# Prof Ross Stewart Forgan MChem (Hons) FRSC FRSE

Publications List

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**Impact factors and citation data (Web of Science) correct as of 27th June 2024.**

***97.** I. Abánades Lázaro, X. Chen, M. Ding, A. Eskandari, D. Fairen-Jimenez, M. Giménez-Marqués, R. Gref, W. Lin, T. Luo and **R. S. Forgan*** "Metal-Organic-Frameworks for Biological Applications" *Nat. Rev. Methods Primers*, 2024, **4**, 42.
**(Impact factor = 39.8, 0 citations)**.

***96. R. S. Forgan*** "Reproducibility in Research into Metal-Organic Frameworks in Nanomedicine" *Commun. Mater.*, 2024, **5**, 46.
*Invited perspective for special collection on Reproducibility in Well-Defined Porous Frameworks.*
**(Impact factor = 7.8, 1 citation)**.

***95.** R. R. R. Prasad, S. S. Boyadjieva, G. Zhou, J. Tan, F. C. N. Firth, S. Ling, Z. Huang, M. J. Cliffe, J. A. Foster and **R. S. Forgan*** "Modulated Self-Assembly of Catalytically Active $Zr_6$-Dicarboxylate Metal-Organic Nanosheets" *ACS Appl. Mater. Interfaces*, 2024, **16**, 17812–17820.
**(Impact factor = 9.5, 0 citations)**.

***94. R. S. Forgan***, R. Gref and J. Liu "Functional Framework Materials for Biomedical Applications" *J. Mater. Chem. B*, 2024, **12**, 3567–3568.
**(Impact factor = 7.0, 0 citations)**.

***93.** A. J. R. Thom, G. F. Turner, Z. H. Davis, M. R. Ward, I. Pakamorė, C. L. Hobday, D. R. Allan, M. R. Warren, W. L. W. Leung, I. D. H. Oswald, R. E. Morris, S. A. Moggach, S. E. Ashbrook and **R. S Forgan*** "Pressure-Induced Postsynthetic Cluster Anion Substitution in a MIL-53 Topology Scandium Metal-Organic Framework" *Chem. Sci.*, 2023, **14**, 7716–7724.
**(Impact factor = 8.4, 3 citations)**.

***92.** V. B. López-Cervantes, D. Bara, A. Yañez-Aulestia, E. Martínez-Ahumada, A. López-Olvera, Y. A. Amador-Sánchez, D. Solis-Ibarra, E. Sánchez-González, I. A. Ibarra and **R. S. Forgan*** "Modulated Self-Assembly of three Flexible Cr(III) PCPs for $SO_2$ Adsorption and Detection" *Chem. Commun.*, 2023, **59**, 8115–8118.
*Invited article for the Pioneering Investigators 2023 special issue.*
**(Impact factor = 4.9, 2 citations)**.

***91.** S. S. Boyadjieva, F. C. N. Firth, M. R. Alizadeh Kiapi, D. Fairen-Jimenez, S. Ling, M. J. Cliffe and **R. S. Forgan*** "Modulated Self-Assembly of hcp Topology MOFs of Zr/Hf and the Extended 4,4′-(Ethyne–1,2–diyl)dibenzoate Linker" *CrystEngComm*, 2023, **25**, 2119–2124.
**(Impact factor = 3.1, 2 citations)**.

**90.** A. M. Bumstead, I. Pakamorė, M. F. Thorne, C. Castillo-Blas, A. F. Sapnik, A. M. Chester, G. Robertson, D. J. M. Irving, P. A. Chater, D. A. Keen, **R. S. Forgan** and T. D. Bennett "Formation of a Meltable Purinate Metal–Organic Framework and its Glass Analogue" *Chem. Commun.* 2023, **59**, 732–735.
**(Impact factor = 4.9, 6 citations)**.

**89.** B. D. Roach, **R. S. Forgan**, E. Kamenetzky, S. Parsons, P. G. Plieger, F. J. White, S. Woodhouse and P. A. Tasker "From gas phase observations to solid state reality: the identification and isolation of trinuclear salicylaldoximato copper complexes" *Molecules* 2022, **27**, 6421.
*Invited article for Metal Ions in Supramolecular Chemistry: A Themed Issue in Honor of Professor Luigi Fabbrizzi.*
**(Impact factor = 4.6, 1 citation)**.

***88.** A. J. R. Thom, E. Regincós Martí, I. Pakamorė, C. Wilson and **R. S. Forgan*** "Phase Control in the Modulated Self-Assembly of Lanthanide MOFs of a Flexible Tetratopic Bis-Amide Linker" *Z. Anorg. Allg. Chem.* 2022, **648**, e202200171.
*Invited paper for Special Collection on Metal-Organic Frameworks.*
**(Impact factor = 1.4, 0 citations)**.

***87.** F. Demir Duman, A. Monaco, R. Foulkes, C. R. Becer, **R. S. Forgan*** "Glycopolymer-Functionalised MOF-808 Nanoparticles as a Cancer-Targeted Dual Drug Delivery System for Carboplatin and Floxuridine" *ACS Appl. Nano Mater.* 2022, **5**, 13862–13873.
*Invited article for the Professor Sir Fraser Stoddart's 80th Birthday Forum special issue.*
**(Impact factor = 5.9, 33 citations)**.

***86.** C. T. Walshe, A. J. R. Thom, C. Wilson, S. Ling and **R. S. Forgan*** "Controlling the flexibility of MIL-88A(Sc) through synthetic optimisation and postsynthetic halogenation" *Chem. Eur. J.*, 2022, **28**, e202201364.
**(Impact factor = 4.3, 7 citations)**.

