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Publications List 20**20**

Abel C., Afach S., Ayres N.J., Baker C.A., Ban G., Bison G., Bodek K., Bondar V., Burghoff M., Chanel E., Chowdhuri Z., Chiu P.J., Clement B., Crawford C.B., Daum M., Emmenegger S., Ferraris-Bouchez L., Fertl M., Flaux P., Franke B., Fratangelo A., Geltenbort P., Green K., Griffith W.C., van der Grinten M., Grujić Z.D., Harris P.G., Hayen L., Heil W., Henneck R., Helaine V., Hild N., Hodge Z., Horras M., Iaydjiev P., Ivanov S.N., Kasprzak M., Kermaidic Y., Kirch K., Knecht A., Knowles P., Koch H.C., Koss P.A., Komposch S., Kozela A., Kraft A., Krempel J., Kuzniak M., Lauss B., Lefort T., Lemièrè Y., Leredde A., Mohanmurthy P., Mtchedlishvili A., Musgrave M., Naviliat-Cuncic O., Pais D., Piegsa F.M., Pierre E., Pignol G., Plonka-Spehr C., Prashanth P.N., Quéméner G., Rawlik M., Rebreyend D., Rienäcker I., Ries D., Roccia S., Rogel G., Rozpedzik D., Schnabel A., Schmidt-Wellenburg P., Severijns N., Shiers D., Tavakoli Dinani R., Virost R., Voigt J., Weis A., Wursten E., Wyszynskai G., Zejma J., Zenner J., Zsigmond G. Measurement of the permanent electric dipole moment of the neutron *Physical Review Letters* **124**, 081803-1-081803-7 (2020)

Abel C., Afach S., Ayres N.J., Ban G., Bison G., Bodek K., Bondar V., Chanel E., Chiu P.J., Crawford C.B., Chowdhuri Z., Daum M., Emmenegger S., Ferraris-Bouchez L., Fertl M., Franke B., Griffith W.C., Grujić Z.D., Hayen L., Helaine V., Hild N., Kasprzak M., Kermaidic Y., Kirch K., Knowles P., Koch H.C., Komposch S., Koss P.A., Kozela A., Krempel J., Lauss B., Lefort T., Lemièrè Y., Leredde A., Mtchedlishvili A., Mohanmurthy P., Musgrave M., Naviliat-Cuncic O., Pais D., Pazgalev A., Piegsa F.M., Pierre E., Pignol G., Prashanth P.N., Quéméner G., Rawlik M., Rebreyend D., Ries D., Roccia S., Rozpedzik D., Schmidt-Wellenburg P., Schnabel A., Severijns N., Dinani R., Tavakoli, Thorne J., Weis A., Wursten E., Wyszynski G., Zejma J., Zsigmond G. Optically pumped Cs magnetometers enabling a high-sensitivity search for the neutron electric dipole moment *Physical Review A* **101**, 053419-1-053419-17 (2020)

Adroja D.T., Sharma S., Ritter C., Hillier A.D., Le D., Tomy C.V., Singh R., Smith R.I., Koza M.M., Sundaresan A., Langridge S. Muon spin rotation and neutron scattering investigations of the B-site ordered double perovskite Sr₂DyRuO₆ *Physical Review B* **101**, 094413-1-094413-13 (2020)

Aguilar-Maldonado C., Arévalo-López E.P., Ritter C., Mentré O., Arévalo-López Á.M. Magnetic structures of Mn₁₁Ta₄O₂₁ and interpretation as an hexagonal A-site manganite *Inorganic Chemistry* **59**, 13128-13135 (2020)

Akrivos V., Wimporoy R.C., Hofmann M., Stewart B., Muránsky O., Smith M.C., Bouchard J. Neutron diffraction measurements of weld residual stresses in three-pass slot weld (Alloy 600/82) and assessment of the measurement uncertainty *Journal of Applied Crystallography* **53**, 1181-1194 (2020)

Alaoui M.C., Le Clézio E., Despau G., Calzavara Y. Radiation resistance of high frequency ultrasonic devices for distance measurement in the RHF *EPJ Web of Conferences* **225**, 04006-1-04006-3 (2020)

Alekseev P.A., Mignot J.M., Adroja D.T., Lazukov V.N., Tanida H., Muro Y., Sera M., Takabatake T., Steffens P., Rols S. Effect of Nd and Rh substitution on the spin dynamics of the Kondo-insulator CeFe₂Al₁₀ *Physical Review B* **102**, 024438-1-024438-14 (2020)

Allenspach S., Biffin A., Stuhr U., Tucker G.S., Ohira-Kawamura S., Kofu M., Voneshen D.J., Boehm M., Normand B., Lafflorencie N., Mila F., Rüegg C. Multiple magnetic bilayers and unconventional criticality without frustration in BaCuSi₂O₆ *Physical Review Letters* **124**, 177205-1-177205-7 (2020)

Almazán H., Bernard L., Blanchet A., Bonhomme A., Buck C., del Amo Sanchez P., El Atmani I., Haser J., Kandzia F., Kox S., Labit L., Lamblin J., Letourneau A., Lhuillier D., Licciardi M., Lindner M., Materna T., Minotti A., Pessard H., Réal J.S., Roca C., Rogly R., Salagnac T., Savu V., Schoppmann S., Sergeyeva V., Soldner T., Stutz A., Vialat M. Improved sterile neutrino constraints from the STEREO experiment with 179 days of reactor-on data *Physical Review D* **102**, 052002-1-052002-31 (2020)

Almazán H., Bernard L., Blanchet A., Bonhomme A., Buck C., del Amo Sanchez P., El Atmani I., Haser J., Labit L., Lamblin J., Letourneau A., Lhuillier D., Licciardi M., Lindner M., Materna T., Minotti A., Onillon A., Pessard H., Réal J.S., Roca C., Rogly R., Salagnac T., Savu V., Schoppmann S., Sergeyeva V., Soldner T., Stutz A., Vialat M. Accurate measurement of the electron antineutrino yield of ²³⁵U fissions from the STEREO experiment with 119 days of reactor-on data *Physical Review Letters* **125**, 201801-1-201801-7 (2020)

Almazán Molina H. Evaluation of the neutron detection efficiency in the STEREO reactor neutrino experiment *PhD Thesis* (2020)

Amedei A., Asadzadeh F., Papi F., Vannucchi M.G., Ferrucci V., Bermejo I.A., Fragai M., Vieira de Almeida C., Cerofolini L., Giuntini S., Bombaci M., Pesce E., Niccolai E., Natali F., Guarini E., Gabel F., Traini C., Catarinichia S., Ricci F., Orzalesi L., Bertl F., Corzana F., Zollo M., Grifantini R., Nativi C. A structurally simple vaccine candidate reduces progression and dissemination of triple-negative breast cancer *iScience* **23**, 101250-1-101250-53 (2020)

Andrade C., Saucedo L., Rebolledo N., Cabeza S., Meinel D. X-Ray computed tomography and traditional analysis of a capillary absorption test in cement pastes *Cement and Concrete Composites* **113**, 103634-1-103634-15 (2020)

Andronikova D., Janolin P.E., Filimonov A., Ivanov A., Vakhrushev S. Temperature evolution of atomic dynamics in chemically ordered lead scandium niobate studied by inelastic neutron scattering *In «2019 IEEE International Conference on Electrical Engineering and Photonics (EEXPolytech)»* (2019, IEEE) pp.230-232

Antognini A., Berger N., Cocolios T.E., Dressler R., Eichler R., Eggenberger A., Indelicato P., Jungmann K., Keitel C.H., Kirch K., Knecht A., Michel N., Nuber J., Oreshkina N.S., Ouf A., Papa A., Pohl R., Pospelov M., Rapisarda E., Ritjoh N., Roccia S., Severijns N., Skawran A., Vogiatzi S.M., Wauters F., Willmann L. Measurement of the quadrupole moment of ¹⁸⁵Re and ¹⁸⁷Re from the hyperfine structure of muonic X rays *Physical Review C* **101**, 054313-1-054313-14 (2020)

Arbe A., Rubio J., Malo de Molina P., Maiz J., Pomposo J.A., Fouquet P., Prévost S., Jurányi F., Khanefi M., Colmenero J. Melts of single-chain nanoparticles: A neutron scattering investigation *Journal of Applied Physics* **127**, 044305-1-044305-11 (2020)

Arjmandi-Tash H., Lima L.M.C., Belyaeva L.A., Mukhina T., Fragneto G., Kros A., Charitat T., Schneider G.F. Encapsulation of graphene in the hydrophobic core of a lipid bilayer *Langmuir* **36**, 14478-14482 (2020)

Arominski D., Sailer A., Latina A., Schulte D. The impact of synchrotron radiation at the Compact Linear Collider *Nuclear Instruments and Methods in Physics Research A* **983**, 164522-1-164522-16 (2020)

Arslanov T.R., Zalibekov U.Z., Kilanski L., Fedorchenko I.V., Chatterji T., Ahuja R. Large pressure-induced magnetoresistance in a hybrid ferromagnet-semiconductor system: Effect of matrix modification on the spin-dependent scattering *Journal of Applied Physics* **128**, 213903-1-213903-8 (2020)

Avers K.E., Gannon W.J., Kuhn S.J., Halperin W.P., Sauls J.A., DeBeer-Schmitt L., Dewhurst C.D., Gavilano J., Nagy G., Gasser U., Eskildsen M.R. Broken time-reversal symmetry in the topological superconductor UPt₃ *Nature Physics* **16**, 531-535 (2020)

Azzam F., Frka-Petesic B., Semeraro F., Cousin F., Jean B. Small-angle neutron scattering reveals the structural details of thermosensitive polymer-grafted cellulose nanocrystals suspensions *Langmuir* **36**, 8511-8519 (2020)

Baccile N., Cristiglio V. Primary and secondary hydration forces between interdigitated membranes composed of bolaform microbial glucolipids *Langmuir* **36**, 2191-2198 (2020)

Baccile N., Zinn T., Laurent G.P., Ben Messaoud G., Cristiglio V., Fernandes F.M. Unveiling the interstitial pressure between growing ice crystals during ice-templating using a lipid lamellar probe *Journal of Physical Chemistry Letters* **11**, 1989-1997 (2020)

Bahn E., Hoyos Giraldo L.A., Kuznetsov V., Calvo-Almazán I., Zbiri M., Koza M.M., Hansen T.C., Henry P.F., Lapp A., Pouget S., Mesa M., Fouquet P. Ultra-fast diffusion of hydrogen in a novel mesoporous N-doped carbon *Carbon* **166**, 307-315 (2020)

Bahout M., Managutti P.B., Dorcet V., Le Gal La Salle A., Paofai S., Hansen T.C. *In situ* exsolution of Ni particles on the PrBaMn₂O₅ SOFC electrode material monitored by high temperature neutron powder diffraction under hydrogen *Journal of Materials Chemistry A* **8**, 3590-3597 (2020)

Balestri A., Chiappisi L., Montis C., Micciulla S., Lonetti B., Berti D. Organized hybrid molecular films from natural phospholipids and synthetic block copolymers: A physicochemical investigation *Langmuir* **36**, 10941-10951 (2020)

Ballard D.A., Qiao P., Cattoz B., Dowding P.J., Prévost S., Alshamsi M., Charpentier T.V.J., Roberts K.J., Xu Z., Harbottle D. Aggregation behaviour of E-SARA asphaltene fractions studied by small-angle neutron scattering *Energy & Fuels* **34**, 6894-6903 (2020)

Balogh R.K., Gyurcsik B., Jensen M., Thulstrup P., Köster U., Christensen N.J., Mørch F.J., Jensen M.L., Jancsó A., Hemmingsen L. Flexibility of the CueR metal site probed by instantaneous change of element and oxidation state from Ag^I to Cd^{II} *Chemistry – A European Journal* **26**, 7451-7457 (2020)

Banhart J., Ritter C. Decomposition of Ti and Zr hydrides studied by neutron diffraction *In «Proceedings of the 11th International Conference on Porous Metals and Metallic Foams (MetFoam 2019)»* (2020, TMS. Minerals-Metals-Materials Society) pp.39-46

Banik R., Bhattacharyya S., Rejmund M., Lemasson A., Biswas S., Navin A., Kim Y.H., Michelagnoli C., Stefan I., Bednarczyk P., Bhattacharya S., Clément E., Crawford H.L., de France G., Fallon P., Frémont G., Goupil J., Jacquot B., Li H.L., Ljungvall J., Maj A., Ménager L., Morel V., Mukherjee G., Palit R., Pérez-Vidal R.M., Ropert J., Schmitt C. High-spin states above the isomers in neutron-rich iodine nuclei near N=82 *Physical Review C* **102**, 044329-1-044329-15 (2020)

PUBLICATIONS

FIND US ON:   

4-5

Basbus J.F., Arce M.D., Napolitano F.R., Troiani H.E., Alonso J.A., Saleta M.E., González M.A., Cuello G.J., Fernández-Díaz M.T., Sainz M.P., Bonanos N., Jimenez C.E., Giebeler L., Figueroa S.J.A., Caneiro A., Serquis A.C., Moggi L.V. Revisiting the crystal structure of $\text{BaCe}_{0.4}\text{Zr}_{0.4}\text{Y}_{0.2}\text{O}_{3.8}$ proton conducting perovskite and its correlation with transport properties
ACS Applied Energy Materials **3**, 2881-2892 (2020)

Beauvois K., Qureshi N., Tsunoda R., Hirose Y., Settai R., Aoki D., Rodière P., McCollam A., Sheikin I. Magnetic structure of Cd-doped CeIrIn_5
Physical Review B **101**, 195146-1-195146-6 (2020)

Beauvois K., Simonet V., Petit S., Robert J., Bourdarot F., Gospodinov M., Mukhin A.A., Ballou R., Skumryev V., Ressouche E. Dimer physics in the frustrated Cairo pentagonal antiferromagnet $\text{Bi}_2\text{Fe}_4\text{O}_9$
Physical Review Letters **124**, 127202-1-127202-6 (2020)

Beck M., Ayala Guardia F., Borg M., Kahlenberg J., Muñoz Horta R., Schmidt C., Wunderle A., Heil W., Maissonobe R., Simson M., Soldner T., Viot R., Zimmer O., Klopff M., Konrad G., Baesler S., Glück F., Schmidt U. Improved determination of the $\beta\bar{\nu}_e$ angular correlation coefficient a in free neutron decay with the α SPECT spectrometer
Physical Review C **101**, 055506-1-055506-35 (2020)

Beddoes C.M., Gooris G.S., Foglia F., Ahmadi D., Barlow D.J., Lawrence M.J., Demé B., Bouwstra J.A. Arrangement of ceramides in the skin: Sphingosine chains localize at a single position in stratum corneum lipid matrix models
Langmuir **36**, 10270-10278 (2020)

Beltrami G., Martucci A., Pasti L., Chenet T., Ardit M., Gigli L., Cescon M., Suard E. L-lysine amino acid adsorption on zeolite L: a combined synchrotron, X-ray and neutron diffraction study
ChemistryOpen **9**, 978-982 (2020)

Ben Messaoud G., Le Griel P., Prévost S., Hermida-Merino D., Soetaert W., Roelants S.L.K.W., Stevens C.V., Baccile N. Single-molecule lamellar hydrogels from bolaform microbial glucolipids
Soft Matter **16**, 2528-2539 (2020)

Bender P., Marcano L., Orue I., Alba Venero D., Honecker D., Fernández Barquín L., Muela A., Fdez-Gubieda M.L. Probing the stability and magnetic properties of magnetosome chains in freeze-dried magnetotactic bacteria
Nanoscale Advances **2**, 1115-1121 (2020)

Bera A.K., Wu J., Yang W., Bewley R., Boehm M., Xu J., Bartkowiak M., Prokhnenko O., Klemke B., Islam A.T.M.N., Law J.M., Wang Z., Lake B. Dispersions of many-body Bethe strings
Nature Physics **16**, 625-630 (2020)

Bergendal E., Campbell R.A., Pilkington G.A., Müller-Buschbaum P., Rutland M.W. 3D texturing of the air-water interface by biomimetic self-assembly
Nanoscale Horizons **5**, 839-846 (2020)

Bernard L. Recherche d'un neutrino stérile avec l'expérience STEREO: détermination des spectres neutrinos et caractérisation du bruit de fond
PhD Thesis (2019)

Bersweiler M., Rubio H.G., Honecker D., Michels A., Bender P. The benefits of a Bayesian analysis for the characterization of magnetic nanoparticles
Nanotechnology **31**, 435704-1-435704-11 (2020)

Bettler S.L. Experimental investigation of frustrated magnetism in two dimensions
PhD Thesis (2019)

Bhatt P., Kumar A., Ritter C., Yusuf S.M. Octahedral lattice distortion-driven ferroelectricity and canted antiferromagnetism in oxalate and phenanthroline ligand-based chain molecular magnets $[(\text{Fe}(\Delta)\text{Fe}(\Lambda))_{1-x}(\text{Cr}(\Delta)\text{Cr}(\Lambda))_x(\text{ox})_2(\text{phen})_2]_n$ ($x = 0, 0.1, \text{ and } 0.5$)
Journal of Physical Chemistry C **124**, 19228-19239 (2020)

Bhattacharjee N., Triboulet S., Dubée V., Fonvielle M., Edoó Z., Hugonnet J.E., Ethève-Quellejeu M., Simorre J.P., Field M.J., Arthur M., Bougault C.M. Negative impact of carbapenem methylation on the reactivity of β -lactams for cysteine acylation as revealed by quantum calculations and kinetic analyses
Antimicrobial Agents and Chemotherapy **63**, e02039-18-1-e02039-18-12 (2019)

Bianchini M., Schiele A., Schweidler S., Sicolo S., Fauth F., Suard E., Indris S., Mazilkin A., Nagel P., Schuppler S., Merz M., Hartmann P., Brezesinski T., Janek J. From LiNiO_2 to Li_2NiO_3 : Synthesis, structures and electrochemical mechanisms in Li-rich nickel oxides
Chemistry of Materials **32**, 9211-9227 (2020)

Biesenkamp S., Qureshi N., Sidis Y., Becker P., Bohatý L., Braden M. Structural dimerization in the commensurate magnetic phases of $\text{NaFe}(\text{WO}_4)_2$ and MnWO_4
Physical Review B **102**, 144429-1-144429-10 (2020)

Birch M.T., Moody S.H., Wilson M.N., Crisanti M., Bewley O., Štefančič A., Balakrishnan G., Fan R., Steadman P., Alba Venero D., Cubitt R., Hatton P.D. Anisotropy-induced depinning in the Zn-substituted skyrmion host Cu_2OSeO_3
Physical Review B **102**, 104424-1-104424-16 (2020)

Biswas P.K., Rybakov F.N., Singh R.P., Mukherjee S., Parzyk N., Balakrishnan G., Lees M.R., Dewhurst C.D., Babaev E., Hillier A.D., Paul D.McK. Coexistence of type-I and type-II superconductivity signatures in ZrB_{12} probed by muon spin rotation measurements
Physical Review B **102**, 144523-1-144523-6 (2020)

Biswas S., Lemasson A., Rejmund M., Navin A., Kim Y.H., Michelagnoli C., Stefan I., Banik R., Bednarczyk P., Bhattacharya S., Bhattacharyya S., Clément E., Crawford H.L., de France G., Fallon P., Frémont G., Goupil J., Jacquot B., Li H.J., Ljungvall J., Maj A., Ménager L., Morel V., Palit R., Pérez-Vidal R.M., Ropert J. Prompt-delayed γ -ray spectroscopy of neutron-rich $^{119,121}\text{In}$ isotopes
Physical Review C **102**, 014326-1-014326-10 (2020)

Blakeley M.P., Fisher S.J. Neutron macromolecular crystallography
In «Encyclopedia of Biophysics» (2020, European Biophysical Societies)

Blanche J., Lewis H., Couples G.D., Buckman J., Lenoir N., Tengattini A., Flynn D. Dynamic fluid ingress detection in geomaterials using K-band frequency modulated continuous wave radar
IEEE Access **8**, 111027-111041 (2020)

Blanchet A. Recherche du neutrino stérile auprès du réacteur de l'ILL : expérience Stereo
PhD Thesis (2019)

Bonde N.A., Petersen J.B., Sørensen M.A., Nielsen U.G., Fåk B., Rols S., Ollivier J., Weihe H., Bendix J., Perfetti M. Importance of axial symmetry in elucidating lanthanide-transition metal interactions
Inorganic Chemistry **59**, 235-243 (2020)

Bosak A., Dideikin A., Dubois M., Ivankov O., Lychagin E., Muzychka A., Nekhaev G., Nesvizhevsky V., Nezvanov A., Schweins R., Strelkov A., Vul' A., Zhernenkov K. Fluorination of diamond nanoparticles in slow neutron reflectors does not destroy their crystalline cores and clustering while decreasing neutron losses
Materials **13**, 3337-1-3337-13 (2020)

Bounoua D., Mangin-Thro L., Jeong J., Saint-Martin R., Pinsard-Gaudart L., Sidis Y., Bourges P. Loop currents in two-leg ladder cuprates
Communications Physics **3**, 123-1-123-11 (2020)

Buchold P., Ram-On M., Talmon Y., Hoffmann I., Schweins R., Gradzielski M. Uncommon structures of oppositely charged hyaluronan/surfactant assemblies under physiological conditions
Biomacromolecules **21**, 3498-3511 (2020)

Budayova-Spano M., Koruza K., Fisher Z. Large crystal growth for neutron protein crystallography
Methods in Enzymology **634**, 21-46 (2020)

Busch H.M. Soft condensates in hard confinement – Structure and molecular mobility
PhD Thesis (2019)

Busch M., Hofmann T., Frick B., Embs J.P., Dyatkin B., Huber P. Ionic liquid dynamics in nanoporous carbon: A pore-size- and temperature-dependent neutron spectroscopy study on supercapacitor materials
Physical Review Materials **4**, 055401-1-055401-12 (2020)

Cabeza S., Özcan B., Cormier J., Pirling T., Polenz S., Marquardt F., Hansen T.C., López E., Vilalta-Clemente A., Leyens C. Strain monitoring during laser metal deposition of Inconel 718 by neutron diffraction
In «Superalloys 2020» (2020, Springer) pp.1033-1045

Cabeza S., Pérez Zubiar P., Garcés G., Andrade C., Adeva P. Corrosion behaviour of $\text{Mg}_{98.5}\text{Nd}_{1.5}$ (at. %) alloy in phosphate buffered saline solution
Metals **10**, 148-1-148-16 (2020)

Calabrese V., da Silva M.A., Porcar L., Bryant S.J., Hossain K.M.Z., Scott J.L., Edler K.J. Filler size effect in an attractive fibrillated network: A structural and rheological perspective
Soft Matter **16**, 3303-3310 (2020)

Callori S.J., Saerbeck T., Cortie D.L., Lin K.W. Using polarized neutron reflectometry to resolve effects of light elements and ion exposure on magnetization
Solid State Physics **71**, 73-116 (2020)

Calvo-Dahlborg M., Dahlborg U., Brown S.G.R., Juraszek J. Influence of the electronic polymorphism of Ni on the classification and design of high entropy alloys
Journal of Alloys and Compounds **824**, 153895-1-153895-7 (2020)

Calvo-Dahlborg M., Dahlborg U., Cornide J., Mehraban S., Leong Z., Hansen T.C., Wunderlich R.K., Goodall R., Lavery N.P., Brown S.G.R. Structural investigation of the stability in temperature of some high entropy / multi major components alloys as a function of their electronic structure
Journal of Alloys and Compounds **837**, 155496-1-155496-10 (2020)

Cañadillas-Delgado L., Fabelo O., Rodríguez-Velamán J.A., Stunault A., Zhao J.P., Bu X.H., Rodríguez-Carvajal J. Spin-density studies of the multiferroic metal-organic compound $[\text{NH}_2(\text{CH}_3)_2][\text{Fe}^{\text{III}}\text{Fe}^{\text{II}}(\text{HCOO})_6]$
IUCr **7**, 803-813 (2020)

Cañadillas-Delgado L., Mazzuca L., Fabelo O., Rodríguez-Carvajal J., Petricek V. Experimental evidence of the coexistence of proper magnetic and structural incommensurability on the $[\text{CH}_3\text{NH}_3][\text{Ni}(\text{COOH})_3]$ compound
Inorganic Chemistry **59**, 17896-17905 (2020)

Candolfi C., Guélou G., Bourgès C., Supka A.R., Al Rahal Al Orabi R., Fornari M., Malaman B., Le Caër G., Lemoine P., Hardy V., Zanotti J.M., Chetty R., Ohta M., Suekuni K., Guilmeau E. Disorder-driven glasslike thermal conductivity in colusite $\text{Cu}_{26}\text{V}_2\text{Sn}_6\text{S}_{32}$ investigated by Mössbauer spectroscopy and inelastic neutron scattering *Physical Review Materials* **4**, 025404-1-025404-10 (2020)

Candolfi C., Koza M.M., Aydemir U., Carrillo-Cabrera W., Grin Y., Steglich F., Baitinger M. Vibrational dynamics of the type-I clathrates $\text{A}_8\text{Sn}_{44}\square_2$ (A=Cs, Rb, K) from lattice-dynamics calculations, inelastic neutron scattering, and specific heat measurements *Journal of Applied Physics* **127**, 145104-1-145104-15 (2020)

Cannavò A., Vacik J., Hnatowicz V., Ceccio G., Horák P., Lavrentiev V., Köster U., Pasold G. Study of Li diffusion in thin film of Re annealed at high temperatures *Journal of Instrumentation* **15**, P05010-1-P05010-10 (2020)

