

# Peter Gehring

## List of Publications by Year in descending order

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126  
papers

6,886  
citations

46918

47  
h-index

58464

82  
g-index

134  
all docs

134  
docs citations

134  
times ranked

4379  
citing authors

#	ARTICLE	and characterization of large $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle$	IF	CITATIONS
1	and $\langle \text{mml:math}$		1.0784314	1981 / Over

#	ARTICLE	IF	CITATIONS
19	Neutron inelastic scattering measurements of low-energy phonons in the multiferroic $\text{BiFeO}_3$ . Physical Review B, 2015, 91, .		
20	Phase diagram of the relaxor ferroelectric $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ a neutron powder diffraction study of the relaxor skin effect. Phase Transitions, 2015, 88, 283-305.	0.6	31
21	Fluctuating defects in the incipient relaxor $\text{Li}_x\text{TaO}_3$ ( $x=0.02$ ). Physical Review B, 2014, 90, .	1.1	9
22	Role of random electric fields in relaxors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1754-1759.	3.3	129
23	X-ray diffraction study of the pressure-induced bcc-to-hcp phase transition in the highly magnetostriuctive $\text{FeGa}$ alloy. Physical Review B, 2013, 87, 114107.	1.1	62
24	The expansion of the NIST Center for Neutron Research. Neutron News, 2013, 24, 29-31.	1.1	3
25	Freezing of the local dynamics in the relaxor ferroelectric $[\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3]_{0.955}[\text{PbTiO}_3]_{0.045}$ . Physical Review B, 2012, 86, .	0.1	3
26	NEUTRON DIFFUSE SCATTERING IN LEAD-BASED RELAXOR FERROELECTRICS AND ITS RELATIONSHIP TO THE ULTRA-HIGH PIEZOELECTRICITY. Journal of Advanced Dielectrics, 2012, 02, 1241005.	1.1	8
27	Evidence for anisotropic polar nanoregions in relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2012, 86, .	1.5	24
28	Thermal evolution of the full three-dimensional magnetic excitations in the multiferroic $\text{BiFeO}_3$ . Physical Review B, 2012, 86, .	1.1	22
29	Single Crystal Study of Competing Rhombohedral and Monoclinic Order in Lead Zirconate Titanate. Physical Review Letters, 2010, 105, 207601.	1.1	20
30	Two-component model of the neutron diffuse scattering in the relaxor ferroelectric PZN-4.5%PT. Physical Review B, 2010, 82, .	2.9	79
31	Interplay between static and dynamic polar correlations in relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2010, 81, .	1.1	22
32	Dissimilarity of polar displacements in barium and lead based relaxors. Applied Physics Letters, 2010, 97, 072903.	1.1	55
33	First single-crystal neutron diffraction results on PZT structure. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s167-s167.	1.5	1
34	Reassessment of the Burns temperature and its relationship to the diffuse scattering, lattice dynamics, and thermal expansion in relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ .	0.3	0
35			