**85.** J. W. M. Osterrieth, J. Rampersad, D. Madden, N. Rampal, L. Skoric, B. Connolly, M. D. Allendorf, V. Stavila, J. L. Snider, R. Ameloot, J. Marreiros, C. Ania, D. Azevedo, E. Vilarrasa-Garcia, B. F. Santos, X. -H. Bu, X. Zang, H. Bunzen, N. R. Champness, S. L. Griffin, B. Chen, R. -B. Lin, B. Coasne, S. Cohen, J. C. Moreton, Y. J. Colon, L. Chen, R. Clowes, F. -X. Coudert, Y. Cui, B. Hou, D. M. D'Alessandro, P. W. Doheny, M. Dincă, C. Sun, C. Doonan, M. T. Huxley, J. D. Evans, P. Falcaro, R. Ricco, O. Farha, K. B. Idrees, T. Islamoglu, P. Feng, H. Yang, **R. S. Forgan**, D. Bara, S. Furukawa, E. Sanchez, J. Gascon, S. Telalovic, S. K. Ghosh, S. Mukherjee, M. R. Hill, M. Munir Sadiq, P. Horcajada, P. Salcedo-Abraira, K. Kaneko, R. Kukobat, J, Kenvin, S. Keskin, S. Kitagawa, K. Otake, R. P. Lively, S. J. A. DeWitt, P. Llewellyn, B. V. Lotsch, S. T. Emmerling, A. M. Pütz, C. Martí-Gastaldo, N. Padial, J. García-Martínez, N. Linares, D. Maspoch, J. A. Suárez del Pino, P. Moghadam, R. Oktavian, R. E. Morris, P. S. Wheatley, J. Navarro, C. Petit, D. Danaci, M. J. Rosseinsky, A. P. Katsoulidis, M. Schröder, X. Han, S. Yang, C. Serre, G. Mouchaham, D. S. Shol, R. Thyagarajan, D. Siderius, R. Q. Snurr, R. B. Goncalves, V. Ting, J. L. Rowlandson, T. Uemura, T. Iiyuka, M. A. van der Veen, D. Rega, V. Van Speybroeck, S. M. J. Rogge, A. Lamaire, K. S. Walton, L. W. Bingel, S. Wuttke, J. Andreo, O. Yaghi, B. Zhang, C. T. Yavuz, T. S. Nguyen, Fe. Zamora, C. Montoro, H. Zhou, A. Kirchon, and D. Fairen-Jimenez "How Reproducible are Surface Areas Calculated from the BET Equation?" *Adv. Mater.* 2022, **34**, 2201502.
**(Impact factor = 29.4, 127 citations)**.

**84.** I. Abánades Lázaro, **R. S. Forgan** and F. G. Cirujano "Ultra-small Zr-MOF nanoparticles as heterogeneous catalysts for direct amide bond formations" *Dalton Trans.* 2022, **51**, 8368–8376.
**(Impact factor = 4.0, 9 citations)**.

***83.** A. J. R. Thom, D. G. Madden, R. Bueno-Perez, A. N. Al Shakhs, C. T. Lennon, R. J. Marshall, C. T. Walshe, C. Wilson, C. A. Murray, S. P. Thompson, G. F. Turner, D. Bara, S. A. Moggach, D. Fairen-Jimenez and **R. S. Forgan*** "Modulated Self-Assembly of an Interpenetrated MIL-53 Sc Metal-Organic Framework with Excellent Volumetric $H_2$ Storage and Working Capacity" *Mater. Today Chem.* 2022, **24**, 100887.
*Invited for a special issue dedicated to Sir Fraser Stoddart on the occasion of his 80th birthday.*
**(Impact factor = 7.3, 7 citations)**.

**82.** A. M. Bumstead, I. Pakamorė, K. D. Richards, M. F. Thorne, S. S. Boyadjieva, L. N. McHugh, A. F. Sapnik, D. S. Keeble, D. A. Keen, R. C. Evans, **R. S. Forgan** and T. D. Bennett "Post-Synthetic Modification of a Metal–Organic Framework Glass" *Chem. Mater.* 2022, **34**, 2187–2196.
**(Impact factor = 8.6, 27 citations)**.

***81.** F. Demir Duman, S. S. Boyadjieva, M. Štrimaite, R. Foulkes, G. R. Williams and **R. S. Forgan*** "Inorganic Materials in Drug Delivery" in *Biomedical Applications of Inorganic Materials*, 2021, Ch2, pp14-126, edited by Gareth R. Williams. Cambridge, UK: RSC Publishing.
**(No impact factor, 0 citations)**.

***80.** D. Bara, E. Meekel, I. Pakamorė, C. Wilson, S. Ling and **R. S. Forgan*** "Exploring and Expanding the Fe-Terephthalate Metal-Organic Framework Phase Space by Coordination and Oxidation Modulation" *Mater. Horiz.*, 2021, **8**, 3377–3386.
**(Impact factor = 13.3, 24 citations)**.

***79.** A. Sussardi, R. J. Marshall, S. A. Moggach, A. C. Jones and **R. S. Forgan*** "Photophysics of azobenzene constrained in a UiO metal-organic framework: effects of pressure, solvation and dynamic disorder" *Chem. Eur. J.*, 2021, **27**, 14871-14875.
**(Impact factor = 4.3, 5 citations)**.

