List of publications

Dr. Gregor Kieslich, Liebig Fellow and TU Munich Junior Fellow
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Number of peer reviewed publications: 64
Number of citations: 3660, h-index: 28 (google scholar, December 2021)

SCIENTIFIC PUBLICATIONS - OVERVIEW

64. A. L. Semrau, S. V. Dummert, C. Eckel, S. Mackewicz, R. T. Weitz, G. Kieslich*. Synthetic Approaches Targeting Metal-Free Perovskite [HMDABCO](NH_4)I_3 Thin Films. *Cryst. Growth. Des.* **2022**, 1, 406.

63. P. Vervoorts, J. Stebani, A. S. J. Méndez, G. Kieslich*. Structural Chemistry of Metal-Organic Frameworks under Hydrostatic Pressures. *ACS Materials Lett*. **2021**, 3, 1635.

62. S. Burger, S. Grover, K. T. Butler, H. L. B. Boström, R. Grau-Crespo*, G. Kieslich*. Tilt and Shift Polymorphism in Molecular Perovskites. *Mater. Horiz*. **2021**, 8, 2444.

61. L. Petters, S. Burger, S. Kronawitter, M. Drees, G. Kieslich*. Linear Negative Thermal Expansion in $Pd(acac)_2$. *CrystEngComm*. **2021**, 23, 5425.

60. D. Ukaj, H. Bunzen, J. Berger, G. Kieslich, R. A. Fischer*. Charge-Transfer-Induced Electrical Conductivity in a Tetrathiafulvalene-Based Metal-Organic Framework. *Chem. Mater*. **2021**, 33, 2532.

59. C. L. Hobday*, G. Kieslich*. Structural Flexibility in Crystalline Coordination Polymers: A Journey Along the Underlying Free Energy Landscape. *Dalton. Trans.* **2021**, 50, 3759.

58. C. Kaußler, G. Kieslich*. crystIT: complexity and configurational entropy of crystal structures via information theory. *J. Appl. Cryst*. **2021**, 54, 306.

57. H. L. B. Boström*, G Kieslich*. Influence of Metal Defects on the Mechanical Properties of ABX_3 Perovskite-Type Metal-formate Frameworks. *J. Phys. Chem. C*. **2021**, 125, 1467.

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55. S. Burger, S. Kronawitter, H. L. B. Boström, J. K. Zareba, G. Kieslich*. A new polar perovskite coordination network with azaspiroundecance as A-site cation. *Dalton. Trans.* **2020**, 49, 10750.

54. D. Bodesheim, G. Kieslich, M. Johnson, K. T. Butler*. Understanding the Balance of Entropy and Enthalpy in Hydrogen-Halide Noncovalent Bonding. *J. Phys. Chem. Lett.* **2020**, 11, 3495.

53. C. Schneider, D. Bodesheim, J. Keupp, R. Schmid, G. Kieslich*. Retrofitting metal-organic frameworks. *Nat. Commun*. **2019**, 10, 4921.

52 Keith T. Butler*, P. Vervoorts, M. G. Ehrenreich, J. Armstrong, J. M. Skelton, G. Kieslich*. Experimental Evidence for Vibrational Entropy as Driving Parameter of Flexibility in the Metal-Organic Framework ZIF-4(Zn). *Chem. Mater.* **2019**, 31, 8366-8372.

51. P. Vervoorts, C. L. Hobday, M. G. Ehrenreich, D. Daisenberger, G. Kieslich*. The Zeolitic Imidazolate Framework ZIF-4 under Low Hydrostatic Pressures. *Z. Anorg. Allg. Chem.* **2019**, 645, 970-974.

50. C. Schneider, D. Bodesheim, M. G. Ehrenreich, V. Crocellà, J. Mink, R. A. Fischer, K. T. Butler, G. Kieslich*****. Tuning the Negative Thermal Expansion Behavior of the Metal-Organic Framework Cu_3BTC_2 by Retrofitting. *J. Am. Chem. Soc.* **2019**, 141, 10504-10509.

49. D. C. Mayer, A. Manzi, R. Medishetty, B. Winkler, C. Schneider, G. Kieslich, A. Pöthig, J. Feldmann, R. A. Fischer*. Controlling Multi-Photon Absorption Efficiency by Chromophore Packing in Metal-Organic Frameworks. *J. Am. Chem. Soc*. **2019**, 141, 11594-11602.

48. A. Schneemann, R. Rudolf, S. J. Baxter, P. Vervoorts, I. Hante, K. Khaletskaya, S. Henke, G. Kieslich*****, R. A. Fischer*****. Flexibility control in alkyl ether-functionalized pillared-layered MOFs by a Cu/Zn mixed metal approach. *Dalton Trans*. **2019**, 48, 6564-6570.

47. W. Li, S. Watzele, H. El-sayed, Y. Liang, G. Kieslich, A. S. Bandarenka, K. Rodewald, B. Rieger, R. A. Fischer*. Unprecedented High Oxygen Evolution Activity of Electrocatalysts Derived from Surface-Mounted Metal-Organic Frameworks. *J. Am. Chem. Soc*. **2019**, 141, 5926-5933.

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45. M. G. Ehrenreich, Z. Zeng, S. Burger, M. R. Warren, M. W. Gaultois, J.-C. Tan*****, G. Kieslich*****. Mechanical Properties of the ferroelectric metal-free perovskites [MDABCO](NH_4)I_3. *Chem. Commun*. **2019**, 55, 3911-3914.

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42. G. Kieslich*****, J. M. Skelton, J. Armstrong, Y. Wu, F. Wei, K. L. Svane, A. Walsh, K. T. Butler*****. Hydrogen Bonding versus Entropy: Revealing the Underlying Thermodynamics of the Hybrid Organic-Inorganic Perovskites [CH_3NH_3]$PbBr_3$. *Chem. Mater*. **2018**, 30, 8782-8788.

41. S. Leukel, M. Panthöfer, M. Mondeshki, G. Kieslich, Y. Wu, N. Krautwurst, W. Tremel*. Trapping Amorphous Intermediates of Carbonates – A combined Total Scattering and NMR Study. *J. Am. Chem. Soc*. **2018**, 140, 14638-14646.

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38. S. Dissegna, P. Vervoorts, C. L. Hobday, T. Düren, D. Daisenberger, A. J. Smith, R. A. Fischer*****, G. Kieslich*****. Tuning the Mechanical Response of Metal-Organic Frameworks by Defect-Engineering. *J. Am. Chem. Soc*. **2018**, 140, 11581-11584.

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33. A. K. Cheetham, G. Kieslich*****, H.-M. H. Yeung*****. Thermodynamic and Kinetic Effects in the Crystallization of Metal-Organic Frameworks. *Acc. Chem. Res*. **2018**, 51, 659-667.

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