**List of Publications:**

1. [Functional links between gelatinase B/matrix metalloproteinase-9 and prominin-1/CD133 in diabeticretinal vasculopathy and neuropathy.](http://www.ncbi.nlm.nih.gov/pubmed/25080402) Mohammad G, Vandooren J, Siddiquei MM, Martens E, Abu El-Asrar AM, Opdenakker G.Prog Retin Eye Res. 2014 Jul 28. pii: S1350-9462(14)00042-1. doi: 10.1016/j.preteyeres.2014.07.002. [Epub ahead of print] PMID: 25080402. **(11.2 Impact Factor)**.
2. [The Angiogenic Biomarker Endocan is Upregulated in Proliferative  Diabetic  Retinopathy and Correlates with Vascular Endothelial Growth Factor.](http://www.ncbi.nlm.nih.gov/pubmed/24871583) Abu El-Asrar AM, Nawaz MI, De Hertogh G, Al-Kharashi AS, Van den Eynde K, Mohammad G, Geboes K. Curr Eye Res. 2014 May 28:1-11. PMID: 24871583. **(1.76 Impact Factor)**.
3. [TIAM1-RAC1 signalling axis-mediated activation of NADPH oxidase-2 initiates mitochondrial damage in the development of diabetic retinopathy.](http://www.ncbi.nlm.nih.gov/pubmed/24554007) Kowluru RA, Kowluru A, Veluthakal R, Mohammad G, Syed I, Santos JM, Mishra M. Diabetologia. 2014 May;57(5):1047-56. doi: 10.1007/s00125-014-3194-z. PMID: 24554007. **(7.06 Impact Factor)**
4. [The proinflammatory cytokine high-mobility group box-1 mediates retinal neuropathy induced by diabetes.](http://www.ncbi.nlm.nih.gov/pubmed/24733965) Abu El-Asrar AM, Siddiquei MM, Nawaz MI, Geboes K, Mohammad G. Mediators Inflamm. 2014;2014:746415. doi: 10.1155/2014/746415. Epub 2014 Mar 10.PMID: 24733965. (**3.88 Impact Factor)**
5. [Cellular mechanisms of high mobility group 1 (HMGB-1) protein action in the diabetic retinopathy.](http://www.ncbi.nlm.nih.gov/pubmed/24498140) Santos AR, Dvoriantchikova G, Li Y, Mohammad G, Abu El-Asrar AM, Wen R, Ivanov D. PLoS One. 2014 Jan 31;9(1):e87574. doi: 10.1371/journal.pone.0087574.PMID: 24498140. **(4.06 Impact Factor)**
6. [Neurotrophins and neurotrophin receptors in proliferative diabetic retinopathy.](http://www.ncbi.nlm.nih.gov/pubmed/23762379)Abu El-Asrar AM, Mohammad G, De Hertogh G, Nawaz MI, Van Den Eynde K, Siddiquei MM, Struyf S, Opdenakker G, Geboes K.PLoS One. 2013 Jun 7;8(6):e65472. doi: 10.1371/journal.pone.0065472. Print 2013.PMID:23762379.**(4.06 Impact Factor)**
7. [Expression of lysophosphatidic acid, autotaxin and acylglycerol kinase as biomarkers in diabeticretinopathy.](http://www.ncbi.nlm.nih.gov/pubmed/22864860)Abu El-Asrar AM, Mohammad G, Nawaz MI, Siddiquei MM, Kangave D, Opdenakker G. Acta Diabetol. 2013 Jun;50(3):363-71. doi: 0.1007/s00592-012-0422-1. .PMID: 22864860. **(4.25 Impact Factor)**
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9. [High-mobility group box-1 protein activates inflammatory signaling pathway components and disrupts retinal vascular-barrier in the diabetic retina.](http://www.ncbi.nlm.nih.gov/pubmed/23261684) Mohammad G, Siddiquei MM, Othman A, Al-Shabrawey M, Abu El-Asrar AM.Exp Eye Res. 2013 Feb;107:101-9. doi: 10.1016/j.exer.2012.12.009. PMID: 23261684. **(3.06 Impact Factor)**
