Personal declaration

SoHyun PARK, Prof. Dr.

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Languages

German: fluent
English: fluent
French, Chinese: reading basis
Korean: mother tongue

Education/academic title

10/12/15	Apl. Professor, Faculty Geosciences at Ludwig-Maximilians-Universität München (LMU), Germany
05/06/08	Privatdozentin *venia legendi* for the field "Crystallography" at Faculty Geosciences, LMU.
01/12/04-16/04/08	Habilitation *facultas docend* for the field "Crystallography" at Faculty Geosciences, LMU Topic: "Investigation of zeolitic lithosilicate ionic conductors" (AG Prof. Dr. Friedrich Frey: Neutron diffraction)
06/95 – 11/98	PhD Topic: "Synthesis and characterization of zeolite-like zinco- and lithosilicates", Faculty for Earth Sciences, Ruhr-Universität Bochum (RUB), supervised by Prof. Dr. Hermann Gies
11/94 – 05/95	Diploma Thesis Title: "Thermal expansion of as-synthesized and calcined porous materials", supervised by Prof. Dr. Hermann Gies, RUB
10/89 – 10/94	Diploma Study Crystallography, Mineralogy, Physical chemistry, and Material Sciences at RUB
10/88 – 06/89	German language course at RUB
03/84 – 02/87	Bachelor of Natural Science Department of Geology, Yonsei University, Seoul, South-Korea

Appointments

Since 09. 2008	Akad. Oberrätin *'auf Lebenszeit'* Section Crystallography (Head: Prof. Dr. Wolfgang W. Schmahl), Department for Environmental and Geosciences at LMU, Germany
01/04 – 08/08	Research scientist Section Crystallography (AG neutron diffraction, Prof. Dr. Friedrich Frey), Department for Environmental and Geosciences at LMU
07/02 – 12/03	Research scientist Max-Planck-Institute for coal research, Heterogeneous catalysis Mülheim an der Ruhr, Germany (Group: Prof. Ferdi Schüth)
09/00 – 05/02	Research scientist Department of Geosciences, State University of New York at Stony Brook, Stony Brook, USA (Group: Prof. John B. Parise)
03/99 – 08/00	Research scientist, Center for Neutron Research, National Institute of Standards and Technology, Gaithersburg, USA (Group: Dr. Brian H. Toby) in collaboration with Prof. J.B. Parise SUNY at Stony Brook, NY, USA
06/95 – 12/98	Research scientist, Institute for Mineralogy, RUB, Germany (Group: Prof. Hermann Gies).

Scholarship

12/04 – 03/05	Habilitation at LMU
03/84 – 02/88	Full scholar for 4-years BSc course (Yonsei-University, Seoul)

Skill

Synthesis and characterization of solid-state functional materials:
Li/Na-ionic conductors, protonic conductors, multiferroics, porous materials, optical crystals.

Expert for structure determination using neutron and X-ray source in combination with impedance, quasi-elastic neutron back scattering, solid-state NMR, IR, and Raman spectroscopy, magnetic measurements, surface area determination (BET), thermal analyses (DTA/DSC/TG).

Long-term cooperation for *in situ* and *ex situ* experiments at large-scale neutron and synchrotron facilities:

Forschungsneutronenquelle FRM II (Garching, Germany);
Photon Science in DESY (Hamburg, Germany);
Center for Neutron Research NCNR (National Institute of Standards and Technology, Gaithersburg, MD, USA);
Institut Laue-Langevin ILL (Grenoble, France);
ISIS Pulsed Neutron & Muon Source (Rutherford Appleton Laboratory, Chilton, UK);
LLB (Laboratoire Leon Brilloun, Saclay, France)
PSI (Paul-Scherrer-Institut, Villigen, Suisse)
National Synchrotron Light Source NSLS (Brookhaven National Laboratory, NY, USA);
Advanced Photon Source APS (Argonne National Laboratory, Argonne, IL, USA).

Project

Deutsche Forschungsgemeinschaft (DFG):

PA-1222/1-1 Title: *Synthesis and Characterization of microporous lithosilicates Li-conductors* (Apr. 2005 – Mär. 2007; 100k Euro).

PA-1222/1-2 Title: *Modification and characterization of microporous lithosilicates Li-conductors* (Jan. 2007 – Mai 2008; 50k Euro).

