

# Marek Szafranski

## List of Publications by Year in descending order

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1880  
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#	ARTICLE	IF	CITATIONS
1	Ferroelectricity in $\text{NH}_4^+\text{N}$ Hydrogen Bonded Crystals. <i>Physical Review Letters</i> , 1999, 82, 576-579.	2.9	269
2	Ferroelectric Order of Parallel Bistable Hydrogen Bonds. <i>Physical Review Letters</i> , 2002, 89, 215507.	2.9	213
3	Mechanism of Pressure-Induced Phase Transitions, Amorphization, and Absorption-Edge Shift in Photovoltaic Methylammonium Lead Iodide. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3458-3466.	2.1	176
4	Photovoltaic Hybrid Perovskites under Pressure. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2496-2506.	2.1	104
5	Disproportionation of Pyrazine in $\text{NH}_4^+\text{N}$ Hydrogen-Bonded Complexes: A New Materials of Exceptional Dielectric Response. <i>Journal of the American Chemical Society</i> , 2006, 128, 15775-15785.	6.6	79
6	Simple Guanidinium Salts Revisited: Room-Temperature Ferroelectricity in Hydrogen-Bonded Supramolecular Structures. <i>Journal of Physical Chemistry B</i> , 2011, 115, 8755-8762.	1.2	62
7	Giant Dielectric Anisotropy and Relaxor Ferroelectricity Induced by Proton Transfers in $\text{NH}_4^+\text{N}$ -Bonded Supramolecular Aggregates. <i>Journal of Physical Chemistry B</i> , 2008, 112, 6779-6785.	1.2	60
8	Band Gap Engineering in $\text{MASnBr}_3$ and $\text{CsSnBr}_3$ Perovskites: Mechanistic Insights through the Application of Pressure. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7398-7405.	2.1	57
9	Phase transitions in the layered structure of diguanidinium tetraiodoplumbate. <i>Physical Review B</i> , 2000, 61, 1026-1035.	1.1	52
10	Ten Polymorphs of $\text{NH}_4^+\text{N}$ Hydrogen-Bonded 1,4-Diazabicyclo[2.2.2]octane Complexes: Supramolecular Origin of Giant Anisotropic Dielectric Response in Polymorph V. <i>Crystal Growth and Design</i> , 2010, 10, 3537-3546.	1.4	45
11	Short-Range Ferroelectric Order Induced by Proton Transfer-Mediated Ionicity. <i>Journal of Physical Chemistry B</i> , 2004, 108, 15709-15713.	1.2	44
12	Investigation of phase instabilities in guanidinium halogenoplumbates(II). <i>Thermochimica Acta</i> , 1997, 307, 177-183.	1.2	43
13	Ferroelectricity in the guanidinium compound $[\text{C}(\text{NH}_2)_3]_4\text{Cl}_2\text{SO}_4$ : Synthesis and characterization. <i>Physical Review B</i> , 2005, 72, .	1.1	43
14	Anomalous Protonic-Glass Evolution from Ordered Phase in $\text{NH}_4^+\text{N}$ Hydrogen-Bonded $\text{DabcoHBF}_4$ Ferroelectric. <i>Journal of Physical Chemistry B</i> , 2008, 112, 16619-16625.	1.2	43
15	Proton Disorder in $\text{NH}_4^+\text{N}$ Bonded $[\text{dabcoH}]_2\text{I}^+$ Relaxor: New Insights into H-Disordering in a One-Dimensional $\text{H}_2\text{O}$ Ice Analogue. <i>Crystal Growth and Design</i> , 2010, 10, 4334-4338.	1.4	36
16	Origin of spontaneous polarization and reconstructive phase transition in guanidinium iodide. <i>CrystEngComm</i> , 2013, 15, 4617.	1.3	35
17	Structural phase transitions in guanidinium nitrate. <i>Journal of Molecular Structure</i> , 1996, 378, 205-223.	1.8	34
18	Thermodynamic behaviour of bistable $\text{NH}_4^+\text{N}$ hydrogen bonds in monosalts of 1,4-diazabicyclo[2.2.2]octane. <i>Chemical Physics Letters</i> , 2000, 318, 427-432.	1.2	33

