 177, 281-292.	1.4	50
40	Mixed Valence in YBaFe ₂ O ₅ . <i>Inorganic Chemistry</i> , 2003, 42, 1121-1129.	1.9	75
41	Mixed Valence in YBaFe ₂ O ₅ .. <i>ChemInform</i> , 2003, 34, no.	0.1	0
42	Effects of oxygen nonstoichiometry and of its distribution on Verwey-type transitions and structure of. <i>Journal of Solid State Chemistry</i> , 2003, 170, 9-23.	1.4	32
43	Substitution of Co ³⁺ in YBa ₂ Fe ₃ O ₈ . <i>Journal of Solid State Chemistry</i> , 2003, 172, 73-80.	1.4	14
44	Neutron powder diffraction study of nuclear and magnetic structures of oxidized and reduced YBa ₂ Fe ₃ O ₈ +w. <i>Journal of Solid State Chemistry</i> , 2003, 174, 87-95.	1.4	26
45	Structural Tuning of Charge, Orbital, and Spin Ordering in Double-Cell Perovskite Series between NdBaFe ₂ O ₅ and HoBaFe ₂ O ₅ . <i>Journal of the American Chemical Society</i> , 2003, 125, 8889-8899.	6.6	55
46	Charge ordering that only succeeds after nature's second attempt. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2002, 58, c339-c339.	0.3	0
47	Exploring the magnetic, electrical and structural properties of transition-metal oxide perovskites. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2002, 58, c22-c22.	0.3	0
48	Verwey Transition under Oxygen Loading in RBaFe ₂ O ₅ +w (R=Nd and Sm). <i>Journal of Solid State Chemistry</i> , 2002, 167, 480-493.	1.4	16
49	Verwey transition in mixed-valence TbBaFe ₂ O ₅ : two attempts to order charges. <i>Physical Review B</i> , 2001, 64, .	1.1	74
50	Neutron powder diffraction study of the crystal structure of the oxycarbonate phase YBa ₂ Cu _{2.85} (CO ₃) _{0.15} O _{6.73} . <i>Physica C: Superconductivity and Its Applications</i> , 2000, 336, 279-286.	0.6	9
51	Chapter 190 Phase diagrams and thermodynamic properties. <i>Fundamental Theories of Physics</i> , 2000, , 229-373.	0.1	4
52	Low to High Spin-State Transition Induced by Charge Ordering in Antiferromagnetic YBaCo ₂ O ₅ . <i>Physical Review Letters</i> , 2000, 84, 2969-2972.	2.9	235
53	Observation of Mixed-Valence State in the BaSm(Cu _{1-x} Fe _x) ₂ O ₅ +δ Double-Perovskite Phase. , 2000, , 95-97.		0
54	Valence-state mixing and separation in SmBaFe ₂ O ₅ +w. <i>Physical Review B</i> , 1999, 60, 15251-15260.	1.1	61

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55	Partial Oxygen Ordering in Cubic Perovskite $\text{REBa}_2\text{Fe}_3\text{O}_{8+w}$ (RE=Gd, Eu, Sm, Nd). Journal of Solid State Chemistry, 1999, 144, 398-404.	1.4	16
56	Synthesis and structural investigations of the double perovskites $\text{REBaFe}_2\text{O}_5+w$ (RE=Nd, Sm). Journal of Materials Chemistry, 1999, 9, 789-797.	6.7	80
57	The crystal structure of magnesium dicarbide. Journal of Alloys and Compounds, 1999, 282, 72-75.	2.8	102
58	Neutron and X-Ray Powder Diffraction Study of $\text{RBa}_2\text{Fe}_3\text{O}_{8+w}$ Phases. Journal of Solid State Chemistry, 1998, 136, 21-33.	1.4	29
59	^{57}Fe Mössbauer Study of the Cubic Perovskite-Type Phase $\text{LaBa}_2\text{Fe}_3\text{O}_{8+w}$ ($0.20 < w < 0.83$). Journal of Solid State Chemistry, 1998, 138, 87-97.	1.4	14
60	^{57}Fe Mössbauer Study of $\text{REBa}_2\text{Fe}_3\text{O}_{8+w}$ Triple Perovskites with Varied Oxygen Content (RE=Dy, Er, and Tj). <i>ETQq 0 0 0 rg BT / Overlock</i>	1.4	18
61	Liquid-Mix Disorder in Crystalline Solids: ScMnO_3 . Journal of Solid State Chemistry, 1998, 141, 78-88.	1.4	48
62	Influence of Cation Size on the Structural Features of $\text{Ln}_{1/2}\text{A}_{1/2}\text{MnO}_3$ Perovskites at Room Temperature. Chemistry of Materials, 1998, 10, 3652-3665.	3.2	248
63	$\text{La}_{1-x}\text{Ba}_x\text{Cr}_{1-y}\text{Ti}_y\text{O}_3$ with Varied Oxygen Content. Journal of the Electrochemical Society, 1998, 264-269.	1.3	12
64	The Crystal Structure of 2-Amino-4,6-dihydroxypyrimidine Determined from Powder X-Ray Synchrotron Diffraction.. Acta Chemica Scandinavica, 1998, 52, 1051-1055.	0.7	4