Capogna L., Granata V., Ouladdiaf B., Rodríguez-Velamazán J.A., Fittipaldi R., Vecchione A. Layer dependent antiferromagnetism in the $\text{Sr}_2\text{Ru}_3\text{O}_{10}$ ruthenate at the metamagnetic-like transition *Journal of Magnetism and Magnetic Materials* **493**, 165698-1-165698-6 (2020)

Carl N., Müller W., Schweins R., Huber K. Controlling self-assembly with light and temperature *Langmuir* **36**, 223-231 (2020)

Carl N., Prévost S., Schweins R., Huber K. Contrast variation of micelles composed of Ca^{2+} and block copolymers of two negatively charged polyelectrolytes *Colloid and Polymer Science* **298**, 663-679 (2020)

Carlier T., Chambrier M.H., Da Costa A., Blanchard F., Denneulin T., Létiche M., Roussel P., Desfeux R., Ferri A. Ferroelectric state in an $\alpha\text{-Nd}_2\text{WO}_6$ polymorph stabilized in a thin film *Chemistry of Materials* **32**, 7188-7200 (2020)

Carrascosa-Tejedor J., Santamaria A., Pereira D., Maestro A. Structure of DPPC monolayers at the air/buffer interface: A neutron reflectometry and ellipsometry study *Coatings* **10**, 507-1-507-16 (2020)

Casanovas A., Tarifeño-Saldivia A.E., Domingo-Pardo C., Calviño F., Maugeri E., Guerrero C., Lereñegui-Marco J., Dressler R., Heinitz S., Schumann D., Taín J.L., Quesada J.M., Aberle O., Alcayne V., Amaducci S., Andrzejewski J., Audouin L., Babiano-Suarez V., Bacak M., Balibrea J., Barbagallo M., Bennett S., Berthoumieux E., Bosnar D., Brown A.S., Busso M., Caamaño M., Caballero L., Calviani M., Cano-Ott D., Cerutti F., Chiaveri E., Colonna N., Cortés G.P., Cortés-Giraldo M.A., Cosentino L., Cristallo S., Damone L.A., Davies P.J., Damone L., Davies P., Diakaki M., Dietz M., Ducasse Q., Dupont E., Dúran I., Eleme Z., Fernández-Domínguez B., Ferrari A., Ferro-Goncalves I., Finocchiaro P., Furman V., Garg R., Gawlik A., Gilardoni S., Göbel K., González-Romero E., Günsing F., Heyse J., Jenkins D.G., Jericha E., Jiri U., Junghans A., Kadi Y., Käppeler F., Kimura A., Knapová I., Kokkoris M., Kopatch Y., Krtička M., Kurtulgil D., Ladarescu I., Lederer-Woods C., Lonsdale S.J., Macina D., Manna A., Martínez T., Masi A., Massimi C., Mastinu P.F., Mastromarco M., Mazzone A., Mendoza E., Mengoni A., Michalopoulou V., Milazzo P.M., Millán-Callado M.A., Mingrone F., Moreno-Soto J., Musumarra A., Negret A., Ogallar F., Oprea A., Patronis N., Pavlik A., Perkowski J., Petrone C., Piersanti L., Pirovano E., Porras I., Praena J., Ramos Doval D., Reifarth R., Rochman D., Rubbia C., Sabaté-Gilarte M., Saxena A., Schillebeeckx P., Sekhar A., Smith A., Sosnin N., Sprung P., Stamatopoulos A., Tagliente G., Tassan-Got L., Thomas B., Torres-Sánchez P., Tsinganis A., Ullrich S., Valenta S., Vannini G., Variale V., Vaz P., Ventura A., Vescovi D., Vlachoudis V., Vlastou R., Wallner A., Woods P.J., Wright T.J., Žugec P., Koester U. Neutron capture measurement at the n_TOF facility of the ^{204}Tl and ^{205}Tl s-process branching points *Journal of Physics: Conference Series* **1668**, 012005-1-012005-9 (2020)

Cascos V., Martínez J.L., Fernández-Díaz M.T., Alonso J.A. Magnetic properties of $\text{Sr}_{0.7}\text{R}_{0.3}\text{CoO}_{3.8}$ (R = Tb, Er and Ho) perovskites *Journal of Alloys and Compounds* **844**, 156121-1-156121-8 (2020)

Cascos V., Martínez-Coronado R., Fernández-Díaz M.T., Alonso J.A. Topotactic oxidation of perovskites to novel $\text{SrMo}_{1-x}\text{M}_x\text{O}_{4.8}$ (M = Fe and Cr) deficient scheelite-type oxides *Materials* **13**, 4441-1-4441-12 (2020)

Cascos V., Troncoso L., Larralde A.L., Fernández-Díaz M.T., Alonso J.A. Performance of $\text{SrCo}_{1-x}\text{Ir}_x\text{O}_{3.8}$ ($x = 0.10$ and 0.15) perovskites as potential cathode materials for intermediate-temperature solid oxide fuel cells (IT-SOFC) *ACS Applied Energy Materials* **3**, 6709-6716 (2020)

Castel A., Guffreund P., Cabane B., Rharbi Y. Stability of fluid ultrathin polymer films in contact with solvent-loaded gels for cultural heritage *Langmuir* **36**, 12607-12619 (2020)

Castel A., Guffreund P., Cabane B., Rharbi Y. Swelling, dewetting and breakup in thin polymer films for cultural heritage *Soft Matter* **16**, 1485-1497 (2020)

Castell S., Peters J., Oger P. High pressure adaptation in extremophiles and biotechnological adaptations In «Physiological and Biotechnological Aspects of Extremophiles» (2020, Academic Press) pp.105-122

Cathelin V., Lefrançois E., Robert J., Guruciaga P.C., Paulsen C., Prabhakaran D., Lejay P., Damay F., Ollivier J., Fåk B., Chapon L.C., Ballou R., Simonet V., Holdsworth P.C.W., Lhotel E. Fragmented monopole crystal, dimer entropy, and Coulomb interactions in $\text{Dy}_2\text{Ir}_2\text{O}_7$ *Physical Review Research* **2**, 032073-1-032073-6 (2020)

Cavallaro G., Chiappisi L., Gradzielski M., Lazzara G. Effect of the supramolecular interactions on the nanostructure of halloysite/biopolymer hybrids: a comprehensive study by SANS, fluorescence correlation spectroscopy and electric birefringence *Physical Chemistry Chemical Physics* **22**, 8193-8202 (2020)

Ceretti M., Agostini G., Brunelli M., Corallini S., Perversi G., Cuello G., Marsicano A., Paulus W. Local structures of oxygen-deficient perovskite $\text{Sr}_2\text{ScGaO}_5$ polymorphs explored by total neutron scattering and EXAFS spectroscopy *Inorganic Chemistry* **59**, 9434-9442 (2020)

Changruengam S., Bicout D.J., Modchang C. How the individual human mobility spatio-temporally shapes the disease transmission dynamics *Scientific Reports* **10**, 11325-1-11325-13 (2020)

Cheong S.W., Fiebig M., Wu W., Chapon L., Kiryukhin V. Seeing is believing: Visualization of antiferromagnetic domains *npj Quantum Materials* **5**, 3-1-3-10 (2020)

Chiappisi L. Structural characterization of clay systems by small-angle scattering In «Clay Nanoparticles – Properties and Applications» (2020, Elsevier) pp.37-65

Chiappisi L., Keiderling U., Gutierrez-Ulloa C.E., Gómez R., Valiente M., Gradzielski M. Aggregation behavior of surfactants with cationic and anionic dendronic head groups *Journal of Colloid and Interface Science* **534**, 430-439 (2019)

Chillal S., Iqbal Y., Jeschke H.O., Rodríguez-Rivera J.A., Bewley R., Manuel P., Khalyavin D., Steffens P., Thomale R., Islam A.T.M.N., Reuther J., Lake B. Evidence for a three-dimensional quantum spin liquid in $\text{PbCuTe}_2\text{O}_6$ *Nature Communications* **11**, 2348-1-2348-9 (2020)

Christoulaki A., Moretti C., Chennevière A., Dubois E., Jouault N. Improving structural features of nanoporous alumina using deuterated electrolytes *Microporous and Mesoporous Materials* **303**, 110201-1-110201-9 (2020)

Chrysalidis K., Barzakh A.E., Ahmed R., Andreyev A.N., Ballof J., Cubiss J.G., Fedorov D.V., Fedosseev V.N., Fraile L.M., Harding R.D., Köster U., Marsh B.A., Raison C., Ramos J.P., Rossel R.E., Rothe S., Wendt K., Wilkins S.G. In-source laser spectroscopy of dysprosium isotopes at the ISOLDE-RILIS *Nuclear Instruments and Methods in Physics Research B* **463**, 472-475 (2020)

Ciemala M., Ziliani S., Crespi F., Leoni S., Fornal B., Maj A., Bednarczyk P., Benzoni G., Bracco A., Boiano C., Bottoni S., Brambilla S., Bast M., Beckers M., Braunroth T., Camera F., Cieplicka-Oryńczak N., Clément E., Dorvaux O., Ertürk S., de France G., Fransen C., Goldkuhle A., Grębosz J., Harakeh M.N., Iskra Ł.W., Jacquot B., Karpov A., Kicińska-Habior M., Kim Y., Kmiecik M., Lemasson A., Lenzi S.M., Lewitowicz M., Li H., Matea I., Mazurek K., Michelagnoli C., Matejska-Minda M., Million B., Müller-Gatermann C., Nanal V., Napiorkowski P., Napoli D.R., Palit R., Rejmund M., Schmitt C., Stănoiu M., Stefan I., Vardaci E., Wasilewska B., Wieland O., Zielińska M., Zieliński M. Short-range lifetime measurements for deep-inelastic reaction products: the ^{19}O test case *Acta Physica Polonica B* **51**, 699-708 (2020)

Ciemala M., Ziliani S., Crespi F.C.L., Leoni S., Fornal B., Maj A., Bednarczyk P., Benzoni G., Bracco A., Boiano C., Bottoni S., Brambilla S., Bast M., Beckers M., Braunroth T., Camera F., Cieplicka-Oryńczak N., Clément E., Coelli S., Dorvaux O., Ertürk S., de France G., Fransen C., Goldkuhle A., Grębosz J., Harakeh M.N., Iskra Ł.W., Jacquot B., Karpov A., Kicińska-Habior M., Kim Y., Kmiecik M., Lemasson A., Lenzi S.M., Lewitowicz M., Li H., Matea I., Mazurek K., Michelagnoli C., Matejska-Minda M., Million B., Müller-Gatermann C., Nanal V., Napiorkowski P., Napoli D.R., Palit R., Rejmund M., Schmitt C., Stănoiu M., Stefan I., Vardaci E., Wasilewska B., Wieland O., Zieliński M., Zielińska M., Ataç A., Barrientos D., Birkenbach B., Boston A.J., Cederwall B., Charles L., Collado J., Cullen D.M., Désesquelles P., Domingo-Pardo C., Dudouet J., Eberth J., González V., Goupil J., Harkness-Brennan L.J., Hess H., Judson D.S., Jungclaus A., Korten W., Labiche M., Lefevre A., Menegazzo R., Mengoni D., Nyberg J., Pérez-Vidal R.M., Podolyák Z., Pullia A., Recchia F., Reiter P., Saillant F., Salsac M.D., Sanchis E., Stezowski O., Theisen C., Valiente-Dobón J.J., Holt J.D., Menéndez J., Schwenk A., Simonis J. Testing *ab initio* nuclear structure in neutron-rich nuclei: Lifetime measurements of second 2^+ state in ^{14}C and ^{20}O *Physical Review C* **101**, 021303-1-021303-7 (2020)

Cieplicka-Oryńczak N., Michelagnoli C., Gargano A., Fornal B., Leoni S., Benzoni G., Blanc A., Bottoni S., Crespi F.C.L., Iskra Ł.W., Jentschel M., Köster U., Mutti P., Pietralla N., Ruiz-Martinez E., Werner V. Contrasting properties of particle-particle and hole-hole excitations in ^{206}Tl and ^{210}Bi nuclei *Physics Letters B* **802**, 135222-1-135222-5 (2020)

PUBLICATIONS

FIND US ON:   

8-9

Cieslak J. Structural and magnetic properties of the σ -phase in FeNiV system
Intermetallics **126**, 106912-1-106912-6 (2020)

Cisse A., Peters J., Lazzara G., Chiappisi L.
PyDSC: A simple tool to treat differential scanning calorimetry data
Journal of Thermal Analysis and Calorimetry (2020)

Coak M.J., Jarvis D.M., Hamidov H., Haines C.R.S., Alireza P.L., Liu C., Son S., Hwang I., Lampronti G.I., Daisenberger D., Nahai-Williamson P., Wildes A.R., Saxena S.S., Park J.G. Tuning dimensionality in van-der-Waals antiferromagnetic Mott insulators $TMPS_3$
Journal of Physics Condensed Matter **32**, 124003-1-124003-9 (2020)

Coduri M., Bernasconi A., Fischer H.E., Malavasi L.
The $Ba_3Mo_{1-x}W_xNbO_{8.5}$ ion conductors: Insights into local coordination from X-ray and neutron total scattering
Journal of Materials Chemistry A **8**, 21227-21240 (2020)

Colard-Itté J.R., Li Q., Collin D., Mariani G., Fuks G., Moulin E., Buhler E., Giuseppone N. Mechanical behaviour of contractile gels based on light-driven molecular motors
Nanoscale **11**, 5197-5202 (2019)

Colas de la Noue A., Natali F., Fekraoui F., Gervais P., Martinez N., Perrier-Cornet J.M., Peters J. The molecular dynamics of bacterial spore and the role of calcium dipicolinate in core properties at the sub-nanosecond time-scale
Scientific Reports **10**, 8265-1-8265-14 (2020)

Coles B.D., McCabe E.E., Hillier A.D., Coomer F.C., Bristowe N.C., Ramos S. Spin interactions and magnetic order in the iron oxychalcogenides $BaFe_2Q_2O$ ($Q=S$ and Se)
Physical Review B **100**, 024427-1-024427-9 (2019)

Colin C.V., Ding L., Ressouche E., Robert J., Terada N., Gay F., Lejay P., Simonet V., Darie C., Bordet P., Petit S. Incommensurate spin ordering and excitations in multiferroic $SrMnGe_2O_6$
Physical Review B **101**, 235109-1-235109-13 (2020)

Combs J.E., Andring J.T., Mckenna R.
Neutron crystallographic studies of carbonic anhydrase
Methods in Enzymology **634**, 281-309 (2020)

Conti Nibali V., Wanderlingh U., D'Angelo G., Branca C., De Francesco A., Petrillo C., Paciaroni A., Sacchetti F. Transverse THz dynamics of phospholipid membranes: A neutron scattering study
Atti della Accademia Peloritana dei Pericolanti **98**, A9-1-A9-8 (2020)

Coppola R., Klimenkov M., Lindau R., Mangiapia G.
Small-angle neutron scattering (SANS) characterization of 13.5 Cr oxide dispersion strengthened ferritic steel for fusion applications
Nuclear Materials and Energy **24**, 100778-1-100778-5 (2020)

Cornel E.J., Smith G.N., Rogers S.E., Hallett J.E., Growney D.J., Smith T., O'Hara P.S., van Meurs S., Mykhaylyk O.O., Armes S.P. Time-resolved small-angle neutron scattering studies of the thermally-induced exchange of copolymer chains between spherical diblock copolymer nanoparticles prepared via polymerization-induced self-assembly
Soft Matter **16**, 3657-3668 (2020)

Cornelison J., Ade P.A.R., Ahmed Z., Amiri M., Barkats D., Basu Thakur R., Bischoff C.A., Bock J.J., Boenish H., Bullock E., Buza V., Cheshire J.R., Connors J., Crumrine M., Cukierman A., Denison E., Dierickx M., Duband L., Eiben M., Fatigoni S., Filippini J.P., Fliescher S., Goeckner-Wald N., Goldfinger D.C., Grayson J.A., Grimes P., Hall G., Halpern M., Harrison S.A., Henderson S., Hildebrandt S.R., Hilton G.C., Hubmayr J., Hui H., Irwin K.D., Kang J., Karkare K.S., Karpel E., Kefeli S., Kernasovskiy S.A., Kovac J.M., Kuo C.L., Lau K., Leitch E.M., Megerian K.G., Minutolo L., Monceli L., Nakato Y., Namikawa T., Nguyen H.T., O'Brien R., Ogburn IV R.W., Palladino S., Precup N., Prouve T., Pryke C., Racine B., Reintsema C.D., Richter S., Schillaci A., Schmitt B.L., Schwarz R., Sheehy C.D., Soliman A., Germaine T.S., Steinbach B., Sudiwala R.V., Teply G.P., Thompson K.L., Tolan J.E., Tucker C., Turner A.D., Umilità C., Vieregge A.G., Wandui A., Weber A.C., Wiebe D.V., Willmert J., Wong C.L., Wu W.L.K., Yang E., Yoon K.W., Young E., Yu C., Zeng L., Zhang C., Zhang S. Polarization calibration of the BICEP3 CMB polarimeter at the South Pole
Proceedings of SPIE **11453**, 1145327-1-1145327-12 (2020)

Costabile G., Provenzano R., Azzalin A., Scoffone V.C., Chiarelli L.R., Rondelli V., Grillo I., Zinn T., Lepioshkin A., Savina S., Miró A., Quaglia F., Makarov V., Coenye T., Brocca P., Riccardi G., Buroni S., Ungaro F. PEGylated mucus-penetrating nanocrystals for lung delivery of a new FtsZ inhibitor against *Burkholderia cenocepacia* infection
Nanomedicine: Nanotechnology, Biology and Medicine **23**, 102113-1-102113-12 (2020)

Couturier L., De Geuser F., Deschamps A. Microstructural evolution during long time aging of 15-5PH stainless steel
Materialia **9**, 100634-1-100634-12 (2020)

Cremer J.T., Filter H., Klepp J., Geltenbort P., Dewhurst C., Oda T., Pantell R.H. Focusing and imaging of cold neutrons with a permanent magnetic lens
Review of Scientific Instruments **91**, 013704-1-013704-11 (2020)

Crespi F.C.L., Cieplicka-Oryńczak N., Jentschel M., Kandzia F., Kim Y.H., Köster U., Leoni S., Michelagnoli C., Ziliani S. GRIDSA: Femtosecond lifetime measurements with germanium detector arrays
European Physical Journal A **56**, 94-1-94-9 (2020)

Crisanti M., Birch M.T., Wilson M.N., Moody S.H., Štefančič A., Huddart B.M., Cabeza S., Balakrishnan G., Hatton P.D., Cubitt R. Position-dependent stability and lifetime of the skyrmion state in nickel-substituted Cu_2OSeO_3
Physical Review B **102**, 224407-1-224407-12 (2020)

Crisanti M., Reynolds N., Živković I., Magrez A., Rønnow H.M., Cubitt R., White J.S. *In situ* control of the helical and skyrmion phases in Cu_2OSeO_3 using high-pressure helium gas up to 5 kbar
Physical Review B **101**, 214435-1-214435-9 (2020)

Crivello C., Lazzara G., Chiappisi L. On the effect of the nature of counterions on the self-assembly of polyoxyethylene alkyl ether carboxylic acids
Soft Matter **16**, 7137-7143 (2020)

Cross E.R., Coulter S.M., Fuentes-Caparrós A.M., McAulay K., Schweins R., Laverty G., Adams D.J. Tuning the antimicrobial activity of low molecular weight hydrogels using dopamine autoxidation
Chemical Communications **56**, 8135-8138 (2020)

Cui Q., Huang Q., Alonso J.A., Sheptyakov D., De la Cruz C.R., Fernández-Díaz M.T., Wang N.N., Cai Y.Q., Li D., Dong X.L., Zhou H.D., Cheng J.G. Complex antiferromagnetic order in the garnet $Co_3Al_2Si_3O_{12}$
Physical Review B **101**, 144424-1-144424-9 (2020)

D'Amore A., Piovano A., Vottero E., Piovano A., Rudić S., Erba A., Groppo E., Civalieri B. Inelastic neutron scattering investigation of $MgCl_2$ nanoparticle-based Ziegler-Natta catalysts for olefin polymerization
ACS Applied Nano Materials **3**, 11118-11128 (2020)

Danner A., Demirel B., Kersten W., Lemmel H., Wagner R., Sponar S., Hasegawa Y. Spin-rotation coupling observed in neutron interferometry
npj Quantum Information **6**, 23-1-23-6 (2020)

Dauti D., Tengattini A., Dal Pont S., Toropovs N., Briffaut M., Weber B. Some observations on testing conditions of high-temperature experiments on concrete: An insight from neutron tomography
Transport in Porous Media **132**, 299-310 (2020)

De Francesco A., Scaccia L., Formisano F., Guarini E., Bafile U., Maccarini M., Alatas A., Cai Y.Q., Cunsolo A. The terahertz dynamics of an aqueous nanoparticle suspension: An inelastic X-ray scattering study
Nanomaterials **10**, 860-1-860-12 (2020)

De Francesco A., Scaccia L., Formisano F., Guarini E., Bafile U., Maccarini M., Alatas A., Cai Y.Q., Nykypanchuk D., Cunsolo A. Onset of interfacial waves in the terahertz spectrum of a nanoparticle suspension
Physical Review E **102**, 022601-1-022601-6 (2020)

de la Mora E., Coquelle N., Bury C.S., Rosenthal M., Holton J.M., Carmichael I., Garman E.F., Burghammer M., Colletier J.P., Weik M. Radiation damage and dose limits in serial synchrotron crystallography at cryo- and room temperatures
Proceedings of the National Academy of Sciences **117**, 4142-4151 (2020)

De Santis A., Vitiello G., Appavou M.S., Scoppola E., Fragneto G., Barnsley L.C., Clifton L.A., Ottaviani M.F., Paduano L., Russo Krauss I., D'Errico G. Not just a fluidifying effect: Omega-3 phospholipids induce formation of non-lamellar structures in biomembranes
Soft Matter **16**, 10425-10438 (2020)

del Rosso L., Celli M., Grazzi F., Catti M., Hansen T.C., Fortes A.D., Ulivi L. Cubic ice Ic without stacking defects obtained from ice XVII
Nature Materials **19**, 663-668 (2020)

Del Sorbo G.R., Prévost S., Schneck E., Gradzielski M., Hoffmann I. On the mechanism of shear-thinning in viscous oppositely charged polyelectrolyte surfactant complexes (PESCs)
Journal of Physical Chemistry B **124**, 909-913 (2020)

Delhom R., Nelson A., Laux V., Haertlein M., Knecht W., Fragneto G., Wacklin-Knecht H.P. The antifungal mechanism of amphotericin B elucidated in ergosterol and cholesterol-containing membranes using neutron reflectometry
Nanomaterials **10**, 2439-1-2439-17 (2020)

Dhal R., Lekshmi P.N., Das A., Chatterji T., Sinha A.K., Santhosh P.N. Synthesis, structure and magnetic properties of a novel double layered brownmillerite $Ca_2LaFe_{1.75}Cr_{0.25}GaO_8$
Materials Research Bulletin **129**, 110847-1-110847-7 (2020)

Dicko C., Engberg A., Houston J.E., Jackson A.J., Pettersson A., Dalgliesh R.M., Akeroyd F.A., Venero D., Rogers S.E., Martel A., Porcar L., Rennie A.R. NURF-Optimization of *in situ* UV-vis and fluorescence and autonomous characterization techniques with small-angle neutron scattering instrumentation
Review of Scientific Instruments **91**, 075111-1-075111-8 (2020)

Dieterich S., Prévost S., Dargel C., Sottmann T., Giesselmann F. Synergistic structures in lyotropic lamellar gels
Soft Matter **16**, 10268-10279 (2020)

Diop L.V.B., Isnard O. Magnetically driven giant negative thermal expansion covering room temperature in $Hf_{0.875}Ta_{0.125}Fe_2$
Solid State Communications **320**, 114021-1-114021-5 (2020)

Diop L.V.B., Isnard O., Amara M., Gay F., Itié J.P. Giant negative thermal expansion across the first-order magnetoelastic transition in $Hf_{0.86}Ta_{0.14}Fe_2$
Journal of Alloys and Compounds **845**, 156310-1-156310-12 (2020)

Döge S., Hingerl J., Morkel C. Measured velocity spectra and neutron densities of the PF2 ultracold-neutron beam ports at the Institut Laue-Langevin
Nuclear Instruments and Methods in Physics Research A **953**, 163112-1-163112-4 (2020)

Dolhen M., Allix M., Sarou-Kanian V., Fayon F., Genevois C., Chenu S., Coulon P.E., Colas M., Cornette J., Duclère J.R., Brisset F., Masson O., Thomas P., Delaizir G. A comprehensive study of the glass/translucent anti-glass/transparent ceramic structural ordering in the $\text{Bi}_2\text{O}_3\text{-Nb}_2\text{O}_5\text{-TeO}_2$ system
Acta Materialia **189**, 73-84 (2020)

dos Santos Alves K., Barrios Sánchez S., Gómez Barreiro J., Merinero Palomares R., Compañía Prieto J.M. Morphological and compositional analysis of alluvial gold: The Fresnedoso gold placer (Spain)
Ore Geology Reviews **121**, 103489-1-103489-17 (2020)

Draper E.R., Dietrich B., McAulay K., Brasnett C., Abdizadeh H., Patmanidis I., Marrink S.J., Su H., Cui H., Schweins R., Seddon A., Adams D.J. Using small-angle scattering and contrast matching to understand molecular packing in low molecular weight gels
Matter **2**, 764-778 (2020)

Dubey S., Echler A., Egelhof P., Grabitz P., Lauterfeld W., Mutterer M., Stolte S., Blanc A., Köster U., Serot O., Kessedjian G., Kraft-Bermuth S., Scholz P., Gönnerwein F. Precise ^{235}U and $^{239,241}\text{Pu}$ determined using calorimetric low-temperature detectors
Physical Review C **102**, 044602-1-044602-10 (2020)

