Detailed list of publications

- more than 60 articles published in international peer-reviewed journals and books
- 1073 citations for 60 publications. h index = 18. (Google Scholar citation tool)

1. Peer-reviewed articles (original publications) *corresponding author (*)*

[1] M. Monachon, M. Albelda-Berenguer, T. Lombardo, E. Cornet, F. Moll-Dau, J. Schramm, K. Schmidt-Ott, **E. Joseph***. (2021). Evaluation of an alternative bio-treatment for the extraction of harmful iron and sulfur species from waterlogged wood. *European Physical Journal* 136, 937. https://doi.org/10.1140/epjp/s13360-021-01908-9

[2] S. James, **E. Joseph***. (2021). Microbial-Driven Stabilisation of Archaeological Iron Artefacts. *Corrosion and Materials Degradation*, *2*(2), 274-292. https://doi.org/10.3390/cmd2020015

[3] A. Passaretti, L. Cuvillier, G. Sciutto, E. Guilminot, **E. Joseph*** (2021). Biologically Derived Gels for the Cleaning of Historical and Artistic Metal Heritage. *Applied Sciences*, 11(8), 3405. https://doi.org/10.3390/app11083405

[4] E. Joseph* (2021). Biopassivation method for the preservation of copper and bronze artefacts. *Frontiers in Materials*, *7*, 475. https://doi.org/10.3389/fmats.2020.613169

[5] M. Monachon, M. Albelda-Berenguer, C. Pelé, E. Cornet, E. Guilminot, C. Rémazeilles, **E. Joseph***. (2020). Characterization of model samples simulating degradation processes induced by iron and sulfur species on waterlogged wood. *Microchemical Journal*, *155*, 104756. *5 citations* https://doi.org/10.1016/j.microc.2020.104756

[6] M. Monachon, M. Albelda-Berenguer, T. Lombardo, E. Cornet, F. Moll-Dau, J. Schramm, K. Schmidt-Ott, **E. Joseph***. (2020). Evaluation of Bio-Based Extraction Methods by Spectroscopic Methods. *Minerals*, *10*(2), 203. *8 citations* https://doi.org/10.3390/min10020203

[7] L. Comensoli, M. Albini, W. Kooli, J. Maillard, T. Lombardo, P. Junier, **E. Joseph***. (2020). Investigation of Biogenic Passivating Layers on Corroded Iron. *Materials*, *13*(5), 1176. 2 *citations* https://doi.org/10.3390/ma13051176

[8] **E. Joseph***, P. Junier. (2020). Metabolic processes applied to endangered metal and wood heritage objects: Call a microbial plumber! *New Biotechnology*, 56, 21-26. *7 citations* https://doi.org/10.1016/j.nbt.2019.11.003

[9] N. Gutknecht, **E. Joseph***. Stabilisation of archaeological copper alloy objects from chlorides-induced active corrosion with Beauveria bassiana. In *Metal 2019 Proceedings of the Interim Meeting of the ICOM-CC Metals Working Group*, September 2-6, 2019, Neuchâtel Switzerland. C. Chemello, L. Brambilla, E. Joseph, Eds. International Council of Museums Committee for Conservation (ICOM-CC) and Haute Ecole Arc Conservation-restauration (HE-Arc CR): Paris, 2020; ISBN 978-92-9012-458-0, 257-260. 2 *citations*

[10] L. Comensoli, W. Kooli, M. Monachon, M. Albini, P. Junier, **E. Joseph***. The potential of microorganisms for the conservation-restoration of iron artworks. In *Metal 2019 Proceedings of the Interim Meeting of the ICOM-CC Metals Working Group.* Chemello, C.; Brambilla, L.; Joseph, E., Eds. International Council of Museums Committee for Conservation (ICOM-CC) and Haute Ecole Arc Conservation-restauration (HE-Arc CR): Neuchatel, Switzerland, 2019; ISBN 978-92-9012-458-0, 242-249. 4 *citations*

