Vistasp M Karbhari

List of Publications by Year
in descending order

144 papers	4,742 citations	81900 39 h-index	123424 61 g-index
150 all docs	150 docs citations	150 times ranked	2771 citing authors

#	Article	IF	Citations
1	Long-term hydrothermal aging of Carbon-Epoxy materials for rehabilitation of civil infrastructure. Composites Part A: Applied Science and Manufacturing, 2022, 153, 106705.	7.6	10
2	Water, saltwater, and concrete leachate solution effects on durability of ambientâ€temperature cure carbonâ€epoxy composites. Journal of Applied Polymer Science, 2022, 139, .	2.6	4
3	Effect of thermal exposure on carbon fiber reinforced composites used in civil infrastructure rehabilitation. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106570.	7.6	9
4	Advances in Seismic Performance Assessment and Improvement of Structures. Advances in Civil Engineering, 2019, 2019, 1-2.	0.7	1
5	Non-destructive evaluation (NDE) of polymer matrix composites. , 2013, , .		34
6	Processing of nanotube-based nanocomposites. , 2012, , 3-32.		0
7	Modal testing as a means of quantitative monitoring of damage progression in a model FRP rehabilitated bridge deck system. Structure and Infrastructure Engineering, 2012, 8, 227-250.	3.7	3
8	Monoblocks in root canals: a finite elemental stress analysis study. International Endodontic Journal, 2011, 44, 817-826.	5.0	57
9	Use of infrared thermography for quantitative non-destructive evaluation in FRP strengthened bridge systems. Materials and Structures/Materiaux Et Constructions, 2011, 44, 169-185.	3.1	29
10	Fatigue performance of reinforced concrete beams with externally bonded CFRP reinforcement. Structure and Infrastructure Engineering, 2011, 7, 229-241.	3.7	25
11	Service life estimation and extension of civil engineering structures. , 2011, , .		4
12	Numerical simulation on seismic retrofitting performance of reinforced concrete columns strengthened with fibre reinforced polymer sheets. Structure and Infrastructure Engineering, 2010, 6, 481-496.	3.7	14
13	Operational modal analysis for vibration-based structural health monitoring of civil structures. , 2009, , 213-259.		8
14	Vibration-based damage detection techniques for structural health monitoring of civil infrastructure systems. , 2009, , 177-212.		14
15	Hygrothermal effects on high VF pultruded unidirectional carbon/epoxy composites: Moisture uptake. Composites Part B: Engineering, 2009, 40, 41-49.	12.0	128
16	Sources of uncertainty and design values for field-manufactured FRP. Composite Structures, 2009, 89, 83-93.	5.8	27
17	Comparative durability evaluation of ambient temperature cured externally bonded CFRP and GFRP composite systems for repair of bridges. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1353-1363.	7.6	79
18	Structural health monitoring of civil infrastructure systems. , 2009, , .		68

#	Article	IF	Citations
19	Calibration of resistance factors for reliability based design of externally-bonded FRP composites. Composites Part B: Engineering, 2008, 39, 665-679.	12.0	75
20	Hygrothermal ageing of an epoxy adhesive used in FRP strengthening of concrete. Journal of Applied Polymer Science, 2008, 107, 2607-2617.	2.6	73
21	Moisture absorption and desorption in a UV cured urethane acrylate adhesive based on radiation source. Journal of Applied Polymer Science, 2008, 107, 3654-3662.	2.6	19
22	Filled reactive ethylene terpolymer primers for cathodic disbondment mitigation. Journal of Applied Polymer Science, 2008, 110, 1531-1544.	2.6	2
23	Improved damage detection method based on Element Modal Strain Damage Index using sparse measurement. Journal of Sound and Vibration, 2008, 309, 465-494.	3.9	73