Dumortier L., Mossa S. From ionic surfactants to nafion through convolutional neural networks
Journal of Physical Chemistry B **124**, 8918-8927 (2020)

E.J.C., Hafner A., Kluyver T., Bertelsen M., Upadhyay-Kahaly M., Lecz Z., Nourbakhsh S., Mancuso A.P., Fortmann-Grote C. VINYL: The Virtual Neutron and x-ray Laboratory and its applications
Proceedings of SPIE **11493**, 114930Z-1-114930Z-11 (2020)

Ebersberger L., Schindler T., Kirsch S.A., Pluhackova K., Schambony A., Seydel T., Bockmann R.A., Unruh T. Lipid dynamics in membranes slowed down by transmembrane proteins
Frontiers in Cell and Developmental Biology **8**, 579388-1-579388-14 (2020)

Edberg R., Bakke I.M.B., Kondo H., Sandberg L.Ø., Haubro M.L., Guthrie M., Holmes A.T., Engqvist J., Wildes A., Matsuhira K., Lefmann K., Deen P.P., Mito M., Henelius P. Effects of uniaxial pressure on the spin ice $\text{Ho}_2\text{Ti}_2\text{O}_7$
Physical Review B **102**, 184408-1-184408-12 (2020)

Edkins K., McIntyre G.J., Wilkinson C., Kahlenberg V., Többsens D., Griesser U.J., Brüning J., Schmidt M.U., Steed J.W. Extensive sequential polymorphic interconversion in the solid state: Two hydrates and ten anhydrous phases of hexamidine diisethionate
Crystal Growth & Design **19**, 7280-7289 (2019)

Edkins R.M., Appel M., Seydel T., Edkins K. The modifying effect of supramolecular gel fibres on the diffusion of paracetamol and ibuprofen sodium on the picosecond timescale
Physical Chemistry Chemical Physics **22**, 10838-10844 (2020)

Engelke J., Tuten B.T., Schweins R., Komber H., Barner L., Plüschke L., Barner-Kowollik C., Lederer A. An in-depth analysis approach enabling precision single chain nanoparticle design
Polymer Chemistry **11**, 6559-6578 (2020)

Esquivel-Peña V., Guccini V., Kumar S., Salazar-Alvarez G., Rodriguez de San Miguel E., de Gyves J. Hybrids based on borate-functionalized cellulose nanofibers and noble-metal nanoparticles as sustainable catalysts for environmental applications
RSC Advances **10**, 12460-12468 (2020)

Evsevelev S., Cabeza S., Mishurova T., Garcés G., Sevostianov I., Requena G., Boin M., Hofmann M., Bruno G. Stress-induced damage evolution in cast $\text{AlSi}_2\text{CuMgNi}$ alloy with one- and two-ceramic reinforcements. Part II: Effect of reinforcement orientation
Journal of Materials Science **55**, 1049-1068 (2020)

Fally M., Klepp J., Pruner C., Jenke T., Geltenbort P. Nanodiamond-polymer composite gratings as diffractive optical elements for light and neutrons: II. Neutron optical diffraction properties
Proceedings of SPIE **11367**, 113670N-1-113670N-9 (2020)

Famprikis T., Kudu Ö.U., Dawson J.A., Canepa P., Fauth F., Suard E., Zbiri M., Dambournet D., Borkiewicz O.J., Bouyanfif H., Emge S.P., Cretu S., Chotard J.N., Grey C.P., Zeier W.G., Islam M.S., Masquelier C. Under pressure: Mechanochemical effects on structure and ion conduction in the sodium-ion solid electrolyte Na_3PS_4
Journal of the American Chemical Society **142**, 18422-18436 (2020)

Fan J., Sarou-Kanian V., Yang X., Diaz-Lopez M., Fayon F., Kuang X., Pitcher M.J., Allix M. $\text{La}_2\text{Ga}_3\text{O}_{7.5}$: A metastable ternary melilite with a super-excess of interstitial oxide ions synthesized by direct crystallization of the melt
Chemistry of Materials **32**, 9016-9025 (2020)

Fang Z., Deng C., Guérard B., Yang Y., Li Y., Zhang Z., Wang X. Realization and evaluation of the Boron Nano Particle-based drip-coating method for boron-lined gaseous neutron detectors
Journal of Instrumentation **14**, P12003-1-P12003-14 (2019)

Faverzani M., Alpert B., Balata M., Backer D., Bennet D., Bevilacqua A., Biasotti M., Borghesi M., Ceruti G., De Gerone M., Dressler R., Ferri E., Fowler J., Gallucci G., Gard J., Gatti F., Giachero A., Heinitz S., Hilton G., Köster U., Lusignoli M., Mates J., Maugeri E., Nisi S., Nucciotti A., Parodi L., Pessina G., Puiu A., Ragazzi S., Reintsema C., Ribeiro-Gomez M., Schmidt D., Schumann D., Siccardi F., Swetz D., Ullom J., Vale L. Status of the HOLMES experiment
Journal of Low Temperature Physics **199**, 1098-1106 (2020)

Favre V.Y., Tucker G.S., Ritter C., Sibille R., Manuel P., Frontzek M.D., Kriener M., Yang L., Berger H., Magrez A., Casati N.P.M., Živković I., Rønnow H.M. Ferrimagnetic 120° magnetic structure in Cu_2OSO_4
Physical Review B **102**, 094422-1-094422-9 (2020)

Fernández-Martínez A., Tao J., Wallace A.F., Bourg I.C., Johnson M.R., De Yoreo J.J., Sposito G., Cuello G.J., Charlet L. Curvature-induced hydrophobicity at imogolite-water interfaces
Environmental Science: Nano **7**, 2759-2772 (2020)

Ferreira A.C., Paofai S., Léotoulon A., Ollivier J., Raymond S., Hehlen B., Rufflé B., Cordier S., Katan C., Even J., Bourges P. Direct evidence of weakly dispersed and strongly anharmonic optical phonons in hybrid perovskites
Communications Physics **3**, 48-1-48-10 (2020)

Fèvre M., Sanchez J.M., Stewart J.R., Mérot J.S., Fossard F., Le Bouar Y., Tanaka K., Numakura H., Schermer G., Pierron-Bohnes V. Investigations of the Co-Pt alloy phase diagram with neutron diffuse scattering, inverse cluster variation method, and Monte Carlo simulations
Physical Review B **102**, 134114-1-134114-13 (2020)

Figueroa A.I., Hesjedal T., Steinke N.J. Magnetic order in 3D topological insulators-wishful thinking or gateway to emergent quantum effects?
Applied Physics Letters **117**, 150502-1-150502-11 (2020)

Foglia F., Clancy A.J., Berry-Gair J., Lisowska K., Wilding M.C., Suter T.M., Miller T.S., Smith K., Demmel F., Appel M., García Sakai V., Sella A., Howard C.A., Tyagi M., Corà F., McMillan P.F. Aquaporin-like water transport in nanoporous crystalline layered carbon nitride
Science Advances **6**, eabb6011-1-eabb6011-10 (2020)

Fop S., McCombie K.S., Wildman E.J., Skakle J.M.S., Irvine J.T.S., Connor P.A., Savaniu C., Ritter C., McLaughlin A.C. High oxide ion and proton conductivity in a disordered hexagonal perovskite
Nature Materials **19**, 752-757 (2020)

Formento-Cavaier R., Köster U., Crepieux B., Gadelshin V.M., Haddad F., Stora T., Wendt K. Very high specific activity erbium ^{169}Er production for potential receptor-targeted radiotherapy
Nuclear Instruments and Methods in Physics Research B **463**, 468-471 (2020)

Fröhlich T., Wang Z., Bagchi M., Stunault A., Ando Y., Braden M. Crystal structure and distortion of superconducting $\text{Cu}_x\text{Bi}_2\text{Se}_3$
Physical Review Materials **4**, 054802-1-054802-9 (2020)

Fuentes E., Boháčová K., Fuentes-Caparrós A.M., Schweins R., Draper E.R., Adams D.J., Pujals S., Albertazzi L. PAINT-ing fluorenylmethoxycarbonyl (Fmoc)-diphenylalanine hydrogels
Chemistry – A European Journal **26**, 9869-9873 (2020)

Fukuda M., Yamada I., Murata H., Hojo H., Hernandez O.J., Ritter C., Tanaka K., Fujita K. Perovskite-type CuNbO_3 exhibiting unusual noncollinear ferrielectric to collinear ferroelectric dipole order transition
Chemistry of Materials **32**, 5016-5027 (2020)

Fuller C.A., Berrod Q., Frick B., Johnson M.R., Avdeev M., Evans J.S.O., Evans I.R. Oxide ion and proton conductivity in highly oxygen-deficient cubic perovskite $\text{SrSc}_{0.3}\text{Zn}_{0.2}\text{Ga}_{0.5}\text{O}_{2.4}$
Chemistry of Materials **32**, 4347-4357 (2020)

Gainza J., Serrano-Sánchez F., Nemes N.M., Martínez J.L., Fernández-Díaz M.T., Alonso J.A. Features of the high-temperature structural evolution of GeTe thermoelectric probed by neutron and synchrotron powder diffraction
Metals **10**, 48-1-48-11 (2020)

Gainza J., Serrano-Sánchez F., Rodrigues J.E.F.S., Hüttel Y., Durá O.J., Koza M.M., Fernández-Díaz M.T., Meléndez J.J., Markus B.G., Simon F., Martínez J.L., Alonso J.A., Nemes N.M. High-performance n-type SnSe thermoelectric polycrystal prepared by arc-melting
Cell Reports Physical Science **1**, 100263-1-100263-20 (2020)

Gao S., Rosales H.D., Gómez Albarracín F.A., Tsurkan V., Kaur G., Fennell T., Steffens P., Boehm M., Čermák P., Schneidewind A., Ressouche E., Cabra D.C., Rüegg C., Zaharko O. Fractional antiferromagnetic skyrmion lattice induced by anisotropic couplings
Nature **586**, 37-41 (2020)

Gardner J.S., Ehlers G., Faraone A., García Sakai V. High-resolution neutron spectroscopy using backscattering and neutron spin-echo spectrometers in soft and hard condensed matter
Nature Reviews Physics **2**, 103-116 (2020)

Gatta G.D., Guastoni A., Lotti P., Guastella G., Fabelo O., Fernández-Díaz M.T. A multi-methodological study of kernite, a mineral commodity of boron
American Mineralogist **105**, 1424-1431 (2020)

Geirhos K., Gross B., Szigeti B.G., Mehlin A., Philipp S., White J.S., Cubitt R., Widmann S., Ghara S., Lunkenheimer P., Tsurkan V., Neuber E., Ivaneyko D., Milde P., Eng L.M., Leonov A.O., Bordács S., Poggio M., Kézsmárki I. Macroscopic manifestation of domain-wall magnetism and magnetoelectric effect in a Néel-type skyrmion host npj Quantum Materials **5**, 44-1-44-8 (2020)

Geisler R., Prévost S., Dattani R., Hellweg T. Effect of cholesterol and ibuprofen on DMPC- β -Aescin bicelles: A temperature-dependent wide-angle X-ray scattering study Crystals **10**, 401-1-401-15 (2020)

Gerasimov E.G., Terentev P.B., Gubkin A.F., Fischer H.E., Gorbunov D.I., Mushnikov N.V. Easy-plane magnetic anisotropy in layered GdMn₂Si₂ compound with easy-axis magnetocrystalline anisotropy Journal of Alloys and Compounds **818**, 152902-1-152902-6 (2020)

Gerelli Y., Eriksson Skog A., Jephthah S., Welbourn R.J.L., Klechikov A., Skepö M. Spontaneous formation of cushioned model membranes promoted by an intrinsically disordered protein Langmuir **36**, 3997-4004 (2020)

Gerlits O., Weiss K.L., Blakeley M.P., Veglia G., Taylor S.S., Kovalevsky A. Protein kinase A in the neutron beam: Insights for catalysis from directly observing protons Methods in Enzymology **634**, 311-331 (2020)

Giles-Donovan N., Qureshi N., Johnson R.D., Zhang L.Y., Cheong S.W., Cochran S., Stock C. Imitation of spin density wave order in Cu₃Nb₂O₈ Physical Review B **102**, 024414-1-024414-18 (2020)

Gobeaux F., Bizeau J., Samson F., Marichal L., Grillo I., Wien F., Yesylevskyy S.O., Ramseyer C., Rouquette M., Lepître-Mouelhi S., Desmaële D., Couvreur P., Guenoun P., Renault J.P., Testard F. Albumin-driven disassembly of lipidic nanoparticles: the specific case of the squalene-adenosine nanodrug Nanoscale **12**, 2793-2809 (2020)

Goel P., Gupta M.K., Mittal R., Skinner S.J., Mukhopadhyay S., Rols S., Chaplot S.L. Phonons and oxygen diffusion in Bi₂O₃ and (Bi_{0.7}Y_{0.3})₂O₃ Journal of Physics Condensed Matter **32**, 334002-1-334002-14 (2020)

Gogonea V., Peters J., Gerstenecker G.S., Topbas C., Hou L., Combet J., DiDonato J.A., Smith J.D., Rye K.A., Hazen S.L. Protein backbone and average particle dynamics in reconstituted discoidal and spherical HDL probed by hydrogen deuterium exchange and elastic incoherent neutron scattering Biomolecules **10**, 121-1-121-24 (2020)

Goldkuhle A., Blazhev A., Fransen C., Dewald A., Beckers M., Birkenbach B., Braunroth T., Clément E., Dudouet J., Eberth J., Hess H., Jacquot B., Jolie J., Kim Y.H., Lemasson A., Lenzi S.M., Li H.J., Litzinger J., Michelagnoli C., Müller-Gatermann C., Nara Singh B.S., Pérez-Vidal R.M., Ralet D., Reiter P., Vogt A., Warr N., Zell K.O. Lifetime measurements of excited states in neutron-rich ⁵³Ti: Benchmarking effective shell-model interactions Physical Review C **102**, 054334-1-054334-10 (2020)

Goldkuhle A., Fransen C., Dewald A., Alahari N., Beckers M., Birkenbach B., Blazhev A., Braunroth T., Clément E., de France G., Dudouet J., Eberth J., Hess H., Jacquot B., Kim Y.H., Lemasson A., Lenzi S.M., Li H., Ljungvall J., Litzinger J., Michelagnoli C., Müller-Gatermann C., Napoli D.R., Nara Singh B.S., Pérez-Vidal R.M., Ralet D., Reiter P., Rejmund M., Vogt A., Warr N., Zell K.O., Zielińska M. Preliminary results of lifetime measurements in neutron-rich ⁵³Ti EPJ Web of Conferences **223**, 01022-1-01022-4 (2019)

Golub M., Hussein R., Ibrahim M., Hecht M., Wieland D.C.F., Martel A., Machado B., Zouni A., Pieper J. Solution structure of the detergent-photosystem II core complex investigated by small-angle scattering techniques Journal of Physical Chemistry B **124**, 8583-8592 (2020)

Golubev A.M., Nuss J., Kremer R.K., Gordon E.E., Whangbo M.H., Ritter C., Weber L., Wessel S. Two-dimensional magnetism in α -CuV₂O₆ Physical Review B **102**, 014436-1-014436-9 (2020)

Gómez L.R., García N.A., Pöschel T. Packing structure of semiflexible rings Proceedings of the National Academy of Sciences **117**, 3382-3387 (2020)

Gómez-Recio I., Azor-Lafarga A., Ruiz-González M.L., Hernando M., Parras M., Calvino J.J., Fernández-Díaz M.T., Portehault D., Sanchez C., González-Calbet J.M. Unambiguous localization of titanium and iron cations in doped manganese hollandite nanowires Chemical Communications **56**, 4812-4815 (2020)

Gong H., Liao M., Hu X., Fa K., Phanphak S., Ciunac D., Hollowell P., Shen K., Clifton L.A., Campana M., Webster J.R.P., Fragneto G., Waigh T.A., McBain A.J., Lu J.R. Aggregated amphiphilic antimicrobial peptides embedded in bacterial membranes ACS Applied Materials & Interfaces **12**, 44420-44432 (2020)

Gong H., Sani M.A., Hu X., Fa K., Hart J.W., Liao M., Hollowell P., Carter J., Clifton L.A., Campana M., Li P., King S.M., Webster J.P.R., Maestro A., Zhu S., Separovic F., Waigh T.A., Xu H., McBain A.J., Lu J.R. How do self-assembling antimicrobial lipopeptides kill bacteria? ACS Applied Materials & Interfaces **12**, 55675-55687 (2020)

González M.A., Borodin O., Kofu M., Shibata K., Yamada T., Yamamuro O., Xu K., Price D.L., Saboungi M.L. Nanoscale relaxation in “water-in-salt” and “water-in-bisalt” electrolytes Journal of Physical Chemistry Letters **11**, 7279-7284 (2020)

González-Izquierdo P., Fabelo O., Beobide G., Cano I., Ruiz de Larramendi I., Vallcorba O., Rodríguez Fernández J., Fernández Díaz M.T., de Pedro I. Crystal structure, magneto-structural correlation, thermal and electrical studies of an imidazolium halometallate molten salt: (trimim)[FeCl₄] RSC Advances **10**, 11200-11209 (2020)

González-Izquierdo P., Fabelo O., Cañadillas-Delgado L., Beobide G., Vallcorba O., Sánchez-Andújar M., Fernández-Díaz M.T., de Pedro I. Temperature evolution of [quinuclidinium][FeCl₄]: A plastic/polar magnetic hybrid compound with a giant dielectric constant Journal of Materials Chemistry C **8**, 11389-11398 (2020)

Goodway C., McIntyre P., Sears A., Belkier N., Burgess G., Kirichek O., Lelièvre-Berna E., Marchal F., Turc S., Wakefield S. A fast-cooling mode for blue series furnaces Journal of Neutron Research **21**, 137-142 (2020)

Gorelov V., Holzmann M., Ceperley D.M., Pierleoni C. Energy gap closure of crystalline molecular hydrogen with pressure Physical Review Letters **124**, 116401-1-116401-6 (2020)

Gorkov D., Toperverg B.P., Zabel H. Artificial magnetic pattern arrays probed by polarized neutron reflectivity Nanomaterials **10**, 851-1-851-21 (2020)

Gorkov D., Toperverg B.P., Zabel H. Probing interspatial magnetic flux distributions in ferromagnetic stripe arrays by specular and off-specular polarized neutron scattering Physical Review B **101**, 224404-1-224404-16 (2020)

Graham J.N., Cook M.J., Son S., Suard E., Park J.G., Clark L., Wildes A.R. Local nuclear and magnetic order in the two-dimensional spin glass Mn_{0.5}Fe_{0.5}PS₃ Physical Review Materials **4**, 084401-1-084401-8 (2020)

Graziadei A., Gabel F., Kirkpatrick J., Carlomagno T. The guide sRNA sequence determines the activity level of box C/D RNPs eLife **9**, 50027-1-50027-27 (2020)

Greving I., Terry A.E., Holland C., Boulet-Audet M., Grillo I., Vollrath F., Dicko C. Structural diversity of native major ampullate, minor ampullate, cylindrical, and flagelliform silk proteins in solution Biomacromolecules **21**, 3387-3393 (2020)

Grieger M., Hensel T., Agramunt J., Bemmerer D., Degering D., Dillmann I., Fraile L.M., Jordan D., Köster U., Marta M., Müller S.E., Szücs T., Taín J.L., Zuber K. Neutron flux and spectrum in the Dresden Felsenkeller underground facility studied by moderated ³He counters Physical Review D **101**, 123027-1-123027-15 (2020)

Grillo I., Morfin I., Combet J. Chain conformation: A key parameter driving clustering or dispersion in polyelectrolyte – Colloid systems Journal of Colloid and Interface Science **561**, 426-438 (2020)

Grillo I.B., Bachega J.F.R., Timmers L.F.S.M., Caceres R.A., de Souza O.N., Field M.J., Rocha G.B. Theoretical characterization of the shikimate 5-dehydrogenase reaction from *Mycobacterium tuberculosis* by hybrid QC/MM simulations and quantum chemical descriptors Journal of Molecular Modeling **26**, 297-1-297-12 (2020)

Grocutt L., Chapman R., Bouhelal M., Haas F., Goasduff A., Smith J.F., Courtin S., Bazzacco D., Braunroth T., Capponi L., Corradi L., Derx X., Désesquelles P., Doncel M., Fioretto E., Gottardo A., Liberati V., Melon B., Mengoni D., Michelagnoli C., Mijatović T., Modamio V., Montagnoli G., Montanari D., Mulholland K.F., Napoli D.R., Petrasche C., Pipidis A., Recchia F., Sahin E., Singh P.P., Stefanini A.M., Szilner S., Valiente-Dobón J.J. Lifetime measurements of N \approx 20 phosphorus isotopes using the AGATA γ -ray tracking spectrometer Physical Review C **100**, 064308-1-064308-18 (2019)

Guarini E., De Francesco A., Bafile U., Laloni A., del Rio B.G., González D.J., González L.E., Barocchi F., Formisano F. Neutron Brillouin scattering and *ab initio* simulation study of the collective dynamics of liquid silver Physical Review B **102**, 054210-1-054210-19 (2020)

Gudkov V., Nesvizhevsky V.V., Protasov K.V., Snow W.M., Voronin A.Y. A new approach to search for free neutron-antineutron oscillations using coherent neutron propagation in gas Physics Letters B **808**, 135636-1-135636-6 (2020)

Guerrero C., Leredegui-Marco J., Paul M., Tessler M., Heinitz S., Domingo-Pardo C., Cristallo S., Dressler R., Halfon S., Kivel N., Köster U., Maugeri E.A., Palchan-Hazan T., Quesada J.M., Rochman D., Schumann D., Weissman L., Aberle O., Amaducci S., Andrzejewski J., Audouin L., Bécares V., Bacak M., Balibrea J., Barak A., Barbagallo M., Barros S., Bečvář F., Beinrucker C., Berkovits D., Berthoumieux E., Billowes J., Bosnar D., Brügger M., Buzaglo Y., Caamaño M., Calviño F., Calviani M., Cano-Ott D., Cardella R., Casanovas A., Castelluccio D.M., Cerutti F., Chen Y.H., Chiaveri E., Colonna N., Cortés G., Cortés-Giraldo M.A., Cosentino L., Dafna H., Damone A., Diakaki M., Dietz M., Dupont E., Dúran I., Eisen Y., Fernández-Domínguez B., Ferrari A., Ferreira P., Finocchiaro P., Furman V., Göbel K., García A.R., Gawlik A., Glodariu T., Gonçalves I.F., González-Romero E., Goverdovski A., Griesmayer E., Günsing F., Harada H., Heftrich T., Heyse J., Hirsh T., Jericha E., Käppeler F., Kadi Y., Kaizer B., Katabuchi T., Kavrigin P., Ketlerov V., Khryachkov V., Kijel D., Kimura A., Kokkoris M., Kriesel A., Kříčká M., Leal-Cidoncha E., Lederer-Woods C., Leeb H., Lo Meo S., Lonsdale S.J., Losito R., Macina D., Manna A., Marganec J., Martínez T., Massimi C., Mastinu P., Mastroarco M., Matteucci F., Mendoza E., Mengoni A., Milazzo P.M., Millán-Callado M.A., Mingrone F., Mirea M., Montesano S., Musumarra A., Nolte R., Oprea A., Patronis N., Pavlik A., Perkowski J., Piersanti L., Porras I., Praena J., Rajeev K., Rauscher T., Reifarh R., Rodríguez-González T., Rout P.C., Rubbia C., Ryan J.A., Sabaté-Gilarte M., Saxena A., Schillebeeckx P., Schmidt S., Shor A., Sedyshev P., Smith A.G., Stamatopoulos A., Tagliente G., Taín J.L., Tarifeño-Saldivia A., Tassan-Got L., Tsinganis A., Valenta S., Vannini G., Variale V., Vaz P., Ventura A., Vlachoudis V., Vlastou R., Wallner A., Warren S., Weigand M., Weiss C., Wolf C., Woods P.J., Wright T., Žugec P. Neutron capture on the *s*-process branching point ¹⁷¹Tm via time-of-flight and activation *Physical Review Letters* **125**, 142701-1-142701-8 (2020)

Günther A., Riegg S., Kraetschmer W., Wehrmeister S., Büttgen N., Scheidt E.W., Krug von Nidda H.A., Eremin M.V., Arkhipova E.A., Eremina R.M., Krimmel A., Mutka H., Loidl A. Electronic correlations and crystal-field effects in $RCu_3Ru_4O_{12}$ ($R=La, Pr, Nd$) *Physical Review B* **102**, 235136-1-235136-18 (2020)

Guo H., Li Z.W., Chang C.F., Hu Z., Kuo C.Y., Perring T.G., Schmidt W., Piovano A., Schmalz K., Walker H.C., Lin H.J., Chen C.T., Blanco-Canosa S., Schlappa J., Schüßler-Langeheine C., Hansmann P., Khomskii D.I., Tjeng L.H., Komarek A.C. Charge disproportionation and nano phase separation in $RSrNiO_4$ *Scientific Reports* **10**, 18012-1-18012-11 (2020)

Gupta M.K., Mittal R., Mishra S.K., Goel P., Singh B., Rols S., Chaplot S.L. Spin-phonon coupling and thermodynamic behaviour in $YCrO_3$ and $LaCrO_3$: Inelastic neutron scattering and lattice dynamics *Journal of Physics: Condensed Matter* **32**, 505402-1-505402-13 (2020)

