

Javier Vázquez Corral

Researcher. Applied Color Science

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OVERVIEW

I am a post-doctoral researcher in image processing and computational vision with extensive teaching experience in many aspects of mathematics and computer science. My main research area is computational color. I have developed novel approaches to solve different problems ranging from color constancy to color stabilization, color characterization, color gamut mapping, high dynamic range imaging, image dehazing, image denoising, and vision color properties such as unique hue prediction and color naming. I am first or second author in 20 publications in top-ranked journals, including IEEE-TPAMI, IEEE-TIP, and SIAM-SIIMS. I have a European Patent application, and more than eight years of post-doctoral experience in cutting-edge research labs in Spain, UK, Switzerland, and Canada, working in high-profile research projects. I have extensive experience in teaching in both undergraduate and master courses in Spain and the UK, with more of 800 hours of teaching already performed.

EDUCATION

PhD Computer Science 2011

Universitat Autònoma de Barcelona

“Colour Constancy in natural images through Colour Naming and Sensor Sharpening”.

Thesis advisor: M. Vanrell (UAB) / G.D. Finlayson (UEA).

Grade: Cum Laude.

MSc Advanced Computer Science 2007

Universitat Autònoma de Barcelona

BSc+MSc Mathematics 2006

Universitat de Barcelona

APPOINTMENTS

Postdoctoral researcher Jun. 2019-

Universitat Pompeu Fabra, Spain

Senior Research Associate Aug 2018-May 2019

University of East Anglia, United Kingdom

Juan de la Cierva-Incorporación Fellow Sept. 2016-Aug 2018

Universitat Pompeu Fabra, Spain

Visiting lecturer Sept. 2014-Sept. 2016

Universitat Pompeu Fabra, Spain

Postdoctoral researcher Oct. 2012-Sept. 2014

Universitat Pompeu Fabra, Spain

Postdoctoral researcher Sept. 2011-Sept. 2012

Universitat Autònoma de Barcelona, Spain

Associate lecturer

Sept. 2008-Sept. 2010

Universitat Autònoma de Barcelona, Spain

PhD Student fellow

Sept. 2006-Sept. 2008

Universitat Autònoma de Barcelona, Spain

SHORT STAYS

Postdoctoral researcher

Jul. 2011-Sept. 2011

EPFL, Switzerland

Visiting Postdoctoral researcher

May 2011-Jun. 2011

Simon Fraser University, Canada

Associate tutor

Jan. 2011-Apr. 2011

University of East Anglia, United Kingdom

Visiting Student

Feb. 2010-May 2010

University of East Anglia, United Kingdom

Visiting Student

Apr. 2009-Jul. 2009

University of East Anglia, United Kingdom

LANGUAGES

Spanish (Native), **Catalan** (Native), **English** (Fluent), **French** (Intermediate).

ACCREDITATIONS

- Acreditació de recerca (Associate Professor level), AQU-Generalitat de Catalunya. February 2016.
- Acreditació de professor lector (Assistant Professor level), AQU-Generalitat de Catalunya. September 2012.

PATENTS

1. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Method and system for color gamut mapping”, EP17382462.4, Patent filed, 2017.

INVITED TALKS

- 2019: Huawei workshop on Color and Multispectral Imaging, Belarus; Spectral Edge, Ltd, United Kingdom.
- 2018: Cortexica Ltd, United Kingdom.
- 2017: Linköping University, Sweden; Universidad Politécnica de Madrid, Spain; Universidad Rey Juan Carlos, Spain.

- 2015: University of East Anglia, United Kingdom; Computer Vision Center, Spain.
- 2013: Universitat Pompeu Fabra, Spain.
- 2012: University of Newcastle, United Kingdom; Leeds University, United Kingdom; University of Bradford, United Kingdom; Al Balqa University, Jordan.

THESES SUPERVISED

1. Raquel Gil Rodríguez – PhD-Co-supervised with M. Bertalmío; November 2018; “Digital camera colour processing pipeline for high dynamic range imaging and colour stabilisation for cinema”, *Universitat Pompeu Fabra*.
2. Syed Waqas Zamir – PhD-Co-supervised with M. Bertalmío; May 2017; “Perceptually-Inspired Gamut Mapping for Display and Projection Technologies”, *Universitat Pompeu Fabra*.