65	Phase diagrams for the $\text{YBa}_2\text{Cu}_3\text{O}_7$ family. ANNO 1996. Journal of Thermal Analysis, 1997, 48, 1143-1227.	0.7	9
66	Raman scattering from $\text{YBa}_2\text{Fe}_3\text{O}_{8+\delta}$. Physical Review B, 1994, 50, 586-589.	1.1	16
67	Neutron-powder-diffraction study of the nuclear and magnetic structures of the substitution compound $(\text{Y}_{1-x}\text{Ca}_x)\text{Ba}_2\text{Fe}_3\text{O}_{8+\delta}$ ($x=0.05, 0.10, \text{ and } 0.20$). Physical Review B, 1994, 49, 3465-3472.	1.1	19
68	Neutron Powder Diffraction Study of the Nuclear and Magnetic Structures of the Oxygen-Deficient Perovskite YBaCuCoO_5 . Journal of Solid State Chemistry, 1994, 108, 80-86.	1.4	39
69	$\text{YBa}_2\text{Fe}_3\text{O}_8$ with Varied Oxygen Content. Journal of Solid State Chemistry, 1994, 112, 73-77.	1.4	14
70	Citrate-Gel Syntheses in the Y(O)-Ba(O)-Cu(O) System. Journal of the American Ceramic Society, 1994, 77, 547-552.	1.9	53
71	Crystal Structure of ScCl_3 Refined from Powder Neutron Diffraction Data.. Acta Chemica Scandinavica, 1994, 48, 294-297.	0.7	28
72	Magnetic Properties of YBaCuCoO_5 .. Acta Chemica Scandinavica, 1993, 47, 1041-1042.	0.7	2

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73	Neutron-powder-diffraction study of the nuclear and magnetic structures of YBa ₂ Fe ₃ O ₈ at room temperature. <i>Physical Review B</i> , 1992, 45, 9611-9619.	1.1	81
74	Hydrolysis and structure of carbides related to propadiene. <i>Journal of Alloys and Compounds</i> , 1992, 178, 285-295.	2.8	7
75	Crystal structure of magnesium sesquicarbide. <i>Inorganic Chemistry</i> , 1992, 31, 3260-3263.	1.9	52
76	Superconductivity in Y(Ba _{1-x} Y _x) ₂ Cu ₃ O _{9-δ} . <i>Journal of Solid State Chemistry</i> , 1992, 97, 257-273.	1.4	11
77	YBa ₂ Fe ₃ O ₈ and the YCu(O)BaCu(O)YFe(O)BaFe(O) phase diagram. <i>Journal of Solid State Chemistry</i> , 1992, 101, 48-58.	1.4	26
78	Chemical Phase Diagrams for the YBa ₂ Cu ₃ O ₇ Family.. <i>Acta Chemica Scandinavica</i> , 1992, 46, 805-840.	0.7	57
79	Superconducting and Structural Properties of Strontium-Substituted YBa ₂ Cu ₄ O ₈ .. <i>Acta Chemica Scandinavica</i> , 1992, 46, 1059-1064.	0.7	8
80	Oxycarbonates in the system. <i>Journal of Solid State Chemistry</i> , 1991, 94, 298-305.	1.4	34
81	Chemical pressure and other effects of strontium substitution in YBa ₂ Cu ₃ O _{9-δ} . <i>Journal of Solid State Chemistry</i> , 1991, 92, 57-67.	1.4	54
82	Lanthanum substitution for barium in YBa ₂ Cu ₃ O _{9-δ} . <i>Journal of Solid State Chemistry</i> , 1991, 93, 163-172.	1.4	18
83	On the Phase Relations and Structural and Magnetic Properties of the Stable Manganese Carbides Mn ₂ 3C ₆ , Mn ₅ C ₂ and Mn ₇ C ₃ .. <i>Acta Chemica Scandinavica</i> , 1991, 45, 549-557.	0.7	33
84	Substitution for Copper in YBa ₂ Cu ₃ O _(9-δ) by 3d- and Pre-transition Metals.. <i>Acta Chemica Scandinavica</i> , 1991, 45, 698-708.	0.7	15
85	Pressure induced transitions between para-, heli- and ferromagnetic phases of Mn _{0.61} Cr _{0.39} As studied by neutron diffraction. <i>Journal of Magnetism and Magnetic Materials</i> , 1990, 92, 75-79.	1.0	2
86	The crystal and molecular structure of scandium formate. <i>Collection of Czechoslovak Chemical Communications</i> , 1990, 55, 426-434.	1.0	4
87	Lanthanide Substitution in YBa ₂ Cu ₃ O _(9-δ) .. <i>Acta Chemica Scandinavica</i> , 1990, 44, 994-1001.	0.7	40
88	Superconducting properties in relation to chemical pressure in YBa ₂ Cu ₃ O _{9-δ} . <i>Physica C: Superconductivity and Its Applications</i> , 1989, 162-164, 49-50.	0.6	9
89	Is mutual separation of rare earth elements crucial for preparation of high T _c materials?. <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 1421-1422.	0.6	2
90	Crystal Structure of Y ₂ Cu ₂ O ₅ Refined from Powder Neutron Diffraction Data.. <i>Acta Chemica Scandinavica</i> , 1988, 42a, 144-147.	0.7	19