Ha J., Sumikama T., Browne F., Hinohara N., Bruce A.M., Choi S., Nishizuka I., Nishimura S., Doornenbal P., Lorusso G., Söderström P.A., Watanabe H., Daido R., Patel Z., Rice S., Sinclair L., Wu J., Xu Z.Y., Yagi A., Baba H., Chiga N., Carroll R., Didierjean F., Fang Y., Fukuda N., Gey G., Ideguchi E., Inabe N., Isobe T., Kameda D., Kojouharov I., Kurz N., Kubo T., Lalkovski S., Li Z., Lozeva R., Nishibata H., Odahara A., Podolyák Z., Regan P.H., Roberts O.J., Sakurai H., Schaffner H., Simpson G.S., Suzuki H., Takeda H., Tanaka M., Taprogge J., Werner V., Wieland O. Shape evolution of neutron-rich ^{106,108,110}Mo isotopes in the triaxial degree of freedom *Physical Review C* **101**, 044311-1-044311-24 (2020)

Hallett J.E., Grillo I., Smith G.N. A neutron scattering study of the structure of poly(dimethylsiloxane)-stabilized poly(methyl methacrylate) (PDMS-PMMA) latexes in dodecane *Langmuir* **36**, 2071-2081 (2020)

Hansen A.S., Baardsen G., Rebolini E., Maschio L., Pedersen T.B. Representation of the virtual space in extended systems – A correlation energy convergence study *Molecular Physics* **118**, e1733118-1-e1733118-11 (2020)

Hansen H.W., Lundin F., Adrjanowicz K., Frick B., Matic A., Niss K. Density scaling of structure and dynamics of an ionic liquid *Physical Chemistry Chemical Physics* **22**, 14169-14176 (2020)

Hayashida S., Ishikawa H., Okamoto Y., Okubo T., Hiroi Z., Nilsen G.J., Mutka H., Masuda T. Zero-energy excitation in the classical kagome antiferromagnet $NaBa_2Mn_3F_{11}$ *Physical Review B* **101**, 214409-1-214409-6 (2020)

Helliwell J.R. Fundamentals of neutron crystallography in structural biology *Methods in Enzymology* **634**, 1-19 (2020)

Hendrickx M., Tang Y., Hunter E.C., Battle P.D., Cadogan J.M., Hadermann J. $CaLa_2FeCoSbO_9$ and $Ala_2FeNiSbO_9$ ($A = Ca, Sr, Ba$): cation-ordered, inhomogeneous, ferrimagnetic perovskites *Journal of Solid State Chemistry* **285**, 121226-1-121226-13 (2020)

Henrichs L.F., Mu X., Scherer T., Gerhards U., Schuppler S., Nagel P., Merz M., Kübel C., Fawey M.H., Hansen T.C., Hahn H. First-time synthesis of a magnetoelectric core-shell composite via conventional solid-state reaction *Nanoscale* **12**, 15677-15686 (2020)

Herraiz M., Batische N., Dubois M., Nesvizhevsky V.V., Cavallari C., Brunelli M., Pischedda V., Radescu S. A multi-technique study of fluorinated nanodiamonds for low-energy neutron physics applications *Journal of Physical Chemistry C* **124**, 14229-14236 (2020)

Hibble S.J., Chippindale A.M., Zbiri M., Rees N.H., Keeble D.S., Wilhelm H., d'Ambrumenil S., Seifert D. Intra- and interchain interactions in $(Cu_{1/2}Au_{1/2})CN$, $(Ag_{1/2}Au_{1/2})CN$, and $(Cu_{1/3}Ag_{1/3}Au_{1/3})CN$ and their effect on one-, two-, and three-dimensional order *Inorganic Chemistry* **59**, 11704-11714 (2020)

Himbert S., Zhang L., Alsop R.J., Cristiglio V., Fragneto G., Rheinstädter M.C. Anesthetics significantly increase the amount of intramembrane water in lipid membranes *Soft Matter* **16**, 9674-9682 (2020)

Hneda M.L., da Cunha J.B.M., Popa A., Isnard O. Magnetic order suppression and structural characterization of $MnNb_{2-x}V_xO_6$ columbites crystallized under extreme pressure conditions *Journal of Magnetism and Magnetic Materials* **496**, 165907-1-165907-7 (2020)

Hohenschutz M., Grillo I., Diat O., Bauduin P. How nano-ions act like ionic surfactants *Angewandte Chemie International Edition* **59**, 8084-8088 (2020)

Hölscher J., Petrecca M., Albino M., Garbus P.G., Saura-Múzquiz M., Sangregorio C., Christensen M. Magnetic property enhancement of spinel Mn-Zn ferrite through atomic structure control *Inorganic Chemistry* **59**, 11184-11192 (2020)

Holt S.J.R., Štefančič A., Ritter C., Hall A.E., Lees M.R., Balakrishnan G. Structure and magnetism of the skyrmion hosting family $GaV_4S_{8-y}Se_y$ with low levels of substitutions between $0 \leq y \leq 0.5$ and $7.5 \leq y \leq 8$ *Physical Review Materials* **4**, 114413-1-114413-8 (2020)

Holzmann M., Moroni S. Itinerant-electron magnetism: The importance of many-body correlations *Physical Review Letters* **124**, 206404-1-206404-5 (2020)

Honecker D., Fernández Barquín L., Bender P. Magnetic structure factor of correlated moments in small-angle neutron scattering *Physical Review B* **101**, 134401-1-134401-9 (2020)

Honnigfort C., Campbell R.A., Droste J., Gutfreund P., Hansen M.R., Ravoo B.J., Braunschweig B. Unexpected monolayer-to-bilayer transition of arylazopyrazole surfactants facilitates superior photo-control of fluid interfaces and colloids *Chemical Science* **11**, 2085-2092 (2020)

Hu X., Liao M., Gong H., Zhang L., Cox H., Waigh T.A., Lu J.R. Recent advances in short peptide self-assembly: From rational design to novel applications *Current Opinion in Colloid & Interface Science* **45**, 1-13 (2020)

Hutzler W.M., Mossou E., Vollrath R., Kohagen M., El Ghriisi I., Grininger M., Zaccai G., Smiatek J., Oesterhelt D. Complex transitions between dihydrate and anhydrate forms of ectoine – unexpected behavior of a highly hygroscopic compatible solute in the solid state *CrystEngComm* **22**, 169-172 (2020)

Hyatt J.G., Prévost S., Devos J.M., Mycroft-West C.J., Skidmore M.A., Winter A. Molecular changes in dengue envelope protein domain III upon interaction with glycosaminoglycans *Pathogens* **9**, 935-1-935-17 (2020)

Hynes E.L., Gutfreund P., Parnell A.J., Higgins A.M. Liquid-liquid equilibrium in polymer-fullerene mixtures; an *in situ* neutron reflectivity study *Soft Matter* **16**, 3727-3739 (2020)

Iashina E.G., Grigoriev S.V. Large-scale structure of chromatin: A fractal globule or a logarithmic fractal? *Journal of Experimental and Theoretical Physics* **129**, 455-458 (2019)

Iskra Ł.W., Fornal B., Leoni S., Michelagnoli C., Bottoni S., Cieplicka-Oryńczak N., Jentschel M., Kandzia F., Kim Y.H., Köster U., Porzio C. Shape transition in the neutron-rich Y nuclei and its evolution across the isotopic chain *EPJ Web of Conferences* **223**, 01024-1-01024-3 (2019)

Iskra Ł.W., Leoni S., Fornal B., Michelagnoli C., Kandzia F., Märginean N., Barani M., Bottoni S., Cieplicka-Oryńczak N., Colombi G., Costache C., Crespi F.C.L., Dudouet J., Jentschel M., Kim Y.H., Köster U., Lică R., Märginean R., Mihai C., Mihai R.E., Nijā C.R., Pascu S., Porzio C., Reygadas D., Ruiz-Martinez E., Turturica A. γ spectroscopy of the ⁹⁶Y isotope: Searching for the onset of shape coexistence before $N=60$ *Physical Review C* **102**, 054324-1-054324-13 (2020)

Isnard O., Kinast E.J. Neutron diffraction investigation of the $DyFe_{11}Ti$ magnetic structure and its spin reorientations *Engineering* **6**, 154-158 (2020)

Jacquet Q., Iadecola A., Saubanière M., Li H., Berg E.J., Rousse G., Cabana J., Doublet M.L., Tarascon J.M. Charge transfer band gap as an indicator of hysteresis in Li-disordered rock salt cathodes for Li-ion batteries *Journal of the American Chemical Society* **141**, 11452-11464 (2019)

Jakobsson U., Mäkilä E., Rahikkala A., Imlimhan S., Lampuotii J., Ranjan S., Heino J., Jalkanen P., Köster U., Mizohata K., Santos H.A., Salonen J., Airaksinen A.J., Sarparanta M., Helariutta K. Preparation and *in vivo* evaluation of red blood cell membrane coated porous silicon nanoparticles implanted with ¹⁵⁵Tb *Nuclear Medicine and Biology* **84-85**, 102-110 (2020)

Janas S., Sørensen M.B., Andersen A.B.A., Juelshtolt M., Boehm M., Pedersen K.S., Jensen K.M.Ø., Lefmann K., Nielsen U.G. Structural characterization and magnetic properties of chromium jarosite $\text{KCr}_3(\text{OD})_6(\text{SO}_4)_2$ *Physical Chemistry Chemical Physics* **22**, 25001-25010 (2020)

Jefremovas E.M., de la Fuente Rodríguez M., Alonso J., Rodríguez Fernández J., Espeso J.I., Puente-Orench I., Rojas D.P., García-Prieto A., Fdez-Gubieda M.L., Rodríguez Fernandez L., Fernández Barquín L. Exploring the different degrees of magnetic disorder in $\text{Tb}_x\text{R}_{1-x}\text{Cu}_2$ nanoparticle alloys *Nanomaterials* **10**, 2148-1-2148-17 (2020)

Jellyman E., Jefferies P., Pollard S., Forgan E.M., Blackburn E., Campillo E., Holmes A.T., Cubitt R., Gavilano J., Wang H., Du J., Fang M. Unconventional superconductivity in the nickel chalcogenide superconductor TlNi_2Se_2 *Physical Review B* **101**, 134523-1-134523-7 (2020)

Jensen A.I., Zhuravlev F., Severin G., Busk Magnus C., Fonslet J., Köster U., Jensen M. A solid support generator of the Auger electron emitter rhodium-103m from ^{103}Pd palladium *Applied Radiation and Isotopes* **156**, 108985-1-108985-7 (2020)

Jericha E., Gösselsberger C., Abele H., Baumgartner S., Berger B.M., Geltenbort P., Hino M., Oda T., Raab R., Badurek G. MONOPOL – A traveling-wave magnetic neutron spin resonator for tailoring polarized neutron beams *Scientific Reports* **10**, 5815-1-5815-12 (2020)

Jimenez A.M., Zhao D., Misquitta K., Jestin J., Kumar S.K. Exchange lifetimes of the bound polymer layer on silica nanoparticles *ACS Macro Letters* **8**, 166-171 (2019)

Jiménez-Ruiz M., Gahle D.S., Lemishko T., Valencia S., Sastre G., Rey F. Evidence of hydronium formation in water-chabazite zeolite using inelastic neutron scattering experiments and ab initio molecular dynamics simulations *Journal of Physical Chemistry C* **124**, 5436-5443 (2020)

Jin L., Batuk M., Kirschner F.K.K., Lang F., Blundell S.J., Hadermann J., Hayward M.A. Exsolution of SrO during the topochemical conversion of $\text{LaSr}_3\text{CoRuO}_8$ to the oxyhydride $\text{LaSr}_3\text{CoRuO}_4\text{H}_4$ *Inorganic Chemistry* **58**, 14863-14870 (2019)

Julien-Laferrrière S., Chebboubi A., Kessedjian G., Serot O., Litaize O., Blanc A., Köster U., Méplan O., Ramdhane M., Sage C. Investigation of neutron emission through the local odd-even effect as a function of the fission product kinetic energy *Physical Review C* **102**, 034602-1-034602-11 (2020)

Jungclaus A., Keatings J.M., Simpson G.S., Naidja H., Gargano A., Nishimura S., Doornenbal P., Gey G., Lorusso G., Söderström P.A., Sumikama T., Taprogge J., Xu Z.Y., Baba H., Browne F., Fukuda N., Inabe N., Isobe T., Jung H.S., Kameda D., Kim G.D., Kim Y.K., Kojouharov I., Kubo T., Kurz N., Kwon Y.K., Li Z., Sakurai H., Schaffner H., Shimizu Y., Suzuki H., Takeda H., Vajta Z., Watanabe H., Wu J., Yagi A., Yoshinaga K., Bönig S., Daugas J.M., Gernhäuser R., Ilieva S., Kröll T., Montaner-Piza A., Moschner K., Mücher D., Nishibata H., Odahara A., Orlandi R., Scheck M., Steiger K., Wendt A. Evolution of proton single-particle states in neutron-rich Sb isotopes beyond $N=82$ *Physical Review C* **102**, 034324-1-034324-11 (2020)

Kabelka I., Pachler M., Prévost S., Letofsky-Papst I., Lohner K., Pabst G., Vácha R. Magainin 2 and PGLa in bacterial membrane mimics II: Membrane fusion and sponge phase formation *Biophysical Journal* **118**, 612-623 (2020)

Kading E.E., Aviv O., Elyahu I., Gai M., Halfon S., Hass M., Howell C.R., Kijel D., Mishnayot Y., Mukul I., Perry A., Shachar Y., Seiffert C., Shor A., Silverman I., Stern S.R., Stora T., Ticehurst D.R., Weiss A., Weissman L. Tests and calibrations of nuclear track detectors (CR39) for operation in high neutron flux *Physical Review Research* **2**, 023279-1-023279-10 (2020)

Kalot G., Godard A., Busser B., Pliquett J., Broekgaarden M., Motto-Ros V., Wegner K.D., Resch-Genger U., Köster U., Denat F., Coll J.L., Bodio E., Goze C., Sancey L. Aza-BODIPY: A new vector for enhanced theranostic boron neutron capture therapy applications *Cells* **9**, 1953-11-1953-14 (2020)

Kandzia F., Bélier G., Michelagnoli C., Aupiais J., Barani M., Dudouet J., Düllmann C.E., Iskra Ł.W., Jentschel M., Kim Y.H., Köster U., Turturica A. Development of a liquid scintillator based active fission target for FIPPS *European Physical Journal A* **56**, 207-1-207-10 (2020)

Kang J.H., Ade P.A.R., Ahmed Z., Amiri M., Barkats D., Basu Thakur R., Bischoff C.A., Bock J.J., Boenish H., Bullock E., Buza V., Cheshire J.R., Connors J., Cornelison J., Crumrine M., Cukierman A., Denison E., Dierickx M., Duband L., Eiben M., Fatigoni S., Filippini J.P., Fliescher S., Goeckner-Wald N., Goldfinger D.C., Grayson J.A., Grimes P., Hall G., Halpern M., Harrison S.A., Henderson S., Hildebrandt S.R., Hilton G.C., Hubmayr J., Hui H., Irwin K.D., Karkare K.S., Karpel E., Kefeli S., Kernasovskiy S.A., Kovac J.M., Kuo C.L., Lau K., Leitch E.M., Megerian K.G., Minotolo L., Moncelsi L., Nakato Y., Namikawa T., Nguyen H.T., O'Brien R., Ogburn IV R.W., Palladino S., Precup N., Prouve T., Pryke C., Racine B., Reintsema C.D., Richter S., Schillaci A., Schmitt B.L., Schwarz R., Sheehy C.D., Soliman A., Germaine T.S., Steinbach B., Sudiwala R.V., Teply G.P., Thompson K.L., Tolan J.E., Tucker C., Turner A.D., Umiltà C., Viereggs A.G., Wandui A., Weber A.C., Wiebe D.V., Willmert J., Wong C.L., Wu W.L.K., Yang H., Yoon K.W., Young E., Yu C., Zeng L., Zhang C., Zhang S. Observing low elevation sky and the CMB Cold Spot with BICEP3 at the South Pole *Proceedings of SPIE* **11453**, 114532D-1-114532D-12 (2020)

Karabanova A. Neutron-assisted modelling for thermochemical heat storage *PhD Thesis* (2020)

Karube K., White J.S., Ukleev V., Dewhurst C.D., Cubitt R., Kikkawa A., Tokunaga Y., Rønnow H.M., Tokura Y., Taguchi Y. Metastable skyrmion lattices governed by magnetic disorder and anisotropy in β -Mn-type chiral magnets *Physical Review B* **102**, 064408-1-064408-20 (2020)

Katukuri V.M., Babkevich P., Mustonen O., Walker H.C., Fåk B., Vasala S., Karppinen M., Rønnow H.M., Yazyev O.V. Exchange interactions mediated by nonmagnetic cations in double perovskites *Physical Review Letters* **124**, 077202-1-077202-7 (2020)

Kelley E.G., Nagao M., Butler P.D., Porcar L., Farago B. Enhanced dynamics in the anomalous melting regime of DMPG lipid membranes *Structural Dynamics* **7**, 054704-1-054704-10 (2020)

Kibble M.G., Laliena V., Goodway C.M., Lelièvre-Berna E., Kamenev K.V., Klotz S., Kirichek O. Low-background materials for high pressure cells used in inelastic neutron scattering experiments *Journal of Neutron Research* **21**, 105-116 (2020)

Kim B.H., Choi J.J., Chung M., Cladé P., Comini P., Crivelli P., Crépin P.P., Dalkarov O., Debu P., Dodd L., Douillet A., Froehlich P., Guellati S., Heinrich J., Hervieux P.A., Hilico L., Husson A., Indelicato P., Janka G., Jonsell S., Karr J.P., Kim E.S., Kim S.K., Ko Y., Kosinski T., Kuroda N., Latacz B., Lee H., Lee J., Leite A.M.M., Lim E., Liszkay L., Louvradoux T., Lunney D., Lévêque K., Manfredi G., Mansoulié B., Matusiak M., Mornacchi G., Nesvizhevsky V.V., Nez F., Niang S., Nishi R., Nourbaksh S., Lotrus P., Park K.H., Paul N., Pérez P., Radics B., Regenfus C., Reynaud S., Roussé J.Y., Rubbia A., Rzadkiewicz J., Sacquin Y., Schmidt-Kaler F., Staszczak M., Tuchming B., Vallage B., van der Werf D.P., Voronin A., Welker A., Wolf S., Wronka S., Yamazaki Y., Yoo K.H. Development of a PbWO_4 detector for single-shot positron annihilation lifetime spectroscopy at the GBAR experiment *Acta Physica Polonica A* **137**, 122-125 (2020)

Kim C., Jeong J., Park P., Masuda T., Asai S., Itoh S., Kim H.S., Wildes A., Park J. Spin waves in the two-dimensional honeycomb lattice XXZ-type van der Waals antiferromagnet CoPS_3 *Physical Review B* **102**, 184429-1-184429-8 (2020)

Kim Y.H., Thomas M., Faust H., Michelagnoli C., Köster U., Kandzia F., Jentschel M., Ruiz-Martinez E., Mutti P., Lelièvre-Berna E., Schwab H., Froidefond E., Kessedjian G., Méplan O., Simpson G., Chebboubi A., Materna T. Development of a gas filled magnet for FIPPS phase II *Nuclear Instruments and Methods in Physics Research B* **463**, 269-271 (2020)

Kimber S.A.J., Wildes A.R., Mutka H., Bos J.W.G., Argyriou D.N. Spin-chain correlations in the frustrated triangular lattice material CuMnO_2 *Journal of Physics: Condensed Matter* **32**, 445802-1-445802-6 (2020)

King M.D., Jones S.H., Lucas C.O.M., Thompson K.C., Rennie A.R., Ward A.D., Marks A.A., Fisher F.N., Pfrang C., Hughes A.V., Campbell R.A. The reaction of oleic acid monolayers with gas-phase ozone at the air water interface: the effect of sub-phase viscosity, and inert secondary components *Physical Chemistry Chemical Physics* **22**, 28032-28044 (2020)

Kitsche D., Schweidler S., Mazilkin A., Geßwein H., Fauth F., Suard E., Hartmann P., Brezesinski T., Janek J., Bianchini M. The effect of gallium substitution on the structure and electrochemical performance of LiNiO_2 in lithium-ion batteries *Materials Advances* **1**, 639-647 (2020)

Klicpera M., Diviš M., Malý F., Puente-Orench I., Javorský P. Magnetization and specific heat study on a SmCuAl_3 single crystal *Journal of Alloys and Compounds* **822**, 153595-1-153595-7 (2020)

Klicpera M., Vlášková K., Colman R.H., Proschek P., Hoser A. Spin-glass state in defect-fluorite $\text{Er}_2\text{Zr}_2\text{O}_7$ *Acta Physica Polonica A* **137**, 750-752 (2020)

Klotz S., Hansen T.C., Lelièvre-Berna E., Amand L., Maurice J., Payre C. Advances in the use of Paris-Edinburgh presses for high pressure neutron scattering *Journal of Neutron Research* **21**, 117-124 (2019)

Knafila L., Alexa P., Köster U., Thiamova G., Régis J.M., Jolie J., Blanc A., Bruce A.M., Esmaylzadeh A., Fraile L.M., de France G., Häfner G., Ilieva S., Jentschel M., Karayonchev V., Korten W., Kröll T., Lalkovski S., Leoni S., Mach H., Märginean N., Mutti P., Pascovici G., Pazyi V., Podolyák Z., Regan P.H., Roberts O.J., Saed-Samii N., Simpson G.S., Smith J.F., Soldner T., Townsley C., Ur C.A., Urban W., Van Craeynest A., Warr N. Lifetime measurements in the odd-A nucleus ^{177}Hf *Physical Review C* **102**, 054322-1-054322-13 (2020)

Korshunov A.N., Kurbakov A.I., Safulina I.A., Susloparova A.E., Pomjakushin V.Y., Mueller T. Long-range magnetic ordering in $\text{Li}_2\text{MnGeO}_4$ and precursor short-range spin correlations *Physical Review B* **102**, 214420-1-214420-9 (2020)

Koseoglou P., Werner V., Pietralla N., Ilieva S., Nikšić T., Vretenar D., Alexa P., Thürauf M., Bernards C., Blanc A., Bruce A.M., Cakirli R.B., Cooper N., Fraile L.M., de France G., Jentschel M., Jolie J., Köster U., Korten W., Kröll T., Lalkovski S., Mach H., Märginean N., Mutti P., Patel Z., Pazyi V., Podolyák Z., Regan P.H., Régis J.M., Roberts O.J., Saed-Samii N., Simpson G.S., Soldner T., Ur C.A., Urban W., Wilmsen D., Wilson E. Low-Z boundary of the $N=88-90$ shape phase transition: ^{148}Ce near the critical point *Physical Review C* **101**, 014303-1-014303-10 (2020)

Koshkina O., White P.B., Staal A.H.J., Schweins R., Swider E., Tirotta I., Tinnemans P., Fokkink R., Veltien A., van Riessen N.K., van Eck E.R.H., Heerschap A., Metrangolo P., Baldelli Bombelli F., Srinivas M. Nanoparticles for "two color" ^{19}F magnetic resonance imaging: Towards combined imaging of biodistribution and degradation *Journal of Colloid and Interface Science* **565**, 278-287 (2020)

Köster U., Assmann W., Bacri C.O., Faestermann T., Garrett P., Gernhäuser R., Tomandl I. Electromagnetic isotope separation of gadolinium isotopes for the production of $^{152,155}\text{Tb}$ for radiopharmaceutical applications *Nuclear Instruments and Methods in Physics Research B* **463**, 111-114 (2020)

Kovalevsky A., Gerlits O., Beltran K., Weiss K.L., Keen D.A., Blakeley M.P., Louis J.M., Weber I.T. Proton transfer and drug binding details revealed in neutron diffraction studies of wild-type and drug resistant HIV-1 protease *Methods in Enzymology* **634**, 257-279 (2020)

Krasta T., Simonova L., Riekstina D., Jentschel M. New rotational levels in ^{186}Re nucleus *Nuclear Physics A* **1000**, 121870-1-121870-20 (2020)

Kruteva M., Allgaier J., Monkenbusch M., Porcar L., Richter D. Self-similar polymer ring conformations based on elementary loops: A direct observation by SANS *ACS Macro Letters* **9**, 507-511 (2020)

Kruteva M., Monkenbusch M., Allgaier J., Holderer O., Pasini S., Hoffmann I., Richter D. Self-similar dynamics of large polymer rings: A neutron spin echo study *Physical Review Letters* **125**, 238004-1-238004-6 (2020)

Kryshchak A., Schwede T., Topf M., Fidelis K., Moutl J. Critical assessment of methods of protein structure prediction (CASP)-Round XIII *Proteins: Structure, Function, and Bioinformatics* **87**, 1011-1020 (2019)

Kulin G.V., Frank A.I., Zakharov M.A., Goryunov S.V., Bushuev V.A., Panzarella A., Geltenbort P., Jentschel M. Nonstationary diffraction of ultracold neutrons from a moving grating and efficiency of energy transfer to a neutron *Journal of Experimental and Theoretical Physics* **129**, 806-811 (2019)

Kumar A., Giri S.K., Nath T.K., Ritter C., Yusuf S.M. Investigation of magnetic ordering and origin of exchange-bias effect in doped manganite, $\text{Sm}_{0.4}\text{Ca}_{0.6}\text{MnO}_3$ *Journal of Applied Physics* **128**, 203901-1-203901-10 (2020)

Kumar M., Mandal K., Blakeley M.P., Wymore T., Kent S.B.H., Louis J.M., Das A., Kovalevsky A. Visualizing tetrahedral oxyanion bound in HIV-1 protease using neutrons: Implications for the catalytic mechanism and drug design *ACS Omega* **5**, 11605-11617 (2020)

Kuttich B., Hoffmann I., Stühn B. Disentangling of complex polymer dynamics under soft nanoscopic confinement *Soft Matter* **16**, 10377-10385 (2020)