GRANTS

- Juan de la Cierva-Incorporación, Ministerio de Economía y Hacienda (MINECO), Gobierno de España, 64.000 €, 2015.
- Beques per a estades de recerca fora de Catalunya (BE), Generalitat de Catalunya (Marie Curie Actions), 6.200 €, 2010.
- Becas de movilidad para obtener la mención europea del título de doctor TME2008-01275, MICINN, Gobierno de España, 4.200 €, 2009.

AWARDS

- Best technology transfer project for the patent: “Method and system for color gamut mapping”, Universitat Pompeu Fabra, 10.000 €, 2017.

COMMITTEES AND ORGANIZATION ACTIVITIES

- **Examiner on 4 PhD Thesis and 9 MSc Thesis.**
 - **Lichao Zhang**, PhD Thesis, Universitat Autònoma de Barcelona (19/11/2019).
 - **Oriol Martínez**, PhD Thesis, Universitat Pompeu Fabra (04/02/2016).
 - **Marc Serra**, PhD Thesis, Universitat Autònoma de Barcelona (10/09/2015).
 - **Rao Anwer Muhammad**, PhD Thesis, Universitat Autònoma de Barcelona (16/07/2013).

General chair in:

- **London Imaging Meeting**, London, United Kingdom (04/2020).

Member of the organizing committee in:

- **Color and Imaging Conference**, Chiba, Japan (11/2020).
- **Color and Imaging Conference**, Paris, France (10/2019).
- **6th Annual catalan meeting in Computer Vision**, Barcelona, Spain (09/2019).

- **Color and Imaging Conference**, Vancouver, Canada (11/2018).
- **SIAM-IS mini-symposium on “Mathematical techniques for bad visibility restoration”**, Bologna, Italy (06/2018).
- **Color and Photometry in Computer Vision Workshop (in conjunction with ECCV)**, Firenze, Italy (10/2012).

Member of the local committee in:

- **Congrès Català d’Intel·ligència Artificial**. Local committee (10/2016).
- **3rd Annual catalan meeting in Computer Vision**. Local organizer (09/2016).
- **2nd Annual catalan meeting in Computer Vision**. Local organizer (09/2015).
- **1st Annual catalan meeting in computer Vision**. Local organizer (09/2014).
- **CVC Workshop on Research and development**. Organizer (10/2011).
- **New Trends in Pattern Recognition for Motion Analysis (PRMA’08)**. Local committee (17/2008).

Reviewer for:

- Journals: IEEE-TPAMI, SIAM-SIIMS, IEEE-TIP, IEEE-TCSVT, Signal Processing, ISPRS P&RS, IEEE-TDSC, IEEE-SPL, CVIU, Plos One, SP:IC, JOSA-A, Applied Optics, IEEE Access, DSP, CRA, Sensors, Information, OE (SPIE), JARS (SPIE), JEI, PRL, Mult. Syst., EURASIP-JIVP, JIST.
- Conferences: CVPR, ICCV, ECCV, AAAI, BMVC, ACCV, CVM, CIC, VISAPP, WCPCV.

PARTICIPATION IN RESEARCH PROJECTS

- Gammavision, **PI:** Marcelo Bertalmío **Start-End date:** 08/2018-01/2020, **Budget:** 150.000€, **Financed by:** European Research Council. Proof of Concept Grant.
- Gamut mapping for cinema, **PI:** Marcelo Bertalmío **Start-End date:** 04/2018-12/2018, **Budget:** 30.000€, **Financed by:** UPF Innovalora Project, ref: INNOV1715-1.
- SAUCE, **PI:** Marcelo Bertalmío, Josep Blat **Start-End date:** 01/2018-12/2020, **Budget:** 4.000.000€, **Financed by:** European Research Council: Horizon 2020, ref: 780470 .
- HDR4EU, **PI:** Marcelo Bertalmío, Josep Blat, **Start-End date:** 07/2017-06/2020, **Budget:** 2.300.000€, **Financed by:** European Research Council: Horizon 2020, ref: 761544.
- Juan de la Cierva-Incorporación Fellowship, **PI:** Javier Vazquez-Corral, **Start-End date:** 09/2016-09/2018, **Budget:** 64.000€, **Financed by:** Spanish Ministry of Science.
- Modelos de visión de contraste y color para cine, **PI:** Marcelo Bertalmío, **Start-End date:** 01/2016-12/2018, **Budget:** 64.493€, **Financed by:** Spanish Ministry of Science.
- Procesamiento de imágenes para realce de fotografía cinematográfica, **PI:** Marcelo Bertalmío, **Start-End date:** 01/2013-12/2015, **Budget:** 103.697€, **Financed by:** Spanish Ministry of Science.
- IP4EC: Image Processing for Enhanced Cinematography, **PI:** Marcelo Bertalmío, **Start-End date:** 10/2012-09/2017, **Budget:** 1.500.000 €, **Financed by:** European Research Council. Starting Grant 306337.