[11] W. M. Kooli, T. Junier, M. Shakya, M. Monachon, K. W. Davenport, K. Vaideeswaran, A. Vernudachi, I. Marozau, T. Monrouzeau, C. D. Gleasner, C. D., K.McMurry, R. Lienhard, L. Rufener, J-L. Perret, O. Sereda, P. S. Chain, **E. Joseph***, P. Junier*. (2019). Remedial treatment of corroded iron objects by environmental Aeromonas isolates. *Applied Environmental Microbiology*, 85 (3), e02042-18. *7 citations* https://doi.org/10.1128/AEM.02042-18

[12] M. Albelda-Berenguer, M. Monachon, C. Jacquet, P. Junier, C. Rémazeilles, E. J. Schofield, **E. Joseph***. (2019). Biological oxidation of sulfur compounds in artificially degraded wood. *International biodeterioration & biodegradation*, 141, 62-70. *10 citations* https://doi.org/10.1016/j.ibiod.2018.06.009

[13] W.M. Kooli, L. Comensoli, J. Maillard, M. Albini, A. Gelb, P. Junier* & **E. Joseph***. (2018). Bacterial iron reduction and biogenic mineral formation for the stabilisation of corroded iron objects. *Scientific reports*, 8(1), 764. *24 citations* https://doi.org/10.1038/s41598-017-19020-3

[14] M. Albini, P. Letardi, L. Mathys, L. Brambilla, J. Schröter, P. Junier, E. Joseph. (2018). Comparison of a bio-based corrosion inhibitor versus benzotriazole on corroded copper surfaces. *Corrosion science*, *143*, 84-92. 33 *citations* https://doi.org/10.1016/j.corsci.2018.08.020

[15] P. Junier*, **E. Joseph**. (2017). Microbial biotechnology approaches to mitigating the deterioration of construction and heritage materials. *Microbial biotechnology*, 10(5), 1145-1148. *18 citations* https://doi.org/10.1111/1751-7915.12795

[16] L. Comensoli, J. Maillard, M. Albini, F. Sandoz, P. Junier, **E. Joseph***. (2017). Use of bacteria to stabilize archaeological iron. *Applied and Environmental Microbiology*, 83:e03478-16. *25 citations* https://doi.org/10.1128/AEM.03478-16

[17] M. Albini, C. Chiavari, E. Bernardi, C. Martini, L. Mathys, **E. Joseph*** (2017). Evaluation of the performances of a biological treatment on tin-enriched bronze. *Environmental Science and Pollution Research*, 24(3), 2150-2159. *6 citations* https://doi.org/10.1007/s11356-016-7361-2

[18] M. Albini, L. Comensoli, L. Brambilla, E. Domon Beuret, W. Kooli, L. Mathys, P. Letardi, **E. Joseph*** (2016). Innovative biological approaches for metal conservation. *Materials and Corrosion*, 67(2), 200-206. *15 citations* https://doi.org/10.1002/maco.201408168

[19] M. Albini, C. Chiavari, E. Bernardi, C. Martini, L. Mathys, P. Letardi, P. Junier, **E. Joseph***. Evaluation of the influence of alloying elements on the performances of a biological treatment. In *METAL 2016 Proceedings of the Interim Meeting of the ICOM-CC Metal Working Group, September 26-30, 2016, New Delhi India. R.* Mehon, C. Chemello, A. Pandya, Eds. International Council of Museums Committee for Conservation (ICOM-CC) and Indira Gandhi National Centre for the Arts (IGNCA): Paris, 2016; ISBN 9789290124184, 306-313.

[20] P. Letardi*, B. Ramírez-Barat, M. Albini, P. Traverso, E. Cano and **E. Joseph**. Copper alloys and weathering steel used in outdoor monuments: Weathering in an urban-marine environment. *In METAL 2016 Proceedings of the Interim Meeting of the ICOM-CC Metal Working Group, September 26-30, 2016, New Delhi India. R.* Mehon, C. Chemello, A. Pandya, Eds. International Council of Museums Committee for Conservation (ICOM-CC) and Indira Gandhi National Centre for the Arts (IGNCA): Paris, 2016; ISBN 9789290124184, 320-328.