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19	Bias-Field and Pressure Effects on the One-Dimensional Dielectric Response in $\text{N}^{\oplus}\text{H}^{\oplus}\text{N}^{\ominus}$ Hydrogen-Bonded 1,4-Diazabicyclo[2.2.2]octane Hydrobromide Crystal. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9479-9488.	1.2	29
20	Pressure-induced collapse of guanidinium nitrate $\text{N}^{\oplus}\text{H}^{\oplus}\text{O}^{\ominus}$ bonded honeycomb layers into a 3-D pattern with varied H-acceptor capacity. <i>Chemical Communications</i> , 2011, 47, 2107-2109.	2.2	29
21	Effect of halogen atom exchange on the thermodynamic behavior and ferroelectric properties of $[\text{C}(\text{NH}_2)_3]_4\text{Br}_2\text{SO}_4$ . <i>Physical Review B</i> , 2006, 73, .	1.1	28
22	Research Update: Tricritical point and large caloric effect in a hybrid organic-inorganic perovskite. <i>APL Materials</i> , 2018, 6, .	2.2	26
23	DTA investigation of phase transitions in 1,3-cyclohexanedione under high pressures. <i>Solid State Communications</i> , 1992, 82, 277-281.	0.9	25
24	Hydrogen bonding in two isomorphous bis-guanidinium salts: tetrachlorozincate(II) and tetrabromozincate(II). <i>Journal of Molecular Structure</i> , 1998, 446, 1-9.	1.8	25
25	Molecular interactions in crystalline dibromomethane and diiodomethane, and the stabilities of their high-pressure and low-temperature phases. <i>Acta Crystallographica Section B: Structural Science</i> , 2006, 62, 1090-1098.	1.8	21
26	From Nonpolar to Ferroelectric Crystal Structure: The Temperature-Tuned Growth of Two Guanidinium Ethoxysulfonate Polymorphs. <i>Journal of Physical Chemistry B</i> , 2008, 112, 3101-3109.	1.2	21
27	NMR Study of Cation Motion in Guanidinium Iodoplumbates. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1997, 52, 783-788.	0.7	20
28	Strong negative thermal expansion and relaxor ferroelectricity driven by supramolecular patterns. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7904.	2.7	20
29	New Polar Phases of 1,4-Diazabicyclo[2.2.2]octane Perchlorate, An $\text{NH}^{\oplus}\text{N}^{\ominus}$ Hydrogen-Bonded Ferroelectric. <i>Crystal Growth and Design</i> , 2013, 13, 2872-2879.	1.4	20
30	Reverse Group-Subgroup Relation at the Ferroelastic Phase Transition in $[(\text{C}_{20}\text{H}_{25}\text{N}_4)]_4(\text{CH}_3)_4\text{MnBr}_4$ . <i>Crystal Growth and Design</i> , 2016, 16, 3771-3776.	1.4	19
31	Unusually strong deformation of guanidinium nitrate crystal at the solid-solid phase transition. <i>Solid State Communications</i> , 1992, 84, 1051-1054.	0.9	18
32	Effect of high pressure on the supramolecular structures of guanidinium based ferroelectrics. <i>CrystEngComm</i> , 2014, 16, 6250.	1.3	18
33	Comment on Ferroelectricity in Bis(imidazolium) Tartrate. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7076-7078.	7.2	17
34	Time-dependent transformation routes of perovskites $\text{CsPbBr}_3$ and $\text{CsPbCl}_3$ under high pressure. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10769-10779.	5.2	17
35	Low-temperature and high-pressure phase transitions in ferroelectric dabcoHBF <sub>4</sub> . <i>Journal of Physics Condensed Matter</i> , 2004, 16, 6053-6062.	0.7	16
36	Crystal structure and phase transitions in perovskite-like $\text{C}(\text{NH}_2)_3\text{SnCl}_3$ . <i>Journal of Solid State Chemistry</i> , 2007, 180, 2209-2215.	1.4	14