- Perceptual models for cinematography, **PI:** Marcelo Bertalmío, **Start-End date:** 10/2012-05/2014, **Budget:** 75.000€, **Financed by:** Spanish Ministry of Science.
- BioColTex: Introducción de información de color y mecanismos de atención a modelos bio-inspirados de visión por computador, **PI:** Maria Vanrell, **Start-End date:** 01/2011-12/2013, **Budget:** 123.000€, **Financed by:** Spanish Ministry of Science.
- Multimodal Interaction in Pattern Recognition and Artificial Vision, **PI:** Enrique Vidal, **Start-End date:** 01/2007-12/2011, **Budget:** 397.700€, **Financed by:** Spanish Ministry of Science.
- CREATE – Colour Research for European Advanced Technology Employment, **PI:** Carinna Parraman, **Start-End date:** 01/2007-12/2010 **Budget:** 532.363 €, **Financed by:** European Commission Marie Curie Actions FP6 mobility- Conference and Training Courses 45963.
- Colour Vision Content Management: modeling spatial perception and semantics, **PI:** Maria Vanrell, **Start-End date:** 01/2008-12/2010, **Budget:** 134.310€, **Financed by:** Spanish Ministry of Science.

TEACHING

@ *Universitat Pompeu Fabra, Escola Superior Politècnica:*

- Academic Year 2017-2018:
Linear Algebra Theory: 28 hours. Coordination of the subject.
Image and video compression Theory: 18 hours. Coordination of the subject.
- Academic Year 2016-2017:
Linear Algebra Theory: 28 hours. Practices: 14 hours. Labs: 12 hours.
Image and video compression Theory: 18 hours. Coordination of the subject.
- Academic Year 2015-2016:
Linear Algebra Theory: 32 hours. Labs: 12 hours.
Image and video compression Theory: 18 hours. Seminars: 8 hours. Coordination of the subject.
- Academic Year 2014-2015:
Linear Algebra Theory: 32 hours. Practices: 20 hours Labs: 24 hours.
Differential Equations Seminars: 18 hours. Labs: 18 hours.

@ *Universitat Autònoma de Barcelona, Escola d'Enginyeria:*

- Academic Year 2012-2013:
Photometric invariance (master) 2 hours.
- Academic Year 2011-2012:
Artificial Intelligence 55 hours.
System Planning 40 hours.
Artificial Vision 20 hours.
Photometric invariance (master) 2 hours.
- Academic Year 2009-2010:
Programming languages and algorithms 160 hours.
- Academic Year 2008-2009:
Programming languages and algorithms 120 hours.

- Academic Year 2007-2008:
Data structure 60 hours.
- Academic Year 2006-2007:
Data structure 60 hours.

@ *University of East Anglia, Computer Sciences School:*

- Academic Year 2010-2011:
Computer Vision for Computational Photography (both undergraduate and masters) 25 hours.

TEACHING PROJECTS AND TEACHING TRAINING

Participation in teaching projects:

- Més enllà de la simple bibliografia: Preparació d'uns apunts interactius d'Àlgebra Lineal. **PI:** Vanesa Daza, **Budget:** 5.000 €, **Financed by:** PlaClik 2018-2019, Universitat Pompeu Fabra.
- MATEscape: Ludificación aplicada para la mejora del aprendizaje. **PI:** Luis Moris, **Budget:** 1.600 €, **Financed by:** PlaClik 2018-2019, Universitat Pompeu Fabra.
- Redefinint la presencialitat a les assignatures de matemàtiques de la mà de Wiris i Piazza. **PI:** Vanesa Daza, **Budget:** 4.500 €, **Financed by:** PlaClik 2016-2017, Universitat Pompeu Fabra.

Teaching training:

- FDES Program (Formació Docent en Educació Superior), Universitat Autònoma de Barcelona 2010.
- Certificat d'Aptitud Pedagògica, Universitat de Barcelona, 2006.