Großgeräte Art. 91 b GG der DFG:

INST 86/1147-1 FUGG (127k Euro) with Prof. W.W: Schmahl: *Installation of a single crystal X-ray diffractometer and LT-device (Oxford Diff. Gemini), 2009*.

INST 86/1147-1 FUGG (115k Euro) with Prof. W.W: Schmahl: *Installation of a dual system X-ray powder diffractometer (GE XRD3003),* 2009.

BMBF-Verbundprojekt *Installation of Chemical Crystallography Beamline at Petra III-Extension*

05K10WM3 Title: *Long-distance-focus polarization microscope* (Jul. 2010 – Jun. 2013; 94k Euro) with Prof. W.W. Schmahl.

05K13WMB Title: *Installation of a hexapod* (Jul. 2013 – Jun. 2016; 160k Euro).

Teaching records

(The complete list of courses taught since 2004 at LMU are found in the enclosure)

Bachelor (in German)

Structure and Properties I & II (Crystal chemistry and Crystallography)
Powder diffraction

Master (in English)

Material Sciences I: Ionic conductors and battery materials, Neutron scattering
Material Sciences II: Zeolites, Magnetic structures
Practice to material Sciences I & II: Powder diffraction
Methods for structure determination
Defect structures
Advanced powder diffraction
Functional materials (Seminar), and Lab-practice (2-week).

Full papers peer-reviewed (* as the corresponding author)

Solid state $Li^+/Na^+/H^+$ conductors

M. Winkler, P. Lunkenheimer, A. Loidl, **S.-H. Park*,** B. Röska, M. Hoelzel, *Charge transport by global protonic conductivity and relaxational dynamics over hydrogen bonds in* $(Fe^{2+}Fe^{3+}_{3.2}(Mn^{2+},Zn)_{0.8}(PO_4)_3(OH)_{4.2}(HOH)_{0.8})$, Solid St. Ionics 347 (2020) 115240 (11pp).

A. Hartl, **S.-H. Park***, M. Hoelzel, N. Paul, R. Gilles, *Proton conductivity in a hureaulite-type compound,* $Mn_5[(PO_4)_2(PO_3(OH))_2](HOH)_4$, J. Solid St. Chem. 277 (2019) 290-302.

B. Röska, **S.-H. Park***, D. Behal, K.-U. Hess, A Günther, G. Benka, Ch. Pfleiderer, M. Hoelzel, T. Kimura, *Determination of the hydrogen-bond network and the ferrimagnetic structure of a rockbridgeite-type compound,* $Fe^{2+}Fe^{3+}_{3.2}(Mn^{2+},Zn)_{0.8}(PO_4)_3(OH)_{4.2}(HOH)_{0.8}$, J. Phys.: Conden. Matter 30 (2018) 235401(12pp).

B. Röska, I. Akter, M. Hoelzel, **S.-H. Park***, *Na^+/Li^+-ionic conductivity in* $Fe_2Na_2K[Li_3Si_{12}O_{30}]$, J. Solid St. Chem. 264 (2018) 98-107**.**

B. Röska, **S.-H. Park***, Y. Yoshimori, K. Kimura, T. Kimura, *Anomalous dielectric response of short hydrogen bonds under pressure: The case of* $(Mn,Fe)^{2+}AlPO_4(OH)_2H_2O$, J. Phys.: Conden. Matter 29 (2017) 365401(5pp).

S.-H. Park*, C.J. Chucholowski, L. Garcia B. Lara, M. Hoelzel, C. Paulmann, *"Investigation of a new willemite-type compound,* $(Li, Na, H)_{0.16}Zn_{1.92}SiO_4$*"*, J. Solid St. Chem. 200 (2013), 328-340.

S.-H. Park*, J.B. Parise, M.E. Franke, T. Seydel, C. Paulmann *"Lithium dynamics in the zeolite-like lithosilicate RUB-29 and its high-temperature structure after dehydration* $(Cs_{14}Li_{42}Si_{72}O_{172})$*"*, Microporous & Mesoporous Materials, 108 (2008), 1-12.

S.-H. Park*, A. Senyshyn, C. Paulmann, *"Increase of ionic conductivity in the microporous lithosilicate RUB-29 by Na-ion exchange processes"*, J. Solid St. Chem. 180 (2007), 3366-3380.