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91	On the Properties of the YBa ₈ Cu ₄ O _(12+eta) Phase.. Acta Chemica Scandinavica, 1988, 42a, 171-177.	0.7	12
92	Carbonatization of YBa ₂ Cu ₃ O _(6+x) .. Acta Chemica Scandinavica, 1988, 42a, 178-184.	0.7	54
93	X-ray photoelectron spectroscopy study of Y ₂ BaCuO ₅ and YBa ₂ Cu ₃ O ₉ . Solid State Communications, 1987, 64, 917-921.	0.9	26
94	Hydrolysis of ternary carbides of manganese Mn ₃ MC (M = Al, Ga, In, Sn). Collection of Czechoslovak Chemical Communications, 1987, 52, 1216-1222.	1.0	3
95	Structural Properties and Phase Transitions of Y ₂ BaCuO ₅ and YBa ₂ Cu ₃ O _(9-delta) .. Acta Chemica Scandinavica, 1987, 41a, 283-293.	0.7	21
96	Determination of composition limits of scandium carbide-oxide Sc(C, O, δ -j) by the combined diffractometric and hydrolysis method. Journal of the Less Common Metals, 1986, 120, 337-344.	0.9	5
97	Hydrolyzable Carbides: Relationships between their Structure and the Composition of their Hydrolysis Products. Reviews in Inorganic Chemistry, 1986, 8, 117-160.	1.8	5
98	Determination of Molar Ratio in AB _{1-x} Rocksalt-type Compounds by X-ray Powder Diffraction Method. Application to TiC _{1-x} . Crystal Research and Technology, 1986, 21, 735-740.	0.6	15
99	Studies on hydrolyzable carbides. XXII: The carbothermal reduction of scandium oxide Sc ₂ O ₃ . Monatshefte für Chemie, 1986, 117, 1271-1278.	0.9	9
100	Hydrolysis of manganese carbides Mn ₅ C ₂ and Mn ₂₃ C ₆ . Collection of Czechoslovak Chemical Communications, 1986, 51, 1628-1635.	1.0	2
101	Contamination by oxygen and nitrogen during the high-temperature synthesis of rare earth element carbides and the hydrocarbon contents of their hydrolysis products. Collection of Czechoslovak Chemical Communications, 1986, 51, 1411-1418.	1.0	3
102	X-ray diffraction analysis of diffusional alloying of HfC and TaC. Journal of Materials Science, 1985, 20, 3605-3609.	1.7	6
103	Studies of hydrolysable carbides XXVI: Composition limits of the NaCl-type yttrium oxycarbide phase. Journal of the Less Common Metals, 1985, 107, 295-299.	0.9	9
104	Studies on hydrolysable carbides XX: The hydrolysis of the scandium carbide Sc ₁₅ C ₁₉ . Journal of the Less Common Metals, 1984, 96, 35-48.	0.9	15
105	Studies of hydrolysable carbides XXI: Preparation and properties of discandium oxycarbide Sc ₂ O ₂ C. Journal of the Less Common Metals, 1984, 98, 245-252.	0.9	8
106	Hydrolysis of uranium monocarbide. Collection of Czechoslovak Chemical Communications, 1984, 49, 793-804.	1.0	5
107	Investigation of the products of carbothermal reduction of yttrium oxide by the hydrolysis method. Collection of Czechoslovak Chemical Communications, 1984, 49, 936-943.	1.0	4
108	Investigation of the products of reaction of (Sc, Y) ₂ O ₃ and (Sc, Dy) ₂ O ₃ mixed crystals with carbon in proportions corresponding to the formation of M ₁₅ C ₁₉ phase. Collection of Czechoslovak Chemical Communications, 1984, 49, 944-953.	1.0	4

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109	Verification of the interstitial carbide hydrolysis mechanism by a radioanalytical method. Journal of Radioanalytical Chemistry, 1983, 80, 165-172.	0.5	5
110	Thermal decomposition of magnesium sesquicarbide. Collection of Czechoslovak Chemical Communications, 1983, 48, 1963-1968.	1.0	12
111	Synthesis and thermal decomposition of magnesium dicarbide. Collection of Czechoslovak Chemical Communications, 1983, 48, 1969-1976.	1.0	12
112	Heptamanganese tricarbonide Mn_7C_3 . Collection of Czechoslovak Chemical Communications, 1983, 48, 2740-2750.	1.0	6
113	Hydrolysis of magnesium sesquicarbide Mg_2C_3 . Collection of Czechoslovak Chemical Communications, 1980, 45, 3408-3416.	1.0	7
114	Dynamics of information flow in the field of rare earth carbides research. Scientometrics, 1979, 1, 339-357.	1.6	4