PEER-REVIEWED JOURNAL PAPERS

20. J. Vazquez-Corral, G. Finlayson and M. Bertalmío, “Physical-based optimization for non-physical image dehazing methods”, *Optics Express* , Accepted, 2020 (IF: 3.561, Q1: 20/95).
19. R. Gil Rodríguez, J. Vazquez-Corral, and M. Bertalmío, “Color matching unknown non-linear encoding images”, *IEEE Transaction on Image Processing* , Accepted, 2019 (IF: 6.790, Q1: 9/134).
18. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Vision models for Wide Gamut Imaging in cinema”, *IEEE Transactions on Pattern Analysis and Machine Intelligence* , DOI: 10.1109/TPAMI.2019.2938499, 2019 (IF: 17.730, Q1: 1/265).
17. R. Gil Rodríguez, J. Vazquez-Corral, and M. Bertalmío, “Issues with common assumptions about the camera pipeline, and their impact in HDR imaging from multiple exposures”, *SIAM Journal on Imaging Sciences* **12(4)**, 1627–1642, 2019 (IF: 2.514, Q1: 21/254).
16. J. Vazquez-Corral, A. Galdran, P. Cyriac, and M. Bertalmío, “A fast image dehazing method that does not introduce color artifacts”, *Journal of Real-Time Image Processing* , accepted, 2018 (IF: 2.588, Q2: 10/28).
15. J. Vazquez-Corral, and M. Bertalmío, “Spatial gamut mapping among non-inclusive gamuts”, *Journal of Visual Communication and Image Representation* **54**, 204-212, 2018 (IF: 2.259, Q2: 36/107).
14. J. Vazquez-Corral, and M. Bertalmío, “Angular-based pre-processing for image denoising”, *IEEE Signal Processing Letters* **25:2**, 219-223, 2018 (IF: 3.268, Q2: 79/265).
13. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Gamut extension for cinema”, *IEEE Trans. on Image Processing* **26:4**, 1596-1606, 2017 (IF: 5.071, Q1: 24/260).
12. I. Rafegas, J. Vazquez-Corral, R. Benavente, M. Vanrell and S. Alvarez, “Enhancing spatio-chromatic representation with more-than-three color coding for image description”, *Journal of The Optical Society of America-A* **34:5**, 827-837, 2017 (IF: 1.566, Q3: 53/94).
11. A. Galdran, J. Vazquez-Corral, D. Pardo, and M. Bertalmío, “Fusion-based variational image dehazing”, *IEEE Signal Processing Letters* **24:2**, 151-155, 2017 (IF: 2.813, Q2: 76/260).
10. A. Galdran, J. Vazquez-Corral, D. Pardo, and M. Bertalmío, “Enhanced Variational Image Dehazing”, *SIAM Journal on Imaging Sciences* **8:3**, 1519–1546, 2015 (IF: 2.687, Q1: 3/106).
9. J. Vazquez-Corral and M. Bertalmío, “Simultaneous blind gamma estimation”, *IEEE Signal Processing Letters* **22:9**, 1316-1320, 2015 (IF: 1.661, Q2: 95/257).
8. J. Vazquez-Corral, D. Connah and M. Bertalmío, “Perceptual Color Characterization of Cameras”, *Sensors* **14(12)**, 23205-29, 2014 (IF: 2.245, Q1: 10/56).
7. J. Vazquez-Corral and M. Bertalmío, “Color Stabilization Along Time and Across Shots of the Same Scene, for One or Several Cameras of Unknown Specifications”, *IEEE Trans. on Image Processing* **23:10**, 4586-4575, 2014 (IF: 3.625, Q1: 14/249).
6. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Gamut mapping in cinematography through Perceptual-based contrast modification”, *IEEE Journal on Selected topics in Signal Processing* **8:3**, 490-502, 2014 (IF: 2.373, Q1: 42/249).
5. J. Vazquez-Corral and M. Bertalmío, “Spectral sharpening of color sensors: diagonal color constancy and beyond”, *Sensors* **14:3**, 3965-3985, 2014 (IF: 2.245, Q1: 10/56).

4. J. Vazquez-Corral, J.K. O'Regan, M. Vanrell, and G. D. Finlayson,, "A new spectrally sharpened sensor basis to predict color naming, unique hues, and hue cancellation", *Journal of Vision* **12:6**, 7, 2012 (IF: 2.479, Q1: 13/59).
3. G. D. Finlayson, J. Vazquez-Corral, S. Susstrunk, and M. Vanrell, "Spectral sharpening by spherical sampling", *Journal of the Optical Society of America -A (JOSA A)* **29:7**, 1199-1210, 2012 (IF: 1.665, Q2: 30/80).
2. J. Vazquez-Corral, M. Vanrell, R. Baldrich, and F. Tous, "Color constancy by category correlation", *IEEE Trans. on Image Processing* **21:4**, 1997-2007, 2012 (IF: 3.199, Q1: 17/243).
1. J. Vazquez-Corral, C. A. Parraga, M. Vanrell, and R. Baldrich, "Color constancy algorithms: Psychophysical evaluation in a new dataset", *Journal of Imaging Science and Technology* **53:3**, 31105-1, 2009 (IF: 0.391, Q4: 11/13).