***78.** F. Demir Duman and **R. S. Forgan*** "Applications of Nanoscale Metal-Organic Frameworks as Imaging Agents in Biology and Medicine" *J. Mater. Chem. B*, 2021, **9**, 3423–3449.
*Invited review article.*
**(Impact factor = 7.0, 63 citations)**.

**77.** C. S. Jennings, J. S. Rossman, B. A. Hourihan, R. J. Marshall, **R. S. Forgan** and B. A. Blight "Immobilising Giant Unilamellar Vesicles with Zirconium Metal-Organic Framework Anchors" *Soft Matter*, 2021, **17**, 2024–2027.
*Featured on the inside cover of Issue 8, March 2021.*
**(Impact factor = 3.4, 0 citations)**.

***76.** P. Markopoulou, N. Panagiotou, A. Li, R. Bueno-Perez, D. Madden, S. Buchanan, D. Fairen-Jimenez, P. G. Shiels and **R. S. Forgan*** "Identifying Differing Intracellular Cargo Release Mechanisms by Monitoring *in vitro* Drug Delivery from MOFs in Real Time" *Cell Rep. Phys. Sci.*, 2020, **1**, 100254.
**(Impact factor = 8.9, 20 citations)**.

**75.** G. Osorio-Toribio, M. de J. Velásquez-Hernández, P. G. M. Mileo, J. A. Zárate, J. Aguila-Rosas, G. Leyva-Gómez, R. Sánchez-Sánchez, J. J. Magaña, M. A. Pérez-Díaz, I. Abánades Lázaro, **R. S. Forgan**, G. Maurin, E. Lima and I. A. Ibarra "Controlled transdermal release of antioxidant ferulate by a Porous Sc(III) MOF" *iScience*, 2020, **23**, 101156.
**(Impact factor = 5.8, 17 citations)**.

***74. R. S. Forgan*** "Modulated Self-Assembly of Metal-Organic Frameworks" *Chem. Sci.* 2020, **11**, 4546–4562.
*Invited Perspective Article*
**(Impact factor = 8.4, 162 citations)**.

***73.** S. L. Griffin, M. L. Briuglia, J. H. ter Horst and **R. S. Forgan*** "Assessing Crystallisation Kinetics of Zr Metal-Organic Frameworks through Turbidity Measurements to Inform Rapid Microwave-Assisted Synthesis" *Chem. Eur. J.*, 2020, **26**, 6910-6918.
*Hot Paper.*
**(Impact factor = 4.3, 22 citations)**.

***72.** S. Haddad, I. Abánades Lázaro, M. Fantham, A. Mishra, J. Silvestre-Albero, J. W. M. Osterrieth, G. S. Kaminski Schierle, C. F. Kaminski, **R. S. Forgan*** and D. Fairen-Jimenez "Design of a Functionalized Metal-Organic Framework System for Enhanced Targeted Delivery to Mitochondria" *J. Am. Chem. Soc*, 2020, **142**, 6661–6674.
*Featured in RSC Chemistry World 15th April 2020.*
**(Impact factor = 15.0, 111 citations)**.

***71.** A. Sussardi, C. Hobday, R. J. Marshall, **R. S. Forgan**,* A. C. Jones* and S. A. Moggach "Correlating Pressure-Induced Emission Modulation with Linker Rotation in a Photoluminescent MOF" *Angew. Chem. Int. Ed.* 2020, **59**, 8118–8122.
**(Impact factor = 16.6, 32 citations)**.

***70.** I. Abánades Lázaro, Connor J. R. Wells and **R. S. Forgan*** "Multivariate Modulation of the Zr MOF UiO-66 for Defect-Controlled Multimodal Anticancer Drug Delivery" *Angew. Chem. Int. Ed*. 2020, **59**, 5211–5217.
**(Impact factor = 16.6, 229 citations)**.

***69.** P. Markopoulou and **R. S. Forgan*** "Postsynthetic Modification of MOFs for Biomedical Applications" in *Metal-Organic Frameworks for Biomedical Applications*, 2020, Ch12, pp245-276, edited by Masoud Mozafari. Amsterdam, Netherlands: Elsevier.
**(No impact factor, 4 citations)**.

***68. R. S. Forgan*** "The Surface Chemistry of Metal-Organic Frameworks and their Applications" *Dalton Trans.* 2019, **48**, 9037–9042.
*Invited Frontier Article*
**(Impact factor = 4.0, 55 citations)**.

***67.** D. Bara, C. Wilson, M. Mörtel, M. M. Khusniyarov, S. Ling, B. Slater, S. Sproules, **R. S. Forgan*** "Kinetic Control of Interpenetration in Fe-Biphenyl-4,4′-Dicarboxylate Metal-Organic Frameworks by Coordination and Oxidation Modulation" *J. Am. Chem. Soc.* 2019, **141**, 8346–8357.
**(Impact factor = 15.0, 61 citations)**.

***66.** E. Angioni, R. J. Marshall, N. J. Findlay, J. Bruckbauer, B. Breig, D. J. Wallis, R. W. Martin, **R. S. Forgan*** and P. J. Skabara "Implementing Fluorescent MOFs as Down-Converting Layers in Hybrid Light-Emitting Diodes" *J. Mater. Chem. C* 2019, **7**, 2394–2400.
**(Impact factor = 6.4, 21 citations)**.