#	ARTICLE	IF	CITATIONS
55	Neutron elastic diffuse scattering study of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2004, 69, .	1.1	232
56	The non-rhombohedral low-temperature structure of $\text{PMN}\hat{=}10\%$ PT. Journal of Physics Condensed Matter, 2004, 16, 7113-7121.	0.7	61
57	Interplay of structural and electronic phase separation in single-crystalline $\text{La}_2\text{CuO}_4$ studied by neutron and Raman scattering. Physical Review B, 2004, 69, .	1.1	4
58	High-q-resolution neutron scattering technique using triple-axis spectrometers. Acta Crystallographica Section A: Foundations and Advances, 2004, 60, 598-603.	0.3	8
59	Neutron Scattering Study of Soft Phonons and Diffuse Scattering in Insulating $\text{La}_{1.95}\text{Sr}_{0.05}\text{CuO}_4$ . Journal of the Physical Society of Japan, 2004, 73, 3413-3417.	0.7	14
60	The high-flux backscattering spectrometer at the NIST Center for Neutron Research. Review of Scientific Instruments, 2003, 74, 2759-2777.	0.6	259
61	Summer school on methods and applications of neutron spectroscopy held at NIST. Neutron News, 2003, 14, 9-10.	0.1	0
62	Evidence of decoupled lattice distortion and ferroelectric polarization in the relaxor system $\text{PMN}\hat{=}x\text{PT}$ . Physical Review B, 2003, 68, .	1.1	112
63	Phase diagram of the relaxor ferroelectric $(1\hat{=}x)\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3\hat{=}x\text{PbTiO}_3$ . Physical Review B, 2002, 65, .	1.1	303
64	Anomalous transverse acoustic phonon broadening in the relaxor ferroelectric $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})_{0.8}\text{Ti}_{0.2}\text{O}_3$ . Physical Review B, 2002, 65, .	1.1	58
65	Static magnetic correlations near the insulating-superconducting phase boundary in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ . Physical Review B, 2002, 65, .	1.1	214
66	Quantum Impurities in the Two-Dimensional Spin One-Half Heisenberg Antiferromagnet. Science, 2002, 295, 1691-1695.	6.0	129
67	Ferroelectric Dynamics in the Perovskite Relaxor PMN. AIP Conference Proceedings, 2002, , .	0.3	1
68	Ferroelectric ordering in the relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ as evidenced by low-temperature phonon anomalies. Physical Review B, 2002, 65, .	1.1	148
69	Neutron diffuse scattering from polar nanoregions in the relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2002, 65, .	1.1	169
70	Mode coupling and polar nanoregions in the relaxor ferroelectric $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2002, 66, .	1.1	71
71	The NIST high-flux backscattering spectrometer. Applied Physics A: Materials Science and Processing, 2002, 74, s311-s313.	1.1	7
72	Neutron scattering study of antiferromagnetic order in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ . Solid State Communications, 2002, 121, 625-629.	0.9	73

#	ARTICLE	IF	CITATIONS
73	Soft modes and ferroelectric order in relaxor ferroelectrics. Acta Crystallographica Section A: Foundations and Advances, 2002, 58, c206-c206.	0.3	0
74	<title>Multiwafer focusing neutron monochromators and applications</title>. , 2001, 4509, 21.		11
75	The dynamics of solid cubane. Neutron News, 2001, 12, 34-37.	0.1	0
76	Dynamical effects of the nanometer-sized polarized domains in $\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review B, 2001, 63, .	1.1	71
77	Soft Mode Dynamics above and below the Burns Temperature in the Relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ . Physical Review Letters, 2001, 87, 277601.	2.9	164
78	Neutron Diffraction Study of the Irreversible $R\bar{4}c$ Phase Transition in Single Crystal $\text{Pb}[(\text{Zn}_{1/3}\text{Nb}_{2/3})_{1-x}\text{Ti}_x]\text{O}_3$ . Journal of the Physical Society of Japan, 2001, 70, 2778-2783.	0.7	68
79	Diagonal static spin correlation in the low-temperature orthorhombic $\text{Pccn}$ phase of $\text{La}_{1.55}\text{Nd}_{0.4}\text{Sr}_{0.05}\text{CuO}_4$ . Physical Review B, 2001, 64, .	1.1	27
80	Cold Neutron Inelastic Scattering Measurements of the Spin-Peierls and Antiferromagnetic Excitations in Si-doped $\text{CuGeO}_3$ Single Crystals. Journal of the Physical Society of Japan, 2000, 69, 592-597.	0.7	3
81	Soft Phonon Anomalies in the Relaxor Ferroelectric $\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})_{0.92}\text{Ti}_{0.08}\text{O}_3$ . Physical Review Letters, 2000, 84, 5216-5219.	2.9	137
82	Direct observation of a one-dimensional static spin modulation in insulating $\text{La}_{1.95}\text{Sr}_{0.05}\text{CuO}_4$ . Physical Review B, 2000, 61, 3699-3706.	1.1	165
83	Local Magnetic Order vs Superconductivity in a Layered Cuprate. Physical Review Letters, 2000, 85, 1738-1741.	2.9	210
84	Observation of incommensurate magnetic correlations at the lower critical concentration for superconductivity in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ ( $x=0.05$ ). Physical Review B, 1999, 60, R769-R772.	1.1	201
85	Neutron scattering study of elastic magnetic signals in superconducting $\text{La}_{1.94}\text{Sr}_{0.06}\text{CuO}_4$ . Journal of Physics and Chemistry of Solids, 1999, 60, 1079-1081.	1.9	7
86	Vibrations of the cubane molecule: inelastic neutron scattering study and theory. Chemical Physics Letters, 1999, 309, 234-240.	1.2	15
87	Neutron-scattering investigation of molecular reorientations in solid cubane. Physical Review B, 1999, 60, 314-321.	1.1	31
88	Solid cubane: A brief review. Carbon, 1998, 36, 809-815.	5.4	47
89	The magnetic phase transition of a lattice-matched holmium thin film. Journal of Physics Condensed Matter, 1998, 10, 6803-6812.	0.7	5
90	Dependence of the interlayer coupling on anneal temperature in $\text{Ni}/\text{Fe}/\text{Cu}$ evaporated multilayers. Journal of Applied Physics, 1997, 81, 3771-3773.	1.1	5