SUBMITTED JOURNAL PAPERS (AVAILABLE ON REQUEST)

- T. Canham, J. Vazquez-Corral, E. Mathieu and M. Bertalmío, "Matching visual induction effects on screens of different size", -, Submitted.
- M. Bertalmío, A. Gomez, A. Martin, J. Vazquez-Corral, D. Kane and J. Malo, "An argument for the intrinsically nonlinear nature of receptive fields in vision", -, Submitted.
- A. Gomez-Villa, A. Martin, J. Vazquez-Corral, M. Bertalmío, and J. Malo, "Visual Illusions Also Deceive Convolutional Neural Networks: Analysis and Implications", <http://arxiv.org/abs/1912.01643>, Submitted.

INTERNATIONAL CONFERENCES

28. O. Vu Thanh, T. Canham, J. Vazquez-Corral, R. Gil Rodríguez and M. Bertalmío, "Color stabilization for multi-camera light-field imaging", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2020
27. J. Trottnow, S. Spielmann, T. Herfet, T. Lange, K. Chelli, M. Solony, P. Smrz, P. Zemcik, W. Aenchbacher, M. Grogan, M. Alain, A. Smolic, T. Canham, O. Vu-Thanh, J. Vazquez-Corral and M. Bertalmío, "The Potential of Light Fields in Media Productions", SIGGRAPH Asia Technical Briefs , 2019
26. J. Vazquez-Corral and G. Finlayson, "Coupled Retinex", Color and Imaging Conference, 2019
25. A. Gomez-Villa, A. Martin, J. Vazquez-Corral and M. Bertalmío, "Convolutional Neural Networks can be deceived by visual illusions", Computer Vision and Pattern Recognition (CVPR), 2019
24. G. Hemrit, F. Matsushita, M. Uchida, J. Vazquez-Corral, H. Gong, N. Tsumura and G. D. Finlayson, "Using the Monge-Kanterovich transform in chromagenic color constancy for pathophysiology", Computational Color Imaging Workshop, 2019
23. J. Vazquez-Corral, G. Finlayson and M. Bertalmío, "Physically plausible dehazing for non-physical dehazing methods", Computational Color Imaging Workshop, 2019
22. J. Vazquez-Corral, P. Cyriac and M. Bertalmío, "Perceptually-based restoration of backlit images", Color and Imaging Conference, 2018

21. A. Galdran, P. Costa, J. Vazquez-Corral, and A. Campilho, “Weakly supervised fog detection”, IEEE International Conference on Image Processing, 2018.
20. A. Galdran, A. Alvarez, A. Bria, J. Vazquez-Corral, and M. Bertalmío, “On the Duality between Retinex and Image Dehazing”, Computer Vision and Pattern Recognition (CVPR), 2018.
19. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Automatic, fast and perceptually accurate gamut mapping based on vision science models”, SMPTE Annual Conference, 2017.
18. R. Gil Rodríguez, J. Vazquez-Corral, and M. Bertalmío, “Color-matching shots from different cameras having unknown gamma or logarithmic encoding curves”, SMPTE Annual Conference, 2017.
17. J. Vazquez-Corral and M. Bertalmío, “Gamut mapping for visual attention retargeting”, Color and Imaging Conference, 2017
16. S. W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Gamut Reduction Through Local Saturation Reduction”, Color and Imaging Conference, 2017
15. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Perceptually-based Gamut Extension Algorithm for Emerging Wide Color Gamut Display and Projection Technologies”, SMPTE Annual Conference, 2016.
14. J. Vazquez-Corral and M. Bertalmío, “Log-encoding estimation for color stabilization of cinematic footage”, IEEE International Conference on Image Processing, 2016.
13. J. Vazquez-Corral, S.W. Zamir, A. Galdran, D. Pardo, and M. Bertalmío, “Image processing applications through a variational perceptually-based color correction related to Retinex”, Color Imaging XXI: Displaying, Processing, Hardcopy, and Applications XXI, 2016.
12. R. Gil Rodríguez, J. Vazquez-Corral, and M. Bertalmío, “The Intrinsic Error of Exposure Fusion for HDR Imaging, and a Way to Reduce it”, British Machine Vision Conference, 2015.
11. J. Vazquez-Corral and M. Bertalmío, “Perceptually-inspired gamut mapping between any gamuts with any intersection”, AIC Midterm Meeting, 2015.
10. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Gamut extension for cinema: psychophysical evaluation of the state of the art and a new algorithm”, Human Vision and Electronic Imaging XX, IST/SPIE Electronic Imaging, 2015.
9. P. Cyriac, D. Kane, M. Bertalmío, and J. Vazquez-Corral, “A Tone Mapping Operator Based on Neural and Psychophysical Models of Visual Perception”, Human Vision and Electronic Imaging XX, IST/SPIE Electronic Imaging, 2015.
8. A. Galdran, J. Vazquez-Corral, D. Pardo, and M. Bertalmío, “A variational Framework for Single Image Dehazing”, European Conference on Computer Vision Workshops (ECCVW), 2014.
7. J. Vazquez-Corral, S.W. Zamir, and M. Bertalmío, “Considering saliency in a perception inspired gamut reduction algorithm”, 22nd Color Imaging Conference (CIC), 2014.
6. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, “Gamut mapping through Perceptually-Based Contrast Reduction”, Pacific Rim Symposium in Image and Video Technology (PSIVT), 2013.
5. J. Vazquez-Corral, G. D. Finlayson, and M. Vanrell, “A compact singularity function to predict WCS Color Names and unique hues”, Conference on Colour in Graphics, Imaging, and Vision, 2010.
4. J. Vazquez-Corral, M. Vanrell, and R. Benavente, “Color Names as a constraint for Computer Vision problems”, Create Conference, 2010.