***65.** S. L. Griffin, C. Wilson and **R. S. Forgan*** "Uncovering the Structural Diversity of Y(III) Naphthalene-2,6-Dicarboxylate MOFs through Coordination Modulation" *Front. Chem*. 2019, **7**, 36.
**(Impact factor = 5.5, 13 citations)**.

***64.** I. Abánades Lázaro and **R. S. Forgan*** "Application of Zirconium MOFs in Drug Delivery and Biomedicine" *Coord. Chem. Rev.* 2019, **380**, 230–259.
**(Impact factor = 20.6, 461 citations)**.

***63.** I. Abánades Lázaro, S. Haddad, J. M. Rodrigo-Muñoz, R. J. Marshall, B. Sastre, V. del Pozo, D. Fairen-Jimenez and **R. S. Forgan*** "Surface-Functionalisation of Zr-Fumarate MOF for Selective Cytotoxicity and Immune System Compatibility in Nanoscale Drug Delivery" *ACS Appl. Mater. Interfaces*, 2018, **10**, 31146–31157.
**(Impact factor = 9.5, 107 citations)**.

**62.** J. S. Foster, A. W. Prentice, **R. S. Forgan**, M. J. Paterson, G. O. Lloyd "Targetable Mechanical Properties by Switching between Self-Sorting and Co-Assembly with *in situ* Formed Tripodal Ketoenamine Supramolecular Hydrogels" *ChemNanoMat*, 2018, **4**, 853–859.
*Invited article for special issue on Supramolecular Nanostructures.*
**(Impact factor = 3.8, 6 citations).**

**61.** M. Barter, J. Hartley, F. –J. Yazigi, R. J. Marshall, **R. S. Forgan**, A. Porch and M. O. Jones "Simultaneous Neutron Powder Diffraction and Microwave Dielectric Studies of Ammonia Absorption in Metal-Organic Framework Systems" *Phys. Chem. Chem. Phys.*, 2018, **20**, 10460–10469.
**(Impact factor = 3.3, 8 citations)**.

***60.** I. Abánades Lázaro, S. Abánades Lázaro and **R. S. Forgan*** "Enhancing Anticancer Cytotoxicity through Bimodal Drug Delivery from Ultrasmall Zr MOF Nanoparticles" *Chem. Commun.*, 2018, **54**, 2792–2795.
**(Impact factor = 4.9, 91 citations)**.

***59.** I. Abánades Lázaro, S. Haddad, J. M. Rodrigo-Muñoz, C. Orellana-Tavra, V. del Pozo, D. Fairen-Jimenez and **R. S. Forgan*** "Mechanistic Investigation into the Selective Anti-Cancer Cytotoxicity and Immune System Response of Surface-Functionalised, Dichloroacetate-Loaded, UiO-66 Nanoparticles" *ACS Appl. Mater. Interfaces*, 2018, **10**, 5255–5268.
**(Impact factor = 9.5, 88 citations)**.

***58.** R. J. Marshall, C. T. Lennon, H. M. Senn, C. Wilson and **R. S. Forgan*** "Controlling Interpenetration through Linker Conformation in the Modulated Synthesis of Sc Metal-Organic Frameworks" *J. Mater. Chem. A*, 2018, **6**, 1181–1187.
**(Impact factor = 11.9, 43 citations)**.

***57.** R. J. Marshall, J. McGuire, C. Wilson and **R. S. Forgan*** "Crystallographic Investigation into the Self-Assembly, Guest Binding, and Flexibility of Urea Functionalised Metal-Organic Frameworks" *Supramol. Chem.,* 2018, **30**, 124–133.
*Invited article for "Emerging Supramolecular Chemistry in the UK" Special Issue*
*One of the most read articles in Supramolecular Chemistry*
**(Impact factor = 3.3, 12 citations)**.

***56.** C. Orellana-Tavra, S. Haddad, R. J. Marshall, I. Abánades Lázaro, G. Boix, I. Imaz, D. Maspoch, **R. S. Forgan*** and D. Fairen-Jimenez "Tuning the Endocytosis Mechanism of Zr-Based MOFs Through Linker Functionalization" *ACS Appl. Mater. Interfaces*, 2017, **9**, 35516–35525.
**(Impact factor = 9.5, 48 citations)**.

***55.** I. Abánades Lázaro and **R. S. Forgan*** "Image-Guided Therapy using Maghemite-MOF Nanovectors" *Chem,* 2017, **3**, 200–202.
*Preview article*
**(Impact factor = 23.5, 4 citations)**.

***54.** F.-J. Yazigi, C. Wilson, D.-L. Long and **R. S. Forgan*** "Synthetic Considerations in the Self-Assembly of Coordination Polymers of Pyridine-Functionalised Hybrid Mn-Anderson Polyoxometalates" *Cryst. Growth Des.,* 2017, **17**, 4739–4748.
**(Impact factor = 3.8, 29 citations)**.

***53.** R. J. Marshall, Y. Kalinovskyy, S. L. Griffin, C. Wilson, B. A. Blight and **R. S. Forgan*** "Functional Versatility of a Series of Zr Metal-Organic Frameworks Probed by Solid-State Photoluminescence Spectroscopy" *J. Am. Chem. Soc.,* 2017, **139**, 6253–6260.
**(Impact factor = 15.0, 83 citations)**.

***52.** I. Abánades Lázaro, S. Haddad, S. Sacca, C. Orellana-Tavra, D. Fairen-Jimenez and **R. S. Forgan*** "Selective Surface PEGylation of UiO-66 Nanoparticles for Enhanced Stability, Cell Uptake and pH Responsive Drug Delivery" *Chem,* 2017, **2**, 561–578.
**(Impact factor = 23.5, 272 citations)**.