S.-H. Park*, M. Hoelzel, H. Boysen, E. Schmidbauer, *"Lithium conductivity in a Li-bearing milarite-type mineral, sogdianite"*, J. Solid St. Chem. 180 (2007), 1306-1317.

Y.J. Lee, **S.-H. Park**, Ch. Eng, J.P. Parise, C.P. Grey, *"Cation ordering and electrochemical properties of the cathode materials* $LiZn_xMn_{2-x}O_4$*; a* ^6Li *magic angle spinning NMR spectroscopy and diffraction study"*, Chem. Mater. 14 (2002), 194 - 205.

S.-H. Park*, J.B. Parise, H. Gies, H. Liu, C.P. Grey, B.H. Toby, *"A new porous lithosilicate with a high ionic conductivity and ion-exchange capacity"*, J. Am. Chem. Soc. V122, N44 (2000), 11023 - 11024.

Magnetic structures and multiferroics

S.-H. Park*, B. Liu, D. Behal, B. Pedersen, A. Schneidewind, *Two spin-canting textures in the antiferromagnetic phase AF1 of $MnWO_4$ based on the new polar atomistic model in P2,* J. Phys.: Condens. Matter 30 (2018) 135802 (6pp).

S.-H. Park*, D. Behal, B. Pedersen, *The origin of the polar symmetry in huebnerite-type multiferroic*s, Physica B: Condens. Matter, 551(2018) 118-121.

B.-Q. Liu, **S.-H. Park**, A. Schneidewind, Y. Xiao, *Theoretical spin-wave dispersions in the antiferromagnetic phase AF1 of $MnWO_4$ based on the polar atomistic model in **P2***, J. Phys.: Conden. Matter 30 (2018) 295401(8pp).

D. Behal, B. Röska, **S.-H. Park***, B. Pedersen, G. Benka, Ch. Pfleiderer, Y. Wakabayashi, T. Kimura, *The first study of antiferromagnetic eosphorite-childrenite series $(Mn_{1-x}Fe_x)AlPO_4(OH)_2H_2O$ (x = 0.5*), J. Magnetism & Magnetic Materials 428 (2017) 17-27.

U. Gattermann, **S.-H. Park***, C. Paulmann, G. Benka, C. Pfleiderer, *HT-solution growth and characterisation of $In_xNa_xMn_{1-2x}WO_4$ $(0 < x \leq 0.26)$*, J. Solid St. Chem. 244 (2016) 140-150.

U. Gattermann, B. Röska, C. Paulmann, **S.-H. Park***, *Large single crystal growth of $MnWO_4$-type materials from high-temperature solutions*, J. Crystal Growth, 453(2016) 40-48.

U. Gattermann, G. Benka, A. Bauer, A. Senyshyn, **S.-H. Park***, *Magnetic properties of In-doped $MnWO_4$-type solid solutions: $Mn_{1-3x}In_{2x}\square_xWO_4$ [□ = vacancy; $0 \leq x \leq 0.11$],* J. Magnetism & Magnetic Materials, 398 (2016), 167-173.

S.-H. Park*, B. Mihailova, B. Pedersen, C. Paulmann, D. Behal, U. Gattermann, R. Hochleitner, *A new polar symmetry of huebnerite ($MnWO_4$) with ferrodistortive domains*, J. Magnetism & Magnetic Materials, 394 (2015) 160-172.

M. John, S. Heuss-Aßbichler, **S.-H. Park**, A. Ullrich, G. Benka, N. Petersen, D. Rettenwander, S.R. Horn, *Low-temperature synthesis of $CuFeO_2$ (delafossite) at 70 °C: A new process solely by precipitation and ageing*, J. Solid St. Chem. 233(2016) 390-396.

U. Gattermann, **S.-H. Park***, M. Kaliwoda, *Synthesis and characterisation of In-doped $MnWO_4$-type solid-solutions: $Mn_{1-3x}In_{2x}\square_xWO_4$ (x = 0 - 0.11)*, J. Solid St. Chem. 219 (2014) 191-200.

Li-containing novel structures

S.-H. Park*, H. Boysen, J. B. Parise, *"Structural disorder of a new zeolite-like lithosilicate, $K_{2.6}Li_{5.4}[Li_4Si_{16}O_{38}]\cdot 4.3H_2O$"*, Acta Cryst. B62 (2006), 41-51.