24	FE Investigation of Material and Preload Parameters on FRP Strengthening Performance of RC Beams, I: Model Development. Journal of Reinforced Plastics and Composites, 2008, 27, 507-522.	3.1	9
25	Conversion of mechanical work to interfacial tension in a nanoporous silica gel. Applied Physics Letters, 2008, 92, .	3.3	24
26	Investigation of durability and surface preparation associated defect criticality of composites bonded to concrete. Composites Part A: Applied Science and Manufacturing, 2008, 39, 997-1006.	7.6	22
27	Investigation of the Sorption and Tensile Response of Pultruded E-Glass/Vinylester Composites Subjected to Hygrothermal Exposure and Sustained Strain. Journal of Reinforced Plastics and Composites, 2008, 27, 613-638.	3.1	35
28	Protection of our bridge infrastructure against man-made and natural hazards. Structure and Infrastructure Engineering, 2008, 4, 415-429.	3.7	18
29	FE Investigation of Material and Preload Parameters on FRP Strengthening Performance of RC Beams II: Results. Journal of Reinforced Plastics and Composites, 2008, 27, 1245-1267.	3.1	2
30	Microleakage in Overflared Root Canals Restored with Different Fiber Reinforced Dowels. Operative Dentistry, 2008, 33, 96-105.	1.2	27
31	Structural Health Monitoring of CFRP Strengthened Bridge Decks Using Ambient Vibrations. Structural Health Monitoring, 2007, 6, 199-214.	7.5	8
32	Introduction: the use of composites in civil structural applications. , 2007, , 1-10.		8
33	New Canadian Highway Bridge Design Code design provisions for fibre-reinforced structures. Canadian Journal of Civil Engineering, 2007, 34, 267-283.	1.3	8
34	Long-term Structural Health Monitoring System for a FRP Composite Highway Bridge Structure. Journal of Intelligent Material Systems and Structures, 2007, 18, 809-823.	2.5	29
35	Durability of Pultruded E-Glass/Vinylester under Combined Hygrothermal Exposure and Sustained Bending. Journal of Materials in Civil Engineering, 2007, 19, 665-673.	2.9	15
36	Performance and design of fibre-reinforced polymer composites at cold temperatures current status and future needs. International Journal of Materials and Product Technology, 2007, 28, 1.	0.2	2

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37	Knowledge-based system for use of FRP materials in cold regions. International Journal of Materials and Product Technology, 2007, 28, 217.	0.2	1
38	Durability of composites in sub-zero and freezeâ€“thaw conditions. , 2007, , 72-79.		1
39	Seismic performance of a FRP encased concrete bridge pylon connection. Composites Part B: Engineering, 2007, 38, 685-702.	12.0	1
40	Reply to the discussion by A.K. El-Sayed on â€œNew Canadian Highway Bridge Design Code design provisions for fibre-reinforced structuresâ€• Canadian Journal of Civil Engineering, 2007, 34, 1378.	1.3	0
41	Thermal, mechanical, and adhesive properties of HDPE/reactive ethylene terpolymer blends. Journal of Applied Polymer Science, 2007, 104, 331-338.	2.6	8
42	DMTA based investigation of hygrothermal ageing of an epoxy system used in rehabilitation. Journal of Applied Polymer Science, 2007, 104, 1084-1094.	2.6	77
43	Design factors, reliability, and durability prediction of wet layup carbon/epoxy used in external strengthening. Composites Part B: Engineering, 2007, 38, 10-23.	12.0	98
44	Fuzzy logic based approach to FRP retrofit of columns. Composites Part B: Engineering, 2007, 38, 651-673.	12.0	7
45	Evaluation of strengthening through laboratory testing of FRP rehabilitated bridge decks after in-service loading. Composite Structures, 2007, 77, 206-222.	5.8	20
46	Durability based design of FRP jackets for seismic retrofit. Composite Structures, 2007, 80, 553-568.	5.8	19