**51.** B. D. Roach, T. Lin, H. Bauer, **R. S. Forgan**, S. Parsons, D. M. Rogers, F. J. White and P. A. Tasker "Salicylaldehyde Hydrazones: Buttressing of Outer Sphere Hydrogen Bonding and Copper Extraction Properties" *Aust. J. Chem.*, 2017, **70**, 556–565.
*Invited article for issue celebrating Len Lindoy's 80$^{th}$ birthday.*
**(Impact factor = 1.1, 4 citations)**.

***50.** C. Orellana-Tavra, R. J. Marshall, E. F. Baxter, I. Abánades Lázaro, A. Tao, A. K. Cheetham, **R. S. Forgan*** and D. Fairen-Jimenez "Drug Delivery and Controlled Release from Biocompatible Metal-Organic Frameworks using Mechanical Amorphization" *J. Mater. Chem. B*, 2016, **4**, 7697–7707. **(Impact factor = 7.0, 147 citations)**.

***49.** R. J. Marshall and **R. S. Forgan*** "Postsynthetic Modification of Zirconium Metal-Organic Frameworks" *Eur. J. Inorg. Chem.*, 2016, 4310–4331.
*Invited article for cluster issue "Metal-Organic Frameworks – Heading Towards Application".*
*One of the most accessed articles in Eur. J. Inorg. Chem. in 2017-22.*
*One of the most cited articles in Eur. J. Inorg. Chem. in 2016-17.*
**(Impact factor = 2.3, 192 citations)**.

***48.** R. J. Marshall, S. L. Griffin, C. Wilson and **R. S. Forgan*** "Stereoselective Halogenation of Integral Unsaturated C-C Bonds in Chemically and Mechanically Robust Zr and Hf MOFs" *Chem. Eur. J.*, 2016, **22**, 4870–4877.
*Hot Paper.*
**(Impact factor = 4.3, 81 citations)**.

***47.** R. J. Marshall, C. L. Hobday, C. F. Murphie, S. L. Griffin, C. A. Morrison, S. A. Moggach and **R. S. Forgan*** "Amino Acids as Highly Efficient Modulators for Single Crystals of Zirconium and Hafnium Metal-Organic Frameworks" *J. Mater. Chem. A*, 2016, **4**, 6955–6963.
*Invited article for Emerging Investigators Issue 2016*.
**(Impact factor = 11.9, 145 citations)**.

***46.** C. L. Hobday, R. J. Marshall, C. F. Murphie, J. Sotelo, T. Richards, D. Allan, T. Düren, F. –X. Coudert, **R. S. Forgan***, C. A. Morrison, S. A. Moggach and T. D. Bennett "A Computation and Experimental Approach Linking Disorder, High-Pressure Behaviour, and Mechanical Properties in UiO Frameworks" *Angew. Chem. Int. Ed.*, 2016, **55**, 2401–2405.
**(Impact factor = 16.6, 108 citations)**.

**45.** I. A. Smellie, **R. S. Forgan**, C. Brodie, J. S. Gavine, L. Harris, D. Houston, A. D. Hoyland, R. P. McCaughan, A. J. Miller, L. Wilson and F. Woodhall "Solvent Extraction of Copper: An Extractive Metallurgy Exercise for Undergraduate Teaching Laboratories" *J. Chem. Ed.*, 2016, **93**, 362–367.
**(Impact factor = 3.0, 9 citations)**.

***44.** R. J. Marshall, T. Richards, C. Hobday, C. F. Murphie, C. Wilson, S. A. Moggach, T. D. Bennett and **R. S. Forgan*** "Postsynthetic Bromination of UiO-66 Analogues: Altering Linker Flexibility and Mechanical Compliance" *Dalton Trans.*, 2016, **45**, 4132–4135.
**(Impact factor = 4.0, 37 citations)**.

**43.** M. R. Healy, E. Carter, I. A. Fallis, **R. S. Forgan**, R. J. Gordon, E. Kamenetzky, J. B. Love, C. A. Morrison, D. M. Murphy and P. A Tasker "An EPR/ENDOR and Computational Study of Outer Sphere Interactions in Copper Complexes of Phenolic Oximes" *Inorg. Chem.*, 2015, **54**, 8465–8473.
**(Impact factor = 4.6, 11 citations)**.

***42.** R. J. Marshall, S. L. Griffin, C. Wilson and **R. S. Forgan*** "Single-Crystal to Single-Crystal Mechanical Contraction of Metal-Organic Frameworks through Stereoselective Postsynthetic Bromination" *J. Am. Chem. Soc.*, 2015, **137**, 9527–9530.
**(Impact factor = 15.0, 120 citations)**.

***41. R. S. Forgan***, R. J. Marshall, M. Struckmann, A. B. Bleine, D. –L. Long, M. C. Bernini and D. Fairen-Jimenez "Structure-Directing Factors when Introducing Hydrogen Bond Functionality to Metal-Organic Frameworks" *CrystEngComm*, 2015, **17**, 299–306.
**(Impact factor = 3.1, 32 citations)**.

***40.** C. V. McGuire and **R. S. Forgan*** "The Surface Chemistry of Metal-Organic Frameworks" *Chem. Commun.*, 2015, **51**, 5199–5217.
*Invited article for Emerging Investigators Issue 2015.*
*One of top 25 most downloaded articles in April 2015-March 2016.*
**(Impact factor = 4.9, 325 citations)**.