S.-H. Park*, H. Liu, M. Kleinsorge, C.P. Grey, B.H. Toby, J.B. Parise, *"[Li-Si-O]-MFI: A new microporous lithosilicate with the MFI topology"*, Chem. Mater. 16 (2004), 2605 – 2614

S.-H. Park*, H. Gies, B.H. Toby, J.B. Parise, *"Characterization of new microporous lithosilicate with ANA topology"*, Chem. Mater. 14 (2002), 3187 - 3196.

S.-H. Park*, M. Kleinsorge, C.P. Grey, J.B. Parise, *"Study of ion-exchanged microporous lithosilicate Na-RUB-29 using synchrotron X-ray single-crystal diffraction and ^{6}Li MAS NMR spectroscopy"*, J. Solid St. Chem. 167 (2002), 310 - 323.

S.-H. Park, P. Daniels, H. Gies, *"RUB-23: a new microporous lithosilicate containing spiro-5 building units"* Microporous & Mesoporous Materials, 37 (2000), 129 - 143.

Characterization of H-containing structures

A. Bieniok, U. Brendel, **S.-H. Park**, *Temperature and humidity dependent investigations on paulingite,* Z. Kristallographie, 230(4) (2015), 213-222.

R. Hochleitner, K.T. Fehr, M. Kaliwoda, A. Günther, Ch. Rewitzer, W.W. Schmahl, **S.-H. Park**, *Hydroniumpharmacoalumite, $(H_3O)Al_4[(OH)_4(AsO_4)_3].4\text{-}5\ H_2O$, a new mineral of the pharmacosiderite supergroup from Rodalquilar, Spain*, N. Jb. Miner. Abh. (J. Min. Geochem.) 192/2 (2015), 169-176.

D. Behal, B. Röska, U. Gattermann, A. Reul, **S.-H. Park***, *Structure analysis of a Mn-doped willemite-type compound, $H_{0.12}(Zn_{1.89(3)}Mn_{0.05(1)}\square_{0.06})Si_{1.00(1)}O_4$*, J. Solid St. Chem. 210 (2014), 144-149.

C.C. Pavel, **S.-H. Park**, A. Dreier, B. Tesche, W. Schmidt, *"Structural defects induced in ETS-10 by post-synthesis treatment with H_2O_2 solution"*, Chem. Mater. 18 (2006), 3813-3820.

Characterization of fuel materials for neutron reactors

H-Y. Chiang, T. Wiss, **S.-H. Park**, O. Dieste-Blanco, W. Petry, *TEM analysis of irradiation-induced interaction layers in coated UMo/X/Al trilayer systems (X= Ti, Nb, Zr, Mo)*, J. Nucl. Mater. 499 (2018) 1-9.

H-Y. Chiang, **S.-H. Park**, M. Mayer, K. Schmid, M. Balden, U. Bösenberg, R. Jungwirth, G. Falkenberg, T. Zweifel, W. Petry, *Swift heavy ion irradiation induced interactions in the UMo/X/Al trilayer system (X= Ti, Zr, Nb, and Mo)*, J. Alloys & Compounds, 626 (2015) 381-390.

H-Y. Chiang, M. Döblinger, **S-H. Park**, L. Beck, W. Petry, *Ion beam induced spinodal decomposition and amorphization in the immiscible bilayer system UMo/Mg*, J. Nucl. Mater. 453(2014) 41-47.

R. Jungwirth, H. Palancher, C. Bertrand-Drira, A. Bonnin, C. Borca, V. Honkimaki, C. Jarousse, **S.-H. Park**, W.W. Schmahl, W. Petry, "*Microstructure of as-fabricated disperse UMo/Al(Si) samples prepared with ground and atomized powder*", J. Nucl. Mater. 438 (2013), 246 – 260.

Optical crystals

V.P. Solntsev, T.B. Bekker, A.V. Davydov, A.P. Yelisseyev, S.V. Rashchenko, A.E. Kokh, V.D. Grigorieva, **S.-H. Park**, *Optical and Magnetic Properties of CU-Containing Borates with 'Anti-Zeolite' Structure*, J. Phys. Chem. C, V123 (7) (2019), 4469-4474.