47	An approach to determine long-term behavior of concrete members prestressed with FRP tendons. Construction and Building Materials, 2007, 21, 1052-1060.	7.2	37
48	Segmental relaxation of water-aged ambient cured epoxy. Polymer Degradation and Stability, 2007, 92, 1650-1659.	5.8	57
49	Effect of fiber architecture on flexural characteristics and fracture of fiber-reinforced dental composites. Dental Materials, 2007, 23, 960-968.	3.5	57
50	Influence of triaxial braid denier on ribbon-based fiber reinforced dental composites. Dental Materials, 2007, 23, 969-976.	3.5	37
51	Cathodic disbondment resistance with reactive ethylene terpolymer blends. Progress in Organic Coatings, 2007, 60, 287-296.	3.9	16
52	Durability of composites for civil structural applications. , 2007, , .		18
53	Fabrication, quality and service-life issues for composites in civil engineering. , 2007, , 13-30.		7
54	Durability of composites in aqueous environments. , 2007, , 31-71.		3

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55	Prediction of Long-Term Prestress Losses. PCI Journal, 2007, 52, 116-130.	0.6	14
56	Rehabilitation of concrete structures using fibre-reinforced polymer composites: identifying potential defects. , 2007, , 284-323.		1
57	Issues of variability and durability under synergistic exposure conditions related to advanced polymer composites in the civil infrastructure. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1102-1110.	7.6	55
58	New bridge systems using FRP composites and concrete: a state-of-the-art review. Structural Control and Health Monitoring, 2006, 8, 143-154.	0.7	85
59	Web-Based Structural Health Monitoring of an FRP Composite Bridge. Computer-Aided Civil and Infrastructure Engineering, 2006, 21, 39-56.	9.8	24
60	Interlaminar and intralaminar durability characterization of wet layup carbon/epoxy used in external strengthening. Composites Part B: Engineering, 2006, 37, 650-661.	12.0	58
61	Diagonal macro-crack induced debonding mechanisms in FRP rehabilitated concrete. Composites Part B: Engineering, 2006, 37, 627-641.	12.0	42
62	Comparative degradation of pultruded E-glass/vinylester in deionized water, alkaline solution, and concrete leachate solution. Journal of Applied Polymer Science, 2006, 99, 1405-1414.	2.6	9
63	The effect of fiber insertion on fracture resistance of endodontically treated molars with MOD cavity and reattached fractured lingual cusps. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 35-41.	3.4	44
64	A critical review of infrared thermography as a method for non-destructive evaluation of FRP rehabilitated structures. International Journal of Materials and Product Technology, 2006, 25, 241.	0.2	24
65	Dynamic Mechanical Analysis of the Effect of Water on E-glass-Vinylester Composites. Journal of Reinforced Plastics and Composites, 2006, 25, 631-644.	3.1	23
66	Rehabilitation of civil structures using advanced polymer composites. , 2006, , 203-234.		0
67	Acoustic Emission Damage Assessment of Steel/CFRP Bonds for Rehabilitation. Journal of Composites for Construction, 2006, 10, 265-274.	3.2	22
68	Structural health monitoring of composite repair patches in bridge rehabilitation. , 2006, , .		3
69	Fatigue Behavior of a Steel-Free FRPâ€“Concrete Modular Bridge Deck System. Journal of Bridge Engineering, 2006, 11, 474-488.	2.9	23
70	Review and Comparison of Fracture Mechanics-based Bond Strength Models for FRP-strengthened Structures. Journal of Reinforced Plastics and Composites, 2006, 25, 1757-1794.	3.1	32
71	Design approach for a FRP structural formwork based steel-free modular bridge system. Structural Engineering and Mechanics, 2006, 24, 561-584.	1.0	4
72	Consideration of material variability in reliability analysis of FRP strengthened bridge decks. Composite Structures, 2005, 70, 430-443.	5.8	67