3. J. Vazquez-Corral, M. Vanrell, R. Baldrich, and C. A. Parraga, “Towards a psychophysical evaluation of colour constancy algorithms”, Conference on Colour in Graphics, Imaging, and Vision, 2008.
2. E. Vazquez, R. Baldrich, J. Vazquez-Corral, and M. Vanrell, “Topological histogram reduction towards colour segmentation”, Iberian conference on Pattern Recognition and Image Analysis (IBPRIA), 2007.
1. J. Vazquez-Corral, M. Vanrell, A. Salvatella, and E. Vazquez, “A colour space based on the image content”, Catalan Conference on Artificial Intelligence (CCIA), 2007.

SUBMITTED INTERNATIONAL CONFERENCES (AVAILABLE ON REQUEST)

- A. Gomez-Villa, A. Martín, J. Vazquez-Corral, J. Malo and M. Bertalmío, “Synthesizing Visual Illusions Using Generative Adversarial Networks”, *arxiv 1911.09599*, 2019.

ABSTRACTS IN JCR JOURNALS

4. C. Gomez-Gavara, M. Moya Gimenez, M. Teresa Salcedo, G. Piella, J. Vazquez Corral, R. Martin, B. Pares, E. Pando, J. Andres Molino and C. Dopazo, “Livercolor: An algorithm quantification of liver graft steatosis using machine learning and color image processing”, *Transplant international* **32**, 419-420, 2019.
3. J. Vazquez-Corral, S.W. Zamir, and M. Bertalmío, “Gamut mapping based on vision models”, *Perception* **48:3**, 271, 2018.
2. J. Vazquez-Corral, C. A. Parraga, and M. Vanrell, “Ordinal pairwise method for natural images comparison”, *Perception* **36:Supp**, 180, 2009.
1. C. A. Parraga, J. Vazquez-Corral, and M. Vanrell, “A new cone-activation based natural image dataset”, *Perception* **36:Supp**, 180, 2009.

ABSTRACTS IN NON-JCR JOURNALS

1. J. Vazquez-Corral, “Color constancy in natural images through color naming and sensor sharpening”, *ELCVIA* **13 (2)**, Special Issue on Recent PhD Thesis Dissemination, 2014.

BOOK CHAPTERS

2. S.W. Zamir, J. Vazquez-Corral, and M. Bertalmío, Variational Methods for Gamut Mapping in Cinema and Television, Imaging, Vision and Learning Based on Optimization and PDEs, Springer, 2018.
1. A. Gonzalez, R. Benavente, O. Penacchio, J. Vazquez-Corral, M. Vanrell, and C. A. Parraga, Coloresia: An Interactive Colour Perception Device for the Visually Impaired, Multimodal Interaction in Image and Video Applications, 47-66, Springer, 2013.