T.B. Bekker, V. P. Solntsev, S. V. Rashchenko, A. P. Yelisseyev, A.V. Davydov, A. A. Kragzhda, A. E. Kokh, A. B. Kuznetsov, **S.-H. Park**, *On the nature of color of the new borates with the 'anti-zeolite' structure*, Inorganic Chemistry, Inorg. Chem.57(5) (2018) 2744-2751.

Zeolites and Carbonates

D. Cicerali, M. Arslan, E. A. Yazar, C. Yücel, İ. Temizel, **S.-H. Park**, P.A. Schroeder, *Mineralogy, chemistry, and genesis of zeolitization in Eocene tuffs from the Bayburt area (NE Turkey): Constraints on alteration processes of acidic pyroclastic deposits*, J. Af. Earth Sci. 162 (2020) 103690 (pp14).

N. Schanchez-Pastor, A.M. Gigler, J.A. Cruz, **S.-H. Park**, G. Jordan, L. Fernandez-Díaz, "*Growth of Calcium Carbonate in the Presence of Cr(VI)*", Crystal Growth Design, 11(7) (2011), 3081–3089.

N. Sánchez-Pastor, J.A. Cruz, A.M. Giegler, **S.-H. Park**, G. Jordan, W. Schmahl, L. Fernández-Díaz, *Microprobe and Raman Investigation of the Zoning in Synthetic Ca (CO3, CrO4) Crystals*, Revista de la Sociedad Espanola de Mineralogıa, Band 13(2010), 197-198.

Characterization of microporous materials in proceedings bands peer-reviewed

S.-H. Park, R.-W. Grosse-Kunstleve, H. Graetsch, H. Gies, *"The thermal expansion of the zeolites MFI, AFI, DOH, DDR, and MTN in their calcined and as synthesized forms"*, H. Chon, S.-K. Ihm and Y.S. Uh (Editors), Progress in Zeolite and Microporous Materials, Studies in Surface Science and Catalysis, Elsevier Science, Vol. 105 (1997), 1989 - 1994.

S.-H. Park*, J.B. Parise, H. Gies, *"Optimized synthesis and structural properties of lithosilicate RUB-29"*, Studies in Surface Science and Catalysis 135, Paper 09-O-05, Ed.: A. Galarneau, F. Di Renzo, F. Fajula, J. Vedrine, Elsevier, 2001.

S.-H. Park, W. Schmidt, A. Dreier, B. Tesche, *"Investigation on the generation of supermicropores in the microporous titanosilicate ETS-10"*, in: 13th European Microscopy Congress, University of Antwerp, Belgium, August 22-27, Proceedings Vol. II., 531-532, Ed: G. van Tendeloo, Belgian Society of Microscopy, Liège, 2004.

Proceedings

([O]: oral presentation, [P]: poster, [C]: collaboration)

[O]29th Deutsche Kristallographie-Tagung, 15.03.-18.03.2021, DESY at Hamburg, Germany, *The complexity of magnetic spin orders and dynamically disordered hydrogen bond networks in $Mn_5[(PO_4)_2(PO_3OH)_2(HOH)_4]$*, S.-H. Park.

[O]European Conference on Neutron Scattering, 30.06.-05.06.2019, St. Petersburg, Russia, *Proton dynamic behaviour in hydrogen bond networks in oxyhydroxides,* S.-H. Park.

[O]25th Deutsche Kristallographie-Tagung, 05.03.-07.03.2018, Essen, Germany, *Magnetic properties and proton dynamics in phosphatic oxyhydroxides,* S.-H. Park.

[O]International conference on neutron scattering, 09.07-13.07.2017, Daejeon, South-Korea, *The origin of polar symmetry in huebnerite-type ($MnWO_4$) multiferroics*, S.-H. Park, et al.

[P] International conference on neutron scattering, 09.07-13.07.2017, Daejeon, South-Korea, *Anomalous dielectric response of short hydrogen bonds under pressure: The case of $(Mn_{0.5}Fe_{0.5})^{2+}AlPO_4(OH)_2H_2O$*, B. Röska, S.-H. Park, B. Pedersen, Y. Yoshimori, K. Kimura, T. Kimura.

[P]23th Deutsche Kristallographie-Tagung, 14.03-17.03.2016, Stuttgart, Germany, *Structural investigation and large single crystal growth of (In,Na):$MnWO_4$,* U. Gattermann, S.-H. Park, C. Paulmann.