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73	Effect of material configuration on strengthening of concrete slabs by CFRP composites. Composites Part B: Engineering, 2005, 37, 213-226.	12.0	16
74	Durability characterization of wet layup graphite/epoxy composites used in external strengthening. Composites Part B: Engineering, 2005, 37, 200-212.	12.0	113
75	Effect of Water Sorption on Performance of Pultruded E-Glass/Vinylester Composites. Journal of Materials in Civil Engineering, 2005, 17, 63-71.	2.9	41
76	Assessment of a Steel-Free Fiber Reinforced Polymer-Composite Modular Bridge System. Journal of Structural Engineering, 2005, 131, 498-506.	3.4	44
77	Rehabilitation of Large Diameter Prestressed Cylinder Concrete Pipe (PCCP) with FRP Composites â€" Experimental Investigation. Advances in Structural Engineering, 2005, 8, 31-44.	2.4	18
78	Building materials for the renewal of civil infrastructure. Reinforced Plastics, 2005, 49, 14-25.	0.1	5
79	Health Monitoring, Damage Prognosis and Service-Life Prediction â€" Issues Related to Implementation. , 2005, , 301-310.		8
80	An approach for failure analysis of composite bridge deck systems with openings. Structural Engineering and Mechanics, 2005, 20, 123-141.	1.0	4
81	Tensile response of steel/CFRP adhesive bonds for the rehabilitation of civil structures. Structural Engineering and Mechanics, 2005, 20, 589-608.	1.0	33
82	E-Glass/Vinylester Composites in Aqueous Environments: Effects on Short-Beam Shear Strength. Journal of Composites for Construction, 2004, 8, 148-156.	3.2	46
83	Multi-frequency dynamic mechanical thermal analysis of moisture uptake in E-glass/vinylester composites. Composites Part B: Engineering, 2004, 35, 299-304.	12.0	57
84	Connection of concrete barrier rails to FRP bridge decks. Composites Part B: Engineering, 2004, 35, 269-278.	12.0	9
85	Fiber reinforced composite bridge systemsâ€"â€"transition from the laboratory to the field. Composite Structures, 2004, 66, 5-16.	5.8	28
86	Durability evaluation of moderate temperature cured E-glass/vinylester systems. Composite Structures, 2004, 66, 367-376.	5.8	96
87	Non-destructive testing techniques for FRP rehabilitated concrete. I: a critical review. International Journal of Materials and Product Technology, 2004, 21, 349.	0.2	30
88	Non-destructive testing techniques for FRP rehabilitated concrete. II: an assessment. International Journal of Materials and Product Technology, 2004, 21, 385.	0.2	17
89	FRP composite jackets and corrosion of steel reinforcement - a critical review. International Journal of Materials and Product Technology, 2004, 21, 455.	0.2	1
90	Remaining Life of FRP Rehabilitated Bridge Structures. , 2004, , 1012-1017.		5

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91	E-Glass/Vinylester Composites in Aqueous Environments â€“ I: Experimental Results. Applied Composite Materials, 2003, 10, 19-48.	2.5	60
92	Field exposure based durability assessment of FRP column wrap systems. Composites Part B: Engineering, 2003, 34, 41-50.	12.0	15
93	Dielectric and mechanical characterization of processing and moisture uptake effects in E-glass/epoxy composites. Composites Part B: Engineering, 2003, 34, 383-390.	12.0	32
94	Energy absorbing characteristics of circular frustra. International Journal of Crashworthiness, 2003, 8, 471-479.	1.9	19
95	Fiber-Sizing-Based Enhancement of Materials Durability for Seismic Retrofit. Journal of Composites for Construction, 2003, 7, 194-199.	3.2	6
96	Poststrengthening of Concrete Slabs: Full-Scale Testing and Design Recommendations. Journal of Structural Engineering, 2003, 129, 743-752.	3.4	9