[21] E. Joseph*, P. Junier, M. Albini, P. Letardi, E. Domon Beuret, L. Brambilla, L. Mathys, C. Cevey, R. Bertholon. Biologically induced patina for metal built heritage. In *Metalli in architettura. Atti del 31° convegno scienza e beni culturali, Bressanone, Italy, 30th June- 3rd July 2015.* G. Biscontin, G. Driussi, Eds. ARCADIA ricerche srl: Marghera, 2015; ISBN 9788895409191, 273-282.

[22] E. Domon Beuret, L. Mathys, L. Brambilla, M. Albini, C. Cevey, R. Bertholon, P. Junier, **E. Joseph***. Biopatines: des champignons au service des alliages cuivreux. In Cahier Technique n°22 – XXVIIIe Journées des restaurateurs en archéologie. Arles, octobre 2014. ARAAFU: Paris, 2015; ISBN 2-907465-24-4.

[23] E. Joseph*, M. Albini, P. Letardi, E. Domon Beuret, L. Brambilla, L. Mathys, C. Cevey, R. Bertholon, D. Job, P. Junier. *BIOPATINAS: Innovative biological patinas for copper-based artefacts.* In *Open Air Metal, Outdoor Metallic Sculpture from the XIXth to the Beginning of the XXth Century: Identification, Conservation, Restoration*. A. Azéma, A. Texier, SFIIC - Section Française de l'Institut International de Conservation, Eds. ICOMOS France: Paris, 2014; ISBN 9782905430182, 154-162.

[24] E. Joseph*, P. Letardi, M. Albini, L. Comensoli, W. Kooli, L. Mathys, E. Domon Beuret, L. Brambilla, C. Cevey, R. Bertholon, D. Job, P. Junier. Innovative biological approaches for metal conservation. In *EUROCORR 2014, European Corrosion Congress « Improving materials durabilty: from cultural heritageto industrial applications » Pisa, Italy, 8th-12th September 2014*. DECHEMA e.V., Frankfurt and AIM – Associazione Italiana di Metallurgia, Milano, 2014; ISBN 9783897461598, 1-10. *2 citations*

[25] E. Joseph*, P. Letardi, L. Comensoli, A. Simon, P. Junier, D. Job & M. Woerle. Assessment of a biological approach for the protection of copper alloys artefacts. In *METAL* 2013 *Interim Meeting of the ICOM-CC Metal Working Group Conference Proceedings, Edinburgh, Scotland, 16th-20th September 2013*. E. Hyslop, V. Gonzalez, L. Troalen, L. Wilson, Eds. Historic Scotland and International Council of Museums: Edinburgh, 2013; ISBN 9781849171427, 203-208. *11 citations*

[26] S. Gulzar, M. Wörle, J-P. Burg, M. Nawaz Chaudhry, **E. Joseph**, E. Reusser. (2013). Characterization of 17th Century Mughal tiles glazes from Shahdara Complex, Lahore-Pakistan. *Journal of Cultural Heritage*, 14(2), 174-179. *21 citations* https://doi.org/10.1016/j.culher.2012.03.007

[27] E. Joseph*, A. Simon, R. Mazzeo, D. Job, M. Wörle. (2012). Spectroscopic characterization of an innovative biological treatment for corroded metal artefacts. *Journal of Raman Spectroscopy*, 43, 1612-1616. *20 citations* https://doi.org/10.1002/jrs.4164

[28] E. Joseph*, S. Cario, A. Simon, M. Wörle, R. Mazzeo, P. Junier, D. Job. (2012). Protection of metal artefacts with the formation of metal-oxalates complexes by *Beauveria bassiana. Frontiers in Microbiotechnology*, 2, 1-8. *51 citations* https://doi.org/10.3389/fmicb.2011.00270