[O]22th Deutsche Kristallographie-Tagung, 16.03-19.03.2015, Göttingen, Germany, *Structural changes of In- and Na-doped $MnWO_4$ and their magnetic behaviours*, S.-H. Park, U. Gattermann, D. Behal.

[P]Gordon Research Conferences: Multiferroic & Magnetoelectric Materials, August 10-15. 2014, University of New England in Biddeford, ME, United States, *Reconsideration of the crystal structure of huebnerite ($MnWO_4$): a naturally occurring multiferroic material with out-of-plane domains*, S.-H. Park, D. Behal, U.Gattermann, B. Pedersen, B. Mihailova, C. Paulmann.

[P]21th Deutsche Kristallographie-Tagung, 19.03-22.03.2013, Freiberg, Germany, *Effect of domains on a multiferroic mineral, huebnerite ($MnWO_4$)*, S.-H. Park, D. Behal, U. Gattermann, B. Pedersen, C. Paulmann.

[P]20th Deutsche Kristallographie-Tagung, 12.03-16.03.2012, München, Germany, *Synthesis of large single crystal of sugilite*, S.-H. Park and J. Heimhilger.

[C] T. Drobek, J. Strobel, S. Park, K.L. Phuong, W. Altermann, H. Lemmel, P. Lindner, R.W. Stark, *Small angle neutron scattering analysis of porous reservoir rocks*, Soc. Core Anlaysts, Vol. 23, No. 1 (2011), SCA2011-48.

[O] 19th Deutsche Kristallographie-Tagung, September, 2011, Salzburg, Austria, *New Li-Na-ionic conductor materials: $(Li, Na)_{2x}[Zn_{2-x}SiO_4]$,* S.-H. Park, C.J. Pietsch, L. Garcia B. Lara.

[O] 19th Deutsche Kristallographie-Tagung, September, 2011, Salzburg, Austria, *In search of Li-Na-ionic conductors*, S.-H. Park, J. Labbe, I.F. Akter, C.J. Pietsch, L.Garcia B. Lara.

[O] Neutrons for Global Energy Solutions 2010, Bonn, Germany, September 26-29, 2010, *New synthetic Li/Na-ionic conductor materials for development of monolithic solid-state electric cell*, S.-H. Park, L. Garcia B. Lara, I. F. Akter, J. Labbé, C.J. Pietsch.

[P] 26th European Crystallographic Meeting, 29.08-02.09.2010, Darmstadt, Germany, *New synthetic cyclosilicates as potential Li/Na-ionic conductors***,** S.-H. Park, C.J. Pietsch, I.F. Akter, J. Labbe, L. Garcia B. Lara, C. Paulmann, A. Senyshyn, M. Hoelzel.

[O] Deutsche Tagung für Forschung mit Synchrotronstrahlung, Neutronen und Ionenstrahlen, Freie Universität Berlin, 24.-26 Februar 2010, *Trace of conducting cations in cyclosilicates using neutron and synchrotron X-Ray diffraction*, S.-H. Park, I. Kaiser-Bischoff , C. Paulmann.

[O] 17th Deutsche Kristallographie-Tagung, March 9-12. 2009, Hannover, Germany, *Ionenleitfähigkeit in Sechserring- und Sechserkette-haltigen Lithosilicaten*, S.-H. Park, B. Pedersen, M. Meven, H. Krüger.

[O] 16th Deutsche Kristallographie-Tagung, March 3-6. 2008, Erlangen, Germany, *Microporous lithosiliates and further Li-bearing minerals als potential Li-ionic conductors*, S.-H. Park.

[P] IUCr, 2008, Osaka, *Ionic conductivity in Li-bearing milarite-group members*, Acta Cryst. A64 (2008), Supplementary, C532, S.-H. Park

[P] 16th Deutsche Kristallographie-Tagung, March 3-6. 2008, Erlangen, Germany, I*onic conductivity in Li-bearing milarite-group members: sugilite and sogdiante*, S.-H. Park.

[P] 16th Deutsche Kristallographie-Tagung, March 3-6. 2008, Erlangen, Germany, *Structure refinement and ionic conductivity in kunzite (pink spodumen)*, S. Gruber, S.-H. Park.