97	Durability Gap Analysis for Fiber-Reinforced Polymer Composites in Civil Infrastructure. Journal of Composites for Construction, 2003, 7, 238-247.	3.2	376
98	Identification of potential defects in the rehabilitation of concrete structures with FRP composites. International Journal of Materials and Product Technology, 2003, 19, 498.	0.2	19
99	Rehabilitation of a Multi-Span Bridge Using FRP Composite Materials. , 2003, , 374.		0
100	Durability of FRP Composites for Civil Infrastructure â€" Myth, Mystery or Reality. Advances in Structural Engineering, 2003, 6, 243-255.	2.4	31
101	Effect of Concrete Based Alkali Solutions on Short-Term Durability of E-Glass/Vinylester Composites. Journal of Composite Materials, 2002, 36, 2101-2121.	2.4	31
102	On the Effect of E-Glass Fiber on the Cure Behavior of Vinylester Composites. Journal of Reinforced Plastics and Composites, 2002, 21, 901-918.	3.1	7
103	Response of Fiber Reinforced Polymer Confined Concrete Exposed to Freeze and Freeze-Thaw Regimes. Journal of Composites for Construction, 2002, 6, 35-40.	3.2	47
104	Short-term effects of sea water on E-glass/vinylester composites. Journal of Applied Polymer Science, 2002, 84, 2760-2767.	2.6	37
105	Low-temperature hygrothermal degradation of ambient cured E-glass/vinylester composites. Journal of Applied Polymer Science, 2002, 86, 2255-2260.	2.6	59
106	Cold-temperature and simultaneous aqueous environment related degradation of carbon/vinylester composites. Composites Part B: Engineering, 2002, 33, 17-24.	12.0	38
107	``Gap Analysis'' for Durability of Composites in Civil Infrastructure. , 2001, , 35.		1
108	<title>Measuring bridge performance using a structural health monitoring system</title>. , 2001, , .		2

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109	Processing and performance of bridge deck subcomponents using two schemes of resin infusion. Composite Structures, 2001, 51, 257-271.	5.8	12
110	Experimental dynamic characterization of an FRP composite bridge superstructure assembly. Composite Structures, 2001, 54, 427-444.	5.8	58
111	NOL-ring based evaluation of freeze and freezeâ€“thaw exposure effects on FRP composite column wrap systems. Composites Part B: Engineering, 2001, 32, 589-598.	12.0	14
112	External FRP Poststrengthening of Scaled Concrete Slabs. Journal of Composites for Construction, 2001, 5, 67-75.	3.2	60
113	Materials Considerations in FRP Rehabilitation of Concrete Structures. Journal of Materials in Civil Engineering, 2001, 13, 90-97.	2.9	61
114	Evaluation of Property Retention in E-Glass/Vinylester Composites after Exposure to Salt Solution and Natural Weathering. Journal of Reinforced Plastics and Composites, 2000, 19, 704-731.	3.1	15
115	Use of composites for 21st century civil infrastructure. Computer Methods in Applied Mechanics and Engineering, 2000, 185, 433-454.	6.6	95
116	Fiber Reinforced Composites â€“ Advanced Materials for the Renewal of Civil Infrastructure. Applied Composite Materials, 2000, 7, 95-124.	2.5	78
117	Structural Characterization of Fiber-Reinforced Composite Short- and Medium-Span Bridge Systems. Applied Composite Materials, 2000, 7, 151-182.	2.5	52
118	Effect of Short-Term Freeze-Thaw Cyclingon Composite Confined Concrete. Journal of Composites for Construction, 2000, 4, 191-197.	3.2	65
119	Evaluation of Property Retention in E-Glass/Vinylester Composites after Exposure to Salt Solution and Natural Weathering. Journal of Reinforced Plastics and Composites, 2000, 19, 704-731.	3.1	7
120	Title is missing!. Journal of Materials Science, 1999, 34, 5641-5648.	3.7	16
121	Kings Stormwater Channel and I-5/Gilman Bridges, USA. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 1999, 9, 250-253.	0.8	44