***39. R. S. Forgan*** "Edible Metal-Organic Frameworks" in *Metal-Organic Framework Materials*, 2014, edited by Leonard R. MacGillivray and Charles M. Lukehart. Chichester, UK: John Wiley & Sons, Ltd.
**(No impact factor, 13 citations)**.

***38.** P. J. Kitson, R. J. Marshall, D. Long, **R. S. Forgan*** and L. Cronin "3D Printed High-Throughput Hydrothermal Reactionware for Discovery, Optimization, and Scale-Up" *Angew. Chem. Int. Ed.*, 2014, **53**, 12723–12728.
*Featured in RSC Chemistry World 6th August 2014.*
*Featured in Nature Chemistry News and Views, 2014, **6**, 953–954.*
**(Impact factor = 16.6, 121 citations)**.

**37. R. S. Forgan**, A. K. Blackburn, M. M. Boyle, S. T. Schneebeli and J. F. Stoddart "The Topological and Chemical Implications of Introducing Oriented Rings to [3]Catenanes" *Supramol. Chem.*, 2014, **26**, 192–201.
*Special Issue for the 8th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC-8).*
**(Impact factor = 3.3, 4 citations)**.

**36.** K. J. Hartlieb, A. K. Blackburn, S. T. Schneebeli, **R. S. Forgan**, A. A. Sarjeant, C. L. Stern, D. Cao and J. F. Stoddart "Topological Isomerism in a Chiral Handcuff Catenane" *Chem. Sci.*, 2014, **5**, 90–100.
*Featured in RSC Chemistry World 9th September 2013.*
**(Impact factor = 8.4, 19 citations)**.

**35.** P. Yin, T. Li, **R. S. Forgan**, C. Lydon, X. Zuo, N. Zheng, B. Lee, L. Cronin and T. Liu "Exploring the Programmable Assembly of a Polyoxometalate-Organic Hybrid via Metal Ion Coordination" *J. Am. Chem. Soc.*, 2013, **135**, 13425–13432.
**(Impact factor = 15.0, 75 citations)**.

**34.** K. J. Hartlieb, A. N. Basuray, C. Ke, A. A. Sarjeant, H. –P. Jacquot de Rouville, T. Kikuchi, **R. S. Forgan**, J. W. Kurutz and J. F. Stoddart "Chameleonic Binding of the Dimethyldiazapero-pyrenium Dication by Cucurbit[8]uril" *Asian J. Org. Chem.*, 2013, **2**, 225–229.
**(Impact factor = 2.7, 10 citations)**.

**33. R. S. Forgan**, J. J. Gassensmith, D. B. Cordes, M. M. Boyle, K. J. Hartlieb, D. C. Friedman, A. M. Z. Slawin and J. F. Stoddart "Self-Assembly of a [2]Pseudorota[3]Catenane in Water" *J. Am. Chem. Soc.*, 2012, **134**, 17007–17010.
**(Impact factor = 15.0, 34 citations)**.

**32.** M. M. Boyle, J. J. Gassensmith, A. C. Whalley, **R. S. Forgan**, R. A. Smaldone, K. J. Hartlieb, A. K. Blackburn, J.-P. Sauvage and J. F. Stoddart "Stereochemistry of Molecular Figure-of-Eights" *Chem. Eur. J.*, 2012, **18**, 10312–10323.
*Selected as a VIP paper.*
**(Impact factor = 4.3, 17 citations)**.

**31.** G. Barin, **R. S. Forgan** and J. F. Stoddart "Mechanostereochemistry and the Mechanical Bond" *Proc. R. Soc. A*, 2012, **468**, 2849–2880.
*Featured on the front cover of Volume **469** (2013).*
*3rd most accessed article in PRSA in 2012.*
**(Impact factor = 3.213, 53 citations)**.

**30.** J. J. Gassensmith, R. A. Smaldone, **R. S. Forgan**, C. E. Wilmer, D. Cordes, Y. Y. Botros, A. M. Z. Slawin, R. Q. Snurr and J. F. Stoddart "Polyporous Metal Coordination Frameworks" *Org. Lett.*, 2012, **14**, 1460–1463.
**(Impact factor = 5.2, 42 citations)**.

**29. R. S. Forgan**, R. A. Smaldone, J. J. Gassensmith, H. Furukawa, D. Cordes, Q. Li, C. E. Wilmer, Y. Y. Botros, R. Q. Snurr, A. M. Z. Slawin and J. F. Stoddart "Nanoporous Carbohydrate Frameworks" *J. Am. Chem. Soc.*, 2012, **134**, 406–417.
*Highlighted in Science, 6th January 2012.*
**(Impact factor = 15.0, 277 citations)**.

**28.** G. W. Bates, J. E. Davidson, **R. S. Forgan**, P. A. Gale, D. K. Henderson, M. G. King, M. E. Light, S. J. Moore, P. A. Tasker and C. C. Tong "A Dual Host Approach to $NiSO_4$ Extraction" *Supramol. Chem.*, 2012, **24**, 117–126.
**(Impact factor = 3.3, 10 citations)**.

**27. R. S. Forgan**, C. Wang, D. C. Friedman, J. M. Spruell, C. L. Stern, A. A. Sarjeant, D. Cao and J. F. Stoddart "Donor-Acceptor Ring-in-Ring Complexes" *Chem. Eur. J.*, 2012, **18**, 202–212.
**(Impact factor = 4.3, 36 citations)**.