Kuzovnikov M.A., Antonov V.E., Ivanov A.S., Hansen T., Savvin S., Kulakov V.I., Tkacz M., Kolesnikov A.I., Gurev V.M. Neutron scattering study of tantalum dihydride *Physical Review B* **102**, 024113-1-024113-8 (2020)

Kwon H., Basran J., Devos J.M., Suardiaz R., van der Kamp M.W., Mulholland A.J., Schrader T.E., Ostermann A., Blakeley M.P., Moody P.C.E., Raven E.L. Visualizing the protons in a metalloenzyme electron proton transfer pathway *Proceedings of the National Academy of Sciences* **117**, 6484-6490 (2020)

Kwon H., Schrader T.E., Ostermann A., Blakeley M.P., Raven E.L., Moody P.C.E. Heme peroxidase-Trapping intermediates by cryo neutron crystallography *Methods in Enzymology* **634**, 379-389 (2020)

Lamura G., Onuorah I.J., Bonfà P., Sanna S., Shermadini Z., Khasanov R., Orain J.C., Baines C., Gastaldo F., Giovannini M., Čurlík I., Dzubinska A., Pristás G., Reiffers M., Martinelli A., Ritter C., Joseph B., Bauer E., De Renzi R., Shiroka T. Pressure-induced antiferromagnetic dome in the heavy-fermion $\text{Yb}_2\text{Pd}_2\text{In}_{1-x}\text{Sn}_x$ system *Physical Review B* **101**, 054410-1-054410-14 (2020)

Lançon D., Scagnoli V., Staub U., Petrenko O.A., Ciomaga Hatnean M., Canévet E., Sibille R., Francoual S., Mardegan J.R.L., Beauvois K., Balakrishnan G., Heyderman L.J., Rüegg C., Fennell T. Evolution of field-induced metastable phases in the Shastry-Sutherland lattice magnet TmB_4 *Physical Review B* **102**, 060407-1-060407-6 (2020)

Lang C., Kohlbrecher J., Porcar L., Radulescu A., Sellinghoff K., Dhont J.K.G., Lettinga M.P. Microstructural understanding of the length- and stiffness-dependent shear thinning in semidilute colloidal rods *Macromolecules* **52**, 9604-9612 (2019)

Larsen S.R., Michels L., dos Santos E.C., Berg M.C., Gates W.P., Aldridge L.P., Seydel T., Ollivier J., Telling M.T.F., Fossum J.O., Bordallo H.N. Physicochemical characterisation of fluorohectorite: Water dynamics and nanocarrier properties *Microporous and Mesoporous Materials* **306**, 110512-1-110512-11 (2020)

Latza V.M., Demé B., Schneck E. Membrane adhesion via glycolipids occurs for abundant saccharide chemistries *Biophysical Journal* **118**, 1602-1611 (2020)

Lawrence G.B., Wildman E.J., Stenning G.B.G., Ritter C., Fauth F., McLaughlin A.C. Electronic and magnetic properties of cation ordered $\text{Sr}_2\text{Mn}_{2.23}\text{Cr}_{0.77}\text{As}_2\text{O}_2$ *Inorganic Chemistry* **59**, 7553-7560 (2020)

Leclercq B., Arévalo-López Á.M., Kabbour H., Daviero-Minaud S., Pautrat A., Basu T., Colin C.V., Das R.R., David R., Mentré O. Multiferroic BaCoX_2O_7 ($X = \text{P}, \text{As}$) compounds with incommensurate structural waves but collinear spin ingredients *Advanced Quantum Technologies*, 2000064-1-2000064-11 (2020)

Lee J., Escribano S., Micoud F., Gébel G., Lyonnard S., Porcar L., Martínez N., Morin A. *In situ* measurement of ionomer water content and liquid water saturation in fuel cell catalyst layers by high-resolution small-angle neutron scattering *ACS Applied Energy Materials* **3**, 8393-8401 (2020)

Lee S., Kaya C., Jang H., Koch M., Loretz B., Buhler E., Lehr C.M., Hirsch A.K.H. pH-dependent morphology and optical properties of lysine-derived molecular biodynamers *Materials Chemistry Frontiers* **4**, 905-909 (2020)

Leimbach D., Karls J., Guo Y., Ahmed R., Ballof J., Bengtsson L., Boix Pamies F., Borschevsky A., Chrysalidis K., Eliav E., Fedorov D., Fedosseev V., Forstner O., Galland N., Garcia Ruiz R.F., Granados C., Heinke R., Johnston K., Koszorus A., Köster U., Kristiansson M.K., Liu Y., Marsh B., Molkanov P., Pašeka L.F., Ramos J.P., Renault E., Reponen M., Ringvall-Moberg A., Rossel R.E., Studer D., Vernon A., Warbinek J., Welander J., Wendt K., Wilkins S., Hanstorp D., Rothe S. The electron affinity of astatine *Nature Communications* **11**, 3824-1-3824-9 (2020)

Leishman A.W.D., Menezes R.M., Longbons G., Bauer E.D., Janoschek M., Honecker D., DeBeer-Schmitt L., White J.S., Sokolova A., Milošević M.V., Eskildsen M.R. Topological energy barrier for skyrmion lattice formation in MnSi *Physical Review B* **102**, 104416-1-104416-9 (2020)

Lemoine P., Pavan Kumar V., Guérou G., Nassif V., Raveau B., Guilmeau E. Thermal stability of the crystal structure and electronic properties of the high power factor thermoelectric colusite $\text{Cu}_{26}\text{Cr}_2\text{Ge}_6\text{S}_{32}$ *Chemistry of Materials* **32**, 830-840 (2020)

Leoni S., Bracco A., Colò G., Fornal B. Particle-phonon coupling: Understanding the variety of excitations in the low-lying spectra of odd nuclei *European Physical Journal A* **55**, 247-1-247-10 (2019)

Leoni S., Fornal B., Märginean N., Michelagnoli C., Wilson J., Sferrazza M., Tsunoda Y., Otsuka T. Shape-coexistence studies in the Ni isotopic chain by using the selectivity of different reaction mechanisms *Acta Physica Polonica B* **51**, 807-815 (2020)

Li Y., Bachus S., Deng H., Schmidt W., Thoma H., Hutano V., Tokiwa Y., Tsirlin A.A., Gegenwart P. Partial up-up-down order with the continuously distributed order parameter in the triangular antiferromagnet TmMgGaO_4 *Physical Review X* **10**, 011007-1-011007-19 (2020)

Li Y., Larralde A.L., Cai J., Du S., Troncoso L., Fernández-Díaz M.T., Alonso J.A. Novel cobalt-free family of $\text{SrFe}_{1-x}\text{Sc}_x\text{O}_{3-\delta}$ perovskite materials for cathode applications in solid oxide fuel cells *International Journal of Energy Research* **44**, 11702-11710 (2020)

Liu P., Klemm M.L., Tian L., Lu X., Song Y., Tam D.W., Schmalz K., Park J.T., Li Y., Tan G., Su Y., Bourdarot F., Zhao Y., Lynn J.W., Birgeneau R.J., Dai P. In-plane uniaxial pressure-induced out-of-plane antiferromagnetic moment and critical fluctuations in BaFe_2As_2 *Nature Communications* **11**, 5728-1-5728-7 (2020)

Liu Y., Kelley E.G., Batchu K.C., Porcar L., Perez-Salas U. Creating asymmetric phospholipid vesicles via exchange with lipid-coated silica nanoparticles *Langmuir* **36**, 8865-8873 (2020)

Ljungvall J., Pérez-Vidal R.M., Lopez-Martens A., Michelagnoli C., Clément E., Dudouet J., Gadea A., Hess H., Korichi A., Labiche M., Lalović N., Li H.J., Recchia F. Performance of the Advanced GAMMA Tracking Array at GANIL *Nuclear Instruments and Methods in Physics Research A* **955**, 163297-1-163297-13 (2020)

Lohr J., Larralde A.L., Curiale J., Sánchez R., Campo J., Cuello G.J., Sheptyakov D., Keller L., Kenzelmann M., Aurelio G. Intermediate magnetic phase of the magnetoelectric compound $(\text{Ca,Sr})\text{BaCo}_4\text{O}_7$ described with the superspace formalism *Physical Review B* **102**, 134406-1-134406-11 (2020)

López C.A., Abia C., Alvarez-Galván M., Hong B., Martínez-Huerta M.V., Serrano-Sánchez F., Carrascoso F., Castellanos-Gómez A., Fernández-Díaz M.T., Alonso J.A. Crystal structure features of CsPbBr_3 perovskite prepared by mechanochemical synthesis *ACS Omega* **5**, 5931-5938 (2020)

López C.A., Abia C., Rodrigues J.E., Serrano-Sánchez F., Nemes N.M., Martínez J.L., Fernández-Díaz M.T., Biškup N., Alvarez-Galván C., Carrascoso F., Castellanos-Gómez A., Alonso J.A. Enhanced stability in $\text{CH}_3\text{NH}_3\text{PbI}_3$ hybrid perovskite from mechano-chemical synthesis: Structural, microstructural and optoelectronic characterization *Scientific Reports* **10**, 11228-1-11228-11 (2020)

López-Casas I., Praena J., Arias de Saavedra F., Sabaté-Gilarte M., Porras I. Exploring neutron capture therapy with ^{33}S and ^{10}B *Applied Radiation and Isotopes* **163**, 109220-1-109220-5 (2020)

López-Díaz D., Merchán M.D., Velázquez M.M., Maestro A. Understanding the role of oxidative debris on the structure of graphene oxide films at the air-water interface: A neutron reflectivity study *ACS Applied Materials & Interfaces* **12**, 25453-25463 (2020)

LoRicco J.G., Salvador-Castell M., Demé B., Peters J., Oger P.M. Apolar polyisoprenoids located in the midplane of the bilayer regulate the response of an archaeal-like membrane to high temperature and pressure *Frontiers in Chemistry* **8**, 594039-1-594039-11 (2020)

Lory P.F., Giordano V.M., Gille P., Euchner H., Mihalkovič M., Pellegrini E., Gonzalez M., Regnault L.P., Bastie P., Schober H., Pailhès S., Johnson M.R., Grin Y., de Boissieu M. Impact of structural complexity and disorder on lattice dynamics and thermal conductivity in the $\alpha\text{-Al}_3\text{Co}_4$ phase *Physical Review B* **102**, 024303-1-024303-14 (2020)

Luchini A., Delhom R., Cristiglio V., Knecht W., Wacklin-Knecht H., Fragneto G. Effect of ergosterol on the interlamellar spacing of deuterated yeast phospholipid multilayers *Chemistry and Physics of Lipids* **227**, 104873-1-104873-7 (2020)

Łuczynska K., Druzbicki K., Runka T., Pałka N., Wąsicki J. Vibrational response of felodipine in the THz domain: Optical and neutron spectroscopy versus plane-wave DFT modeling *International Journal of Infrared and Millimeter Waves* **41**, 1301-1336 (2020)

Lushchekina S.V., Inidjel G., Martinez N., Masson P., Trovaslet-Leroy M., Nachon F., Koza M.M., Seydel T., Peters J. Impact of sucrose as osmolyte on molecular dynamics of mouse acetylcholinesterase *Biomolecules* **10**, 1664-1-1664-19 (2020)

Luviano A.S., Hernández-Pascacio J., Ondo D., Campbell R.A., Piñeiro Á., Campos-Terán J., Costas M. Highly viscoelastic films at the water/air interface: α -Cyclodextrin with anionic surfactants *Journal of Colloid and Interface Science* **565**, 601-613 (2020)

Maestro A., Guzmán E. Colloids at fluid interfaces *Processes* **7**, 942-1-942-19 (2019)

Maharaj D.D., Sala G., Stone M.B., Kermarrec E., Ritter C., Fauth F., Marjerrison C.A., Greedan J.E., Paramekanti A., Gaulin B.D. Octupolar versus Néel order in cubic $5d^2$ double perovskites *Physical Review Letters* **124**, 087206-1-087206-6 (2020)

Mahieu E., Covès J., Krüger G., Martel A., Moulin M., Carl N., Härtlein M., Carlomagno T., Franzetti B., Gabel F. Observing protein degradation by the PAN-20S proteasome by time-resolved neutron scattering *Biophysical Journal* **119**, 375-388 (2020)

Mahieu E., Ibrahim Z., Moulin M., Härtlein M., Franzetti B., Martel A., Gabel F. The power of SANS, combined with deuteration and contrast variation, for structural studies of functional and dynamic biomacromolecular systems in solution *EPJ Web of Conferences* **236**, 03002-1-03002-10 (2020)

Mahon T., Gaudin E., Nassif V., Tencé S. Structural and magnetic properties of the interstitial carbide-hydride $\text{NdScSiC}_{0.5}\text{H}_{0.2}$ *Journal of Alloys and Compounds* **844**, 156105-1-156105-8 (2020)

Maier R., Zoicher G., Sauter A., Da Vela S., Matsarskaia O., Schweins R., Sztucki M., Zhang F., Stehle T., Schreiber F. Protein crystallization in the presence of a metastable liquid-liquid phase separation *Crystal Growth & Design* **20**, 7951-7962 (2020)

Malo de Molina P., Alegria A., Allgaier J., Kruteva M., Hoffmann I., Prévost S., Monkenbusch M., Richter D., Arbe A., Colmenero J. Tube dilation in iso-frictional polymer blends based on polyisoprene with different topologies: Combination of dielectric and rheological spectroscopy, pulsed-field-gradient NMR, and neutron spin echo (NSE) techniques *Macromolecules* **53**, 5919-5936 (2020)

Mao X., Brown P., Červinka C., Hazell G., Li H., Ren Y., Chen D., Atkin R., Eastoe J., Grillo I., Padua A.A.H., Costa Gomes M.F., Hatton T.A. Self-assembled nanostructures in ionic liquids facilitate charge storage at electrified interfaces *Nature Materials* **18**, 1350-1357 (2019)

Marchandier T., Rousse G., Jacquet Q., Abakumov A.M., Fauth F., Colin C.V., Tarascon J.M. Magnetic and intercalation properties of BaRu_2O_6 and SrRu_2O_6 *Chemistry of Materials* **32**, 8471-8480 (2020)

Mariani G., Colard-Htté J.R., Moulin E., Giuseppone N., Buhler E. Structural properties of contractile gels based on light-driven molecular motors: A small-angle neutron and X-ray study *Soft Matter* **16**, 4008-4023 (2020)

Marin I., Rydén T., Van Essen M., Svensson J., Gracheva N., Köster U., Zeevaert J.R., van der Meulen N.P., Müller C., Bernhardt P. Establishment of a clinical SPECT/CT protocol for imaging of ^{161}Tb *EJNMMI Physics* **7**, 45-1-45-16 (2020)

Märkisch B., Abele H., Dubbers D., Saul H., Soldner T. Accurate measurement of the beta-asymmetry in neutron decay rules out dark decay mode *Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques* **14**, S140-S143 (2020)

Martínez de Irujo-Labalde X., López-Paz S.A., García-Martín S., Alario-Franco M.Á. A far from conventional Tc-p correlation in the highly doped superconducting molybdo-cuprates: The case of $\text{Mo}_{0.3}\text{Cu}_{0.7}\text{Sr}_2\text{TmCu}_2\text{O}_{7+\delta}$ *Journal of Solid State Chemistry* **286**, 121289-1-121289-8 (2020)

Matana Luza L., Söderström D., Puchner H., García Alía R., Létiche M., Bosio A., Dilillo L. Effects of thermal neutron irradiation on a self-refresh DRAM *In «2020 15th Design & Technology of Integrated Systems in Nanoscale Era (DTIS)» (2020, IEEE) pp.19576181-1-19576181-6*

Mathis E., Michon M.L., Billaud C., Grau P., Bocahut A., Vergelati C., Long D.R. Thermoset modified with polyethersulfone: Characterization and control of the morphology *Journal of Polymer Science* **58**, 1177-1188 (2020)

Matsarskaia O., Bühl L., Beck C., Grimaldo M., Schweins R., Zhang F., Seydel T., Schreiber F., Roosen-Runge F. Evolution of the structure and dynamics of bovine serum albumin induced by thermal denaturation *Physical Chemistry Chemical Physics* **22**, 18507-18517 (2020)

Matsarskaia O., Roosen-Runge F., Schreiber F. Multivalent ions and biomolecules: Attempting a comprehensive perspective *ChemPhysChem* **21**, 1742-1767 (2020)

Matsubara N., Masese T., Suard E., Forslund O.K., Nocerino E., Palm R., Guguchia Z., Andreica D., Hardt A., Ishikado M., Papadopoulos K., Sassa Y., Månsson M. Cation distributions and magnetic properties of ferrispinel MgFeMnO_4 *Inorganic Chemistry* **59**, 17970-17980 (2020)

Matsubara N., Petit S., Martin C., Fauth F., Suard E., Rols S., Damay F. BiMnTeO_6 : A multi-axis Ising antiferromagnet *Physical Review B* **100**, 220406-1-220406-6 (2019)

Matsumoto A., Sugiyama M., Li Z., Martel A., Porcar L., Inoue R., Kato D., Osakabe A., Kurumizaka H., Kono H. Structural studies of overlapping dinucleosomes in solution *Biophysical Journal* **118**, 2209-2219 (2020)

Mattei G.S., Dagdelen J.M., Bianchini M., Ganose A.M., Jain A., Suard E., Fauth F., Masquelier C., Croguennec L., Ceder G., Persson K.A., Khalifah P.G. Enumeration as a tool for structure solution: A materials genomic approach to solving the cation-ordered structure of $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$ *Chemistry of Materials* **32**, 8981-8992 (2020)

Matthey B., Pirling T., Herrmann M., Schreiber J. Determination of bulk residual stresses in superhard diamond-SiC materials *Journal of the European Ceramic Society* **40**, 1035-1042 (2020)

Mayer S.F., Falcón H., Fernández-Díaz M.T., Campos-Martin J.M., Alonso J.A. Structure-properties relationship in the hydronium-containing pyrochlores $(\text{H}_3\text{O})_{1+\text{p}}\text{Sb}_{1+\text{p}}\text{Te}_{1-\text{p}}\text{O}_6$ with catalytic activity in the fructose dehydration reaction *Dalton Transactions* **49**, 11657-11667 (2020)

Mayer S.F., Rodrigues J.E., Marini C., Fernández-Díaz M.T., Falcón H., Asensio M.C., Alonso J.A. A comprehensive examination of the local- and long-range structure of Sb_6O_{13} pyrochlore oxide *Scientific Reports* **10**, 16956-1-16956-14 (2020)

PUBLICATIONS

FIND US ON:   

22-23

Märginean N., Little D., Tsunoda Y., Leoni S., Janssens R.V.F., Fornal B., Michelagnoli C., Stan L., Crespi F.C.L., Lică R., Sferazza M., Turturica A., Ayangeakaa A.D., Auranen K., Barani M., Bender P.C., Bottoni S., Boromiza M., Bracco A., Călinescu S., Campbell C.M., Carpenter M.P., Chowdhury P., Ciemala M., Cieplicka-Oryńczak N., Cline D., Clisu C., Crawford H.L., Dinescu I.E., Dudouet J., Florea N., Forney A.M., Fracassetti S., Gade A., Gheorghe I., Hayes A.B., Harca I., Henderson J., Ionescu A., Iskra Ł.W., Jentschel M., Kandzia F., Kim Y.H., Kondev F.G., Korschinek G., Köster U., Krzysiek M., Lauritsen T., Li J., Märginean R., Mauger E.A., Mihai R.E., Mitu A., Mutti P., Negret A., Niță C.R., Olăcel A., Oprea A., Pascu S., Petrone C., Porzio C., Rhodes D., Schumann D., Sotty C., Stolze S.M., Șuvăilă R., Toma S., Ujenic S., Walters W.B., Wu C.Y., Wu J., Zhu S., Ziliani S. Shape coexistence at zero spin in ^{64}Ni driven by the monopole tensor interaction
Physical Review Letters **125**, 102502-1-102502-7 (2020)

McAulay K., Thomson L., Porcar L., Schweins R., Mahmoudi N., Adams D.J., Draper E.R. Using rheo-small-angle neutron scattering to understand how functionalised dipeptides form gels
Organic Materials **2**, 108-115 (2020)

McGilvery C.M., Abellan P., Kłosowski M.M., Livingston A.G., Cabral J.T., Ramasse Q.M., Porter A.E. Nanoscale chemical heterogeneity in aromatic polyamide membranes for reverse osmosis applications
ACS Applied Materials & Interfaces **12**, 19890-19902 (2020)

Meineke J., Weik M., Zaccari G., Fragneto G. Behavior of hydrated lipid bilayers at cryogenic temperatures
Frontiers in Chemistry **8**, 455-1-455-7 (2020)

Melgar D., Zhou Q., Chakraborty S., Porcar L., Weinstock I.A., Avalos J.B., Wu B., Bo C., Yin P. Dimension-controlled dewetting in hydrophobic porous nanocapsules
Journal of Physical Chemistry C **124**, 10201-10208 (2020)

Mena M., Hänni N., Ward S., Hirtenlechner E., Bewley R., Hubig C., Schollwöck U., Normand B., Krämer K.W., McMorrow D.F., Rüegg C. Thermal control of spin excitations in the coupled Ising-chain material RbCoCl_3
Physical Review Letters **124**, 257201-1-257201-6 (2020)

Metwalli E., Götz K., Lages S., Bär C., Zech T., Noll D.M., Schuldes I., Schindler T., Prihoda A., Lang H., Grasser J., Jacques M., Didier L., Cyril A., Martel A., Porcar L., Unruh T. A novel experimental approach for nanostructure analysis: simultaneous small-angle X-ray and neutron scattering
Journal of Applied Crystallography **53**, 722-733 (2020)

Mhanna R., Catrou P., Dutta S., Lefort R., Essafri I., Ghoufi A., Muthmann M., Zamponi M., Frick B., Morineau D. Dynamic heterogeneities in liquid mixtures confined in nanopores
Journal of Physical Chemistry B **124**, 3152-3162 (2020)

Mias-Lucquin D., Dos Santos Morais R., Chéron A., Lagarrigue M., Winder S.J., Chenuel T., Pérez J., Appavou M.S., Martel A., Alviset G., Le Rumeur E., Combet S., Huber J.F., Delalande O. How the central domain of dystrophin acts to bridge F-actin to sarcolemmal lipids
Journal of Structural Biology **209**, 107411-1-107411-12 (2020)

Michels A., Malyeyev A., Titov I., Honecker D., Cubitt R., Blackburn E., Suzuki K. Magnetic Guinier law
IUCr **7**, 136-142 (2020)

Milanović T., Čeliković I., Michelagnoli C., de France G., Boso A., Braunroth T., Clément E., Dewald A., Georgiev G., Ideguchi E., Jacquot B., Królas W., Napoli D., Lalović N., Lee K.Y., Lemasson A., Li H., Ljungvall J., Navin A., Nari A., Pérez-Vidal R., Rejmund M., Ujić P., Wilmsen D., Yamamoto Y., Zielińska M. Lifetime measurements of low-lying states in ^{73}Ga and $^{70,72,74}\text{Zn}$ isotopes
Acta Physica Polonica B **51**, 837-842 (2020)

Misuraca L., Calìo A., Grillo I., Grélard A., Oger P., Peters J., Demé B. High-temperature behavior of early life membrane models
Langmuir **36**, 13516-13526 (2020)

Mizuno H., Mossa S. Impact of elastic heterogeneity on the propagation of vibrations at finite temperatures in glasses
Condensed Matter News **22**, 43604-1-43604-14 (2019)

Mizuno H., Ruocco G., Mossa S. Sound damping in glasses: Interplay between anharmonicities and elastic heterogeneities
Physical Review B **101**, 174206-1-174206-6 (2020)

Mizuno H., Tong H., Ikeda A., Mossa S. Intermittent rearrangements accompanying thermal fluctuations distinguish glasses from crystals
Journal of Chemical Physics **153**, 154501-1-154501-13 (2020)

Mokdad J., Knebel G., Marin C., Brison J.P., Matei I., Braithwaite D. Probing insulators under pressure
Review of Scientific Instruments **91**, 093902-1-093902-6 (2020)

Moll A., Laborde S., Barou F., Beaudhuin M. Centimetric CrSi_2 crystal grown by the vertical gradient freeze method
Journal of Crystal Growth **534**, 125505-1-125505-8 (2020)

Mondelli C., Zorzi S., Ricci G., Galván V., Balliana E., Schweins R., Cattaruzza E. Exploring the porosity in ceramics at the nm scale: From understanding historical ceramics to innovative materials design
ChemPhysChem **21**, 966-970 (2020)

Monet G., Paineau E., Chai Z., Amara M.S., Orecchini A., Jiménez-Ruiz M., Ruiz-Caridad A., Fine L., Rouzière S., Liu L.M., Teobaldi G., Rols S., Launois P. Solid wetting-layers in inorganic nano-reactors: The water in imogolite nanotube case
Nanoscale Advances **2**, 1869-1877 (2020)

Monkenbusch M., Kruteva M., Zamponi M., Willner L., Hoffman I., Farago B., Richter D. A practical method to account for random phase approximation effects on the dynamic scattering of multi-component polymer systems
Journal of Chemical Physics **152**, 054901-1-054901-9 (2020)

Montero J., Ek G., Laversenne L., Nassif V., Zepon G., Sahlberg M., Zlotea C. Hydrogen storage properties of the refractory Ti-V-Zr-Nb-Ta multi-principal element alloy
Journal of Alloys and Compounds **835**, 155376-1-155376-7 (2020)

Montis C., Caselli L., Valle F., Zandrini A., Carlà F., Schweins R., Maccarini M., Bergese P., Berti D. Shedding light on membrane-templated clustering of gold nanoparticles
Journal of Colloid and Interface Science **573**, 204-214 (2020)