[O] 15th Deutsche Kristallographie-Tagung, March 5-8. 2007, Bremen, Germany, *Structural modification in low-temperature form of a microporous lithosilicate* $Cs_{14}Li_{42}Si_{72}O_{172}$, S.-H. Park, F. Frey, C. Paulmann.

[O] 14th Deutsche Kristallographie-Tagung, April 3-5. 2006, Freiburg, Germany, *Dynamic and static disorder of lithium in the microporous lithosilicate RUB-29* $(Cs_{14}Li_{42}Si_{72}O_{172}\cdot 14H_2O)$, S.-H. Park, J.B. Parise, H. Boysen, C. Paulmann.

[P]14th Deutsche Kristallographie-Tagung, April 3-5. 2006, Freiburg, Germany, *Rietveld analysis with VT neutron powder diffraction data of sogdianite*, S.-H. Park, H. Boysen, M Hoelzel.

[O]14th Deutsche Kristallographie-Tagung, April 3-5. 2006, Freiburg, Germany, *Structural defects in the zeolite-like lithosilicate RUB-30*, S.-H. Park, H. Boysen, C. Paulmann.

[O]18th Deutsche Zeolith-Tagung, March 3-5. 2006, Hannover, Germany, State-*of-the-art of the study on zeolite-like lithosilicates*, S.-H. Park.

[P]Gordon Conferences: Electrochemistry, February 12-17. 2006, Buellton, CA, USA, *Li-cationic conductivity in microporous lithosilicates*, S.-H. Park.

[P]Catalytic Processes on Advanced Micro- and mesoporous Materials, September 2-5, 2005, Nessebar, Bulgaria, *Creation of porosity on several length scales in the titanosilicate catalyst ETS-10*, C.C. Pavel, S.-H. Park, W. Schmidt.

[P]COPS VII, May 2005, Aix-en-Provence, France, *Investigation on factors controlling the larger pore formation in the titanosilicate ETS-10*, C.C. Pavel, S.-H. Park, W. Schmidt.

[P]EMC 2004, Antwerpen, Belgium, *Investigation on the generation of supermicropores in the microporous titanosilicate ETS-10*, S.-H. Park, W. Schmidt, A. Dreier, B. Tesche.

[P]17th Deutsche Zeolith-Tagung, March 2.-4. 2005, Gießen, Germany, *The superstructure of RUB-30: A synthetic zeolite-like lithosilicate*, S.-H. Park, H. Boysen.

[O]13th Gemeinsame Jahrestagung der DGK, DGKK und NKK-ÖAW, Feb. 28.- Mar.04. 2005, Köln, Germany, *The superstructure of RUB-30: A synthetic zeolite-like potassiumlithosilicate*, S.-H. Park, H. Boysen.

[O]12th Deutsche Kristallographie-Tagung, March 15.-19. 2004, Jena, Germany, *Creation of supermicropores in the microporous titanosilicate ETS-10*, S.-H. Park, W. Schmidt, B. Tesche, A. Dreier, E. Löffler.

[O]16th Deutsche Zeolith-Tagung, March 3.-5. 2004, Dresden, Germany, *Impedance Spectroscopy on Ion-Exchanged Lithosilicate RUB-29*, M. E. Franke, L. Rodriguez-Gonzalez, U. Simon, and S.-H. Park.

[P]15th Deutsche Zeolith-Tagung, March 5.-7. 2003, Kaiserslautern, Germany, *Investigation on the adsorbate-framework interaction in ETS-10 using 29Si MAS NMR and XRD methods*, B. Zibrowius, S.-H. Park, C. Weidenthaler, W. Schmidt.

[P]15th Deutsche Zeolith-Tagung, March 5.-7. 2003, Kaiserslautern, Germany, *Lithium-cationic conductivity of a microporous lithosilicate RUB-29*, S.-H. Park, J.B. Parise, B. Zibrowius, M.E. Franke.

[P]14th Deutsche Zeolith-Tagung, March 6-8. 2002, Frankfurt am Main, Germany, *Study of ion-exchanged microporous lithosilicate Na-RUB-29 using synchrotron X-ray single crystal diffraction and ^{6}Li MAS NMR spectroscopy,* S.-H. Park, M. Kleinsorge, C.P. Grey, J.B. Parise.

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