**26.** M. M. Boyle, **R. S. Forgan**, D. C. Friedman, J. J. Gassensmith, R. A. Smaldone, J. F. Stoddart and J.-P. Sauvage "Donor–Acceptor Molecular Figures-of-Eight" *Chem. Commun.*, 2011, **47**, 11870–11872.
**(Impact factor = 4.9, 38 citations)**.

**25.** J. J. Gassensmith, H. Furukawa, R. A. Smaldone, **R. S. Forgan**, Y. Y. Botros, O. M. Yaghi and J. F. Stoddart "Strong and Reversible Binding of $CO_2$ in a Green Metal-Organic Framework" *J. Am Chem Soc.*, 2011, **133**, 15312–15315.
*Featured in The Daily, Science Daily, Discovery Channel News and more.*
**(Impact factor = 15.0, 375 citations)**.

**24. R. S. Forgan**, J.-P. Sauvage and J. F. Stoddart "Chemical Topology: Complex Molecular Knots, Links and Entanglements" *Chem. Rev.*, 2011, **111**, 5434–5464.
**(Impact factor = 62.1, 726 citations)**.

**23. R. S. Forgan**, B. D. Roach, P. A. Wood, F. J. White, J. Campbell, D. K. Henderson, E. Kamenetzky, F. E. McAllister, S. Parsons, E. Pidcock, P. Richardson, R. M. Swart and P. A. Tasker "Using the Outer Coordination Sphere to Tune the Strength of Metal Extractants" *Inorg. Chem.*, 2011, **50**, 4515–4522.
**(Impact factor = 4.6, 35 citations)**.

**22.** N. L. Strutt, **R. S. Forgan**, J. M. Spruell, Y. Y. Botros and J. F. Stoddart "Monofunctionalized Pillar[5]arene as a Host for Alkanediamines" *J. Am. Chem. Soc.*, 2011, **133**, 5668–5671.
**(Impact factor = 15.0, 476 citations)**.

**21.** A. Coskun, J. M. Spruell, G. Barin, A. C. Fahrenbach, **R. S. Forgan**, M. T. Colvin, R. Carmielli, D. Benítez, E. Tkatchouk, D. C. Friedman, A. A. Sarjeant, M. R. Wasielewski, W. A. Goddard III and J. F. Stoddart, "Mechanically Stabilized Tetrathiafulvalene Radical Dimers" *J. Am. Chem. Soc.*, 2011, **133**, 4538–4547.
*Featured in RSC Chemistry World, 7 March 2011.*
**(Impact factor = 15.0, 111 citations)**.

**20.** S. Han, Y. Wei, C. A. Valente, **R. S. Forgan**, J. J. Gassensmith, R. A. Smaldone, H. Nakanishi, A. Coskun, J. F. Stoddart and B. A. Grzybowski "Imprinting Chemical and Responsive Micropatterns into Metal-Organic Frameworks" *Angew. Chem. Int. Ed.*, 2011, **50**, 276–279.

**(Impact factor = 16.6, 66 citations)**.

**19.** C. D. Meyer, **R. S. Forgan**, K. S. Chichak, A. J. Peters, N. Tangchaivang, G. W. V. Cave, S. I. Khan, S. J. Cantrill, and J. F. Stoddart "The Dynamic Chemistry of Molecular Borromean Rings and Solomon Knots" *Chem. Eur. J.*, 2010, **16**, 12570–12581.
*Featured as a Spotlight in Angew. Chem. 2010, **49**, 8554-8556.*
**(Impact factor = 4.3, 94 citations)**.

**18.** R. A. Smaldone,† **R. S. Forgan**,† H. Furukawa, J. J. Gassensmith, A. M. Z. Slawin, O. M. Yaghi and J. F. Stoddart "Metal-Organic Frameworks from Edible Natural Products" *Angew. Chem. Int. Ed.*, 2010, **49**, 8630–8634.
† *Co-first authors*
*Featured on the front cover of Issue 46, November 2010, and in the New York Times, Frankfurt Allgemeine Zeitung, Nature Chemistry, Angewandte Chemie, New Scientist, Chemistry World, C&E News, Science Daily and more.*
**(Impact factor = 16.6, 614 citations)**.

**17.** J. M. Spruell, A. Coskun, D. C. Friedman, **R. S. Forgan**, A. A. Sarjeant, A. Trabolsi, A. C. Fahrenbach, G. Barin, W. F. Paxton, S. K. Dey, M. A. Olson, D. Benítez, E. Tkatchouk, M. T. Colvin, R. Carmielli, S. T. Caldwell, G. M. Rosair, S. G. Hewage, F. Duclairoir, J. L. Seymour, A. M. Z. Slawin, W. A. Goddard III, M. R. Wasielewski, G. Cooke and J. F. Stoddart "Highly Stable TTF Radical Dimers in [3]Catenanes" *Nature Chem.*, 2010, **2**, 870–879.
**(Impact factor = 24.274, 168 citations)**.

**16. R. S. Forgan**, D. C. Friedman, C. L. Stern, C. J. Bruns, J. F. Stoddart "Directed Self-Assembly of a Ring-in-Ring Complex" *Chem. Commun.*, 2010, **46**, 5861–5863.
*Featured on the front cover of Issue 32, August 2010.*
**(Impact factor = 4.9, 45 citations)**.