Mueser T.C., Drago V., Kovalevsky A., Dajnowicz S. Pyridoxal 5'-phosphate dependent reactions: Analyzing the mechanism of aspartate aminotransferase
Methods in Enzymology **634**, 333-359 (2020)

Muñoz-Gil D., Azcondo M.T., Ritter C., Fabelo O., Pérez-Coll D., Mather G.C., Amador U., Boulahya K. The effects of Sr content on the performance of $\text{Nd}_{1-x}\text{Sr}_x\text{CoO}_{3-\delta}$ air-electrode materials for intermediate temperature solid oxide fuel cells under operational conditions
Inorganic Chemistry **59**, 12111-12121 (2020)

Muñoz-López R., Guzmán E., Velázquez M.M., Fernández-Peña L., Merchán M.D., Maestro A., Ortega F., Rubio R.G. Influence of carbon nanosheets on the behavior of 1,2-dipalmitoyl-sn-glycerol-3-phosphocholine langmuir monolayers
Processes **8**, 94-1-94-17 (2020)

Musino D., Oberdisse J., Farago B., Alegría A., Genix A.C. Resolving segmental polymer dynamics in nanocomposites by incoherent neutron spin-echo spectroscopy
ACS Macro Letters **9**, 910-916 (2020)

Naidjonoka P., Arcos Hernandez M., Pálsson G.K., Heinrich F., Stålbrand H., Nylander T. On the interaction of softwood hemicellulose with cellulose surfaces in relation to molecular structure and physicochemical properties of hemicellulose
Soft Matter **16**, 7063-7076 (2020)

Nambu Y., Barker J., Okino Y., Kikkawa T., Shiomi Y., Enderle M., Weber T., Winn B., Graves-Brook M., Tranquada J.M., Ziman T., Fujita M., Bauer G.E.W., Saitoh E., Kakurai K. Observation of magnon polarization
Physical Review Letters **125**, 027201-1-027201-6 (2020)

Naser H., Rado C., Lapertot G., Raymond S. Anisotropy and temperature dependence of the spin-wave stiffness in $\text{Nd}_2\text{Fe}_{14}\text{B}$: An inelastic neutron scattering investigation
Physical Review B **102**, 014443-1-014443-7 (2020)

Nesvizhevsky V.V., Gudkov V., Protasov K.V., Snow W.M., Voronin A.Y. Comment on B.O. Kerbikov, "The effect of collisions with the wall on neutron-antineutron transitions", Phys. Lett. B 795 (2019) 362
Physics Letters B **803**, 135357-1-135357-2 (2020)

Nesvizhevsky V.V., Nez F., Vasiliev S.A., Widmann E., Crivelli P., Reynaud S., Voronin A.Y. A magneto-gravitational trap for studies of gravitational quantum states
European Physical Journal C **80**, 520-1-520-10 (2020)

Ngono F., Cuello G.J., Jiménez-Ruiz M., Willart J.F., Guerin M., Wildes A.R., Stunault A., Hamoudi-Ben Yelles C.M., Affouard F. Morphological and structural properties of amorphous lactulose studied by scanning electron microscopy, polarized neutron scattering, and molecular dynamics simulations
Molecular Pharmaceutics **17**, 10-20 (2020)

Ngono F., Willart J.F., Cuello G.J., Jiménez-Ruiz M., Hamoudi-Ben Yelles C.M., Affouard F. Impact of amorphization methods on the physicochemical properties of amorphous lactulose
Molecular Pharmaceutics **17**, 1-9 (2020)

Nguyen H.D., Nguyen T.K.L., Planes E., Jestin J., Porcar L., Lyonard S., Lojoiu C. Tailoring the proton conductivity and microstructure of block copolymers by counterion-selective membrane fabrication
Journal of Physical Chemistry C **124**, 13071-13081 (2020)

Nguyen H.D., Poriher R., Brubach J.B., Planes E., Soudant P., Judeinstein P., Porcar L., Lyonard S., Lojoiu C. Perfluorosulfonyl imide versus perfluorosulfonic acid ionomers in proton-exchange membrane fuel cells at low relative humidity
ChemSusChem **13**, 590-600 (2020)

Niang S., Charlton M., Choi J.J., Chung M., Cladé P., Comini P., Crivelli P., Crépin P.P., Dalkarov O., Debu P., Dodd L., Douillet A., Froehlich P., Gafriller J., Guellati S., Heinrich J., Hervieux P.A., Hilico L., Husson A., Indelicato P., Janka G., Jonsell S., Karr J.P., Kim B.H., Kim E.S., Kim S.K., Kleyheeg A., Ko Y., Kosinski T., Kuroda N., Latacz B., Lee H., Lee J., Leite A.M.M., Lim E., Liskay L., Louvradoux T., Lunney D., Lévêque K., Manfredi G., Mansoulié B., Matusiak M., Mornacchi G., Nesvizhevsky V.V., Nez F., Nishi R., Nourbakhsh S., Park K.H., Paul N., Pérez P., Radics B., Regenfus C., Reynaud S., Roussé J.Y., Rubbia A., Rzakiewicz J., Sacquin Y., Schmidt-Kaler F., Staszczak M., Tuchming B., Vallage B., van der Werf D.P., Voronin A., Welker A., Wolf S., Won D., Wronka S., Yamazaki Y., Yoo K.H., Baker C.J. Accumulation of positrons from a LINAC based source
Acta Physica Polonica A **137**, 164-166 (2020)

Niebuur B.J. Thermoresponsive polymers under high pressure – Thermoresponsive Polymere unter Hochdruck
PhD Thesis (2019)

Niebuur B.J., Ko C.H., Zhang X., Claude K.L., Chiappisi L., Schulte A., Papadakis C.M. Pressure dependence of the cononsolvency effect in aqueous poly(*N*-isopropylacrylamide) solutions: A SANS study
Macromolecules **53**, 3946-3955 (2020)

Nielsen J.E., König N., Yang S., Skoda M.W.A., Maestro A., Dong H., Cárdenas M., Lund R. Lipid membrane interactions of self-assembling antimicrobial nanofibers: effect of PEGylation
RSC Advances **10**, 35329-35340 (2020)

Nikitin S.E., Franco D.G., Kwon J., Bewley R., Podlesnyak A., Hoser A., Koza M.M., Geibel C., Stockert O. Gradual pressure-induced enhancement of magnon excitations in CeCoSi
Physical Review B **101**, 214426-1-214426-11 (2020)

Nilsen G.J., Brown K.L., Mangin-Thro L., Clancy W., Giroud B., Dewhurst C.D., Wildes A.R. A proposed upgrade for the polarized cold neutron spectrometer, D7
Nuclear Instruments and Methods in Physics Research A **951**, 162990-1-162990-13 (2020)

Nkansa-Gyamfi N.A., Kazibwe J., Traoré D.A.K., Nji E. Prevalence of multidrug-, extensive drug-, and pandrug-resistant commensal *Escherichia coli* isolated from healthy humans in community settings in low- and middle-income countries: A systematic review and meta-analysis
Global Health Action **12**, 1815272-1-1815272-10 (2019)

Noguere G., Scotta J.P., Xu S., Filhol A., Ollivier J., Farhi E., Calzavara Y., Rols S., Fák B., Zanotti J.M., Berrod Q. Combining density functional theory and Monte Carlo neutron transport calculations to study the phonon density of states of UO₂ up to 1675K by inelastic neutron scattering
Physical Review B **102**, 134312-1-134312-12 (2020)

Nordström R., Browning K.L., Parra-Ortiz E., Damgaard L.S.E., Häffner S.M., Maestro A., Campbell R.A., Cooper J.F.K., Malmsten M. Membrane interactions of antimicrobial peptide-loaded microgels
Journal of Colloid and Interface Science **562**, 322-332 (2020)

Núñez Meireles M., Alonso J.A., Fernández Díaz M.T., Cadús L.E., Agüero F.N. Ni particles generated in situ from spinel structures used in ethanol steam reforming reaction
Materials Today Chemistry **15**, 100213-1-100213-15 (2020)

Onodera Y., Kohara S., Salmon P.S., Hirata A., Nishiyama N., Kitani S., Zeidler A., Shiga M., Masuno A., Inoue H., Tahara S., Polidori A., Fischer H.E., Mori T., Kojima S., Kawaji H., Kolesnikov A.I., Stone M.B., Tucker M.G., McDonnell M.T., Hannon A.C., Hiraoka Y., Obayashi I., Nakamura T., Akola J., Fujii Y., Ohara K., Taniguchi T., Sakata O. Structure and properties of densified silica glass: Characterizing the order within disorder
NPG Asia Materials **12**, 85-1-85-16 (2020)

Oró-Solé J., Fina I., Frontera C., Gàzquez J., Ritter C., Cunqueiro M., Loza-Alvarez P., Conejeros S., Alemany P., Canadell E., Fontcuberta J., Fuertes A. Engineering polar oxynitrides: Hexagonal perovskite BaWON₂
Angewandte Chemie International Edition **59**, 18395-18399 (2020)

Osta O., Bombléd M., Partouche D., Gallier F., Lubin-Germain N., Brodie-Linder N., Alba-Simionesco C. Direct synthesis of mesoporous organosilica and proof-of-concept applications in lysozyme adsorption and supported catalysis
ACS Omega **5**, 18842-18848 (2020)

Ovsyanikov A.K., Zobkalo I.A., Schmidt W., Barilo S.N., Guretskii S.A., Hutanu V. Neutron inelastic scattering study of rare-earth orthoferrite HoFeO₃
Journal of Magnetism and Magnetic Materials **507**, 166855-1-166855-8 (2020)

Özcan B., Güler G., Gür C.H. Effect of microstructural modification on damage tolerance of ³⁴Cr/Mo₄ shaft steel
Fatigue & Fracture of Engineering Materials & Structures **43**, 1214-1225 (2020)

Pabois O., Antoine-Michard A., Zhao X., Omar J., Ahmed F., Alexis F., Harvey R.D., Grillo I., Gerelli Y., Grundy M.M.L., Bajka B., Wilde P.J., Dreiss C.A. Interactions of bile salts with a dietary fibre, methylcellulose, and impact on lipolysis
Carbohydrate Polymers **231**, 115741-1-115741-11 (2020)

Paciaroni A., Comez L., Longo M., Sebastiani F., Bianchi F., Orecchini A., Zanatta M., Verbeni R., Bosak A., Sacchetti F., Petrillo C. Terahertz collective dynamics of DNA as affected by hydration and counterions
Journal of Molecular Liquids **318**, 113956-1-113956-7 (2020)

Page J.E., Hayward M.A. CaMn_{0.5}Ir_{0.5}O_{2.5}: An anion-deficient perovskite oxide containing Ir³⁺
Inorganic Chemistry **58**, 8835-8840 (2019)

Page J.E., Hayward M.A. Structure and magnetism of (La/Sr)₂M_{0.5}Ir_{0.5}O₄ and topochemically reduced (La/Sr)₂M_{0.5}Ir_{0.5}O₃ (M = Fe, Co) complex oxides
Inorganic Chemistry **58**, 6336-6343 (2019)

Pajzderska A., González M.A., Wąsicki J. Molecular dynamics simulations study of the structure and dynamics of nimodipine confined in an ordered mesoporous silica matrix
Chemical Physics **536**, 110819-1-110819-11 (2020)

Paradis-Fortin L., Lemoine P., Prestipino C., Kumar V.P., Raveau B., Nassif V., Cordier S., Guilmeau E. Time-resolved in situ neutron diffraction study of Cu₂₂Fe₈Ge₄S₃₂ germanite: A guide for the synthesis of complex chalcogenides
Chemistry of Materials **32**, 8993-9000 (2020)

Parnell S.R., Van Well A.A., Plomp J., Dalglish R.M., Steinke N.J., Cooper J.F.K., Geerits N., Steffen K.E., Snow W.M., de Haan V.O. Search for exotic spin-dependent couplings of the neutron with matter using spin-echo based neutron interferometry
Physical Review D **101**, 122002-1-122002-9 (2020)

Parra-Ortiz E., Häffner S.M., Saerbeck T., Skoda M.W.A., Browning K.L., Malmsten M. Oxidation of polyunsaturated lipid membranes by photocatalytic titanium dioxide nanoparticles: Role of pH and salinity
ACS Applied Materials & Interfaces **12**, 32446-32460 (2020)

Parsons T.G., Hadermann J., Halasyamani P.S., Hayward M.A. Preparation of the noncentrosymmetric ferrimagnetic phase La_{0.9}Ba_{0.1}Mn_{0.96}O_{2.43} by topochemical reduction
Journal of Solid State Chemistry **287**, 121356-1-121356-7 (2020)

Pattie R.W., Callahan N.B., Cude-Woods C., Adamek E.R., Adams M., Barlow D., Blatnik M., Bowman D., Broussard L.J., Clayton S., Currie S., Dees E.B., Ding X., Fellers D., Fox W., Fries E., Gonzalez F., Geltenbort P., Hickerson K.P., Hoffbauer M.A., Hoffman K., Holley A.T., Howard D., Ito T.M., Komives A., Liu C.Y., Makela M., Medina J., Morley D., Morris C.L., O'Connor T., Penttilä S.I., Ramsey J.C., Roberts A., Salvat D., Saunders A., Seestrom S.J., Sharapov E.I., Sjøe S.K.L., Snow W.M., Sprow A., Vanderwerp J., Vogelaar B., Walstrom P.L., Wang Z., Weaver H., Wexler J., Womack T.L., Young A.R., Zeck B.A. Status of the UCNτ experiment
EPJ Web of Conferences **219**, 03004-1-03004-6 (2019)

Paul M., Tessler M., Halfon S., Korngut E., Kreisel A., Palchan T., Peretz E., Weissman L., Shor A. Study of astrophysical s-process neutron capture reactions at the high-intensity SARAF-LiLiT neutron source
EPJ Web of Conferences **232**, 01003-1-01003-6 (2020)

Pavan Kumar V., Supka A.R., Lemoine P., Lebedev O.I., Raveau B., Suekuni K., Nassif V., Al Rahal Al Orabi R., Fornari M., Guilmeau E. High power factors of thermoelectric colusites Cu₂₀T₂Ge₆S₃₂ (T = Cr, Mo, W): Toward functionalization of the conductive “Cu-S” network
Advanced Energy Materials **9**, 1803249-1-1803249-11 (2019)

Pazy V., Fraile L.M., Mach H., Olaizola B., Simpson G.S., Aprahamian A., Bernards C., Briz J.A., Bucher B., Chiara C.J., Dlouhý Z., Gheorghe I., Ghiță D., Hoff P., Jolie J., Köster U., Kurcewicz W., Lică R., Mărginean N., Mărginean R., Régis J.M., Rudigier M., Sava T., Sănoiu M., Stroe L., Walters W.B. Fast-timing study of ⁸¹Ga from the β decay of ⁸¹Zn
Physical Review C **102**, 014329-1-014329-18 (2020)

Pearce P.E., Assat G., Iadecola A., Fauth F., Dedryvère R., Abakumov A., Rousse G., Tarascon J.M. Anionic and cationic redox processes in β-Li₂IrO₃ and their structural implications on electrochemical cycling in a Li-ion cell
Journal of Physical Chemistry C **124**, 2771-2781 (2020)

Pedrosa-Rivera M., Praena J., Porras I., Ruiz-Magaña M.J., Ruiz-Ruiz C. A simple approximation for the evaluation of the photon iso-effective dose in Boron Neutron Capture Therapy based on dose-independent weighting factors
Applied Radiation and Isotopes **157**, 109018-1-109018-7 (2020)

Pedrosa-Rivera M., Praena J., Porras I., Sabariego M.P., Köster U., Haertlein M., Forsyth V.T., Ramírez J.C., Jover C., Jimena D., Osorio J.L., Álvarez P., Ruiz-Ruiz C., Ruiz-Magaña M.J. Thermal neutron relative biological effectiveness factors for boron neutron capture therapy from in vitro irradiations
Cells **9**, 2144-1-2144-14 (2020)

Pedrosa-Rivera M., Ruiz-Magaña M.J., Álvarez P., Porras I., Praena J., Sabariego M.P., Köster U., Haertlein M., Forsyth V.T., Soldner T., Ramírez J.C., Jover C., Jimena D., Osorio J.L., Postuma I., Ruiz-Ruiz C. Radiobiology data of melanoma cells after low-energy neutron irradiation and boron compound administration
Applied Radiation and Isotopes **163**, 109205-1-109205-5 (2020)

Pedrosa-Rivera M., Ruiz-Magaña M.J., Porras I., Praena J., Torres-Sánchez P., Sabariego M.P., Köster U., Forsyth T., Soldner T., Haertlein M., Ruiz-Ruiz C. Neutron radiobiology studies with a pure cold neutron beam
Nuclear Instruments and Methods in Physics Research B **462**, 24-31 (2020)

Penttilä P.A., Altgen M., Awais M., Österberg M., Rautkari L., Schweins R. Bundling of cellulose microfibrils in native and polyethylene glycol-containing wood cell walls revealed by small-angle neutron scattering
Scientific Reports **10**, 20844-1-20844-9 (2020)

Penttilä P.A., Altgen M., Carl N., van der Linden P., Morfin I., Österberg M., Schweins R., Rautkari L. Moisture-related changes in the nanostructure of woods studied with X-ray and neutron scattering
Cellulose **27**, 71-87 (2020)

Pereira A.L.J., Santamaría-Pérez D., Vilaplana R., Errandonea D., Popescu C., da Silva E.L., Sans J.A., Rodríguez-Carvajal J., Muñoz A., Rodríguez-Hernández P., Mujica A., Radescu S.E., Beltrán A., Otero-de-la-Roza A., Nalin M., Mollar M., Manjón F.J. Experimental and theoretical study of SbPO_4 under compression *Inorganic Chemistry* **59**, 287-307 (2020)

Perez-Checa A., Porro J.M., Feuchtwanger J., Lázpita P., Hansen T.C., Mondelli C., Sozinov A., Barandiarán J.M., Ullakko K., Chernenko V. Role of Fe addition in Ni-Mn-Ga-Co-Cu-Fe ferromagnetic shape memory alloys for high-temperature magnetic actuation *Acta Materialia* **196**, 549-555 (2020)

Pérez-Landazábal J.I., Sánchez-Alarcos V., Recarte V., Lambri O.A., Bonifacich F.G., Khanna D.L.R., Unzueta I., García J.A., Plazaola F., López-García J., Jimenez Ruiz M., Rodríguez-Velamazán J.A., Cesari E. Influence of structural defects on the properties of metamagnetic shape memory alloys *Metals* **10**, 1131-1-1131-12 (2020)

Perrichon A., Granhed E.J., Romanelli G., Piovano A., Lindman A., Hyldgaard P., Wahnström G., Karlsson M. Unraveling the ground-state structure of BaZrO_3 by neutron scattering experiments and first-principles calculations *Chemistry of Materials* **32**, 2824-2835 (2020)

Perrichon A., Torino N., Granhed E.J., Lin Y.C., Parker S.F., Jiménez-Ruiz M., Karlsson M., Henry P.F. Local coordination environments and vibrational dynamics of protons in hexagonal and cubic Sc-doped BaTiO_3 proton-conducting oxides *Journal of Physical Chemistry C* **124**, 8643-8651 (2020)

Petsch A.N., Zhu M., Enderle M., Mao Z.Q., Maeno Y., Mazin I.I., Hayden S.M. Reduction of the spin susceptibility in the superconducting state of Sr_2RuO_4 observed by polarized neutron scattering *Physical Review Letters* **125**, 217004-1-217004-6 (2020)

Pilkington G.A., Oleshkevych A., Pedraz P., Watanabe S., Radiom M., Reddy A.B., Vorobiev A., Glavatskih S., Rutland M.W. Electroresponsive structuring and friction of a non-halogenated ionic liquid in a polar solvent: Effect of concentration *Physical Chemistry Chemical Physics* **22**, 19162-19171 (2020)

Pokharel G., Arachchige H.S., Williams T.J., May A.F., Fishman R.S., Sala G., Calder S., Ehlers G., Parker D.S., Hong T., Wildes A., Mandrus D., Paddison J.A.M., Christianson A.D. Cluster frustration in the breathing pyrochlore magnet $\text{LiGaCr}_4\text{S}_8$ *Physical Review Letters* **125**, 167201-1-167201-6 (2020)

Polidori A., Zeidler A., Salmon P.S. Structure of As-Se glasses by neutron diffraction with isotope substitution *Journal of Chemical Physics* **153**, 154507-1-154507-10 (2020)

Poole J., Bentley J., Barraud L., Samish I., Dalkas G., Matheson A., Clegg P., Euston S.R., Kauffman Johnson J., Haacke C., Westphal L., Molina Beato L., Adams M., Spiro A. Rising to the challenges: Solution-based case studies highlighting innovation and evolution in reformulation *Nutrition Bulletin* **45**, 332-340 (2020)

Porcar L., Gerelli Y. On the lipid flip-flop and phase transition coupling *Soft Matter* **16**, 7696-7703 (2020)

Porras I., Praena J., Arias de Saavedra F., Pedrosa-Rivera M., Torres-Sánchez P., Sabariego M.P., Expósito-Hernández J., Llamas-Elvira J.M., Ramírez-Navarro A., Rodríguez-Fernández A., Osorio-Ceballos J.M., Ruiz-Ruiz C., Ruiz-Magaña M.J. BNCT research activities at the Granada group and the project NeMeSis: Neutrons for medicine and sciences, towards an accelerator-based facility for new BNCT therapies, medical isotope production and other scientific neutron applications *Applied Radiation and Isotopes* **165**, 109247-1-109247-7 (2020)

Portnichenko P.Y., Akbari A., Nikitin S.E., Cameron A.S., Dukhnenko A.V., Filipov V.B., Shitsevalova N.Y., Čermák P., Radelytskyi I., Schneidewind A., Ollivier J., Podlesnyak A., Huesges Z., Xu J., Ivanov A., Sidis Y., Petit S., Mignot J.M., Thalmeier P., Inosov D.S. Field-angle-resolved magnetic excitations as a probe of hidden-order symmetry in CeB_6 *Physical Review X* **10**, 021010-1-021010-19 (2020)

Porzio C., Michelagnoli C., Cieplicka-Oryńczak N., Sferazza M., Leoni S., Fornal B., Tsunoda Y., Otsuka T., Bottoni S., Costache C., Crespi F.C.L., Iskra Ł.W., Jentschel M., Kandzia F., Kim Y.H., Köster U., Mărginean N., Mihaic C., Mutti P., Turturica A. Detailed low-spin spectroscopy of ^{65}Ni via neutron capture reaction *Physical Review C* **102**, 064310-1-064310-13 (2020)

Possamai Bastos R., Dutertre J.M., Garay Trindade M., Viera R.A.C., Potin O., Létiche M., Cheymol B., Beaucour J. Assessment of on-chip current sensor for detection of thermal-neutron-induced transients *IEEE Transactions on Nuclear Science* **67**, 1404-1411 (2020)

Pounot K., Chaaban H., Foderà V., Schiró G., Weik M., Seydel T. Tracking internal and global diffusive dynamics during protein aggregation by high-resolution neutron spectroscopy *Journal of Physical Chemistry Letters* **11**, 6299-6304 (2020)

Prado-Gonjal J., Gainza J., Aguayo I., Durá O.J., Rodríguez-Pérez S., Serrano-Sánchez F., Nemes N.M., Fernández-Díaz M.T., Alonso J.A., Morán E. High thermoelectric performance of rapidly microwave-synthesized Sn_{1-x}S *Materials Advances* **1**, 845-853 (2020)

Prado-Gonjal J., López C.A., Pinacca R.M., Serrano-Sánchez F., Nemes N.M., Durá O.J., Martínez J.L., Fernández-Díaz M.T., Alonso J.A. Correlation between crystal structure and thermoelectric properties of $\text{Sr}_{1-x}\text{Ti}_x\text{Nb}_{0.1}\text{O}_{3.8}$ ceramics *Crystals* **10**, 100-1-100-13 (2020)

Prasad B.E., Sadhukhan S., Hansen T.C., Felsler C., Kanungo S., Jansen M. Synthesis, crystal and magnetic structure of the spin-chain compound Ag_2RuO_4 *Physical Review Materials* **4**, 024418-1-024418-14 (2020)

Prokeš K., Fabelo O., Süllow S., Lee J., Mydosh J.A. High temperature tetragonal crystal structure of UPt_2Si_2 *Zeitschrift für Kristallographie* **235**, 175-181 (2020)

Protasov K.V., Gudkov V., Kupriyanova E.A., Nesvizhevsky V.V., Snow W.M., Voronin A.Y. Theoretical analysis of antineutron-nucleus data needed for antineutron mirrors in neutron-antineutron oscillation experiments *Physical Review D* **102**, 075025-1-075025-14 (2020)

Puig-Rigall J., Serra-Gómez R., Guembe-Michel N., Grillo I., Dreiss C.A., González-Gaitano G. Threading different rings on X-shaped block copolymers: Hybrid pseudopolyrotaxanes of cyclodextrins and tetronics *Macromolecules* **53**, 3166-3174 (2020)

Puphal P., Krebber S., Suard E., Cubitt R., Wang C., Shang T., Ukleev V., White J.S., Pomjakushina E. Development of magnetism in the solid solution of $\text{Ce}_{1-x}\text{Pr}_x\text{AlGe}$: From magnetic topology to spin glass *Physical Review B* **101**, 214416-1-214416-11 (2020)

Puphal P., Pomjakushin V., Kanazawa N., Ukleev V., Gawryluk D.J., Ma J., Naamneh M., Plumb N.C., Keller L., Cubitt R., Pomjakushina E., White J.S. Topological magnetic phase in the candidate Weyl semimetal CeAlGe *Physical Review Letters* **124**, 017202-1-017202-7 (2020)