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91	Unusual Structure, Phase Transition, and Dynamics of Solid Cubane. <i>Physical Review Letters</i> , 1997, 78, 4938-4941.	2.9	50
92	Observation of two length scales above TN in a holmium thin film. <i>Physica B: Condensed Matter</i> , 1996, 221, 398-404.	1.3	14
93	Nature of the interlayer coupling in annealed Ni <sub>80</sub> Fe <sub>20</sub> /Ag multilayers. <i>Journal of Applied Physics</i> , 1996, 79, 4762.	1.1	12
94	Antiferromagnetic interlayer correlations in annealed Ni <sub>80</sub> Fe <sub>20</sub> /Ag multilayers. <i>Physical Review B</i> , 1996, 54, 9870-9882.	1.1	30
95	High-energy phonon dispersion in La <sub>1.85</sub> Sr <sub>0.15</sub> CuO <sub>4</sub> . <i>Physica B: Condensed Matter</i> , 1995, 213-214, 72-74.	1.3	0
96	Low-frequency excitations of oriented DNA. <i>Physica B: Condensed Matter</i> , 1995, 213-214, 780-782.	1.3	6
97	Absence of the anomalous second length scale in the bulk of a terbium single crystal. <i>Physical Review B</i> , 1995, 51, 3234-3237.	1.1	16
98	Neutron scattering study of the lattice modes of solid cubane. <i>The Journal of Physical Chemistry</i> , 1995, 99, 4429-4434.	2.9	17
99	Spin-glass behaviour in dilute weak random-anisotropy magnets Dy <sub>x</sub> Y <sub>1-x</sub> Al <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , 1994, 6, 4779-4794.	0.7	4
100	Neutron-scattering studies of the two magnetic correlation lengths in terbium. <i>Physical Review B</i> , 1994, 49, 11967-11978.	1.1	50
101	Magnetic properties of cubic R <sub>x</sub> Y <sub>1-x</sub> Al <sub>2</sub> (R=Dy, Tb) intermetallic random anisotropy magnets (invited). <i>Journal of Applied Physics</i> , 1994, 76, 6180-6185.	1.1	13
102	Magnetic penetration depth in V <sub>3</sub> Si and LiTi <sub>2</sub> O <sub>4</sub> measured by <sup>1</sup> / <sub>4</sub> SR. <i>Hyperfine Interactions</i> , 1994, 86, 615-621.	0.2	9
103	Magnetic Structure Determination for Annealed Ni <sub>80</sub> Fe <sub>20</sub> /Ag Multilayers Using Polarized-Neutron Reflectivity. <i>Materials Research Society Symposia Proceedings</i> , 1994, 376, 577.	0.1	1
104	Design of a High-Flux Backscattering Spectrometer for Ultra-High Resolution Inelastic Neutron Measurements. <i>Materials Research Society Symposia Proceedings</i> , 1994, 376, 113.	0.1	4
105	Stoichiometry, percolation, and Verwey ordering in magnetite. <i>Physical Review Letters</i> , 1993, 70, 1635-1638.	2.9	62
106	Anomalous dispersion and thermal expansion in lightly-doped KTa <sub>1-x</sub> Nb <sub>x</sub> O <sub>3</sub> . <i>Ferroelectrics</i> , 1993, 150, 47-58.	0.3	8
107	Origin of the second length scale above the magnetic-spiral phase of Tb. <i>Physical Review Letters</i> , 1993, 71, 1087-1090.	2.9	70
108	Magnetic first-order phase transition and crossover associated with random anisotropy in crystalline Dy <sub>x</sub> Y <sub>1-x</sub> Al <sub>2</sub> . <i>Physical Review B</i> , 1993, 47, 7892-7896.	1.1	11