[29] E. Joseph*, A. Simon, S. Prati, M. Wörle, D. Job, R. Mazzeo. (2011). Development of an analytical procedure for evaluation of the protective behaviour of innovative fungal patinas on archaeological and artistic metal artefacts. *Analytical and Bioanalytical Chemistry*, 399, 2899-2907. (*Paper in forefront and cover image*). *21 citations* https://doi.org/10.1007/s00216-010-4279-2

[30] S. Prati, **E. Joseph**, G. Sciutto R. Mazzeo*. (2010). New Advances in the Application of FTIR Microscopy and Spectroscopy for the Characterization of Artistic Materials. *Accounts of Chemical Research*, 43, 792–801. *159 citations (equal contribution as first author, data collection, analysis and interpretation of results, draft manuscript preparation)* https://doi.org/10.1021/ar900274f

[31] E. Joseph, S. Prati, G. Sciutto, M. Ioele, P. Santopadre, R. Mazzeo*. (2010). Performance evaluation of mapping and linear imaging FTIR microspectroscopy for the characterization of paint cross sections. *Analytical and Bioanalytical Chemistry*, 396, 899 – 910. *57 citations* https://doi.org/10.1007/s00216-009-3269-8

[32] E. Joseph, C. Ricci, S.G. Kazarian*, R. Mazzeo*, S. Prati, M. Ioele. (2010). Macro-ATR-FT-IR spectroscopic imaging analysis of paint cross-sections. *Vibrational Spectroscopy*, 53, 274-278. *44 citations* https://doi.org/10.1016/j.vibspec.2010.04.006

[33] E.L. Kendix, S. Prati, R. Mazzeo*, **E. Joseph**, G. Sciutto, C. Fagnano. (2010). Far infrared spectroscopy in the field of cultural heritage. *e-Preservation Science*, 7, 8 – 13. *18 citations (participation to study design, data collection, analysis and interpretation of results)* http://www.morana-rtd.com/e-preservationscience/2010/Kendix-27-06-2008.pdf

[34] M. Menu*, E. Itié, E. Ravaud, M. Eveno, E. Lambert, E. Laval, I. Reiche, R. Mazzeo*, M. L. Amadori, I. Bonacini, **E. Joseph**, S. Prati and G. Sciutto. Examination of the Uomini Illustri: looking for the origins of the portraits in the Studiolo of the Ducal Palace of Urbino. Part I. In *Studying Old Master Paintings: Technology and Practice*. M. Spring, Ed. Archetype publications: London, 2010 ; ISBN 9781904982630, 37-43. *1 citation (participation to study design, data collection, analysis and interpretation of results)*

[35] R. Mazzeo*, M. Menu*, M. L. Amadori, I. Bonacini, E. Itié, M. Eveno, **E. Joseph**, E. Lambert, E. Laval, S. Prati, E. Ravaud and G. Sciutto. Examination of the Uomini Illustri: looking for the origins of the portraits in the Studiolo of the Ducal Palace of Urbino. Part II. In *Studying Old Master Paintings: Technology and Practice*. M. Spring, Ed. Archetype publications : London, 2010 ; ISBN 9781904982630, 44-51. *3 citations (alphabetic order excepted group leaders in 1st position, participation to study design, data collection, analysis and interpretation of results)*

[36] R. Mazzeo*, **E. Joseph**, S. Prati, M. Tao, G. Gautier and L. M. van Valen. Scientific investigation on traditional manufacturing technique used in Yuan Dynasty mural paintings. In *Conservation of Ancient Sites on the Silk Road. Proceedings of the second international conference on the Conservation of Grotto Sites, Mogao Grottoes, Dunhuang, People Republic of China, June 28-July 3, 2004*. A. Neville, Ed. Getty conservation institute: Los Angeles, CA 2010; ISBN 9781606060131, 275-285. *4 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[37] E. Kendix, S. Prati, **E. Joseph**, G. Sciutto, R. Mazzeo*. (2009). ATR and transmission Analysis of pigments by means of far infrared spectroscopy. *Analytical and Bioanalytical Chemistry*, 394, 1023-1032. *27 citations (participation to study design, data collection)* https://doi.org/10.1007/s00216-009-2691-2