Qureshi N., Bombardi A., Picozzi S., Barone P., Lelièvre-Berna E., Xu X., Stock C., McMorrow D.F., Hearmon A., Fabrizi F., Radaelli P.G., Cheong S.W., Chapon L.C. Absolute crystal and magnetic chiralities in the langasite compound $\text{Ba}_3\text{NbFe}_3\text{Si}_2\text{O}_{14}$ determined by polarized neutron and X-ray scattering *Physical Review B* **102**, 054417-1-054417-12 (2020)

Qureshi N., Ressouche E., Mukhin A., Gospodinov M., Skumryev V. Proof of the elusive high-temperature incommensurate phase in CuO by spherical neutron polarimetry *Science Advances* **6**, eaay7661-1-eaay7661-9 (2020)

Rafique A.S., Khodaparast S., Poulos A.S., Sharratt W.N., Robles E.S.J., Cabral J.T. Micellar structure and transformations in sodium alkylbenzenesulfonate (NaLAS) aqueous solutions: Effects of concentration, temperature, and salt *Soft Matter* **16**, 7835-7844 (2020)

Ratcliff L.E., Dawson W., Fiscaro G., Caliste D., Mohr S., Degomme A., Videau B., Cristiglio V., Stella M., D'Alessandro M., Goedecker S., Nakajima T., Deutsch T., Genovese L. Flexibilities of wavelets as a computational basis set for large-scale electronic structure calculations *Journal of Chemical Physics* **152**, 194110-1-194110-28 (2020)

Régis J.M., Esmaylzadeh A., Jolie J., Karayonchev V., Knafla L., Köster U., Kim Y.H., Strub E. γ - γ fast timing at X-ray energies and investigation on various timing deviations *Nuclear Instruments and Methods in Physics Research A* **955**, 163258-1-163258-15 (2020)

Ritter C., Provino A., Manfrinetti P. Contrasting exchange interactions in the new R_3Pd_5 ($\text{R} = \text{Tb}, \text{Dy}, \text{Ho}, \text{Er}$) compounds. Multiple magnetic transitions, spin-reorientation and frustration, as revealed by temperature dependent neutron diffraction studies: A question of sublattices? *Journal of Alloys and Compounds* **819**, 152947-1-152947-12 (2020)

Robinson M.L., Whitaker E., Jin L., Hayward M.A., Laurita G. Evidence of paracrystalline cation order in the Ruddlesden-Popper phase $\text{LaSr}_3\text{NiRuO}_8$ through neutron total scattering techniques *Inorganic Chemistry* **59**, 3026-3033 (2020)

Roca Català C. Optimization of the simulation framework in the Stereo Experiment to characterize the detector response and optical properties of the liquid scintillators *PhD Thesis* (2019)

Rodrigues J.E.F.S., Gainza J., Serrano-Sánchez F., López C., Durá O.J., Nemes N., Martínez J.L., Hüttel Y., Fauth F., Fernández-Díaz M.T., Biškup N., Alonso J.A. Structural features, anisotropic thermal expansion, and thermoelectric performance in bulk black phosphorus synthesized under high pressure *Inorganic Chemistry* **59**, 14932-14943 (2020)

Rondelli V., Salmons M., Colombo L., Fragneto G., Fadda G.C., Cantu' L., Del Favero E. $\text{A}\beta$ beyond the AD pathology: Exploring the structural response of membranes exposed to nascent $\text{A}\beta$ peptide *International Journal of Molecular Sciences* **21**, 8295-1-8295-16 (2020)

Roosen-Runge F., Gulotta A., Bucciarelli S., Casal-Dujat L., Garting T., Skar-Gislinge N., Obiols-Rabasa M., Farago B., Zaccarelli E., Schurtenberger P., Stradner A. Crowding in the eye lens: Modeling the multisubunit protein β -crystallin with a colloidal approach *Biophysical Journal* **119**, 2483-2496 (2020)

Ruggeri M., Holzmann M., Ceperley D.M., Pierleoni C. Quantum Monte Carlo determination of the principal Hugoniot of deuterium *Physical Review B* **102**, 144108-1-144108-12 (2020)

Russo D., Pelosi C., Wurm F.R., Frick B., Ollivier J., Teixeira J. Insight into protein-polymer conjugate relaxation dynamics: The importance of polymer grafting *Macromolecular Bioscience* **20**, 1900410-1-1900410-8 (2020)

Russo Krauss I., Picariello A., Vitiello G., De Santis A., Koutsoubas A., Houston J.E., Fragneto G., Paduano L. Interaction with human serum proteins reveals biocompatibility of phosphocholine-functionalized SPIONs and formation of albumin-decorated nanoparticles *Langmuir* **36**, 8777-8791 (2020)

Saerbeck T., Huckfeldt H., Toperverg B.P., Ehresmann A. Magnetic structure of ion-beam imprinted stripe domains determined by neutron scattering *Nanomaterials* **10**, 752-1-752-23 (2020)

Saillet S., Le Delliou P. Prediction of J-R curves and thermoelectric power evolution of cast austenitic stainless steels after very long-term aging (200,000 h) at temperatures below 350 °C *Journal of Nuclear Materials* **540**, 152328-1-152328-17 (2020)

Salvador-Castell M., Brooks N.J., Peters J., Oger P. Induction of non-lamellar phases in archaeal lipids at high temperature and high hydrostatic pressure by apolar polyisoprenoids *Biochimica et Biophysica Acta* **1862**, 183130-1-183130-7 (2020)

Salvador-Castell M., Demé B., Oger P., Peters J. Lipid phase separation induced by the apolar polyisoprenoid squalane demonstrates its role in membrane domain formation in archaeal membranes *Langmuir* **36**, 7375-7382 (2020)

Salvador-Castell M., Demé B., Oger P., Peters J. Structural characterization of an archaeal lipid bilayer as a function of hydration and temperature *International Journal of Molecular Sciences* **21**, 1816-1-1816-12 (2020)

Samajdar R.N., Asampille G., Atreya H.S., Bhattacharyya A.J. Hemoglobin dynamics in solution vis-à-vis under confinement: An electrochemical perspective *Journal of Physical Chemistry B* **124**, 5771-5779 (2020)

Samanta K., Guenet J.M., Malik S. Intermingled network of syndiotactic polystyrene/poly(3-hexylthiophene) *Macromolecules* **52**, 8569-8576 (2019)

Sánchez-Ahijón E., Marín-Gamero R., Molero-Sánchez B., Ávila-Brandé D., Manjón-Sanz A., Fernández-Díaz M.T., Morán E., Schmidt R., Prado-Gonjal J. From theory to experiment: BaFe_{0.125}Co_{0.125}Zr_{0.75}O_{3.87} a highly promising cathode for intermediate temperature SOFCs *Journal of Materials Chemistry A* **8**, 3413-3420 (2020)

Sanchez-Fernandez A., Diehl C., Houston J.E., Leung A.E., Tellam J.P., Rogers S.E., Prévost S., Ulvenlund S., Sjögren H., Wahlgren M. An integrative toolbox to unlock the structure and dynamics of protein-surfactant complexes *Nanoscale Advances* **2**, 4011-4023 (2020)

Santoro V., Andersen K.H., DiJulio D.D., Klinkby E.B., Miller T.M., Milstead D., Muhrer G., Strobl M., Takibayev A., Zanini L., Zimmer O. Development of high intensity neutron source at the European Spallation Source *Journal of Neutron Research* **22**, 209-219 (2020)

Sarvezuk P.W.C., Isnard O., da Cunha J.B.M. Peculiarity of a magnetic structure in a quasi-one-dimensional columbite Co_{0.4}Ni_{0.6}Nb₂O₆ *AIP Advances* **10**, 035016-1-035016-5 (2020)

Saul H., Roick C., Abele H., Mest H., Klopff M., Petukhov A.K., Soldner T., Wang X., Werder D., Märkisch B. Limit on the Fierz interference term *b* from a measurement of the beta asymmetry in neutron decay *Physical Review Letters* **125**, 112501-1-112501-7 (2020)

Schell J., Kamba S., Kachlik M., Maca K., Drahokoupil J., Rano B.R., Nuno Gonçalves J., Thanh Dang T., Costa A., Noll C., Vianden R., Lupascu D.C. Thermal annealing effects in polycrystalline EuTiO₃ and Eu₂Ti₂O₇ *AIP Advances* **9**, 125125-1-125125-7 (2019)

Schemenz V., Gjardy A., Chamasemani F.F., Roschger A., Roschger P., Zaslansky P., Helfen L., Burghammer M., Fratzi P., Weinkamer R., Brunner R., Willie B.M., Wagermaier W. Heterogeneity of the osteocyte lacuno-canalicular network architecture and material characteristics across different tissue types in healing bone *Journal of Structural Biology* **212**, 107616-1-107616-14 (2020)

Schiró G. Probing the dynamics of biological matter by elastic, quasi-elastic, and inelastic neutron scattering *EPJ Web of Conferences* **236**, 05001-1-05001-18 (2020)

Schmidt C. Improved determination of the $\beta\bar{\gamma}_e$ angular correlation coefficient *a* in free neutron decay using the α SPECT experiment *PhD Thesis* (2019)

Schmutzler T. Untersuchung der Struktur von CTAB-Mizellen und deren Einfluss auf die Bildung und Stabilisierung von Goldnanopartikeln mittels Röntgen- und Neutronenkleinwinkelstreuung *PhD Thesis* (2020)

Schneider K., Verkoyen P., Krappel M., Gardiner C., Schweins R., Frey H., Sottmann T. Efficiency boosting of surfactants with poly(ethylene oxide)-poly(alkyl glycidyl ether)s: A new class of amphiphilic polymers *Langmuir* **36**, 9849-9866 (2020)

Schnurbus M., Campbell R.A., Droste J., Honnigfort C., Glikman D., Gutfreund P., Hansen M.R., Braunschweig B. Photo-switchable surfactants for responsive air-water interfaces: Azo versus arylazopyrazole amphiphiles *Journal of Physical Chemistry B* **124**, 6913-6923 (2020)

Schulte M.F., Scotti A., Brugnoli M., Bochenek S., Mourran A., Richtering W. Tuning the structure and properties of ultra-low cross-linked temperature-sensitive microgels at interfaces via the adsorption pathway *Langmuir* **35**, 14769-14781 (2019)

Scotti A., Houston J.E., Brugnoli M., Schmidt M.M., Schulte M.F., Bochenek S., Schweins R., Feoktystov A., Radulescu A., Richtering W. Phase behavior of ultrasoft spheres show stable bcc lattices *Physical Review E* **102**, 052602-1-052602-11 (2020)

Sedmik R., Bosina J., Geltenbort P., Ivanov A., Jenke T., Micko J., Pitschmann M., Rechberger T., Roccia S., Thalhammer M., Abele H. Ramsey gravity resonance spectroscopy with ultracold neutrons *Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques* **14**, S195-S197 (2020)

Seeman V., Lushchik A., Shablonin E., Prieditis G., Gryaznov D., Platonenko A., Kotomin E.A., Popov A.I. Atomic, electronic and magnetic structure of an oxygen interstitial in neutron-irradiated Al₂O₃ single crystals *Scientific Reports* **10**, 15852-1-15852-14 (2020)

Serebrov A.P., Kolomensky E.A., Fomin A.K., Krasnoschekova I.A., Vassiljev A.V., Prudnikov D.V., Shoka I.V., Chechkin A.V., Chaikovskiy M.E., Varlamov V.E., Ivanov S.N., Pirozhkov A.N., Geltenbort P., Zimmer O., Jenke T., van der Grinten M., Tucker M. Neutron lifetime measurement with the big gravitational trap for ultracold neutrons. Current state and future prospects *Journal of Physics: Conference Series* **1390**, 012136-1-012136-5 (2019)

Seydel T., Koza M.M., Matsarskaia O., André A., Maiti S., Weber M., Schweins R., Prévost S., Schreiber F., Scheele M. A neutron scattering perspective on the structure, softness and dynamics of the ligand shell of PbS nanocrystals in solution *Chemical Science* **11**, 8875-8884 (2020)

Sharma S., Adroja D.T., Ritter C., Khalyavin D., Manuel P., Stenning G.B.G., Sundaresan A., Hillier A.D., Deen P.P., Khomskii D.I., Langridge S. Magnetic ground state of the ordered double-perovskite Sr₂YbRuO₆: Two magnetic transitions *Physical Review B* **102**, 134112-1-134112-11 (2020)

Shiryaev A.A., Polyakov V.B., Rols S., Rivera A., Shenderova O. Inelastic neutron scattering: a novel approach towards determination of equilibrium isotopic fractionation factors. Size effects on heat capacity and beta-factor of diamond *Physical Chemistry Chemical Physics* **22**, 13261-13270 (2020)

Sibille R., Gauthier N., Lhotel E., Porée V., Pomjakushin V., Ewings R.A., Perring T.G., Ollivier J., Wildes A., Ritter C., Hansen T.C., Keen D.A., Nilsen G.J., Keller L., Petit S., Fennell T. A quantum liquid of magnetic octupoles on the pyrochlore lattice *Nature Physics* **16**, 546-552 (2020)

Sibille R., Gauthier N., Yan H., Ciomaga Hatnean M., Ollivier J., Winn B., Filges U., Balakrishnan G., Kenzelmann M., Shannon N., Fennell T. Neutron scattering signatures of a quantum spin ice *Swiss Neutron News* **53**, 12-22 (2019)

Siciliano M., Valiente-Dobón J.J., Goasduff A., Nowacki F., Zuker A.P., Bazzacco D., Lopez-Martens A., Clément E., Benzoni G., Braunroth T., Crespi F.C.L., Cieplicka-Oryńczak N., Doncel M., Ertürk S., de France G., Fransen C., Gadea A., Georgiev G., Goldkuhle A., Jakobsson U., Jaworski G., John P.R., Kuti I., Lemasson A., Marchi T., Mengoni D., Michelagnoli C., Mijatović T., Müller-Gatermann C., Napoli D.R., Nyberg J., Palacz M., Pérez-Vidal R.M., Saygi B., Sohler D., Szilner S., Testov D., Zielińska M., Barrientos D., Birkenbach B., Boston H.C., Boston A.J., Cederwall B., Collado J., Cullen D.M., Désesquelles P., Domingo-Pardo C., Dudouet J., Eberth J., Egea-Canet F.J., González V., Harkness-Brennan L.J., Hess H., Judson D.S., Jungclaus A., Korten W., Labiche M., Lefevre A., Leoni S., Li H., Maj A., Menegazzo R., Million B., Pullia A., Recchia F., Reiter P., Salsac M.D., Sanchis E., Stezowski O., Theisen C. Pairing-quadrupole interplay in the neutron-deficient tin nuclei: First lifetime measurements of low-lying states in ^{106,108}Sn *Physics Letters B* **806**, 135474-1-135474-7 (2020)

Sikolenko V.V., Efimov V.V., Levterova E.A., Tiutiunnikov S.I., Troyanchuk I.O., Karpinsky D.V., Bushinsky M.V. Study of doped complex cobalt oxides by neutron diffraction and methods based on synchrotron radiation *Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques* **14**, 17-23 (2020)

Simon M., Gradzielski M., Hoffmann I. Dynamics in polyelectrolyte/microemulsion complexes *Nanoscale Advances* **2**, 4722-4727 (2020)

Simon M., Schneck E., Noirez L., Rahn S., Davidovich I., Talmon Y., Gradziński M. Effect of polymer architecture on the phase behavior and structure of polyelectrolyte/microemulsion complexes (PEMECs) *Macromolecules* **53**, 4055-4067 (2020)

Singh A., Padmanabhan B., Yadav R., Nassif V., Malik V.K. Study of short-range correlations and two-fold spin reorientation in $\text{NdFe}_{0.5}\text{Mn}_{0.5}\text{O}_3$ *Journal of Physics Condensed Matter* **32**, 315802-1-315802-8 (2020)

Singh B., Gupta M.K., Mittal R., Zbiri M., Ravindran T.R., Schober H., Chaplot S.L. Phonons and anomalous lattice behavior in $\text{KMnAg}_3(\text{CN})_6$ and $\text{KNiAu}_3(\text{CN})_6$: Inelastic neutron scattering and first-principles calculations *Journal of Physical Chemistry C* **124**, 7216-7228 (2020)

Skiadopoulou S., Retuerto M., Borodavka F., Kadlec C., Kadlec F., Mišek M., Prokleška J., Deng Z., Tan X., Frank C., Alonso J.A., Fernández-Díaz M.T., Croft M., Orlandi F., Manuel P., McCabe E., Legut D., Greenblatt M., Kamba S. Structural, magnetic, and spin dynamical properties of the polar antiferromagnets $\text{Ni}_{3-x}\text{Co}_x\text{TeO}_6$ ($x=1,2$) *Physical Review B* **101**, 014429-1-014429-10 (2020)

Slastanova A., Campbell R.A., Snow T., Mould E., Li P., Welbourn R.J.L., Chen M., Robles E., Briscoe W.H. Synergy, competition, and the "hanging" polymer layer: Interactions between a neutral amphiphilic 'tardigrade' comb co-polymer with an anionic surfactant at the air-water interface *Journal of Colloid and Interface Science* **561**, 181-194 (2020)

Sleiman H.C., Briffaut M., Dal Pont S., Tengattini A., Huet B. Influence of common simplifications on the drying of cement-based materials up to moderate temperatures *International Journal of Heat and Mass Transfer* **150**, 119254-1-119254-13 (2020)

Smari M., Hamdi R., Prado-Gonjal J., Cortés-Gil R., Dhahri E., Mompean F., García-Hernández M., Schmidt R. Magnetoimpedance spectroscopy of phase-separated $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ polycrystalline manganites *Physical Chemistry Chemical Physics* **22**, 11625-11636 (2020)

Smith G.N., Grillo I., Hallett J.E. Molecular exchange in spherical diblock copolymer colloids synthesised by polymerisation-induced self-assembly *Journal of Colloid and Interface Science* **579**, 243-249 (2020)

Soh J.R., de Juan F., Qureshi N., Jacobsen H., Wang H.Y., Guo Y.F., Boothroyd A.T. Ground-state magnetic structure of Mn_3Ge *Physical Review B* **101**, 140411-1-140411-5 (2020)

Song G., Porcar L., Boehm M., Cecillon F., Dewhurst C., Le Goc Y., Locatelli J., Mutti P., Weber T. Deep learning methods on neutron scattering data *EPJ Web of Conferences* **225**, 01004-1-01004-6 (2020)

Songvilay M., Petit S., Koza M., Rols S., Suard E., Skumryev V., Martin C., Damay F. Disorder and magnetic excitations in $\text{CaCr}_x\text{Fe}_{2-x}\text{O}_4$ ($x=0,0.5$) *Physical Review B* **101**, 014407-1-014407-9 (2020)

Songvilay M., Robert J., Petit S., Rodriguez-Rivera J.A., Ratcliff W.D., Damay F., Balédent V., Jiménez-Ruiz M., Lejay P., Pachoud E., Hadj-Azzem A., Simonet V., Stock C. Kitaev interactions in the Co honeycomb antiferromagnets $\text{Na}_3\text{Co}_2\text{SbO}_6$ and $\text{Na}_2\text{Co}_2\text{TeO}_6$ *Physical Review B* **102**, 224429-1-224429-12 (2020)

Sosnin N.V., Smith A.G., Wright T., Köster U., Blanc A., Nara Singh B.S., Kennedy-Reid R.L., Davies P.J. Fission fragment atomic number measurements using Bragg detectors *Nuclear Instruments and Methods in Physics Research A* **957**, 163397-1-163397-7 (2020)

Sparks T.D., Gurlo A., Bekheet M.F., Gaultois M.W., Cherkashin G., Laversenne L., Clarke D.R. High-temperature structure of Co_3O_4 : Understanding spinel inversion using in situ and ex situ measurements *Physical Review B* **99**, 104104-1-104104-10 (2019)

Sponar S., Geppert H., Denkmayr T., Lemmel H., Hasegawa Y. Asking neutrons where they have been *Journal of Physics: Conference Series* **1316**, 012002-1-012002-8 (2019)

Squillace O., Fong R., Shepherd O., Hind J., Tellam J., Steinke N.J., Thompson R.L. Influence of PVAc/PVA hydrolysis on additive surface activity *Polymers* **12**, 205-1-205-17 (2020)

Stamati O., Andò E., Roubin E., Cailletaud R., Wiebicke M., Pinzon G., Couture C., Hurley R.C., Caulk R., Caillerie D., Matsushima T., Bésuelle P., Bertoni F., Arnaud T., Ortega Laborin A., Rorato R., Sun Y., Tengattini A., Okubadejo O., Colliat J.B., Saadatfar M., Garcia F.E., Papazoglou C., Vego I., Brisard S., Dijkstra J., Birmipilis G. spam: Software for Practical Analysis of Materials *Journal of Open Source Software* **5**, 2286-1-2286-9 (2020)

Stavropoulou E., Andò E., Roubin E., Lenoir N., Tengattini A., Briffaut M., Bésuelle P. Dynamics of water absorption in Callovo-Oxfordian claystone revealed with multimodal X-ray and neutron tomography *Frontiers in Earth Science* **8**, 6-1-6-13 (2020)

Stevenson S.C., Götz A., Kohlmann H. Synthesis and crystal structure of $\text{SnPd}_3\text{D}_{0.13817}$ by neutron powder diffraction *Zeitschrift für Anorganische und Allgemeine Chemie* **646**, 1490-1493 (2020)

Stockert O., Hoffmann J.U., Mühlbauer M., Senyshyn A., Koza M.M., Tsirlin A.A., Wolf F.M., Bachus S., Gegenwart P., Movshovich R., Bobev S., Fritsch V. Magnetic frustration in a metallic fcc lattice *Physical Review Research* **2**, 013183-1-013183-12 (2020)

Studer D., Ulrich J., Braccini S., Carzaniga T., Dressler R., Eberhardt K., Heinke R., Köster U., Raeder S., Wendt K. High-resolution laser resonance ionization spectroscopy of $^{143-147}\text{Pm}$ *European Physical Journal A* **56**, 69-1-69-13 (2020)

Sun X., Adamek E., Allgeier B., Bagdasarova Y., Berguno D.B., Blatnik M., Bowles T.J., Broussard L.J., Brown M.A.P., Carr R., Clayton S., Cude-Woods C., Currie S., Dees E.B., Ding X., Filippone B.W., Garcia A., Geltenbort P., Hasan S., Hickerson K.P., Hoagland J., Hong R., Holley A.T., Ito T.M., Knecht A., Liu C.Y., Liu J., Makela M., Mammei R., Martin J.W., Melconian D., Mendenhall M.P., Moore S.D., Morris C.L., Nepal S., Nouri N., Pattie R.W., Pérez Galván A., Phillips D.G., Picker R., Pitt M.L., Plaster B., Salvat D.J., Saunders A., Sharapov E.I., Sjøe S., Slutsky S., Sondheim W., Swank C., Tatar E., Vogelaar R.B., VornDick B., Wang Z., Wei W., Wexler J.W., Womack T., Wrede C., Young A.R., Zeck B.A. Improved limits on Fierz interference using asymmetry measurements from the Ultracold Neutron Asymmetry (UCNA) experiment *Physical Review C* **101**, 035503-1-035503-7 (2020)

Štefančič A., Holt S.J.R., Lees M.R., Ritter C., Gutmann M.J., Lancaster T., Balakrishnan G. Establishing magneto-structural relationships in the solid solutions of the skyrmion hosting family of materials: $\text{GaV}_4\text{S}_{8-y}\text{Se}_y$ *Scientific Reports* **10**, 9813-1-9813-12 (2020)

Țuțueanu A.E., Tejsner T.B., Lăcătușu M.E., Hansen H.W., Eliassen K.L., Böhm M., Steffens P., Niedermayer C., Lefmann G. Multiple scattering camouflaged as magnetic stripes in single crystals of superconducting $(\text{La,Sr})_2\text{CuO}_4$ *Journal of Neutron Research* **22**, 49-56 (2020)

Taglieri G., Daniele V., Macera L., Schweins R., Zorzi S., Capron M., Chaumat G., Mondelli C. Sustainable nanotechnologies for curative and preventive wood deacidification treatments: An eco-friendly and innovative approach *Nanomaterials* **10**, 1744-1-1744-16 (2020)

Taieb L., Ludwig A., Ogden N.H., Lindsay R.L., Iranpour M., Gagnon C.A., Bicout D.J. Bird species involved in West Nile Virus epidemiological cycle in Southern Québec *International Journal of Environmental Research and Public Health* **17**, 4517-1-4517-18 (2020)

Taniguchi H., Watanabe M., Ibe T., Tokuda M., Arakawa T., Taniguchi T., Gu B., Ziman T., Maekawa S., Kobayashi K., Niimi Y. Spin treacle in a frustrated magnet observed with spin current *Physical Review B* **102**, 094405-1-094405-7 (2020)

Teixeira M.H., Curtolo F., Camilo S.R.G., Field M.J., Zheng P., Li H., Arantes G.M. Modeling the hydrolysis of iron-sulfur clusters *Journal of Chemical Information and Modeling* **60**, 653-660 (2020)

Tejsner T., Piovano A., Țuțueanu A., Rømer A.T., Wells B.O., Grivel J.C., Boehm M., Udby L. Anomalous dispersion of longitudinal optical phonons in oxygen-doped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_{4+\delta}$ *Physical Review B* **101**, 100504-1-100504-6 (2020)

Terada N., Colin C.V., Qureshi N., Hansen T.C., Matsubayashi K., Uwatoko Y., Belik A.A. Pressure-induced incommensurate antiferromagnetic order in a ferromagnetic B-site ordered double-perovskite $\text{Lu}_2\text{NiMnO}_6$ *Physical Review B* **102**, 094412-1-094412-9 (2020)