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109	Magnetic x-ray-scattering study of Tb. Physical Review B, 1992, 45, 243-248.	1.1	26
110	Low-energy incommensurate spin excitations in superconducting $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ . Physical Review B, 1992, 46, 9128-9131.	1.1	144
111	Dipole-glass behavior of lightly doped $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$ . Physical Review B, 1992, 46, 5116-5121.	1.1	20
112	Neutron-scattering study of the dynamical spin susceptibility in $\text{YBa}_2\text{Cu}_3\text{O}_{6.6}$ . Physical Review B, 1992, 46, 5561-5575.	1.1	278
113	Incommensurate Magnetic Phases in $\text{NdIn}_3$ near $T_N$ . Journal of the Physical Society of Japan, 1992, 61, 1469-1472.	0.7	10
114	Temperature scaling of the integrated dynamical susceptibility in $\text{YBa}_2\text{Cu}_3\text{O}_{6.5}$ ( $T_c = 50$ K). European Physical Journal B, 1992, 87, 15-19.	0.6	47
115	Ferro-, quasiferro- and antiferromagnetic spin-glass orders in random anisotropy crystalline $\text{Dy}_x\text{Y}_{1-x}\text{Al}_2$ compounds. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 243-245.	1.0	2
116	Neutron diffraction study of the magnetic ordering of the $\text{Cu}^{++}$ spins in $\text{Nd}_{1.5}\text{Ba}_{1.5}\text{Cu}_3\text{O}_{6+x}$ . Physica C: Superconductivity and Its Applications, 1991, 185-189, 1167-1168.	0.6	6
117	Spectral shift of the magnetic cross section in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ . Physical Review B, 1991, 43, 8690-8693.	1.1	47
118	Magnetic correlations and energy gap in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{6.6}$ with $T_c = 53$ K. Physical Review B, 1991, 44, 2811-2814.	1.1	33
119	Three-dimensional magnetic structures and rare-earth magnetic ordering in $\text{Nd}_2\text{CuO}_4$ and $\text{Pr}_2\text{CuO}_4$ . Physical Review B, 1990, 42, 10098-10107.	1.1	217
120	Muon-spin-relaxation and neutron-scattering studies of magnetism in single-crystal $\text{La}_{1.94}\text{Sr}_{0.06}\text{CuO}_4$ . Physical Review B, 1990, 41, 8866-8871.	1.1	73
121	Magnetic static and scaling properties of the weak random-axis magnet $(\text{Dy}_x\text{Y}_{1-x})\text{Al}_2$ . Physical Review B, 1990, 41, 9134-9147.	1.1	66
122	Antiferromagnetic spin correlations in $(\text{Nd},\text{Pr})_{2-x}\text{Ce}_x\text{CuO}_4$ . Physical Review Letters, 1990, 65, 263-266.	2.9	92
123	Temperature dependence of the magnetic excitations in $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ ( $T_c = 33$ K). Physical Review Letters, 1989, 63, 330-333.	2.9	236
124	Temperature-induced magnetism in $\text{LaCoO}_3$ . Physical Review B, 1989, 40, 10982-10985.	1.1	188
125	Low field hysteresis and loss in sintered samples of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ . Solid State Communications, 1988, 67, 253-256.	0.9	12
126	Detection of a metastable magnetic phase in the $\text{La}_{1.85}\text{Ba}_{0.15}\text{CuO}_{4-y}$ system. Journal of Low Temperature Physics, 1987, 68, 419-425.	0.6	0