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37	Pressure-induced decoupling of the order-disorder and displacive contributions to the phase transition in diguanidinium tetrachlorostannate. <i>Physical Review B</i> , 2000, 62, 8787-8793.	1.1	12
38	A giant 2-dimensional dielectric response in a compressed hydrogen-bonded hybrid organic-inorganic salt. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7689-7699.	2.7	12
39	Optical activity, domain structure and deflection of light at domain walls in lithium ammonium tartrate monohydrate (LAT). <i>Ferroelectrics</i> , 1989, 97, 233-245.	0.3	11
40	Investigation of phase transitions in guanidinium nitrate crystals. <i>Journal of Physics Condensed Matter</i> , 1993, 5, 7425-7434.	0.7	11
41	Temperature-induced H-site centring in NH-O hydrogen-bonds of guanidinium nitrate by neutron diffraction. <i>Chemical Physics Letters</i> , 2004, 391, 267-272.	1.2	11
42	Microscopic origin of spontaneous polarization and absolute sense of pyroelectric and piezoelectric coefficients in $\text{Li-LiIO}_3$ . <i>Solid State Communications</i> , 1990, 75, 535-538.	0.9	10
43	Phase Transitions in Layered Diguanidinium Hexachlorostannate(IV). <i>Crystal Growth and Design</i> , 2016, 16, 2157-2166.	1.4	10
44	Influence of Molecular and Lattice Vibrations on the Stability of Layered Crystal Structure of Guanidinium Nitrate. <i>Physica Status Solidi (B): Basic Research</i> , 1997, 201, 343-354.	0.7	9
45	Polymorphism and Thermal Stability of Natural Active Ingredients. 3,3-Diindolylmethane (Chemopreventive and Chemotherapeutic) Studied by a Combined X-ray, $^1\text{H}$ NMR-NQR, Differential Scanning Calorimetry, and Solid-State DFT/3D HS/QTAIM/RDS Computational Approach. <i>Crystal Growth and Design</i> , 2016, 16, 4336-4348.	1.4	9
46	Ferroelastic phase transition in $[(\text{C}_2\text{H}_5)_4\text{N}][(\text{CH}_3)_4\text{N}]\text{MnBr}_4$ . <i>Phase Transitions</i> , 2017, 90, 610-617.	0.6	9
47	Synthesis, Crystal Structures, and Phase Transitions of Dabco Oxonium Triperchlorate and Tritetrafluoroborate. <i>Crystal Growth and Design</i> , 2018, 18, 7106-7113.	1.4	9
48	Pressure-Temperature Phase Diagrams and Transition Mechanisms of Hybrid Organic-Inorganic $\text{NH}_4\text{-N}$ Bonded Ferroelectrics. <i>Crystal Growth and Design</i> , 2018, 18, 6488-6496.	1.4	9
49	Large Negative Linear Compressibility Triggered by Hydrogen Bonding. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11631-11638.	1.5	9
50	Phase transitions and pressure effects in simple pyridinium salts. <i>Journal of Physics Condensed Matter</i> , 2003, 15, 5933-5944.	0.7	8
51	High-pressure peculiarities in compositionally ordered $\text{Pb}(\text{Sc}_{1/2}\text{Nb}_{1/2})\text{O}_3$ . <i>Journal of Physics Condensed Matter</i> , 2004, 16, 7025-7032.	0.7	8
52	Crystal Structures, Phase Transitions, and Pressure-Induced Ferroelectricity in $[\text{C}(\text{NH}_2)_3]_5\text{SO}_4(\text{SO}_3\text{-OC}_2\text{H}_5)_2\text{F}$ . <i>Journal of Physical Chemistry B</i> , 2011, 115, 10277-10284.	1.2	8
53	Microscopic instabilities related to $\text{H}_3\text{O}^+$ dynamics in monoguanidinium dioxonium trinitrate. <i>Chemical Physics Letters</i> , 2001, 340, 302-307.	1.2	7
54	Comment on $\epsilon$ -1,4-Diazabicyclo[2.2.2]octane-based disalts showing non-centrosymmetric structures and phase transition behaviors by X.-B. Han, P. Hu, C. Shi and W. Zhang, <i>CrystEngComm</i> , 2016, 18, 1563. <i>CrystEngComm</i> , 2017, 19, 179-182.	1.3	7