10. [New developments in the pathophysiology and management of diabetic retinopathy.](http://www.ncbi.nlm.nih.gov/pubmed/24392456) Abu El-Asrar AM, Midena E, Al-Shabrawey M, Mohammad G. J Diabetes Res. 2013;2013:424258. doi: 10.1155/2013/424258.PMID: 24392456.**(3.56 Impact Factor)**
11. [The ERK1/2 Inhibitor U0126 Attenuates Diabetes-Induced Upregulation of MMP-9 and Biomarkers of Inflammation in the Retina.](http://www.ncbi.nlm.nih.gov/pubmed/23671886) Mohammad G, Mairaj Siddiquei M, Imtiaz Nawaz M, Abu El-Asrar AM. J Diabetes Res. 2013;2013:658548. doi: 10.1155/2013/658548. PMID:23671886 **(3.56 Impact Factor)**
12. [Poly (ADP-ribose) polymerase mediates diabetes-induced retinal neuropathy.](http://www.ncbi.nlm.nih.gov/pubmed/24347828) Mohammad G, Siddiquei MM, Abu El-Asrar AM. Mediators Inflamm. 2013;2013:510451. doi: 10.1155/2013/510451. PMID: 24347828. **(3.88 Impact Factor)**
13. [High-mobility group box-1 induces decreased brain-derived neurotrophic factor-mediated neuroprotection in the diabetic retina.](http://www.ncbi.nlm.nih.gov/pubmed/23766563) Abu El-Asrar AM, Nawaz MI, Siddiquei MM, Al-Kharashi AS, Kangave D, Mohammad G. Mediators Inflamm. 2013;2013:863036. doi: 10.1155/2013/863036. PMID: 23766563 **(3.88 Impact Factor)**
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**Abstract Presented in International Conferences:**

* **Ghulam Mohammad**,Varun Kesharvani, H.P.Pandey 2007, Role of free radicals in mitochondrial mediated apoptosis in diabetic wound of human. 33rd **Indian Immunology Society Conference**, New Delhi, **India** (Oral and poster presentation)
* **Ghulam Mohammad** and Renu A Kowluru 2009. Diabetic Retinopathy and MMP-2: Mitochondrial dysfunction and retinal capillary cell apoptosis. Post doc poster competition, **Wayne State University**, Detroit. **USA**
* **Ghulam Mohammad**, Renu A Kowluru **2010. Mitochondrial Dysfunction and Diabetic Retinopathy: Role of Matrix Metalloproteinase-2. Poster Presentation** May 2-6, 2010, **ARVO**, Fort Lauderdale, Florida.
* **Ghulam Mohammad,** Renu A KowluruInhibition of MMP9 Protects the Development of Retinopathy in Diabetic Mice Via Ameliorating Mitochondria Dysfunction. **Poster Presentation** May 1-5, 2011, **ARVO**, Fort Lauderdale, Florida. **USA**
* **Ghulam Mohammad, 2013** Matrix metalloproteinase-9 regulates angiogenic and vasculogenic factors in diabetic retina. **Poster Presentation** May 08, **2013, ARVO, Seattle, USA**
* A Novel Role For High Mobility Group Box-1 In The Pathogenesis Of Diabetic Retinopathy. Ahmed Abu El-Asrar, **Ghulam Mohammad**, Mohammad Mairaj Siddiquei, Amira Othman, Georagia and Mohamed Al-Shabrawey. 20 - February 27th-28th and March 1st 2014, 12th **International Ocular Inflammation Society Congress**, Valencia (**Spain**) 19.
* Matrix Metalloproteinase-9 Destroys Prominin-1/Cd133 In Diabetes-Induced Retinal Vasculopathy And Neuropathy. **Oral Presentation, Ghulam Mohammad**, **Saudi Ophthalmology** 2014 – Abstract Number: 610, Saudi Arab
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