[38] R.Mazzeo*, S. Prati, M. Quaranta, **E. Joseph**, E. Kendix, M. Galeotti. (2008). Attenuated Total Reflection microFTIR characterization of pigment-binder interaction in reconstructed paint films. *Analytical and Bioanalytical Chemistry*, 392, 65-76. *143 citations (participation to study design, data collection, analysis and interpretation of results, draft manuscript preparation)* https://doi.org/10.1007/s00216-008-2126-5

[39] E. Kendix, G. Moscardi, P. Baraldi, R. Mazzeo*, S. Prati, **E. Joseph**, S. Capelli. (2008). Far Infrared and Raman spectroscopy analysis of inorganic pigments. *Journal of Raman Spectroscopy*, 39 (8), 1104-1112. *48 citations (participation to study design, data collection)* https://doi.org/10.1002/jrs.1956

[40] E. Kendix, S. Prati, R. Mazzeo*, **E. Joseph**, G. Sciutto. (2008). Far infrared spectroscopy of pigments in art. *Meddelelser om Konservering*, 2, 3-10. *1 citation (participation to study design, data collection)*

[41] R. Mazzeo*, S. Bittner, D. Job, G. Farron, R. Fontinha, **E. Joseph**, P. Letardi, M. Mach, S. Prati, M. Salta, A. Simon. Development and Evaluation of New Treatments for Outdoor Bronze Monuments. In *Conservation Science 2007*, J. Townsend, L. Toniolo, F. Cappitelli, Eds. Archetype publications: London, 2008; ISBN 9781904982340, 40-48. *12 citations ((alphabetic order excepted group leaders, participation to study design, data collection, analysis and interpretation of results, draft manuscript preparation)*

[42] R. Mazzeo*, S. Prati, **E. Joseph**. Falsificazione di bronzi archeologici in estremo oriente. In *Giornata di studio Vero e falso nelle opere d'arte e nei materiali storici: il ruolo dell'archeometria*. Accademia Nazionale dei Lincei, Ed. Bardi Editore: Roma, 2008; ISBN 9788821809927, 141-160. *(data collection, analysis and interpretation of results)*

[43] R. Mazzeo*, **E. Joseph**, S. Prati, A. Millemaggi. (2007). Attenuated Total Reflection-Fourier transform infrared microspectroscopic mapping for the characterisation of paint cross-sections. *Analytica Chimica Acta*, 599, 107-117. *87 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)* https://doi.org/10.1016/j.aca.2007.07.076

[44] R. Mazzeo* & **E. Joseph**. (2007). Attenuated total reflectance microspectroscopy mapping for the characterisation of bronze corrosion products. *European Journal of Mineralogy*, 19 (3), 363-371. *16 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)* https://doi.org/10.1127/0935-1221/2007/0019-1733

[45] C. Di Francesco, M. Ragazzino, B. Ferriani, M. Matteini*, M. Realini, C. Conti, R. Mazzeo*, **E. Joseph**, S. Prati. Esperienze innovative e conferme nei trattamenti a base di ossalati solubili su superfici lapidee e leghe metalliche: intervento e monitoraggio nel cantiere del portale di Santa Maria delle Grazie a Milano. In *Il consolidamento degli apparati architettonici e decorativi: conoscenze, orientamenti, esperienze. Atti del convegno di Studi Scienze e beni culturali, Bressanone, 10-13 luglio 2007*. G. Biscontin, G. Driussi, Eds. ARCADIA ricerche srl: Marghera, 2007; ISBN 9788895409115, 245-256. *2 citations (data collection, analysis and interpretation of results, draft manuscript preparation for Mazzeo's group)*