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55	Structural Disorder and Molecular Dynamics in Ferroelectric Crystals $[C(NH_2)_3]_4Br_2SO_4$ and $[C(NH_2)_3]_4Cl_2SO_4$ . Journal of Physical Chemistry C, 2018, 122, 22054-22062.	1.5	7
56	Dielectric and Structural Properties of Dipyrindinium Iodide Triiodide. Ferroelectrics, 2002, 268, 289-294.	0.3	6
57	Structural Implications of Anomalous Thermal Expansion and Glass-Like Dielectric Response in Pyridinium Halogenoaurates. Journal of Physical Chemistry B, 2005, 109, 20824-20829.	1.2	6
58	Comment on Ferroelectricity in Bis(imidazolium)L-Tartrate. Angewandte Chemie, 2013, 125, 7214-7216.	1.6	6
59	Quasistatic Disorder of $NH\cdots N$ Bonds and Elastic-Properties Relationship in 2-Phenylimidazole Crystals. Journal of Physical Chemistry C, 2014, 118, 7049-7056.	1.5	6
60	Differences in photoinduced optical transients in perovskite absorbers for solar cells. RSC Advances, 2018, 8, 6479-6487.	1.7	6
61	Deflection and diffraction of light by ferroelastic crystals of sodium-ammonium tartrate tetrahydrate and lithium-ammonium tartrate monohydrate. Ferroelectrics, 1992, 129, 55-65.	0.3	5
62	A Combined Neutron Powder and X-Ray Single Crystal Diffraction Study of Anhydro-Iodic Acid, $DIO_3 \cdot \frac{1}{2}H_2O$ , at 293 K. Journal of Solid State Chemistry, 1993, 102, 408-413.	1.4	5
63	Effect of Hydrostatic Pressure on the Dielectric Properties of PMN-0.31PT Single Crystal. Ferroelectrics, 2006, 339, 75-84.	0.3	5
64	Temperature-induced displacement of the proton site in strong $F\cdots H\cdots F$ hydrogen bond and mechanism of phase transition in 1,4 diazabicyclo[2.2.2]octane dihydrogen difluoride. Chemical Physics Letters, 2008, 457, 110-114.	1.2	4
65	Impact of structural differences in carcinopreventive agents indole-3-carbinol and 3,3'-diindolylmethane on biological activity. An X-ray, $^1H$ NMR, $^{13}C$ CP/MAS NMR, and periodic hybrid DFT study. European Journal of Pharmaceutical Sciences, 2015, 77, 141-153.	1.9	4
66	Dielectric response of disordered $Pb(Sc_{1/2}Ta_{1/2})O_3$ single crystal under hydrostatic pressure. Phase Transitions, 2008, 81, 987-998.	0.6	3
67	Phase Transitions Studied by High-Pressure Dielectric Spectroscopy and Calorimetry. , 2004, , 295-310.		3
68	Comment on "Unprecedented 30 K hysteresis across switchable dielectric and magnetic properties in a bright luminescent organic-inorganic halide $(CH_6N_3)_2MnCl_4$ " by A. Sen, D. Swain, T. N. Guru Row and A. Sundaresan, <i>J. Mater. Chem. C</i>, 2019, 7, 4838. Journal of Materials Chemistry C, 2020, 8, 2594-2596.	2.7	3
69	Energy gap of some alkaline halate crystals by optical methods. Journal of Molecular Structure, 1986, 142, 139-142.	1.8	2
70	Linear Birefringence and Domain Structure in Dabco Salts. Ferroelectrics, 2002, 269, 45-50.	0.3	2
71	Dielectric Response of PLZT 9.5/65/35 Relaxor Under Hydrostatic Pressure. Ferroelectrics, Letters Section, 2007, 34, 29-35.	0.4	2
72	Szafrański and Katrusiak Reply.. Physical Review Letters, 2012, 109, .	2.9	2

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73	Origin of Metastable Properties in the Ferroelectric Phase of Tetraguanidinium Dichloro-Sulfate. <i>Journal of Physical Chemistry C</i> , 2014, 118, 15556-15564.	1.5	2
74	Comment on "Phase transitions, screening and dielectric response of CsPbBr <sub>3</sub> " by A. Svirskas, S. Balčiūnas, M. Aimašius, G. Uševičius, M. Kinka, M. Velička, D. Kubicki, M. E. Castillo, A. Karabanov, V. V. Shvartsman, M. R. Soares, V. Aablinskas, A. N. Salak, D. C. Lupascu and J. Banyš, <i>J. Mater. Chem. A</i> , 2020, 8, 14015. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11450-11452.	5.2	2
75	Heat capacity anomaly near magnetic phase transition in GaFeO <sub>3</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 548, 168978.	1.0	2
76	Effect of Hydrostatic Pressure on the Dielectric Behavior of Polymer Relaxors. <i>Ferroelectrics</i> , 2004, 304, 13-18.	0.3	1
77	Comment on the Phase Transition Mechanism in Diglycine Methanesulfonate. <i>Chemistry - an Asian Journal</i> , 2014, 9, 3342-3343.	1.7	1
78	Vitrification and New Phases in the Water:Pyrimidine Binary Eutectic System. <i>Journal of Physical Chemistry B</i> , 2019, 123, 7190-7196.	1.2	1
79	Comment on "Improper molecular ferroelectrics with simultaneous ultrahigh pyroelectricity and figures of merit" by Li <i>et al.</i> . <i>Science Advances</i> , 2022, 8, .	4.7	1
80	Thermodynamic pathway between the non-polar and ferroelectric polymorphs of guanidinium ethoxysulfonate. <i>CrystEngComm</i> , 2020, 22, 3975-3983.	1.3	0