**15.** B. D. Roach, **R. S. Forgan**, P. A. Tasker, R. M. Swart, J. Campbell, F. E. McAllister, A. P. Stopford and B. J. Duncombe "Collision Induced Dissociation (CID) to Probe the Outer Sphere Coordination Chemistry of bis-Salicylaldoximate Complexes" *Dalton Trans.*, 2010, **39**, 5614–5616.
**(Impact factor = 4.0, 6 citations)**.

**14. R. S. Forgan**, J. E. Davidson, F. P. A. Fabbiani, S. G. Galbraith, D. K. Henderson, S. A. Moggach, S. Parsons, P. A. Tasker and F. J. White "Cation and Anion Selectivity of Zwitterionic Salicylaldoxime Metal Salt Extractants" *Dalton Trans.*, 2010, **39**, 1763–1770.
*Featured as an RSC Highlight in Chemical Technology, 18 January 2010.*
**(Impact factor = 4.0, 24 citations)**.

**13. R. S. Forgan**, J. M. Spruell, J.-C. Olsen, C. L. Stern and J. F. Stoddart, "Towards the Stepwise Assembly of Molecular Borromean Rings. A Donor-Acceptor Ring-in-Ring Complex" *J. Mex. Chem. Soc.*, 2009, **53**, 134–138.
*Special Edition Dedicated to the Memory of Ernest L. Eliel.*
**(Impact factor = 1.5, 18 citations)**.

**12.** M. Wenzel, **R. S. Forgan**, A. Faure, K. Mason, P. A. Tasker, S. Piligkos, E. K. Brechin and P. G. Plieger "A New Polynuclear Coordination Mode in Cu(II)-Salicylaldoxime Complexes: Structure and Magnetics of a $Cu_6$-Oxime Cluster" *Eur. J. Inorg. Chem.*, 2009, **31**, 4613–4617.
**(Impact factor = 2.3, 33 citations)**.

**11.** P. A. Wood, **R. S. Forgan**, S. Parsons, E. Pidcock and P. A. Tasker "3-Fluorosalicylaldoxime at 6.5 GPa" *Acta Cryst.*, 2009, **E65**, o2001.
**(Impact factor not available, 1 citation)**.

**10.** M. Wenzel, G. B. Jameson, L. A. Ferguson, Q. W. Knapp, **R. S. Forgan**, F. J. White, S. Parsons, P. A. Tasker, P. G. Plieger "Anion-Induced Contraction of Helical Receptors" *Chem. Commun.*, 2009, 3606–3608.
**(Impact factor = 4.9, 17 citations)**.

**09. R. S. Forgan**, J. E. Davidson, S. G. Galbraith, D. K. Henderson, S. Parsons, P. A. Tasker and F. J. White "Transport of Metal Salts by Zwitterionic Ligands; Simple but Highly Efficient Salicylaldoxime Extractants" *Chem. Commun.*, 2008, 4049–4051.
**(Impact factor = 4.9, 20 citations)**.

**08. R. S. Forgan**, D. K. Henderson, F. E. McAllister, S. Parsons, P. A. Tasker, F. J. White, J. Campbell and R. M. Swart "Copper Extractant Strength: The Effects of 3-Substitution on Hydroxyoxime Extractant Strength" *Can. Metall. Quart.*, 2008, **47**, 293–300.
**(Impact factor = 0.9, 2 citations)**.

**07.** P. A. Wood, **R. S. Forgan**, A. R. Lennie, S. Parsons, E. Pidcock, P. A. Tasker and J. E. Warren "The Effect of Pressure and Substituents on the Size of Pseudo-Macrocyclic Cavities in Salicylaldoxime Ligands" *CrystEngComm*, 2008, 239–251.
**(Impact factor = 3.1, 17 citations)**.

**06. R. S. Forgan**, P. A. Wood, J. Campbell, D. K. Henderson, F. E. McAllister, S. Parsons, E. Pidcock, R. M. Swart and P. A. Tasker "Supramolecular Chemistry in Metal Recovery; H-Bond Buttressing to Tune Extractant Strength" *Chem. Commun.*, 2007, 4940–4942.
**(Impact factor = 4.9, 20 citations)**.

**05. R. S. Forgan**, S. Parsons, P. A. Tasker and F. J. White "3-(5-*tert*-Butyl-2-hydroxybenzyl)propanoic acid" *Acta Cryst.*, 2007, **E63**, o3249.
**(Impact factor not available, 0 citations)**.

**04.** P. A. Wood, **R. S. Forgan**, S. Parsons, E. Pidcock and P. A. Tasker "3-Fluorosalicylaldoxime" *Acta Cryst.*, 2007, **E63**, o3132.
**(Impact factor not available, 2 citations)**.

**03.** P. A. Wood, **R. S. Forgan**, S. Parsons, E. Pidcock and P. A. Tasker "3-Hydroxysalicylaldoxime" *Acta Cryst.*, 2007, **E63**, o3131.
**(Impact factor not available, 3 citations)**.

**02.** P. A. Wood, **R. S. Forgan**, S. Parsons, E. Pidcock and P. A. Tasker "Salicylaldoxime-III" *Acta Cryst.*, 2006, **E62**, o3944-o3946.
**(Impact factor not available, 10 citations)**.

**01.** P. A. Wood, **R. S. Forgan**, D. K. Henderson, S. Parsons, E. Pidcock, P. A. Tasker and J. E. Warren "Effect of Pressure on the Crystal Structure of Salicylaldoxime-I, and the Structure of Salicylaldoxime-II at 5.93 GPa" *Acta Cryst.*, 2006, **B62**, 1099–1111.
**(Impact factor = 0.9, 51 citations)**.