Steven D Abramowitch

List of Publications by Year
in descending order

43	1,046	516710 16	414414 32
papers	citations	h-index	g-index

43	43	43	986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tissue mechanics, animal models, and pelvic organ prolapse: A review. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2009, 144, S146-S158.	1.1	184
2	An Improved Method to Analyze the Stress Relaxation of Ligaments Following a Finite Ramp Time Based on the Quasi-Linear Viscoelastic Theory. Journal of Biomechanical Engineering, 2004, 126, 92-97.	1.3	135
3	Host response to synthetic mesh in women with mesh complications. American Journal of Obstetrics and Gynecology, 2016, 215, 206.e1-206.e8.	1.3	99
4	Characterization of the host inflammatory response following implantation of prolapse mesh in rhesus macaque. American Journal of Obstetrics and Gynecology, 2015, 213, 668.e1-668.e10.	1.3	65
5	An Evaluation of the Quasi-Linear Viscoelastic Properties of the Healing Medial Collateral Ligament in a Goat Model. Annals of Biomedical Engineering, 2004, 32, 329-335.	2.5	59
6	Impact of prolapse meshes on the metabolism of vaginal extracellular matrix in rhesus macaque. American Journal of Obstetrics and Gynecology, 2015, 212, 174.e1-174.e7.	1.3	53
7	A comparison of the quasi-static mechanical and non-linear viscoelastic properties of the human semitendinosus and gracilis tendons. Clinical Biomechanics, 2010, 25, 325-331.	1.2	48
8	Textile properties of synthetic prolapse mesh in response to uniaxial loading. American Journal of Obstetrics and Gynecology, 2016, 215, 326.e1-326.e9.	1.3	37
9	Extracellular matrix regenerative graft attenuates the negative impact of polypropylene prolapse mesh on vaginaÂin rhesus macaque. American Journal of Obstetrics and Gynecology, 2017, 216, 153.e1-153.e9.	1.3	30
10	A discrete spectral analysis for determining quasi-linear viscoelastic properties of biological materials. Journal of the Royal Society Interface, 2015, 12, 20150707.	3.4	29
11	The impact of boundary conditions on surface curvature of polypropylene mesh in response to uniaxial loading. Journal of Biomechanics, 2015, 48, 1566-1574.	2.1	24
12	Discrete quasi-linear viscoelastic damping analysis of connective tissues, and the biomechanics of stretching. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 193-202.	3.1	23
13	Impact of parity on ewe vaginal mechanical properties relative to the nonhuman primate and rodent. International Urogynecology Journal, 2016, 27, 1255-1263.	1.4	21
14	Pelvic floor shape variations during pregnancy and after vaginal delivery. Computer Methods and Programs in Biomedicine, 2020, 194, 105516.	4.7	21
15	Towards rebuilding vaginal support utilizing an extracellular matrix bioscaffold. Acta Biomaterialia, 2017, 57, 324-333.	8.3	20
16	Mesh induced fibrosis: The protective role of T regulatory cells. Acta Biomaterialia, 2019, 96, 203-210.	8.3	20
17	Varying degrees of nonlinear mechanical behavior arising from geometric differences of urogynecological meshes. Journal of Biomechanics, 2014, 47, 2584-2589.	2.1	15
18	Preventing Mesh Pore Collapse by Designing Mesh Pores With Auxetic Geometries: A Comprehensive Evaluation Via Computational Modeling. Journal of Biomechanical Engineering, 2018, 140, .	1.3	15