122	Peel Test for Characterization of Polymer Composite/Concrete Interface. Journal of Composite Materials, 1998, 32, 1894-1913.	2.4	18
123	Progressive Crush of Resin Transfer Molded Square Tube Stiffened Beam Elements. Journal of Composite Materials, 1997, 31, 981-1001.	2.4	8
124	Effect of Composite Wrap Architecture on Strengthening of Concrete Due to Confinement: II-Strain and Damage Effects. Journal of Reinforced Plastics and Composites, 1997, 16, 1039-1063.	3.1	13
125	Peel Test for Characterization of Polymer Composite/Concrete Interface. Journal of Composite Materials, 1997, 31, 1806-1825.	2.4	16
126	Progressive Crush Response of Hybrid Felt/Fabric Composite Structures. Journal of Reinforced Plastics and Composites, 1997, 16, 243-269.	3.1	7

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127	Energy Absorption Characteristics of Hybrid Braided Composite Tubes. Journal of Composite Materials, 1997, 31, 1164-1186.	2.4	36
128	Composite Jacketed Concrete under Uniaxial Compressionâ€"Verification of Simple Design Equations. Journal of Materials in Civil Engineering, 1997, 9, 185-193.	2.9	306
129	Effects of preform structure on progressive crush characteristics of flange-stiffened tubular elements. Composite Structures, 1997, 37, 81-96.	5.8	7
130	Investigation of Bond between Concrete and Composites: Use of a Peel Test. Journal of Reinforced Plastics and Composites, 1996, 15, 208-227.	3.1	76
131	Effect of Environmental Exposure on the External Strengthening of Concrete with Composites-Short Term Bond Durability. Journal of Reinforced Plastics and Composites, 1996, 15, 1194-1216.	3.1	58
132	Notes on the Modeling of Preform Compaction: II-Effect of Sizing on Bundle Level Micromechanics. Journal of Reinforced Plastics and Composites, 1996, 15, 837-861.	3.1	21
133	Effects of Compaction on the Stiffness and Strength of Plain Weave Fabric RTM Composites. Journal of Composite Materials, 1996, 30, 1210-1247.	2.4	22
134	Notes on the Modeling of Preform Compaction: I -Micromechanics at the Fiber Bundle Level. Journal of Reinforced Plastics and Composites, 1996, 15, 86-122.	3.1	51
135	Generalized Fluid Flow Model for Ceramic Tape Casting. Journal of the American Ceramic Society, 1995, 78, 2497-2503.	3.8	39
136	Response of Multi-Element Foam-Filled Preform RTM Structures, II: Low-Velocity Impact and Post-Impact Crush Response. Journal of Composite Materials, 1995, 29, 1437-1457.	2.4	2
137	Effect of Resin System Parameters on Resin Transfer Molding of Vinyl Ester Based Compositesâ€"A Statistically Designed Study. Polymer-Plastics Technology and Engineering, 1995, 34, 599-620.	1.9	4
138	Use of Composites for Rehabilitation of Steel Structuresâ€"Determination of Bond Durability. Journal of Materials in Civil Engineering, 1995, 7, 239-245.	2.9	83
139	Effect of Tow Sheet Composite Wrap Architecture on Strengthening of Concrete Due to Confinement: Iâ€"Experimental Studies. Journal of Reinforced Plastics and Composites, 1995, 14, 1008-1030.	3.1	33
140	Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions. Journal of Cold Regions Engineering - ASCE, 1994, 8, 1-20.	1.1	21
141	Investigation of Bond Behavior Between Glass Fiber Composite Reinforcements and Concrete. Polymer-Plastics Technology and Engineering, 1994, 33, 733-753.	1.9	10
142	Effect of fiber architecture on manufacturability and crush performance of a stiffened plate type RTM structure. Composite Structures, 1993, 26, 83-93.	5.8	5
143	Nondestructive Load Predictions of Concrete Shell Buckling. Journal of Structural Engineering, 1989, 115, 1191-1211.	3.4	4
144	Discussion of â€œ Active Earth Pressure Behind Retaining Walls â€•by Sangchul Bang (March, 1985, Vol. 111,) Tj ETQq0 0 0 rgBT /Overl	0.4	6