[46] **E. Joseph***, P. Letardi, R. Mazzeo, S. Prati, M. Vandini. Innovative Treatments for the Protection of Outdoor Bronze Monuments. In *Metal 07: Interim Meeting of ICOM-CC Metal WG Amsterdam, 17-21 September 2007*. C. Degrigny, R. van Langh, I. Joosten, B. Ankersmit, *et al.*, Eds. Rijksmuseum: Amsterdam, 2007; 71-77. *25 citations*

[47] R. Mazzeo*, **E. Joseph**, S. Prati, V. Minguzzi, G. C. Grillini, P. Baraldi & D. Prandstraller. Scientific examination of mural paintings of the Koguryo Tombs. In *Mural paintings of the Silk Road. Cultural Exchanges Between East and West*. K. Yamauchi, Y.Taniguchi and T. Uno, Eds. Archetype Publications: London, 2007; ISBN 9781904982227, 163-172. *1 citation (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[48] R. Mazzeo*, **E. Joseph**, V. Minguzzi, F. Modugno & S. Prati. Indagini scientifiche sui dipinti murali della dinastia Yuan (1279-1368 D.C.) situati nel sito archeologico di Yao Wang Shan, Cina. In *Diagnosi, conservazione e restauro di dipinti murali dell'estremo Oriente: quando oriente e occidente s'incontrano e si confrontano*. R. Mazzeo, Ed. Longo Editore: Ravenna, 2006; ISBN 8880635050, 65-79. *1 citation (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[49] R. Mazzeo, **E. Joseph**, V. Minguzzi, G. C. Grillini, P. Baraldi, D. Prandstraller. (2006). Scientific investigations of the Tokhung-Ri tomb mural paintings of the Koguryo era, Democratic People's Republic of Korea. *Journal of Raman Spectroscopy*, 37 (10), 1086-1097. *21 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)* https://doi.org/10.1002/jrs.1592

[50] R. Mazzeo* & **E. Joseph**. Applicazione di imaging multispettrale allo studio e conservazione di graffiti e dipinti murali siti nell'edificio delle ex-carceri, Palazzo Steri (Pa). In *Lo stato dell'Arte III: III Congresso Nazionale IGIIC,*

Palermo, Palazzo Steri, 21-25 Settembre 2005. Nardini Editore: Firenze, 2006; ISBN 40441441, 18-23. *4 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[51] R. Mazzeo* & **E. Joseph**. The use of FTIR micro-ATR spectroscopy and FTIR mapping for the surface characterisation of bronze corrosion products. In *Art'05. Proceedings of 8th International Conference on Non-Destructive Investigation and Microanalysis for the Diagnostics and Conservation of Cultural and Environmental Heritage. Lecce (Italy), 15-19 May 2005*. C. Parisi, G. Buzzanca and A. Paradisi, Eds. Italian Society for Non-Destructive Testing Monitoring Diagnostics (AIPnD): Lecce, 2005; ISBN 8889758015, B-179. *1 citation (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[52] R. Mazzeo* & **E. Joseph**. Micro-destructive analytical investigation for conservation and restoration. In *Monumenti in bronzo all'aperto. Esperienze di conservazione a confronto*. P. Letardi, I. Trentin and G. Cutugno, Eds. Nardini Editore: Firenze, 2004; ISBN 9788840440903, 53-58. *5 citations (corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

[53] T. R. Ward, J. Collot, J. Gradinaru, A. Loosli, M. Skander, C. Letondor, **E. Joseph**, and G. Klein. (2003) Exploiting the Second Coordination Sphere: Proteins as Host for Enantioselective Catalysis. *Chimia*, 57 (10), 586-588. *15 citations* https://doi.org/10.2533/000942903777678722

2. Monographs

[1] Microorganisms in the Deterioration and Preservation of Cultural Heritage. Joseph, E. (ed.). Springer Nature: Heidelberg, Germany, 2021; ISBN 978-3-030-69411-1. *3 citations* https://doi.org/10.1007/978-3-030-69411-1