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19	Impact of polypropylene prolapse mesh on vaginal smooth muscle in rhesus macaque. American Journal of Obstetrics and Gynecology, 2019, 221, 330.e1-330.e9.	1.3	14
20	Inflation and rupture of vaginal tissue. Interface Focus, 2019, 9, 20190029.	3.0	13
21	Finite Element Modeling in Female Pelvic Floor Medicine: a Literature Review. Current Obstetrics and Gynecology Reports, 2015, 4, 125-131.	0.8	11
22	Swine Vagina Under Planar Biaxial Loads: An Investigation of Large Deformations and Tears. Journal of Biomechanical Engineering, 2019, 141, .	1.3	11
23	Strains induced in the vagina by smooth muscle contractions. Acta Biomaterialia, 2021, 129, 178-187.	8.3	11
24	Descent and hypermobility of the rectum in women with obstructed defecation symptoms. International Urogynecology Journal, 2020, 31, 337-349.	1.4	10
25	Novel simulations to determine the impact of superficial perineal structures on vaginal delivery. Interface Focus, 2019, 9, 20190011.	3.0	9
26	Defining mechanisms of recurrence following apical prolapse repair based on imaging criteria. American Journal of Obstetrics and Gynecology, 2021, 225, 506.e1-506.e28.	1.3	9
27	Deformation of Transvaginal Mesh in Response to Multiaxial Loading. Journal of Biomechanical Engineering, 2019, 141, .	1.3	8
28	T regulatory cells and TGF-Î²1: Predictors of the host response in mesh complications. Acta Biomaterialia, 2020, 115, 127-135.	8.3	7
29	Urethral support in female urinary continence part 2: a computational, biomechanical analysis of Valsalva. International Urogynecology Journal, 2022, 33, 551-561.	1.4	7
30	Urethral support in female urinary continence part 1: dynamic measurements of urethral shape and motion. International Urogynecology Journal, 2022, 33, 541-550.	1.4	6
31	Smooth Muscle Organization and Nerves in the Rat Vagina: A First Look Using Tissue Clearing and Immunolabeling. Annals of Biomedical Engineering, 2022, 50, 440-451.	2.5	5
32	The role of conventional pelvic floor reconstructive surgeries in obstructed defecation symptoms change: CARE and OPTIMAL trials sub-analysis of 2-year follow-up data. International Urogynecology Journal, 2020, 31, 1325-1334.	1.4	4
33	Methods for the defining mechanisms of anterior vaginal wall descent (DEMAND) study. International Urogynecology Journal, 2021, 32, 809-818.	1.4	4
34	Transvaginal sacrospinous ligament suture rectopexy for obstructed defecation symptoms: 1-year outcomes. International Urogynecology Journal, 2020, 32, 3045-3052.	1.4	3
35	Obstructed Defecation Symptom Severity and Degree of Rectal Hypermobility and Folding Detected by Dynamic Ultrasound. Ultrasound Quarterly, 2021, 37, 229-236.	0.8	3
36	The establishment of a 3D anatomical coordinate system for defining vaginal axis and spatial position. Computer Methods and Programs in Biomedicine, 2021, 208, 106175.	4.7	3

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37	Motion of the vaginal apex during strain and defecation. International Urogynecology Journal, 2020, 31, 391-400.	1.4	2
38	Comparison of 2 single incision slings on the vagina in an ovine model. American Journal of Obstetrics and Gynecology, 2021, 224, 78.e1-78.e7.	1.3	2
39	Statistical shape modeling of the pelvic floor to evaluate women with obstructed defecation symptoms. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 122-130.	1.6	2
40	Novel Application of Photogrammetry to Quantify Fascicle Orientations of Female Cadaveric Pelvic Floor Muscles. Annals of Biomedical Engineering, 2021, 49, 1888-1899.	2.5	2
41	3D quantitative analysis of normal clitoral anatomy in nulliparous women by MRI. International Urogynecology Journal, 2022, 33, 1649-1657.	1.4	2
42	The Assumption of a Negligible Preload on the Determination of Viscoelastic Properties Based on the Quasi-linear Viscoelastic (QLV) Theory. , 2007, , .		0
43	Reproductive biomechanics: Innovations and challenges. Journal of Biomechanics, 2015, 48, 1509-1510.	2.1	0