Terada N., Qureshi N., Stunault A., Enderle M., Ouladdiaf B., Colin C.V., Khalyavin D.D., Manuel P., Orlandi F., Miyahara S., Prabhakaran D., Osakabe T. Origin of the large ferroelectric polarization enhancement under high pressure for multiferroic DyMnO_3 studied by polarized and unpolarized neutron diffraction *Physical Review B* **102**, 085131-1-085131-7 (2020)

Terada N., Terashima K., de Castro P.B., Colin C.V., Mamiya H., Yamamoto T.D., Takeya H., Sakai O., Takano Y., Kitazawa H. Relationship between magnetic ordering and gigantic magnetocaloric effect in HoB_2 studied by neutron diffraction experiment *Physical Review B* **102**, 094435-1-094435-7 (2020)

Tetreau G., Banneville A.S., Andreeva E.A., Brewster A.S., Hunter M.S., Sierra R.G., Teulon J., Young I.D., Burke N., Grünwald T.A., Beaudouin J., Snigireva I., Fernandez-Luna M.T., Burt A., Park H., Signor L., Bafna J.A., Sadir R., Fenel D., Boeri-Erba E., Bacia M., Zala N., Laporte F., Després L., Weik M., Boutet S., Rosenthal M., Coquelle N., Burghammer M., Cascio D., Sawaya M.R., Winterhalter M., Gratton E., Gutsche I., Federici B., Pellequer J., Sauter N.K., Colletier J. Serial femtosecond crystallography on in vivo-grown crystals drives elucidation of mosquitoicidal Cyt1Aa bioactivation cascade *Nature Communications* **11**, 1153-1-1153-16 (2020)

Thakur G.S., Dinnebier R., Hansen T.C., Assenmacher W., Felser C., Jansen M. Idiosyncratic $\text{Ag}_3\text{Pt}_2\text{O}_7$: An electron imprecise yet diamagnetic small band gap oxide *Angewandte Chemie International Edition* **59**, 19910-19913 (2020)

Thakur G.S., Dinnebier R., Hansen T.C., Assenmacher W., Felser C., Jansen M. Idiosyncratic $\text{Ag}_3\text{Pt}_2\text{O}_7$: An electron imprecise yet diamagnetic small band gap oxide *Angewandte Chemie* **132**, 20082-20085 (2020)

Thomas L.H., Martel A., Grillo I., Jarvis M.C. Hemicellulose binding and the spacing of cellulose microfibrils in spruce wood *Cellulose* **27**, 4249-4254 (2020)

Thomson L., Schweins R., Draper E.R., Adams D.J. Creating transient gradients in supramolecular hydrogels *Macromolecular Rapid Communications* **41**, 2000093-1-2000093-6 (2020)

Timaeva O., Pashkin I., Mulakov S., Kuzmicheva G., Konarev P., Terekhova R., Sadovskaya N., Czakkel O., Prévost S. Synthesis and physico-chemical properties of poly(*N*-vinyl pyrrolidone)-based hydrogels with titania nanoparticles *Journal of Materials Science* **55**, 3005-3021 (2020)

Timaeva O.I., Kuz'micheva G.M., Pashkin I.I., Czakkel O., Prévost S. Structure and dynamics of titania - poly(*N*-vinyl caprolactam) composite hydrogels *Soft Matter* **16**, 219-228 (2020)

Tomita Y., Kageyama A., Iso Y., Umemoto K., Kume A., Liu M., Pruner C., Jenke T., Rocca S., Geltenbort P., Fally M., Klepp J. Fabrication of nanodiamond-dispersed composite holographic gratings and their light and slow-neutron diffraction properties *Physical Review Applied* **14**, 044056-1-044056-15 (2020)

Tomita Y., Kageyama A., Iso Y., Umemoto K., Liu M., Klepp J., Pruner C., Jenke T., Geltenbort P., Fally M. Nanodiamond-polymer composite gratings as diffractive optical elements for light and neutrons: I. Their fabrication and light optical diffraction properties *Proceedings of SPIE* **11367**, 113670M-1-113670M-11 (2020)

Törnquist E., Gentile L., Prévost S., Diaz A., Olsson U., Isaksson H. Comparison of small-angle neutron and X-ray scattering for studying cortical bone nanostructure *Scientific Reports* **10**, 14552-1-14552-11 (2020)

Tosato M., Asti M., Dalla Tiezza M., Orian L., Häussinger D., Vogel R., Köster U., Jensen M., Andrighetto A., Pastore P., Di Marco V. Highly stable silver(I) complexes with cyclen-based ligands bearing sulfide arms: A step toward silver-111 labeled radiopharmaceuticals *Inorganic Chemistry* **59**, 10907-10919 (2020)

Tritik P., Meyer M., Wehmann T., Tengattini A., Atkins D., Lehmann E.H., Strobl M. PSI 'Neutron Microscope' at ILL-D50 Beamline – First results *Materials Research Proceedings* **15**, 23-28 (2020)

Tu S., Ziman T., Yu G., Wan C., Hu J., Wu H., Wang H., Liu M., Liu C., Guo C., Zhang J., Cabero Z.M.A., Zhang Y., Gao P., Liu S., Yu D., Han X., Hallsteinsen I., Gilbert D.A., Matsuo M., Ohnuma Y., Wölflle P., Wang K.L., Ansermet J.P., Maekawa S., Yu H.B. Record thermopower found in an IrMn-based spintronic stack *Nature Communications* **11**, 2023-1-2023-7 (2020)

Uhlig M., Löhmann O., Vargas Ruiz S., Varga I., von Klitzing R., Campbell R.A. New structural approach to rationalize the foam film stability of oppositely charged polyelectrolyte/surfactant mixtures *Chemical Communications* **56**, 952-955 (2020)

Ulrich T.L., Vogel S.C., White J.T., Andersson D.A., Wood E.S., Besmann T.M. High temperature neutron diffraction investigation of U₃Si₂ *Materialia* **9**, 100580-1-100580-8 (2020)

Umbricht C.A., Köster U., Bernhardt P., Gracheva N., Johnston K., Schibli R., van der Meulen N.P., Müller C. Alpha-PET for prostate cancer: Preclinical investigation using ¹⁴⁹Tb-PSMA-617 *Scientific Reports* **9**, 17800-1-17800-10 (2019)

Ünneper R., Paul S., Zsiros O., Kovács L., Székely N.K., Steinbach G., Appavou M., Porcar L., Holzwarth A.R., Garab G., Nagy G. Thylakoid membrane reorganizations revealed by small-angle neutron scattering of *Monstera deliciosa* leaves associated with non-photochemical quenching *Open Biology* **10**, 200144-1-200144-12 (2020)

Vaclavkova D., Delhomme A., Faugeras C., Potemski M., Bogucki A., Suffczyński J., Kossacki P., Wildes A.R., Grémaud B., Saúl A. Magnetoelastic interaction in the two-dimensional magnetic material MnPS₃ studied by first principles calculations and Raman experiments *2D Materials* **7**, 035030-1-035030-11 (2020)

van Well N., Ramakrishnan S., Beauvois K., Qureshi N., Ressouche E., Skoulatos M., Georgii R., Zaharko O., van Smaalen S. Magnetic-field-controlled quantum critical points in the triangular antiferromagnetic Cs₂CuCl_{4-x}Br_x mixed system *Annalen der Physik* **532**, 2000147-1-200147-7 (2020)

Varela A., Gómez-Recio I., Serrador L., Hernando M., Matesanz E., Torres-Pardo A., Fernández-Díaz M.T., Martínez J.L., Gonell F., Rousse G., Sanchez C., Laberty-Robert C., Portehault D., González-Calbet J.M., Parras M. Hydroxyapatites as versatile inorganic hosts of unusual pentavalent manganese cations *Chemistry of Materials* **32**, 10584-10593 (2020)

Vauclare P., Natali F., Kleman J.P., Zaccari G., Franzetti B. Surviving salt fluctuations: Stress and recovery in *Halobacterium salinarum*, an extreme halophilic Archaeon *Scientific Reports* **10**, 3298-1-3298-10 (2020)

Vega-Castillo J., Cuello G.J., Prado F. Partial cationic order at the B site of the n = 3 Ruddlesden-Popper phases LaSr₃(Fe,Co,Ga)₃O₁₀₋₃ studied by neutron powder diffraction and X-ray absorption spectroscopy *Journal of Solid State Chemistry* **290**, 121584-1-121584-10 (2020)

Velte C., Ahrens F., Barth A., Blaum K., Braß M., Door M., Dorner H., Düllmann C.E., Eliseev S., Enss C., Filianin P., Fleischmann A., Gastaldo L., Goeggelmann A., Goodacre T.D., Haverkort M.W., Hengstler D., Jochum J., Johnston K., Keller M., Kempf S., Kieck T., König C.M., Köster U., Kromer K., Mantegazzini F., Marsh B., Novikov Y.N., Piquemal F., Riccio C., Richter D., Rischka A., Rothe S., Schüssler R.X., Schweiger C., Stora T., Wegner M., Wendt K., Zampaolo M., Zuber K. High-resolution and low-background ¹⁶³Ho spectrum: Interpretation of the resonance tails *European Physical Journal C* **79**, 1026-1-1026-8 (2019)

Venkat G., Cox C.D.W., Voneshen D., Caruana A.J., Piovano A., Cropper M.D., Morrison K. Magnon diffusion lengths in bulk and thin film Fe₃O₄ for spin Seebeck applications *Physical Review Materials* **4**, 075402-1-075402-6 (2020)

Verhoeven H., Cocolios T.E., Dockx K., Farooq-Smith G.J., Felden O., Formento-Cavaier R., Gebel R., Köster U., Neumaier B., Scholten B., Spahn I., Spellerberg S., Stamati M.E., Stegemann S. Measurement of spallation cross sections for the production of terbium radioisotopes for medical applications from tantalum targets *Nuclear Instruments and Methods in Physics Research B* **463**, 327-329 (2020)

Vermot A., Petit-Härtlein I., Breyton C., Le Roy A., Thépaut M., Vivès C., Moulin M., Härtlein M., Grudinin S., Smith S.M.E., Ebel C., Martel A., Fieschi F. Interdomain flexibility within NADPH oxidase suggested by SANS using LMNG stealth carrier *Biophysical Journal* **119**, 605-618 (2020)

Viani A., Lanzafame G., Chateigner D., El Mendili Y., Sotiriadis K., Mancini L., Zucali M., Ouladdiaf B. Microstructural evolution and texture analysis of magnesium phosphate cement *Journal of the American Ceramic Society* **103**, 1414-1424 (2020)

Viennois R., Hermet P., Machon D., Koza M.M., Bourgogne D., Fraisse B., Petrović A.P., Maurin D. Stability and lattice dynamics of Ruddlesden-Popper tetragonal Sr₂TiO₄ *Journal of Physical Chemistry C* **124**, 27882-27893 (2020)

Viennois R., Koza M.M., Debord R., Toulemonde P., Mutka H., Pailhès S. Anisotropic low-energy vibrational modes as an effect of cage geometry in the binary barium silicon clathrate Ba₂₄Si₁₀₀ *Physical Review B* **101**, 224302-1-224302-10 (2020)

Viennois R., Kume T., Komura M., Girard L., Haidoux A., Rouquette J., Koza M.M. Raman-scattering experiments on unfilled skutterudite CoSb₃ under high pressure and high temperature *Journal of Physical Chemistry C* **124**, 23004-23012 (2020)

Viljanen M., Ahvenainen P., Penttilä P., Help H., Svedström K. Ultrastructural X-ray scattering studies of tropical and temperate hardwoods used as tonewoods *IAWA Journal* **41**, 301-319 (2020)

Vlášková K., Proschek P., Pospíšil J., Klicpera M. Low-temperature study of an Er₂Ti₂O₇ single crystal synthesized by floating zone technique and simplified feed rod preparation route *Journal of Crystal Growth* **546**, 125783-1-125783-5 (2020)

Vorauer T., Kumar P., Berhaut C.L., Chamasemani F.F., Jouneau P.H., Aradilla D., Tardif S., Pouget S., Fuchsichler B., Helfen L., Atalay S., Widanage W.D., Koller S., Lyonnard S., Brunner R. Multi-scale quantification and modeling of aged nanostructured silicon-based composite anodes *Communications Chemistry* **3**, 141-1-141-11 (2020)

Voronin V.V., Semenikhin S.Y., Shapiro D.D., Braginetz Y.P., Fedorov V.V., Nesvizhevsky V.V., Jentschel M., Ioffe A., Berdnikov Y.A. 7-order enhancement of the Stern-Gerlach effect of neutrons diffracting in a crystal *Physics Letters B* **809**, 135739-1-135739-5 (2020)

Voronin V.V., Semenikhin S.Y., Shapiro D.D., Braginetz Y.P., Fedorov V.V., Nesvizhevsky V.V., Jentschel M., Ioffe A., Berdnikov Y.A. Diffraction enhancement of the Stern-Gerlach effect for a neutron in a crystal *JETP Letters* **110**, 581-584 (2019)

Vottero E., Carosso M., Jiménez-Ruiz M., Pellegrini R., Groppo E., Piovano A. How do the graphenic domains terminate in activated carbons and carbon-supported metal catalysts? *Carbon* **169**, 357-369 (2020)

Waldie S., Sebastiani F., Browning K., Maric S., Lind T.K., Yepuri N., Darwish T.A., Moulin M., Strohmeier G., Pichler H., Skoda M.W.A., Maestro A., Haertlein M., Forsyth V.T., Bengtsson E., Malmsten M., Cárdenas M. Lipoprotein ability to exchange and remove lipids from model membranes as a function of fatty acid saturation and presence of cholesterol *BBA – Molecular and Cell Biology of Lipids* **1865**, 158769-1-158769-8 (2020)

Wei Y., Liu X., Haidar N., Jobic H., Paul S., Jalowiecki-Duhamel L. CeNi_xAl_{0.5}H₂O_y nano-oxides for H₂ production by oxidative dry reforming of CH₄ without carbon formation *Applied Catalysis A: General* **594**, 117439-1-117439-10 (2020)

Wildes A.R., Lançon D., Chan M.K., Weickert F., Harrison N., Simonet V., Zhitomirsky M.E., Gvozdkova M.V., Ziman T., Rønnow H.M. High field magnetization of FePS₃ *Physical Review B* **101**, 024415-1-024415-11 (2020)

Wildes A.R., Ward R.C.C., Wells M.R., Hill J.P., Cowley R.A. High-resolution X-ray scattering from epitaxial thin films of Y/Nb on Al₂O₃ *Journal of Physics: Condensed Matter* **32**, 374006-1-374006-11 (2020)

Wildes A.R., Zhitomirsky M.E., Ziman T., Lançon D., Walker H.C. Evidence for biquadratic exchange in the quasi-two-dimensional antiferromagnet FePS₃ *Journal of Applied Physics* **127**, 223903-1-223903-9 (2020)

Woodhouse J., Nass Kovacs G., Coquelle N., Uriarte L.M., Adam V., Barends T.R.M., Byrdin M., de la Mora E., Bruce Doak R., Feliks M., Field M., Fieschi F., Guillon V., Jakobs S., Joti Y., Macheboeuf P., Motomura K., Nass K., Owada S., Roome C.M., Ruckebusch C., Schiró G., Shoeman R.L., Thépaut M., Togashi T., Tono K., Yabashi M., Cammarata M., Foucar L., Bourgeois D., Sliwa M., Colletier J., Schlichting I., Weik M. Photoswitching mechanism of a fluorescent protein revealed by time-resolved crystallography and transient absorption spectroscopy *Nature Communications* **11**, 741-1-741-11 (2020)

Wright D.W., Elliston E.L.K., Hui G.K., Perkins S.J. Atomistic modeling of scattering curves for human IgG_{1/4} reveals new structure-function insights *Biophysical Journal* **117**, 2101-2119 (2019)

Wu S., Zhu Y., Gao H., Xiao Y., Xia J., Zhou P., Ouyang D., Li Z., Chen Z., Tang Z., Li H.F. Super-necking crystal growth and structural and magnetic properties of SrTb₂O₄ single crystals *ACS Omega* **5**, 16584-16594 (2020)

Wylezich T., Valois R., Suta M., Mutschke A., Ritter C., Meijerink A., Karttunen A.J., Kunkel N. Borate hydrides as a new material class: Structure, computational studies and spectroscopic investigations on Sr₃(BO₃)₃H and Sr₃(¹¹B₃)₃D *Chemistry – A European Journal* **26**, 11742-11750 (2020)

Xie T., Liu C., Bourdarot F., Regnault L.P., Li S., Luo H. Spin-excitation anisotropy in the bilayer iron-based superconductor CaKFe₄As₄ *Physical Review Research* **2**, 022018-1-022018-5 (2020)

Yanda P., Golosovsky I.V., Mirebeau I., Ter-Oganessian N.V., Rodríguez-Carvajal J., Sundaresan A. Interplay of 4f3d interactions and spin-induced ferroelectricity in the green phase Gd₂BaCuO₅ *Physical Review Research* **2**, 023271-1-023271-7 (2020)

Yang Y., Gorelov V., Pierleoni C., Ceperley D.M., Holzmann M. Electronic band gaps from quantum Monte Carlo methods *Physical Review B* **101**, 085115-1-085115-11 (2020)

Yang Y., Hiraoka N., Matsuda K., Holzmann M., Ceperley D.M. Quantum Monte Carlo Compton profiles of solid and liquid lithium *Physical Review B* **101**, 165125-1-165125-8 (2020)

Yarmohammadian R. Fast transient analysis of spalling phenomenon using neutron radiography *PhD Thesis* (2019)

Ye J., Book A., Mayr S., Gabold H., Meng F., Schäfferer H., Need R., Gilbert D., Saerbeck T., Stahn J., Böni P., Kreuzpaintner W. Design and realization of a sputter deposition system for the *in situ* and *in operando* use in polarized neutron reflectometry experiments: Novel capabilities *Nuclear Instruments and Methods in Physics Research A* **964**, 163710-1-163710-7 (2020)

Yildirim A., Krause C., Zorn R., Lohstroh W., Schneider G.J., Zamponi M., Holderer O., Frick B., Schönhalz A. Complex molecular dynamics of a symmetric model discotic liquid crystal revealed by broadband dielectric, thermal and neutron spectroscopy *Soft Matter* **16**, 2005-2016 (2020)

Yildirim H.C., Remes H., Nussbaumer A. Fatigue properties of as-welded and post-weld-treated high-strength steel joints: The influence of constant and variable amplitude loads *International Journal of Fatigue* **138**, 105687-1-105687-22 (2020)

Zaccai G. Molecular dynamics in cells: A neutron view *Biochimica et Biophysica Acta* **1864**, 129475-1-129475-7 (2020)

Zaccai N.R., Coquelle N. Opportunities and challenges in neutron crystallography *EPJ Web of Conferences* **236**, 02001-1-02001-22 (2020)

Zaccaria M., Dawson W., Cristiglio V., Reverberi M., Ratcliff L.E., Nakajima T., Genovese L., Momeni B. Designing a bioremediator: mechanistic models guide cellular and molecular specialization *Current Opinion in Biotechnology* **62**, 98-105 (2020)

Zákutná D., Graef K., Dresen D., Porcar L., Honecker D., Disch S. In situ magnetorheological SANS setup at Institut Laue-Langevin *Colloid and Polymer Science* (2020)

Zákutná D., Nižňanský D., Barnsley L.C., Babcock E., Salhi Z., Feoktystov A., Honecker D., Disch S. Field dependence of magnetic disorder in nanoparticles *Physical Review X* **10**, 031019-1-031019-17 (2020)

Zanatta M., Tavagnacco L., Buratti E., Chiessi E., Natali F., Bertoldo M., Orecchini A., Zaccarelli E. Atomic scale investigation of the volume phase transition in concentrated PNIPAM microgels *Journal of Chemical Physics* **152**, 204904-1-204904-11 (2020)

Zeller D., Tan P., Hong L., Di Bari D., García Sakai V., Peters J. Differences between calcium rich and depleted alpha-lactalbumin investigated by molecular dynamics simulations and incoherent neutron scattering *Physical Review E* **101**, 032415-1-032415-9 (2020)

Zhang J., Farias-Mancilla B., Kulai I., Hoepfener S., Lonetti B., Prévost S., Ulbrich J., Destarac M., Colombani O., Schubert U.S., Guerrero-Sanchez C., Harrison S. Einfluss der Verteilung hydrophiler Monomere auf die Selbstassemblierung eines pH-responsiven Copolymeren: Kugeln, Würmer und Vesikel aus einer einzigen Copolymerkomposition *Angewandte Chemie* **132**, 2-9 (2020)

Zhao Y., Talbi G., Clément S., Toulemonde P., Hansen T., Cambon M., Cambon O., Beaudhuin M., Viennois R., Haines J. High-pressure, high temperature synthesis of a mesoporous α -quartz/bismuth nanowire composite *Solid State Sciences* **101**, 106125-1-106125-4 (2020)

Zheng W., Balédent V., Lepetit M.B., Retailleau P., Elslande E.V., Pasquier C.R., Auban-Senzier P., Forget A., Colson D., Foury-Leylekian P. Room temperature polar structure and multiferroicity in BaFe₂Se₃ *Physical Review B* **101**, 020101-1-020101-4 (2020)

Zhong Q., Chen C., Mi L., Wang J.P., Yang J., Wu G.P., Xu Z.K., Cubitt R., Müller-Buschbaum P. Thermoresponsive diblock copolymer films with a linear shrinkage behavior and its potential application in temperature sensors *Langmuir* **36**, 742-753 (2020)

Zhong Q., Hu N., Mi L., Wang J.P., Metwalli E., Bießmann L., Hérolde C., Yang J., Wu G.P., Xu Z.K., Cubitt R., Müller-Buschbaum P. Impact of thermal history on the kinetic response of thermoresponsive poly(diethylene glycol monomethyl ether methacrylate)-block-poly(poly(ethylene glycol) methyl ether methacrylate) thin films investigated by in-situ neutron reflectivity *Langmuir* **36**, 6228-6237 (2020)

Zhu F., Wang X., Meven M., Song J., Mueller T., Yi C., Ji W., Shi Y., Ma J., Schmalz K., Schmidt W.F., Su Y., Brückel T. Magnetic structures, spin-flop transition, and coupling of Eu and Mn magnetism in the Dirac semimetal EuMnBi₂ *Physical Review Research* **2**, 043100-1-043100-14 (2020)

Zhu Y., Fu Y., Tu B., Li T., Miao J., Zhao Q., Wu S., Xia J., Zhou P., Huq A., Schmidt W., Ouyang D., Tang Z., He Z., Li H.F. Crystalline and magnetic structures, magnetization, heat capacity, and anisotropic magnetostriction effect in a yttrium-chromium oxide *Physical Review Materials* **4**, 094409-1-094409-11 (2020)

Zhu Y., Tahini H.A., Hu Z., Chen Z.G., Zhou W., Komarek A.C., Lin Q., Lin H.J., Chen C.T., Zhong Y., Fernández-Díaz M.T., Smith S.C., Wang H., Liu M., Shao Z. Boosting oxygen evolution reaction by creating both metal ion and lattice-oxygen active sites in a complex oxide *Advanced Materials* **32**, 1905025-1-1905025-8 (2020)

Ziesche R.F., Arlt T., Finegan D.P., Heenan T.M.M., Tengattini A., Baum D., Kardjilov N., Markötter H., Manke I., Kockelmann W., Brett D.J.L., Shearing P.R. 4D imaging of lithium-batteries using correlative neutron and X-ray tomography with a virtual unrolling technique *Nature Communications* **11**, 777-1-777-11 (2020)

Ziesche R.F., Robinson J.B., Markötter H., Bradbury R., Tengattini A., Lenoir N., Helfen L., Kockelmann W., Kardjilov N., Manke I., Brett D.J.L., Shearing P.R. Editors' choice-4D neutron and X-ray tomography studies of high energy density primary batteries: Part II. Multi-modal microscopy of LiSOCl₂ cells *Journal of the Electrochemical Society* **167**, 140509-1-140509-11 (2020)

Ziliani S., Ciemala M., Crespi F.C.L., Leoni S., Fornal B., Maj A., Bednarczyk P., Benzoni G., Bracco A., Boiano C., Bottoni S., Brambilla S., Bast M., Beckers M., Braunroth T., Camera F., Cieplicka-Oryńczak N., Clément E., Coelli S., Dorvaux O., Ertürk S., de France G., Fransen C., Goldkuhle A., Grębosz J., Harakeh M.N., Iskra t.W., Jacquot B., Karpov A., Kicińska-Habior M., Kim Y., Kmiecik M., Lemasson A., Lenzi S.M., Lewitowicz M., Li H., Matea I., Mazurek K., Michelagnoli C., Matejska-Minda M., Million B., Müller-Gatermann C., Nanal V., Napierkowski P., Napoli D.R., Palit R., Rejmund M., Schmitt C., Siänoiu M., Stefan I., Vardaci E., Wasilewska B., Wieland O., Ziębliński M., Zielińska M. Spectroscopy of neutron-rich nitrogen isotopes with AGATA+PARIS+VAMOS *Acta Physica Polonica B* **51**, 709-716 (2020)

Ziolek R.M., Omar J., Hu W., Porcar L., González-Gaitano G., Dreiss C.A., Lorenz C.D. Understanding the pH-directed self-assembly of a four-arm block copolymer *Macromolecules* **53**, 11065-11076 (2020)

Zucali M., Chateigner D., Ouladdiaf B. Crystallographic and seismic anisotropies of calcite at different depths: A study using quantitative texture analysis by neutron diffraction *Minerals* **10**, 26-1-26-24 (2020)

Zuo P., Darie C., Colin C.V., Klein H. Investigation of the structure of the modulated doubly ordered perovskite NaLaCoWO₆ and its reversible phase transition with a colossal temperature hysteresis *Inorganic Chemistry* **58**, 81-92 (2019)