[2] Application of FTIR microscopy to cultural heritage materials. PhD Dissertation thesis, Alma Mater Studiorum University of Bologna, Italy, 2009. *2 citations* https://doi.org/10.6092/unibo/amsdottorato/1404

3. Book contributions

[1] M. Monachon, M. Albelda-Berenguer, E. Joseph*. (2019). Biological oxidation of iron sulfides. *Advances in applied microbiology*, 107, 1-27. *8 citations* https://doi.org/10.1016/bs.aambs.2018.12.002

[2] M. Albelda-Berenguer, M. Monachon, E. Joseph*. (2019). Siderophores: From natural roles to potential applications. *Advances in applied microbiology*, 106, 193. *26 citations* https://doi.org/10.1016/bs.aambs.2018.12.001

[3] S. Bindschedler, T.Q.T. Vu Bouquet, D. Job, E. joseph, P. Junier*. (2017). Fungal recovery of gold from e-waste. *Advances in Applied Microbiology*, 99, 53-81. *23 citations* https://doi.org/10.1016/bs.aambs.2017.02.002

[4] L. Comensoli, S. Bindschedler, P. Junier*, E. Joseph*. (2017). Iron and Fungal Physiology: A Review of Biotechnological Opportunities. *Advances in Applied Microbiology*, 98, 31–60. *18 citations* https://doi.org/10.1016/bs.aambs.2016.11.001

[5] E. Joseph*, S. Bindschedler, M. Albini, L. Comensoli, W. Kooli, L. Mathys. Microorganisms for Safeguarding Cultural Heritage. In The Fungal Community: Its Organization and Role in the Ecosystem, Fourth Edition. J. Dighton, J. F. White, Eds. CRC Press: Boca Raton, FL, USA, 2017; 509–518.

[6] M. Galeotti, **E. Joseph**, R. Mazzeo, S. Prati. Five chapters: 3. Canvas support (p.44), 4. Underdraying, ground/priming layers (p.54, 58, 65-66), 5. Paint layers (p.74, 82, 92, 104), 7. Varnish layers (p.122, 137, 142), 8. Non-destructive and micro destructive techniques (p.151-156) In *Scientific examination for the investigation of paintings. A handbook for conservators-restorers*. D. Pinna, M. Galeotti and R. Mazzeo, Eds. Centro Di: Firenze, 2009; ISBN 9788870384741. *7 citations (data collection, analysis and interpretation of results, draft manuscript preparation)*

[7] R. Mazzeo*, **E. Joseph**, G. Sciutto. Indagini di imaging multispettrale e analisi microFTIR per la caratterizzazione dei materiali originali e di restauro del globo celeste di V. Coronelli. In *Restaurare il cielo. Il restauro del globo celeste faentino di Vincenzo Coronelli*. N. Scianna, Ed. CLUEB: Bologna, 2008; ISBN 9788849130065, 48-61. *(corresponding author in 1st position, E.Joseph as 1st author, data collection, analysis and interpretation of results, draft manuscript preparation)*

4. Other pertinent publications

[1] **E. Joseph***, M. Albelda-Berenguer, E. Cornet, L. Cuvillier, S. James, L. Mathys, M. Monachon, A. Passaretti and S. Russo. (2020). Innovative approaches towards a green and sustainable metal conservation. *Chimia*, 74, 611. https://doi.org/10.2533/chimia.2020.611

[2] **E. Joseph***, D. Job, P. Junier, M. Wörle. MAIA: Microbes for Archaeological Iron Artefacts. (2013). *Bulletin of research on metal conservation BROMEC*, 34, 5. https://warwick.ac.uk/fac/sci/physics/research/condensedmatt/sims/bromec/bromec_34_english.pdf

[3] **E. Joseph***, D. Job, P. Letardi, R. Mazzeo, M. Wörle. (2012). Development and evaluation of an innovative biological treatment for the protection of metal artefacts. *Bulletin of research on metal conservation BROMEC*, 33, 9**.** https://warwick.ac.uk/fac/sci/physics/research/condensedmatt/sims/bromec/bromec_33_english.pdf